blue planet™

GAME MASTER'S GUIDE

SCIENCE FICTION ROLEPLAYING
ON THE NEW FRONTIER

BLUE PLANET REVISED EDITION CORE RULEBOOK

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REVISED EDITION CORE RULEBOOK

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In Tribute: As the first edition of Blue Planet went to press in June of 1997, the world mourned the death of Captain Jacques-Yves Cousteau. In his passing, the Earth's oceans lost one of their greatest champions and humanity lost one of its more noble men. Please honor his memory by honoring the oceans.

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CHAPTER 1: GAME MASTER

THE GAME MASTER'S ROLE

Welcome to the Revised Edition of the critically acclaimed BLUE PLANET™ science fiction roleplaying game. BLUE PLANET REVISED™ builds on and revises the prior BLUE PLANET SECOND EDITION™ (BPv2) game and integrates the content from the BPv2 *Natural Selection* sourcebook. The *Player's Guide* (available separately) covers the mechanics of the game: character creation, skills, backgrounds, combat, and technology.

The *Game Master's Guide* is the second core book for the BLUE PLANET REVISED science fiction roleplaying game. In the *Game Master's Guide*, the planet itself is the main character. This book brings to life the colony world Poseidon, providing details on the people, colonial settlements, ecosystems, flora and fauna, climate and weather, and enigmatic aborigines of this exotic ocean planet. With the help of this book, Game Masters will be able to create vivid scenes and develop exciting adventures awash in the sights, sounds, smells, and feel of this richly detailed science fiction setting.

Game Masters are faced with a challenging but rewarding task. While the players are each expected to create and roleplay a unique character, the Game Master (GM) is largely responsible for presenting the rest of the game world. At various times during the game, the Game Master will play the part of guide, referee, narrator, special-effects artist, set designer, producer, director, screenwriter, and actor.

The *Game Master's Guide* is packed with information about the game setting and background. The Game Master must add further details to existing people and places, invent new ones, and describe those elements to the players. The GM must also roleplay the interactions of the non-player characters with the player characters, and referee the actions of both player characters and non-player characters.

Finally, and perhaps most importantly, the Game Master must create the core plot lines and story elements on which the decisions of the players and the actions of their characters will build the adventure. These plot lines can be detailed, complete and rich, or loose, suggestive, and open-ended—this decision is completely at the discretion of the GM and his gaming group.

Presented during play, plot elements make up a *scenario*. Scenarios are the individual adventures that make up the episodic lives of the player characters. Scenarios can be isolated, periodic and unrelated to each other, or they can be strung together in relevant order to make a continuous descriptive story of the player characters' lives. A group of scenarios that creates such a story is called a *campaign*.

Campaigns may last for years of "game time" and are a common way for gaming groups to involve the same characters in a number of adventures. Campaigns serve to build imaginary lives for individual characters, giving them histories and allowing them to grow while working to achieve long-term goals.

DESIGNING CAMPAIGNS

Because campaigns are created through the interactions of a number of players, they can never be fully scripted in advance and as a result are "works in progress." Nevertheless there are a number of planning choices that will make for a more enjoyable BLUE PLANET game.

CAMPAIGN CONCEPT

Though the BLUE PLANET game mechanics encourage the creation of unique and diverse characters, it is important that characters created for a particular campaign share some unifying feature, even if it is only their current circumstance. A scenario is more plausible, and therefore usually more enjoyable, when there is a logical, motivating reason for the player characters to be and work together. Many roleplaying games provide a very focused and specific setting in which it is assumed the player characters will all be doing one thing, such as adventuring for fame and fortune, investigating supernatural phenomena, or crewing an exploratory starship.

BLUE PLANET takes a very different approach, presenting a richly-detailed setting in which a broad range of characters, adventures, and ongoing campaigns are possible. While this approach gives the gaming group a great deal of flexibility, it also requires some added consideration and preparation before the game begins. The choice of a general concept for the campaign is a very important one, and the Game Master should encourage the play-

EASTER

On the one hundred and eighty-third day, he rose from the dead. No Mary Magdalene there to see him, no Julia, only a medtech to administer post-hibernation drugs.

Textbooks called the miracle Induced Hypothermic Metabolic Suppression. His skin itched and he wanted to puke up the gray odorless soup they gave him.

Where was Julia? There had been an accident, the medtechs told him. Then they shrugged. Ramon Ortega had come to Poseidon in his sleep, across six months and a gulf of stars, but somewhere along the way his wife had slipped away. A problem with Julia's hibernation canister. Something about a lapse in automatic drug injections, lack of circulation to the brain, and million-to-one chances, they said.

He found to his surprise that he could not weep. Maybe it was a side effect of the hibernation. But neither did he weep in the weeks that followed. As he underwent physical therapy aboard Prosperity Station, there were no memories of her, no dreams, only the path ahead and the planet below.

The National Geographic Society (they sent their condolences) had paid too much for the expedition to have a Pulitzer-winning photographer return empty-handed. They still wanted a Poseidon aborigine on their magazine cover. When he was released from Customs and Immigration, Ramon Ortega numbly boarded the shuttle, carrying his wife's cameras as well as his own, and descended to Poseidon. He had risen from the dead, but he was no longer one of the living.

In the colonial capital of Haven, beneath a cloudy sky, he sought out scientists and officials. Where, he asked, could he find the aborigines? There were a few old records of sightings, a detailed necropsy report, but little else. After nearly thirty years of prying and looking, scientists still knew nothing about them.

ers to participate in and contribute to this decision. A Game Master may be tempted to run the kind of game he wants regardless of what the players say, but it is usually a thankless task to run a game that is not interesting and engaging to the players.

Premise

A campaign concept defines who the characters are, what they are doing, and why they are doing it. It identifies what they can attain or achieve, and what is at stake in the course of their adventures. It provides the Game Master with information that empowers him to create relevant scenarios that are both motivating and appropriate for the characters. The concept might suggest background developments and plot twists and help in the creation of meaningful non-player characters. The campaign concept allows the GM to focus his creative energies on those elements of the setting and story that are likely to be most central to the campaign.

The following are just a few of the archetypal campaign premises in the BLUE PLANET setting.

- The characters are GEO Peacekeepers stationed at an isolated outpost or garrison.
- The characters are GEO Patrol officers in one of the water world's major colonial settlements.
- The characters are an ecoterrorist cell fighting a covert war against the Incorporate's exploitation of Poseidon.
- The characters are covert operatives in the security forces of an Incorporate state waging industrial and political espionage against its rivals.
- The characters are gangsters and enforcers in one of the syndicates that dominate the criminal underworld of Poseidon.
- The characters are native insurgents waging a desperate war against the encroachment of newcomers who threaten their traditional way of life.
- The characters are rugged pioneers battling a dangerous planet—and sometimes themselves—in an effort to carve a new civilization from the wilderness.
- The characters are research scientists struggling to uncover the secrets of Poseidon and its ancient legacy.
- The characters are guides and frontiersmen who brave Poseidon's savage wilderness to explore the planet's darkest corners.

Theme

A campaign theme is a recurrent story thread or idea that is of central importance throughout the course of the campaign. A solid theme that engages the player characters will lend a campaign context, continuity, meaning, and drama. Campaign themes might include the escalating conflict between the natives and the newcomers, the ongoing struggle to tame a new frontier, the fight to protect a pristine world, or the aborigines and their secrets.

Note that a campaign theme does not have to include an ethical or moral component, such as "crime doesn't pay" or "charity is good and greed is bad." In reality, the character's personalities and individual moral codes will drive such judgments, though they may often come into conflict with those of society. In BLUE PLANET, the characters are responsible for their own choices and actions and moral themes should never be used to constrain their decisions or dictate predetermined outcomes.

The other side of the coin, of course, is that all of a character's actions have consequences, ones that aren't always desirable. Rather than implementing deterministic moral themes, the Game Master may choose to craft situations in which the characters' values conflict. For example, the GM may set up a scenario in which a character has an opportunity for a promotion, financial gain, or some other achievement, but only at the expense of his friends' trust. Such a scenario places the character's ambition and loyalty in direct conflict, but doesn't constrain his decisions or actions. This serves to reinforce the sense that the characters' choices have consequences and that they alone are responsible for them.

Though the players can have input in many aspects of the campaign concept, the Game Master is largely responsible for the determination of a campaign's theme. It is possible for a campaign to include more than one theme, or for the main theme to evolve or change during the course of the campaign. It is even possible that the players may prefer a theme that develops entirely from the decisions and actions of their characters.

The ray-like creatures lived in the vast reaches of the oceans, while Man had only settled the islands and shallow seas around the archipelagos. The few encounters between them had often ended in mysterious violence and death. That was fine with him. Just fine.

In the Sea of Cousteau, beneath the yellow glare of Lambda Serpentis, he rode with field researchers, followed the caneopoise herds, and dove in the kelp fields where aborigines had once been sighted. Fierce storms threatened to capsize them. A four-jawed eel ripped his thigh with poisoned fangs. Ramon Ortega survived; he'd lived through worse. He did not think back to the year he had spent in the war-torn New Balkans. He did not remember his brushes with death—minefields, snipers, and fellow journalists bleeding in his arms. He did not recall that he'd first met Julia there, in the ruins of a firebombed town. Two photographers preserving the moment, trying to awaken the world's weary conscience.

Julia. When he and Julia had been courting for two months, she asked him about the scars on his back. He told her what his parents had done, long ago: the worst demon of a past he'd traveled the globe to escape. The story told it was lifted from his shoulders, gone from his mind. Julia became his memory.

She had memory enough for the both of them. She was Memory incarnate. She remembered Esperanto, an artificial language nobody spoke anymore. Her aunt had taught it to her as a child. She remembered the antique techniques of black-and-white photography, a lost art in an age of holographic imaging. For ten years, she carried both their pasts—laughter, nightmares, anniversaries, sunny days in the park. Now, Memory was dead.

In the shantytown of Nomad, beneath a chaotic web of walkways and teetering wood and plastic structures built on houseboats and stilts, he questioned poachers and smugglers and prospectors. There were rumors of a place where aborigines frequented; for an exorbitant price, a dolphin guide would show him where. He sensed that after all these months, his search was near an end. Poseidon had not killed him. If he came out of this alive, what then?

In the sprawling roots of a Poseidon mangrove, beneath the surface of the Dolphin Sea, he reached the end of his quest. The alien trees grew up from the shallow seafloor, twenty meters up to the surface, to form organic islands with their palm-like fronds. Millions of tiny phosphorescent creatures flitted in the dark beneath the mangrove. Organic debris—remains of leaves and dead lizards and other, unrecognizable things—floated in the darkness, getting stuck in between the roots, forming the walls of a labyrinth of decaying matter. Ramon negotiated the root chambers alone, gill mask hissing, his camera light barely illuminating the way ahead.

They were waiting for him in the heart of the trees, ten meters below the surface. Unspeakably majestic, built like three-meter stingrays, but poised like lions. Emanating both history and timelessness at once. They circled him with ease and agility, despite their size. And then, he simply knew: the aborigines were the memory of this world. They kept a secret history, one too beautiful and unimaginable for humans to comprehend. Yet he finally realized that there existed a more beautiful memory. Just as Poseidon's past was the foundation of what the aborigines were, Julia had been a living part of him.

The aborigines seemed to say: You have forgotten yourself. You chose not to grieve, and so you are missing part of who you are. Go back. Find what you have lost. You cannot live on and grow without it. Or perhaps they said nothing. It didn't matter.

The camera slipped from his fingers, and Ramon Ortega swam up out of the darkness. Breaking the surface, with alien sunlight stippled all around him through the treetops, he heard the cries of eel dragons and the howling of the warm wind through the leaves. He took off the gill mask, breathed deeply, and wept.

On the two hundred and sixty-third day, he ascended to the living.

Mood

What should the campaign feel like? Should it be dark, gritty, and threatening, or light and hopeful? Should the campaign's scenarios evoke a sense of wonder and discovery, or one of paranoia and fear? Are the characters ordinary people caught up in events bigger than themselves, or larger-than-life heroes who drive momentous events that affect everyone around them?

The campaign's dominant mood goes hand-in-hand with its theme and serves to engage the players' emotions and imaginations.

The Game Master has two primary tools with which to craft the mood of his campaign. The first is the setting. If the chosen mood is dark and gritty, most scenarios should take place in a setting that is dark and gritty as well—the shadowy corridors and confined quarters of an undersea mining station, or an insurgent camp deep in the jungle. The second tool is the non-player characters who surround the player characters and share their lives.

If the GM is trying to evoke promise and hope, these characters will often be friendly, helpful, and honest. In a campaign with a mood of paranoia and fear, however, such people will often be threatening, secretive, and disloyal. The Game Master should use non-player characters to "mirror" the setting and evoke a sense of mood that will give the campaign a tangible aura.

Conflict

Conflict is the key ingredient in most roleplaying adventures, providing motivation, objectives, plot ideas, and background story. In addition to a running theme, a good campaign should contain a central conflict to charge the action and excite the players. The numerous polarized interests in the world of BLUE PLANET have been specifically created to foster a setting rife with conflict. Well-crafted background conflict colors in the characters' collective reality, just as events in the real world fill in the background of our lives. Conflicts should be integrated into the campaign's theme, while others should rage in the background, creating the sense that the characters are involved in something real, something larger than themselves.

Mystery

An air of mystery can be the single most compelling aspect of a roleplaying campaign. Nothing engages players and provides plot ideas like the promise and threat of the unknown. There are intriguing myster-

ies lying below the surface of Poseidon's oceans, and these should be exploited in any BLUE PLANET campaign. The best campaigns are those in which mysteries are layered upon deeper mysteries, and the uncovering of one leads to another more intriguing than the last. A compelling mystery will keep the players coming back to the gaming table for more, and give them a genuine sense of accomplishment when it is finally solved.

Plot

The plot of a scenario or a campaign consists of the actual events that tie characters, themes, mysteries, conflicts, and non-player characters together into a coherent whole. It is important that a plot be plausible within the context of the campaign, and that it be carefully crafted to interest, surprise, and motivate the players.

Roleplaying game plots can be tightly scripted and contrived to force characters into responding to specific circumstances. They can also be loosely put together, to give the characters the opportunity to take action on their own. A good adventure is usually a combination of both—tight scripting to present key story elements, encounters, or clues, and looser sequences to give the players choices and a sense of free will. The Game Master alone is typically responsible for crafting plot, and should be sensitive to this balance, taking advantage of the strengths of both styles.

Non-Player Characters

In real life, everyone is surrounded by people who play an important part in their lives—friends, family, coworkers, employers, rivals, even enemies. In a BLUE PLANET campaign, the people who play a recurring role in the lives of the player characters can do much to lend the campaign realism, context, and continuity. The players may have the opportunity to detail some of these non-player characters (NPCs), but it will invariably be the job of the Game Master to create most of them.

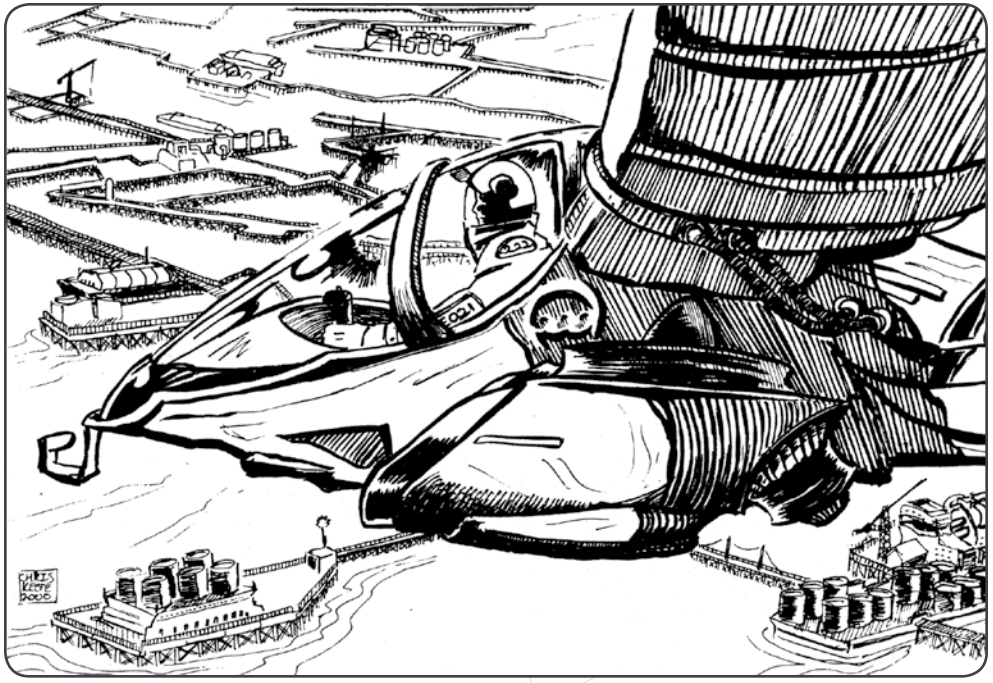
To create an average non-player character, a GM need only come up with a name, a brief physical description, and the character's role in the campaign. For more important non-player characters, the Game Master will need to detail their attributes, aptitudes, and skills, how they talk and act, where they live and work, and so forth. Elements from the character profile can serve as "snapshots" of non-player characters' personalities and can be handy guidelines for roleplaying their interactions with the player characters.

Scenario Ideas

Coming up with ideas for an exciting scenario can be difficult for even the most imaginative Game Master. While books, movies, television shows, newspapers, and magazines can all be used for inspiration, the best sources of relevant scenario ideas are the characters and the campaign itself.

When BLUE PLANET REVISED characters are created, the GM immediately knows a great deal about them—where they're from, what experiences most shaped their lives, what their goals and motivations are. Players often provide even more details by elaborating on their selections for the character profile. The Game Master can use this information as inspiration for scenarios and to make adventures uniquely compelling for the individual characters.

The design elements of the campaign concept can also provide the GM with inspiration, suggesting a number of questions that can spark the creative pro-



cess. How can this scenario emphasize our campaign's theme? How could the players continue to explore the mystery in our campaign, and how might I introduce a new one? How might the player characters get caught up in the conflicts raging in the background? I wonder what their old nemesis has been up to? Maybe it's time for him to show up again.

The campaign itself—what has gone before and what might yet happen—is often a Game Master's best source of new scenario ideas. When the GM builds scenarios from the campaign's interconnected plots and storylines, the campaign continues to gain greater depth and continuity.

THE GAME MASTER'S OBJECTIVE

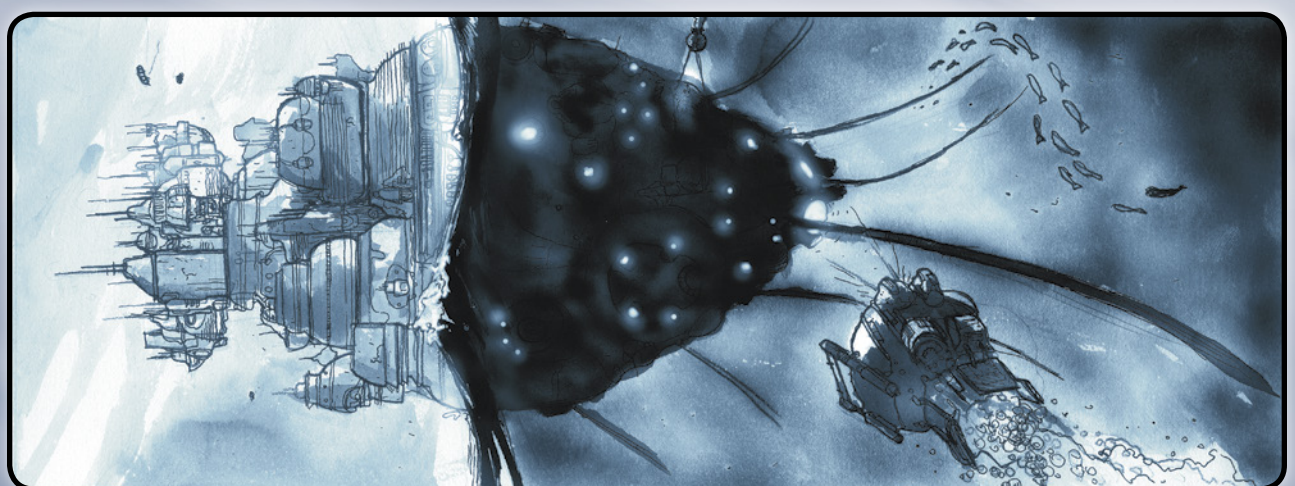
Game Masters should always remember that their first and most important goal is to have fun and make sure the players do, too. Running a BLUE PLANET game can be a challenging hobby, but with a little thought and preparation, just about anyone can do it. Most players do not expect their GM to be a master storyteller or brilliant actor, or to know every rule of the game inside and out.

Running BLUE PLANET REVISED games gets easier with experience, but a lack of experience should never stop a would-be Game Master from starting a new campaign. Dive in, make mistakes, and enjoy yourself. Listen to your players, and watch what they like and dislike as the game progresses. Give them what they want, only more than they expected and with an edge.

This book, together with the *Player's Guide*, offers you a whole world, a new frontier, to experience with your friends. Stretch the boundaries and explore the dark corners. BLUE PLANET is a new world of hope and threat, liberty and oppression, human and machine, the familiar and the alien.

Let your imagination be your guide and follow it with abandon.

CHAPTER 2: NEW FRONTIER



THE SERPENTIS SYSTEM

In January 2078, the fusion-powered *Prometheus II* space probe passed through the newly discovered Lorentzian wormhole orbiting Earth s sun. An instant later the probe emerged on the far side, on the outer edge of the Lambda Serpentis star system, more than 30 light years away. The discovery of this star system and its planets will forever stand as a transcendent moment in human history.

Lambda Serpentis is a G0 main sequence yellow star, very similar to the Sun. Serpentis, known also as Serpens, has six major satellites. The innermost is a planet of primordial heat and radiation, orbiting only 105 million kilometers from the primary. A fair-size world, Hephestus is a natural planetological experiment, but offers little else to the sciences. Because of its extremely high surface temperatures, naming the planet for the ancient deity of the forge seemed obvious.

The third orbit contains evidence of some catastrophe in Serpentis' past. Chunks of planetary debris are all that remain, some as much as 300 kilometers across. Thousands of spacers and belters immigrate to the Serpentis Belt every year, drawn by the resources locked in these shattered remains. Questions about the rarity of ring systems like those around Saturn were answered by the three outermost planets of the Serpentis System. Each is a gas giant with a complex ring system and several satellites of substantial size.

The largest of the gas giants, Lambda Serpentis V, produces far more heat than can be accounted for by contemporary planetological theories. It is not massive enough to undergo hydrogen fusion but still glows brightly in the infrared. Somewhat smaller than Jupiter, Serpentis V bears a strong resemblance to Earth's giant neighbor. It too is enveloped in bands of orange and red with monstrous eddies in its cloud patterns, suggesting strong storm systems.

For obvious reasons, the name Cronus, the father of Jupiter, was quickly accepted by the International Astronomers Union. Serpentis IV, or Aeolus, is named for the ancient keeper of the winds. Serpentis VI is named for the consort of Hades, Persephone, and marks the distant periphery of the Serpens System.

Humanity was utterly unprepared for the *Prometheus* data describing the second planet of the system, Lambda Serpentis II. The planet has an uncanny resemblance to Earth with a diameter, mass, density, and gravity all within 12% of Earth normal. The planet's orbit is slightly wider, so its year is 13.5% longer, and its rotation is slightly slower so that each day on Lambda Serpentis II is a full 30.012 hours. Initially, the planet's most striking feature was not its similarity to Earth, but the vast oceans dominating its surface. Covered with azure saltwater seas, Poseidon's name was inevitable.

The initial climatological data for Poseidon were highly suspect. The planet seemed far warmer than it should be given its extensive ice caps and widespread cloud cover. At the time, climatological theories indicated that based on its albedo, the planet should be frozen solid. With the amount of solar energy the ice, snow, and clouds were reflecting back into space, few scientists believed the planet could be as warm as the *Prometheus* data indicated. The answers were found in the spectrographic analysis of Poseidon's atmosphere. The planet was extremely active tectonically.

Poseidon's crust is composed of 13 major tectonic plates, most of which appear to be in motion. During the *Argos 12* mission to the planet, 275 active volcanoes were catalogued. Each volcano spouts sulfur compounds and other gasses into the planet's atmosphere, increasing both its atmospheric pressure and its natural greenhouse effect. The resultant warming has kept Poseidon in a precarious and temperate balance. The high level of volcanic activity also accounts for the majority of the planet's significant landmasses. With just a few large islands, most of the planet's land surface consists of tiny archipelagos and isolated chains of volcanic islands hundreds, even thousands, of kilometers from their nearest neighbors.

Poseidon has two moons, Proteus and Nereus. The nearest moon, Proteus, orbits almost 600,000 km from Poseidon and is so massive that many scientists feel the two bodies constitute a binary planet system. Measuring more than 7,000 km in diameter, the planetoid produces a surface gravity of more than half a g. The planet also has a relatively dense atmosphere, with an average surface pressure of around 0.4 atmospheres.

Proteus supports a moderate biome, consisting mainly of a diverse radiation of plant-like analogs. With only a thin atmosphere to protect the surface from the radiation streaming from Serpentis and Poseidon's strong Van Allen belts, mutation rates are high. Life on Proteus ranges from the poles to the

equator, and has adapted to the long days and nights. Only a few of these organisms demonstrate reactions to stimulation, and fewer still are aggressive. Others produce strong chemicals, usually either deadly poisons or molecules that are utterly nonreactive to humans. Although none of Proteus' organisms can move faster than a slime mold, some develop pleasing fragrances or beautiful foliage, and all of them have unique methods of reproduction.

The second moon, Nereus, orbits at 825,000 km. Just under 5,000 km in diameter, the moon's mass is about one-twentieth of Earth's and has a surface gravity of .33 g. It has a negligible atmosphere of mostly carbon dioxide and nitrogen, with surface pressures at 0.14 atmospheres. This lack of pressure makes the surface uninhabitable without full vac suits, but the moon's apparently stormy origins have left huge ore deposits at or near the surface. With these natural resources and its low escape velocity, the moon has become an important mining and refining center for companies with interests in orbital construction.

SERPENTIS SYSTEM INFORMATION

Lambda Serpentis
Class: G0-V main sequence star
Mass: 1.04 Solar Masses (2.06×10^{30} kg)
Radius: 1.1
Magnitude: 4.4
Luminosity: 1.04

Lambda Serpentis I
Mean Orbital Distance: 0.7 AU (105 million km)
Diameter: 12,141 km
Mass: 5×10^{24} kg
Orbital Period: 210 Standard Days

Lambda Serpentis II
Mean Orbital Distance: 1.1 AU (165 million km)
Diameter: 13,750 km
Circumference: 43,121 km
Axial tilt: 29˚05′57″
Rotation: 30.012 Standard Hours
Year: 413.2 Standard Days
Mass: 1.133 Earth Masses (6.799×10^{24} kg)
Density: 4.999×10^{3} kg/m3
Gravity: 0.98g
Albedo: 0.74
Avg. surface pressure: 1.3 atm
Dry surface area: 3%
Avg. cloud cover: 70%
Avg. mean temp: 19˚C

Lambda Serpentis IIA
Mean Orbital Distance: 587,400 km
Diameter: 7,243 km
Density: 4.941×10^{3} kg/m3
Mass: 9.827×10^{23} kg
Gravity: 0.510g
Orbital Period: 47 Standard Days
Rotational Period: 46.9 Standard Days
Avg. surface pressure: .4 atm
Avg. mean temp: 3˚C

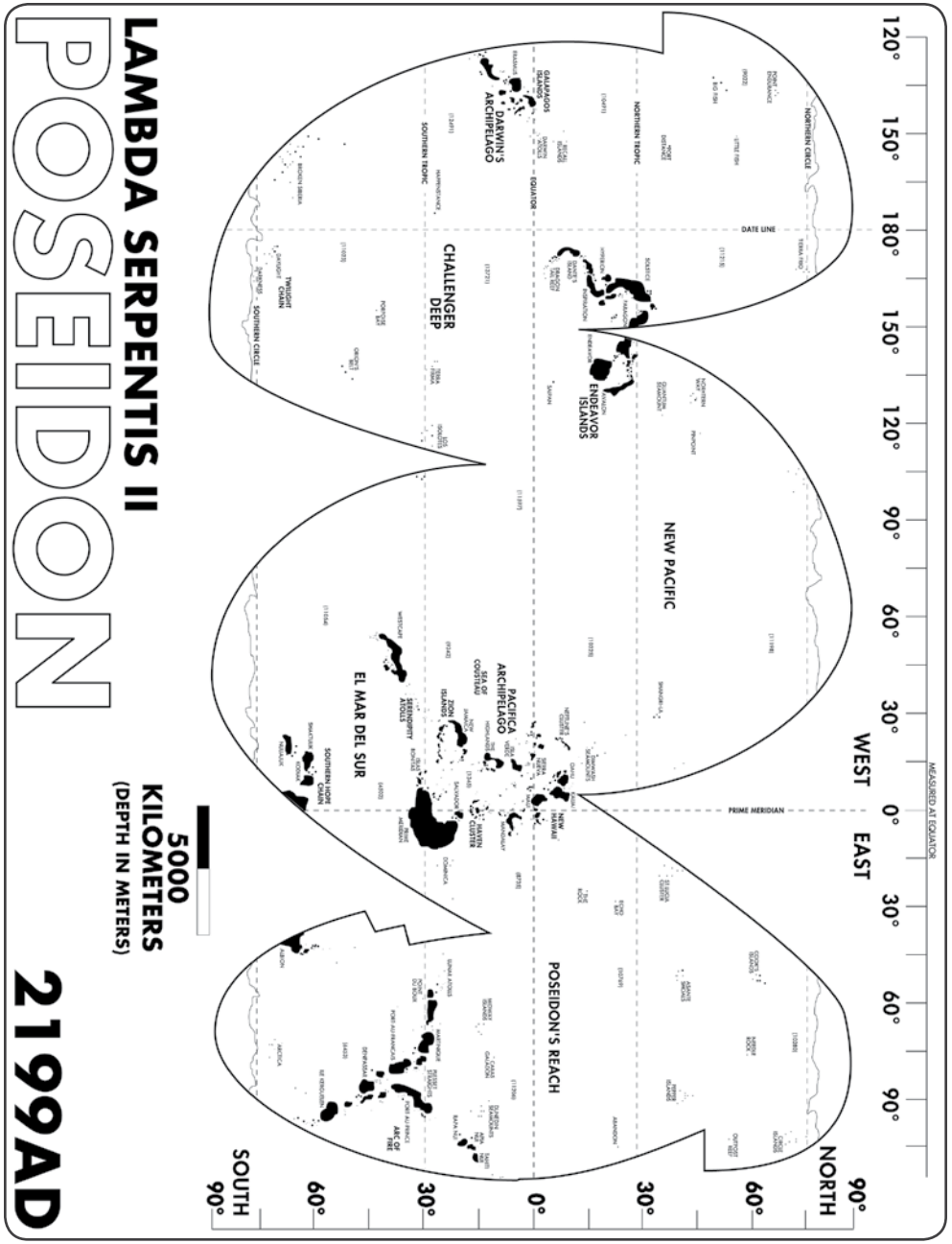
Lambda Serpentis IIB
Mean Orbital Distance: 825,000 km
Diameter: 4,960 km
Density: 4.741×10^{3} kg/m3
Mass: 3.03×10^{23} kg
Gravity: 0.336g
Orbital Period: 78.4 Standard Days
Rotational Period: 29.5 Standard Days
Avg. surface pressure: 0.14 atm
Avg. mean temp: 29˚C

Lambda Serpentis III
Orbital Distance: 1.4 to 1.8 AU (210 million km to 270 million km)

Lambda Serpentis IV
Mean Orbital Distance: 2.3 AU (345 million km)
Diameter: 42,960 km
Mass: 6.6×10^{25} kg
Orbital Period: 1,259 Standard Days

Lambda Serpentis V
Mean Orbital Distance: 3.5 AU (525 million km)
Diameter: 112,440 km
Mass: 6.4×10^{26} kg
Orbital Period: 6.42 Standard Years

Lambda Serpentis VI
Mean Orbital Distance: 5.5 AU (825 million km)
Diameter: 500,000 km
Mass: 1.1×10^{26} kg
Orbital Period: 12.65 Standard Years



The Serpentis System is heralded by many as the greatest discovery in the history of human civilization. Given the unlikely characteristics of the system and their profound similarities to those of the Solar System, the discovery takes on the flavor of destiny. When asked to comment on the realistic likelihood of such a discovery, a well-known World Space Agency astronomer was compelled to state that "the odds were not especially good."

THE PACIFICA ARCHIPELAGO

The Pacifica Archipelago is the largest collection of islands on Poseidon and contains more than 43% of the planet's exposed landmasses. Pacifica consists of more than 200 major islands and thousands of lesser clusters, islets, and atolls. The vast majority of these islands were formed as a direct result of volcanism, and many still support active volcanoes. Other islands are made of limestone, some are of uplifted basalt, and a few even have granite cores.

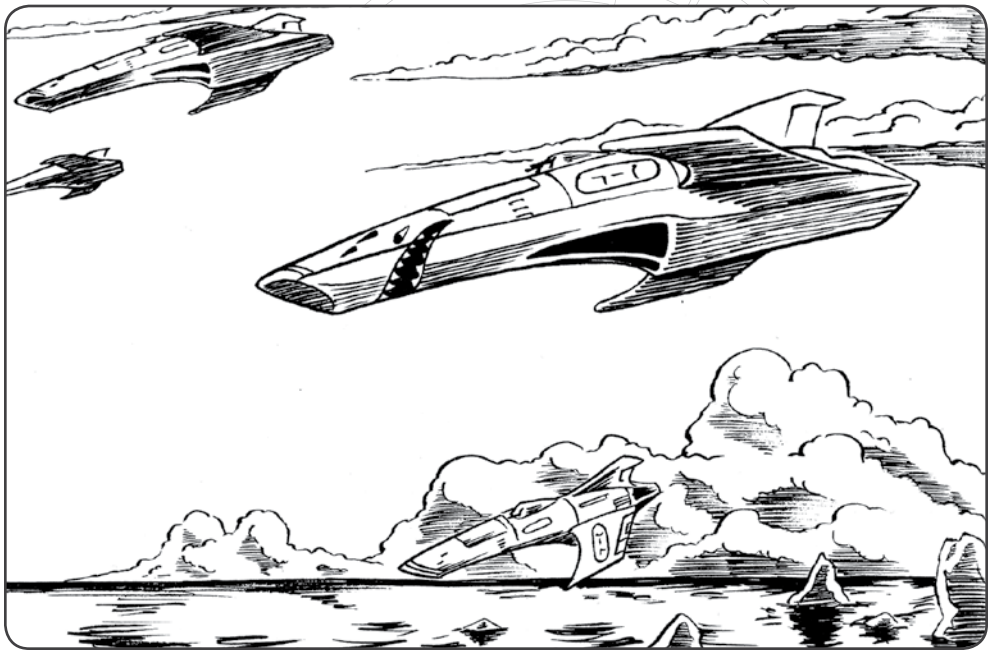
Pacifica straddles Poseidon's equator, but most of its larger islands are in the planet's southern hemisphere. The prevailing climate is warm and wet, with tropical and subtropical ecosystems throughout. Heavy rainfall and bright sun support densely vegetated forests almost everywhere, but local conditions often conspire to create other biomes.

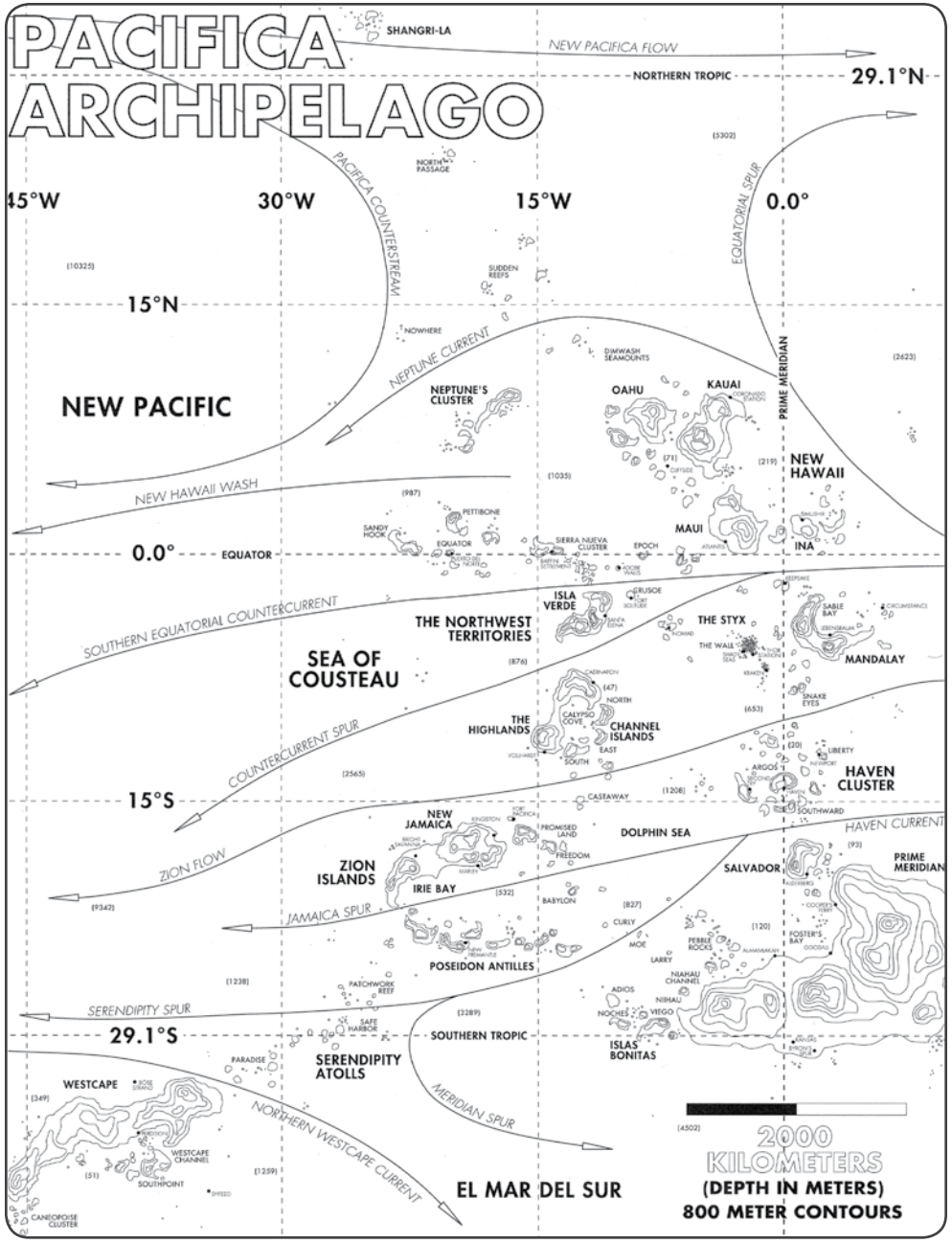
The mountains of Prime Meridian are cold and snow-capped in the winter, while the central savannas are warm and fertile year round. On Westcape and New Jamaica, prevailing winds and steep mountains form rain shadows, turning the islands' western shores into coastal deserts. Some islands are covered in dry chaparral, while others have only a few palm-like trees and broad, sandy beaches. The older and smaller islands are relatively flat, while the younger ones are high peaked with sheer sea cliffs. It is a little-known fact that the southern end of the Highlands has the highest sea cliffs in either of the solar systems.

The oceans surrounding the islands are uniformly deep, but the waters of the archipelago are relatively warm and shallow. In some regions the prevailing winds bring cold, nutrient-rich water to the surface, supporting rich and productive ecologist. In others, calm, clear water is a perfect habitat for diverse and almost endless coral reef systems.

The Pacifica Archipelago was the logical choice for the establishment of Haven, the Athena Project's first settlement, and the vast majority of subsequent settlements have been built within its reaches. Though deep in the Storm Belt, the cluster's countless islands and protected coves serve to shelter settlements from the worst of the weather. The surrounding seas are rich fishing grounds, and many of the islands have proven to be productive farmland. The typically dense forests yield good timber for construction and boat building, and have provided many other useful products such as seed stock, pharmaceuticals, and natural cloth fibers.

As the human presence on Poseidon continues to grow, so do the demands on the archipelago's





diverse, but ultimately limited, natural resources. The Incorporate continue to mine Long John with little regard for the local ecology. Concerned activists are already demanding more regulations and enforcement. Native fishermen have begun to notice declines in their harvests, as the GEO scientists scramble to gain insight into the region's ecological future.

HAVEN CLUSTER

The Haven Cluster covers almost four million square kilometers of the northeastern Dolphin Sea, though only about 600,000 square kilometers—around 15%—is exposed land surface. While the land area is small, the southern section of the Haven Cluster is still the most densely packed group of large islands on Poseidon. The cluster straddles the Prime Meridian between one and 16° south latitude, extending roughly 5° both east and west.

The climate in the Haven Cluster is primarily tropical. Warm, wet weather prevails throughout the region, supporting densely vegetated forests on most large landmasses. The nearly constant winds from the northeast moderate the extremes of heat and humidity, so despite the Cluster's location near the equator, the islands are habitable throughout the year.

Most islands in the Haven Cluster formed through volcanism, and some still support active volcanoes, though these are largely unsettled. Other local islands consist of limestone, basalt, and granite. Tectonic activity was at one time extreme in this region, producing uncommon geological formations such as the Wall, a 1,000-square-kilometer canyonland, and Snake Eyes, two small islands that evidently were once a single landmass.

The waters throughout the Haven Cluster are warm and shallow relative to the surrounding oceans. This is the heart of the Storm Belt, and the lack of large landmasses and high water temperatures offer a choice path for cyclonic activity.

Mandalay Island's majestic twin peaks, Primus and Tomorrow, are the only mountains of note in the Haven Cluster. On most islands, topographical variance is extreme near the shores, but the degree of sloping lessens approaching their centers. In fact, many islands are actually rounded plateaus, their bases under hundreds of meters of water. The easy grades atop the islands have proven to be excellent farmland, and the slow runoff of heavy precipitation allows rainforests to thrive.

The waters from Snake Eyes and Fable Island west to Nomad have become known to pilots and captains all over Poseidon as the Styx, and have garnered the enigmatic status previously reserved for Earth's Bermuda Triangle. There have been an unusually high number of crashes, shipwrecks, disappearances, and instrument malfunctions in the area.

Skeptics have offered some explanations for the strange occurrences in the Styx: the waters are in a heavy traffic zone near the most densely populated region of Poseidon, therefore, a high number of incidents is to be expected; the Styx lies in the heart of the Storm Belt and electromagnetic disturbances are not uncommon; many newcomer pilots are unfamiliar with travel on Poseidon and blame their mistakes on the existing legend. All of the explanations have some degree of truth to them, but nobody denies that more accidents and strange disappearances have occurred in the Styx than anywhere else on Poseidon.

The Haven Cluster was the first region settled on Poseidon, beginning with Haven in 2087. The original colonists targeted the region for human settlement while the *UNSS Cousteau* was still in orbit. Athena Project colonists surveyed Poseidon and the Haven Cluster was selected for its natural harbors, consistent weather patterns, quality farmland, and relatively limited tectonic activity.

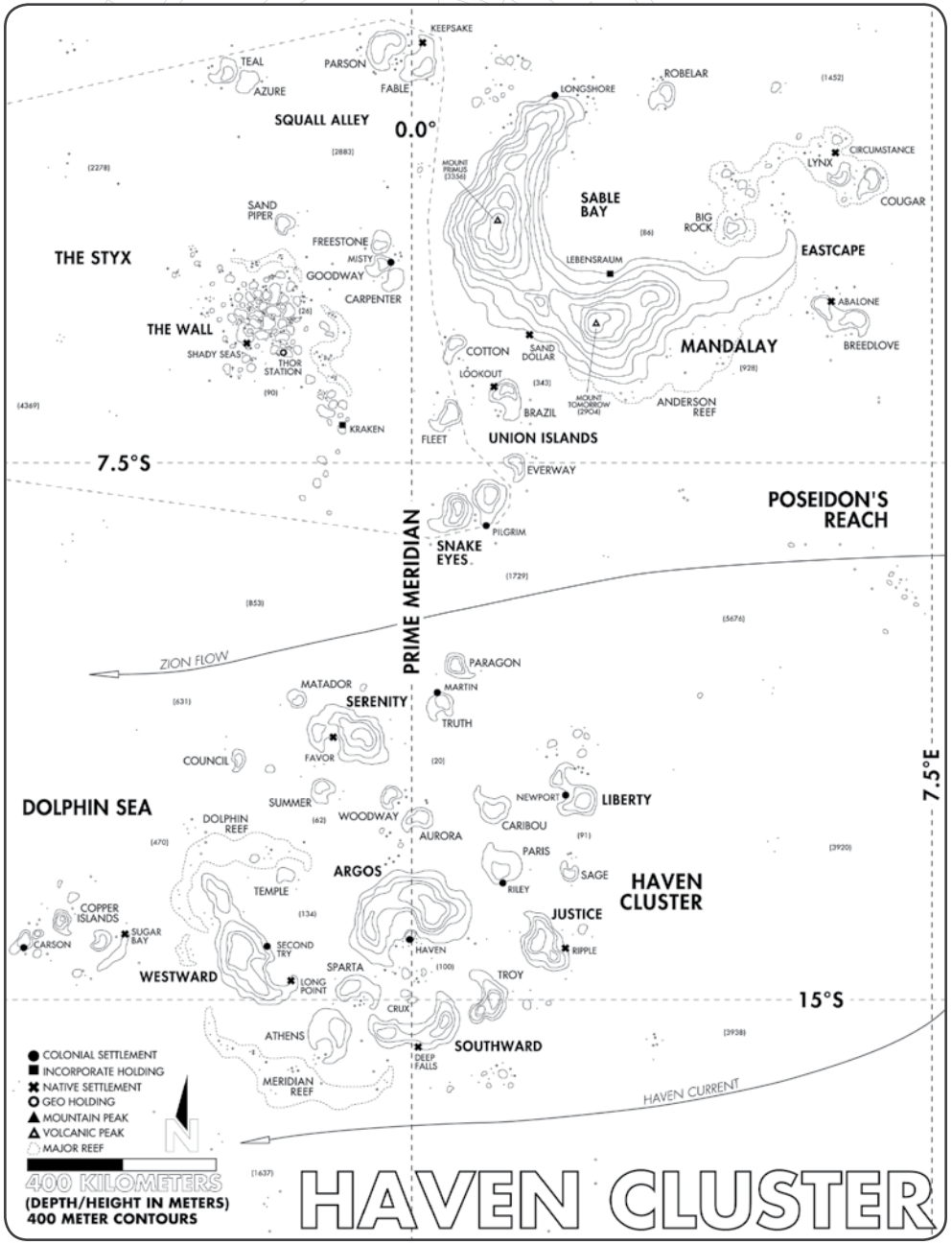
In 2089, with Haven finally established, colonists moved on to settle new areas, and villages were founded in a few preselected areas. Among these early settlements was Homestead, which was initially a failure but is now the thriving town of Second Try.

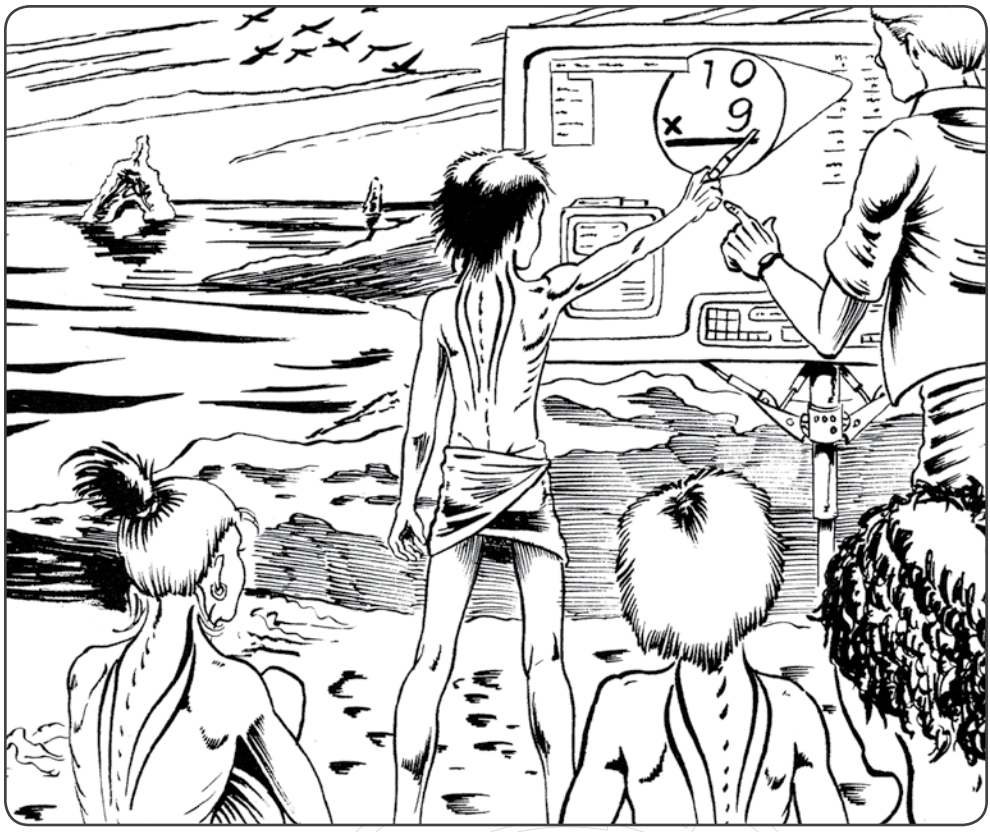
Even after the Abandonment, the Haven Cluster continued to grow as the center of human life on Poseidon. More and more settlements were founded as colonists spread out, both to ensure the colony's survival and to explore the planet. The region's population grew steadily and techniques for filling its basic needs improved. Farming, fishing, weaving, and other labor-intensive skills were the most important for the pioneers, and the Haven Cluster witnessed a renaissance of simple technologies as these activities became the focus of colony life.

With Recontact and the subsequent discovery of Long John, the Haven Cluster experienced a tremendous population increase. The newcomers represented a different breed of humanity, however, and mere differences in history or genetics were not all that separated them from the natives. The natives had come to Poseidon as volunteers, hoping to build a better world than the one left behind. They gave up their standards of living and discovered a new way to measure quality of life. However, many newcomers came to Poseidon for material gain. While natives

banded into tight communities to create the infrastructure necessary for survival, newcomers often came from places with infrastructures so overwhelming, the individual did not exist. Separated by vast cultural differences, the waves of newcomers often faced both geographical and ideological segregation from the original native colonists.

The tremendous influx of people since the discovery of Long John has greatly increased the populations of existing settlements in the Haven Cluster. In





its first hundred years, the entire region's population grew steadily from 5,000 to almost 50,000, while in just the last 10 years, the region's population has exploded to almost one million. This small region now supports roughly half of Poseidon's population.

The city of Haven remains the oldest and largest settlement on Poseidon, and is the center of GEO activity on the planet. While other towns within the Haven Cluster have grown to well over 30,000 residents, there is no rival for Haven with its population of over half a million. Over 80% of the colonists arriving on Poseidon make planetfall at the Haven shuttle port, so most everyone has at least a passing familiarity with the city.

In addition to the exploding populations of the Haven Cluster's existing settlements, the 2190s have seen the development of several new communities in the region. One of these is Newport, a GEO-sponsored colonial settlement on Liberty Island. Founded in 2194, Newport already boasts 30,000 residents. Similar growth has been achieved in Lebensraum, Hanover Industries' company town. Largely devoted to establishing a heavy manufacturing base for the Incorporate state, this settlement has grown to over 26,000 permanent residents in the six years since it was established.

Though the majority of the colonists in the Haven Cluster reside in its large modern towns, tiny native settlements are more common. During the Abandonment, native colonists dispersed, establishing small settlements in order to ensure the colony's survival. Many of these villages are located in places impractical for the support of large, modern towns and most have changed little since Recontact. Among the barren rock cliffs of the Wall are isolated settlements that survive on fishing and aquaculture. Tiny villages float on interconnected barges, leading semi-nomadic existences. Some villages even rest within the huge Poseidon mangroves, suspended treehouses hanging among the massive trunks.

HAVEN

I love this city. The history of the human colonization of Poseidon is written here, on the streets, the aging landmarks of Old Town, and the faces of its people. When I first came to Poseidon, I walked up to the Planetfall Monument on Watertop and I could almost see how it must have looked to those first colonists who landed here over a hundred years ago. The historical buildings of Old Town whisper the secrets of those earliest days, when the Athena Project colonists built a home for themselves, and humanity, on an alien world. The spirit of history still echoes in this place, and the ghosts of the first humans on Poseidon still drift with the morning tides in its harbor. Listen carefully, and you can hear the cries of Jessica DeMarco, the first colonist native-born to this world. Haven is a city haunted by a past too wonderful to fade into the history books and museums. There is another Haven, though, one that rails against the weight of nostalgia pressing down on it and struggles to overcome its charm with efficiency and progress. This is the Haven that sprawls around Old Town like a pack of wolves encircling its prey. It is a city of Incorporate spires and fiscal policies, a place where government bureaucracy, commercialism, and opportunism strangle the ghosts of its own legacy. Haven is a city with two faces: on one, a grimace of fierce determination, on the other, a sad smile.

—Tomas McLain, *The New Yorker*

LOCATION AND LOCAL TERRAIN

Haven is located in the Pacifica Archipelago, at 14°11′48″ south latitude, 0°0′0″ longitude. The city was built along the southern coast of Argos Island, a landmass in the Haven Cluster. Most of Haven sprawls over a small coastal island nestled in natural, deep-water harbor. Because of the steep terrain of the island, much of the city is terraced in the fashion of old Mediterranean cities on Earth.

HISTORY

The site of present-day Haven was targeted for Poseidon's first human settlement while the *UNSS Cousteau* was still in orbit. The extensive survey conducted prior to planet fall recommended the location for its natural harbor, relatively stable weather patterns, and limited tectonic activity. In 2087, the original colonists made planet fall on the surface of the ocean about two kilometers south of the current spaceport facilities on Shuttle Point. The colony ship had been designed with modular components that could be dismantled and reassembled on the planet's surface. The Colonial Headquarters, erected two days after planet fall, had served as one of the *Cousteau's* habitation pods during the ship's long voyage from Earth. Construction of the original settlement followed a colonization plan drawn up by a UN team on Earth and was completed in 2088. At this time, the settlement consisted almost entirely of modular habitats stripped from the *Cousteau*.

In 2096, the colony, which had spread from Haven to several more settlements throughout the archipelago, received a stunning blow to morale when the expected resupply ship from Earth failed to arrive. Administrative records report 15 suicides in that year, as well as several more deaths attributed to "mysterious circumstances" and a dramatic increase in the incidence of violent crime. A week long summit meeting in Haven, attended by the leadership of each of Poseidon's settlements, resulted in a new plan to increase industrial development, infrastructure, and agricultural production in order to achieve long-term self-sufficiency. The next 50 years saw a vast improvement in each of these areas, with the exception of industrial development. The colony lacked the human resources, raw materials, and infrastructure to bootstrap a self-sufficient heavy industrial base. While the colony was able to build the tools and support infrastructure necessary to sustain much of its existing technology, it was unable to develop the factories, refineries, power plants, mines, and other resource-exploitation infrastructure necessary to sustain long-term industry.

The greatest setback to Haven's industrialization effort came in 2146 when a helium flash vaporized the massive fusion reactor stripped from the *Cousteau*. The scars from the ensuing fire are still visible in Oceanside, even after decades of renovation and new construction. Well over 100 colonists lost their lives fighting the fire, and their names are inscribed on the faces of the Planetfall Monument, along with all of the other original colonists who lived and died in Haven. The reactor disaster forced the colonists to turn to alternative power sources, and Haven is

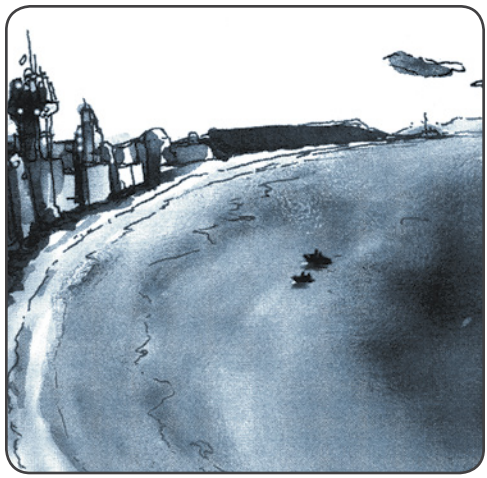
now a leader in the development of solar-, wind-, and wave-power technology. Nevertheless, the reactor fire was significant enough, at the time, to crush once and for all any hopes that Haven might be able to sustain a self-sufficient industrial base.

The years between the reactor fire and Recontact were difficult for the citizens of Haven, as they were for all of the colonists on Poseidon. Kelp fields continued to be developed in and around the harbor, and much of the human and physical resources of the town were devoted to the agricultural production necessary to sustain the town's growing population. Between 2146 and 2165, well over 90% of Haven's population was involved in the kelp and fishing industries or in support services for these industries. As the aggregate population of the Poseidon colony continued to grow, the population of Haven actually declined, as the need for agricultural self-sufficiency created a strong disincentive to continued urbanization, and more and more families moved to outlying areas and isolated settlements.

By the time the *Adm. Robert Perry* arrived in orbit around Poseidon, the population had leveled off at just over 15,000 permanent residents. Though their economic standard of living and technology base would have reminded many newcomers of a 20th Century Third World nation, the citizens of Haven were healthy, content, and possessed of a fierce pride in their cultural and historic heritage. As a result, and because Haven was the focus of the GEO's initial contacts, there was a great deal of political and social unrest surrounding Recontact. Haven's population would actually decline further before it began its tremendous boom in response to renewed colonization efforts, as natives fled the town in hopes of salvaging their culture and lifestyle.

Physical Layout

Haven's evolution from a small, colonial settlement to a major city has progressed in distinct, historical stages. In the earliest years of the Athena Project, construction was centralized almost entirely in Old Town and the Heights. There were a few scattered buildings in what is now the Warehouse District and CBD, and the colony's fusion reactor and limited industrial facilities were located in what would become Oceanside. Otherwise, there were kelp fields growing in the cove now dominated by the Wharf, and a moderate collection of fishing vessels docked where the Floats now sprawl. The rest of the island was predominately wilderness, with the exception of the Planetfall Monument on Watertop, which was reached by a long, winding path up the slope from Old Town.



With Recontact, the city began to spread outward along the beach from Old Town. GEO administrators and scientists built homes in the Heights, and the modular, outlying storage buildings west of Old Town were supplemented with modern warehouses and supply depots. The first Colonial Affairs offices were constructed in the Central Business District, and the majority of the hybrid colonists arriving in 2176 were settled in the newly completed Brighton housing development. A new fusion plant was constructed on Shuttle Point, along with modern maintenance facilities for tugs and shuttles.

Following the discovery of Long John, Haven's exploding population continued to push construction up the sharp slopes inland from the harbor. Today, these slopes are covered with terraced rows of commercial buildings and tasteful, private dwellings. A two-way maglev line runs from the spaceport up the East Shore, across the Haven Channel north of the Waterfront, west along the shoreline to the Heights, then winds its way along the terraces up to the Government Center.

The Districts of Haven

Old Town

Haven's Old Town, built on the island's natural harbor, is evolved from an original design drawn up by colonization planners back on Earth. As a result,

Old Town's physical layout is almost jarringly efficient and utilitarian. The oldest original buildings are almost exclusively the pre-fabricated, modular structures stripped from the *Cousteau*. Most of these buildings, however, have been extensively modified and expanded with improvements and additions of bioplastic, wood, and stone construction in a variety of architectural styles.

The streets of Old Town were originally designed along an efficient grid pattern, but additions and new construction have transformed this orderly design into a maze of narrow, twisting streets and covered alleyways. The streets themselves are constructed of biocrete, a genetically engineered, organic surfacing material that is smooth and spongy to the touch, but stronger and more durable than asphalt or concrete. Biocrete, which can be inexpensively grown in simple vats of organic nutrients, is highly moisture-absorbent and capable of flexing and contracting in response to changing temperature. Seed samples of the material were brought with the original expedition and grown locally in Haven and other major settlements during the first years of the colonization effort.

Old Town includes both commercial and residential real estate, and zoning is almost completely absent. In the northern and central blocks, one can find small privately owned shops interspersed with some of the first homes built on Poseidon. These neighborhoods are what one usually thinks of as Old Town, and they are still the heart and soul of the city. The Colonial Headquarters sits in Athena Plaza, and is still the home of the city's Mayor. As one moves east toward the Wharf, Old Town becomes more modern and commercial. The neighborhoods nearest the Warehouse District have become increasingly rough in recent years, resulting in an increased Patrol presence.

The Floats

Since the earliest days of the colony, people have been taking up residence on boats moored in West Harbor. Before Recontact, this region was mainly occupied by the fishermen who found it efficient to stay close to their work. In the last 20 years, however, the district has exploded into a full-blown boat town, as Haven's poor have built and lashed together sailboats, houseboats, crude rafts, and barges to serve as inexpensive dwellings. Unfortunately, there is little to distinguish public walkways from private residences on the Floats, and it is easy for a newcomer to find himself in an altercation when he inadvertently wanders into someone's home. The Floats still have a large native population, and poverty and crime continue to be major concerns.

Brighton

This district in dominated by a sprawling, GEO-funded housing project, and is one of the poorest neighborhoods in Haven outside of the Floats. The Brighton projects are home to such unfortunate souls as impoverished natives, a large hybrid population, and countless newcomers who have failed to find their dreams on the new world. Crime and violence are rampant in the projects, and the Patrol seems to have written them off entirely.

The Heights

Besides Old Town, this is the oldest residential district in Haven, and is still among the most sought-after real estate in the city. Since Recontact, the Heights has become an exclusive, upper-class neighborhood that is home to high-level government officials, Incorporate executives, and the independent rich. In addition to a sizable Patrol presence, the district also has a private security contract with MacLeod Enforcement. The residents of the Heights consider these added measures necessary due to the close proximity of Brighton, the Warehouse District, and the Floats.

Warehouse District

The western districts of Haven are among the oldest, and consequently, less reputable of the city. The warehouse district is a study in contrasts. It has its share of dilapidated, modular structures from the earliest days of the colony, but it is also home to the newer, well-constructed and secured Incorporate warehouses that have accompanied Haven's increasing role as a global distribution center. The westernmost sections of the Warehouse District, as one approaches the Floats, are an infamous high-crime area, and everything from organized crime operations to ecoterrorist cells can be found hiding in these old, abandoned buildings and darkened alleys.

The Wharf

Despite its name, it has been decades since this district was actually used to dock ships, other than the luxury yachts moored at its exclusive marinas. Today,

JASON AND DARWIN

Jason had grown up on the Floats, a son of the nasty canals that made up Haven's squatter district. It was a horrible, sad place to live, but if one paid attention, there were always lessons to learn. One thing the canals had taught Jason over and over again was that life on the Floats was like the garbage that drifted by in the current. You never knew what it was going to be, but sure enough it was going to stink.

Unfortunately, lessons, even hard ones, are sometimes forgotten. Maybe it's human nature, a misplaced belief that things can be better, or a need to have hope. Whatever the reason, Jason forgot the first time he saw Darwin.

Keat's Pizza was just off the bridge in south Brighton, but was still one of the best hang-outs in town. And the cool thing was, Tom didn't care whether you were an urchin from the Floats as long as you showed up on time and did your job.

Jason started out washing beer glasses, and then bussed tables, and then learned to spin dough. After a while he even made a show of it, spinning the gooey mass through all sorts of contortions. Mainly, he'd started the act to impress girls, but he gave it up when he met Darwin.

"Darwin? Kind of a lame name for a girl, isn't it?" The sneer on his face was all bravado as he stood behind the counter spinning a pie. He'd only made the comment so he had an excuse to stare at her dusky face.

"Not as lame as that fast fungus on your face you call a beard, punk." He shaved off his scraggly goatee the next day, and she moved in with him a month later.

Like Jason, Darwin had no illusions about life on the Floats. Jason didn't know what she did. He knew she didn't have a pimp, and that was some comfort. He knew she didn't do lot of drugs; she'd rarely been ripped around him. But she did seem to have more money than she ought to. Figuring he was unlikely to be better off knowing what she did when they weren't together; Jason wisely kept his questions to himself. He was happier than he could ever remember being, and he didn't want to mess it up.

On Founder's Day, Keats' always threw the biggest bash in town. They started at dusk and kept right on going. This was Jason's first Planetfall celebration, and by the time he had spun what felt like his four-millionth pie, he was ready to down a couple frosty ones and call it a night.

the Wharf is a high-rent neighborhood built out over the harbor, and its open-air markets, bazaars, restaurants, and small shops are a popular stop for tourists from around Poseidon. In addition to fresh seafood and kelp, one can find native handcrafted jewelry, clothing, furniture, knickknacks, and artwork on the Wharf.

Central Business District

This district was originally home to the colony's administrative offices, research labs, medical clinics, machine shops, and other vital facilities. In 2199, it has been almost entirely renovated, and is now dominated by the towering offices of the Incorporate. Many residents consider these glass-and-steel spires an eyesore that has completely destroyed the charm of historic Old Town. The Central Business District has the largest Patrol presence in Haven.

The Waterfront

This district is a popular entertainment strip, home to restaurants, bars, clubs, virtual arcades, shopping malls, and even a brothel or two. The Waterfront has continued to grow with Haven's booming population, and it now spans the width of Haven Channel. While the West Shore is well protected by the Patrol and caters mostly to the tourist trade, the East Shore has a more rough and seedy reputation.

Oceanside

This district was something of a limited industrial complex during the early years of the colony, and was home to the city's fusion reactor. Along with parts of the CBD and Waterfront, it was completely destroyed by the reactor fire in 2146. Since Recontact, Oceanside has been rebuilt and renovated and is now a prosperous, middle-class neighborhood.

The Terraces

These upper-class residential neighborhoods have been developed within the last 10 years, and become more exclusive the further "uptown" one travels. Many of the homes and mansions in these districts are built out away from the mountainside on sturdy supports and offer wonderful views of the city below. The South and East Terraces are favored by Incorporate executives for their proximity to the Central Business District, while the North Terraces are home to many high-level GEO officials and administrators.

Colonial Park

The northwestern slopes of the city are devoted to Colonial Park, 20 square kilometers of wooded lawns, terraces, streams, ponds, and hiking trails. The park is open to the public and is both a popular getaway spot for locals and major sightseeing stop for tourists.

Government Center

The GEO has recently finished construction of a new colonial administrative complex on the plateau near Watertop. It is suspected that most of the GEO's bureaucratic and administrative infrastructure will be moved from *Prosperity Station* to the Government Center within the next couple of years.

The complex includes offices of each GEO Commission with an official presence on Poseidon, as well as the Governor's Mansion and the colony's only permanent courthouse and judicial administration facilities. The Poseidon Training Academy is located on a small campus on the northeastern edge of the complex.

Demographics

Haven's population reflects the dichotomy of its architecture and history. At just over 500,000 permanent residents, Haven represents approximately

He expected to meet Darwin at the bar when Pester came in to take over, like he did almost every night. Being a stand-up guy, Pes was a few minutes early.

"Hey, Jay. S'up? Righteous bash, yah?" Pester was cool but odd, always half involved in whatever he was doing, half visiting some netherland of the mind. "Jay, you be gettin' soma th' bon temps, yah? Go grab that girl a'yours and soireé." Jason flashed Pes a grin and wiped flour-white handprints on his pants.

Jason stepped behind the bar and poured a cold one for himself. Quaffing the first half in three big swallows, he searched the sizable crowd for Darwin's face. Keats' was in an old warehouse, and could easily hold almost a thousand people. Tonight, with four bands on the bill, the place was packed.

The first band had started almost an hour ago, and seemed to have their amps set to "maim." He was debating what to do when one of the waitresses caught his eye. Belle made big eyes at him and nodded over her tray towards the far side of the dance floor. Jason groaned and rolled his eyes at the ceiling. Belle smiled and yelled something back at him, but her voice was lost in the noise of the crowd.

Walking through the midst of hundreds of madly dancing fans without dumping his beer took all his tired concentration. He was through the thickest part of the crowd, moving between some tables, when he saw Darwin sitting with a mousy guy in a caneopoise jacket and tinted peepers. Mousy Guy said something, and Darwin glared, stuck out her chin, and tossed her head.

"Damn," thought Jason, "she's pissed." He was surprised. It took a lot to get her that upset. Apparently, she'd had a bit and more. She stood up quickly, knocking over her chair. She had one hand on the table, the other pointed at the mousy guy's face. At this distance, Jason couldn't make out what she was yelling, but she was clearly not pleased.

Mousy Guy looked quickly over both shoulders and hunched in on himself. As Jason pushed through the last few dancers, Darwin pounded her fist on the table and stepped back. She'd started to turn away and then suddenly spun around and sat down hard on the edge of her toppled chair. Looking panicked, Mousy Guy stood up, stumbled away from the table, and disappeared into the crowd.

By the time Jason had shoved the final dancer out of his way Darwin had slid off the chair and was sitting slumped on the floor. She saw Jason approach but didn't say anything until he was kneeling beside her.

"Hey," she whispered. Her face looked like there was more she wanted to say, but just then she coughed and started to fall over backwards. Jason lunged forward to catch her, and only then did he notice the spreading wetness on her shirt. When he laid her head on the floor her eyes were open, dull and unblinking.

With a cold pit in his stomach and the noise of the crowd a distant roar in his ears, Jason just sat and stared at Darwin's face, not really even seeing it. For a long moment, he understood where Pester's mind went when he tuned out. He couldn't remember how long he had been sitting there; a few minutes? A few hours? He didn't remember the band trailing off, and then stopping. He didn't remember the first shout or the scream that followed. He didn't remember the sudden silence followed by the curious and morbid buzz.

When he finally came back to himself and managed to drag his eyes away from Darwin's dead face, he began to notice things. The first thing he noticed was that he had spilled his beer, and that he was sitting in the puddle. The second thing he noticed was the silence. He realized the place was now empty, and slowly, like a very old man, he stood up, stiff and hunched over. He wandered instinctively toward the bar, but could have just as easily wandered in front of a cargo hover. It would have made no difference to him.

There was Pester, on the phone, talking to a cop or something. Belle was on a stool at the bar, her face in her hands, and Tom Keats himself was there, a short shotgun cradled in one arm. Mousy Guy's corpse lay nearby, a small pistol on the floor just beyond his outstretched hand.

Pester came up to Jason with something in his hands, his raised eyebrows asking a question. Jason took the package from him and unwrapped enough powdered juice to charge half the Floats and then some. Pester's other hand held a wad of bloodstained scrip. "Figured you didn't want the cops askin' stupid questions, yah?" Pester really was a stand-up guy.

That's how she'd been doing it. He could have gotten her an honest job, something safe, something to get her out of the business and out of the Floats.

Out of the drifting garbage. Jason had forgotten the hard lesson. He had forgotten that no matter what drifts by, no matter how good it looks, or how clean the water, garbage—just like life—still stinks.

25% of Poseidon's total population. Though most of the descendants of its founders have long since fled the city, there are still between 10,000 and 15,000 natives living in Haven. Most of these continue to work in the kelp and fishing industries, though a few can be found in most other sectors of Haven's market economy as well.

The vast majority of Haven's population, however, consists of newcomers—the post-Recontact waves of colonists and settlers that have flooded to Poseidon in increasingly staggering numbers. Many of these are affiliated with the GEO or Incorporate, but there are also independent prospectors and opportunists, scientists and scholars at the Haven Institute of Science and Technology, small-time business people, laborers, criminals, teachers, preachers, political activists, journalists, and entertainers—the list goes on. Haven's ethnic, genetic, and socioeconomic makeup is as diverse as any human population in history. Though some people mourn the city's loss of its traditional culture and identity, others celebrate this multicultural diversity.

Government

Of all the settlements on Poseidon, Haven is the most tightly controlled by the GEO. The city is slated to become the colonial capital, and the Colonial Administrator has already established offices in the Government Center. In keeping with tradition, Janson Blair, the mayor of Haven, resides in the old Colonial Headquarters building in Old Town. Though Haven is the GEO's political center on the surface of Poseidon, the mayor and City Council retain, in principle, as much autonomous control of the municipality as in any other settlement. In practice, however, the OCA is far more concerned and involved with local policy than is the case with other settlements.

The Incorporate also maintain extensive offices and facilities in and around Haven. Janson Blair's family has a long tradition of service to Biogene,

and his appointment to the highest municipal office of Poseidon's largest city is considered controversial and suspicious by many. Blair was the first newcomer with an Incorporate background elected to any public office on Poseidon. The election was contested by local political organizations, but an investigation directed by the City Council found no evidence of electoral tampering. Several members of the City Council, including a popular native activist named Deacon Kingsley, went on record calling the investigation a "complete farce."

Blair's Incorporate sympathies aren't a secret to anyone in Haven, and recent zoning and fiscal policies have benefited local Incorporate operations a great deal. In all fairness, Blair wants to keep his city on the cutting-edge of Poseidon's dynamic economy, and he realizes that the real economic power rests in the factories and boardrooms of the Incorporate giants. In turn, Incorporate agents, lobbyists, and executives try to use Blair and the municipal government as political and economic leverage against the GEO.

ACCESS DENIED

The Incorporate Connection

Haven is, in many ways, the commercial hub of the entire Poseidon colony. Its excellent infrastructure, distribution facilities, and access to the planet's primary spaceport give it a strong competitive advantage as a staging point for all cargo coming to and from the surface of Poseidon. As such, the city is a hotbed of commercially-driven political maneuvering and industrial espionage.

The local tactics in this "secret war" are typically far more subtle than the often-violent conflicts that flare up in outlying settlements, company towns, and undersea facilities. The bribery and blackmail of regulatory officials, data piracy, and cargo tempering and sabotage are more likely than armed assaults and bombings.

Most of this illicit activity is directed toward a single objective, regardless of the parties involved: capturing an economic advantage over a competitor, or gaining a political advantage over Incorporate rivals, the GEO, or the local government.

Free Poseidon!

This organization seeks to rid Poseidon of Earth's political influence. Its primary enemies include the GEO, the Incorporate states, and the Independent nations. While its leadership is dominated by natives, Free Poseidon! has actively pursued the support of newcomers, as long as they do not have a stake in the political status quo on the colony world. The organization has a strong base in Haven, and Deacon Kingsley, the popular councilman, is a local cell leader.

In fact, the organization is planning to assassinate Janson Blair, the city's mayor, while implicating GenDiver in the crime. Because of Blair's Biogene connection, it is believed that this will escalate the Incorporate conflict, and as a result, strengthen anti-Incorporate sentiments in Haven. The organization also believes that Kingsley will be the leading candidate to replace Blair in the even of the mayor's death.

Wilderness Outfitters

In addition to retailing all manner of survival gear, including firearms, Gunther Kettman also organizes and leads expeditions into Poseidon's wilderness. Gunther is considered one of the most highly-skilled big-game hunters on the colony world. While hunting is his specialty, Gunther has led everything from tourist outings to scientific expeditions during his years in Haven.

Rumors continue to circulate that Gunther has connections with poachers, smuggling rings, or other organized crime syndicates. Others believe him to be an undercover Warden or an ecoterrorist. None of these rumors have even been substantiated and there is no evidence that he is anything but what he claims to be.

ACCESS DENIED

No Man's Land

This popular tavern is located in the partially-submerged hold of a rusted-out freighter on the East Shore and caters to Haven's cetacean population. Most of the clientele are current or former military personnel, recently arrived from Earth. As a result, the place has a reputation for being "off limits" for all but native humans.

The owner-operator of the establishment is known simply as Barkeep. The dolphin was apparently a logistics officer in the GEO Naval Command before he purchased the establishment. Napapu, his orca bouncer, is a retired Marine Corps NCO whose professionalism and patience are legendary on the Waterfront. Unsurprisingly, No Man's Land is a hotbed of insurgent activity. Barkeep is using his contacts in the Naval Command to funnel weapons to natives throughout Poseidon, including Bataku's warpods in the Sierra Nueva Cluster.

Aborigine Specimen

In violation of GEO protocol, a group of scientists at the Haven Institute of Science and Technology is attempting to acquire a live aborigine specimen. Though inexperienced, the group has managed to make a few contacts in the local black market, but their efforts have so far been fruitless. Some of those who have heard about this contract believe it is a GEO sting operation.

Gorchoff Family

This powerful family's ties to organized crime can be traced back to the Russian Mafia of the late 20th Century. Vladimir Gorchoff's father was a boss in one of the most powerful and prosperous syndicates in St. Petersburg. When his father was killed in 2188, Vladimir marshaled his family's resources and brought them to Poseidon. In 2199, the Gorchoff Family is one of the oldest and most formidable of the organized crime syndicates on the colony world. Justice Commission estimates place the number of people on the Family payroll at approximately 3,000, from street-corner dealers to senior GEO and Incorporate bureaucrats.

The Gorchoff Family specializes in smuggling, and its illegal trafficking includes sunburst hides, narcotics, and weapons. In addition, the Gorchoff Family takes at least a piece of just about every black market deal in Haven. This underworld trade includes everything from pirated data to salvaged or stolen machine and electronics components.

The Marshal Service's Organized Crime Task Force is investigating Gorchoff Family connections to smuggling and piracy rings based in the Serpentis Belt. While its influence is much weaker in outlying areas, the Gorchoff Family has a virtual stranglehold on Haven's criminal underworld.

The Colonial Administrator points to this frustrating political triangle as one very good reason to establish a true local government on Poseidon. Others disagree, claiming that, if anything, the current political situation in Haven offers strong evidence that an autonomous colonial government would quickly be undermined by the expanding Incorporate presence.

Economic Base

Haven is the center of Poseidon's exploding service industry. Though the city still lacks any significant industrial development, its banks and insurance companies, hospitals, transportation, distribution and communications services, schools, entertainment facilities, and the like support the burgeoning heavy industry that is taking place in the company towns and industrial complexes on and below Poseidon's surface. Haven's expansive deep-water harbor and ready access to the planet's major spaceport make it a hub of commerce, especially the Long John trade.

The city has seen explosive, double-digit economic growth over the last eight years, and the principal concern for local policy-makers is the looming

threat of runaway hyperinflation. Local financial institutions have responded to political pressure and repeatedly raised the interest rates on both personal and commercial loans in an effort to restrict the money supply and ease inflationary pressures. Unfortunately, even with short-term interest rates well in excess of 20%, there seems to be a steady supply of newly arrived colonists with the credit and optimism to maintain constant pressure on the loan offices of Haven's major banks.

The root of the problem is apparent enough: thousands upon thousands of colonists are flocking to Poseidon with little more than credit, personal possessions, and a desire to become wealthy. When they arrive, whether they are entrepreneurs or prospectors, they invest that credit in the mining equipment, real estate, and machinery that they're sure will guarantee their financial future. The more they buy, the higher prices move in response. When they do get their enterprise up and running, they find that they're forced to charge increasingly exorbitant prices for their services simply to keep up with their enormous debt load. It is a vicious cycle that many believe can only end in disaster.

Infrastructure

Haven is becoming an advanced, modern city similar in many respects to the sprawling metropolitan centers of Earth, but for the countless, inconspicuous reminders of its unique colonial past. Though chaotic, its streets and buildings are well maintained in all but the poorest areas, such as the Floats and the Brighton project. The city retained first-rate disaster response services, including the best fire and flood protection on the planet, even before the GEO brought in its advanced technology and Emergency Response Teams. Since the reactor disaster, the town has sustained a deeply ingrained tradition of volunteerism in these services that has continued through its dramatic cultural and social transformation.

Haven's educational and medical infrastructure is just as impressive. The city privately funds several primary and secondary schools, and there are many private schools in the city's wealthy neighborhoods. Human Resources usually encourages newly arrived teachers to spend a tenure at one of these schools to prepare themselves for the much more difficult conditions found in Poseidon's other settlements. As a result, Haven's schools enjoy a constant influx of fresh, enthusiastic, young instructors. Many of the city's residents receive excellent medical care from the Haven Medical Center, a modern, well-staffed facility with direct sponsorship from the HCHR. There are a number of smaller hospitals and clinics in the city as well.

Haven receives reliable electrical power from two massive fusion reactors, located at a power generation complex on Shuttle Point. Many residences and businesses receive additional, inexpensive power from private wind and solar facilities. The city obtains its fresh water from an advanced, fusion-powered desalinization plant purchased from the GEO through a municipal bond issue, five years ago.

Map Key

1. Colonial Headquarters

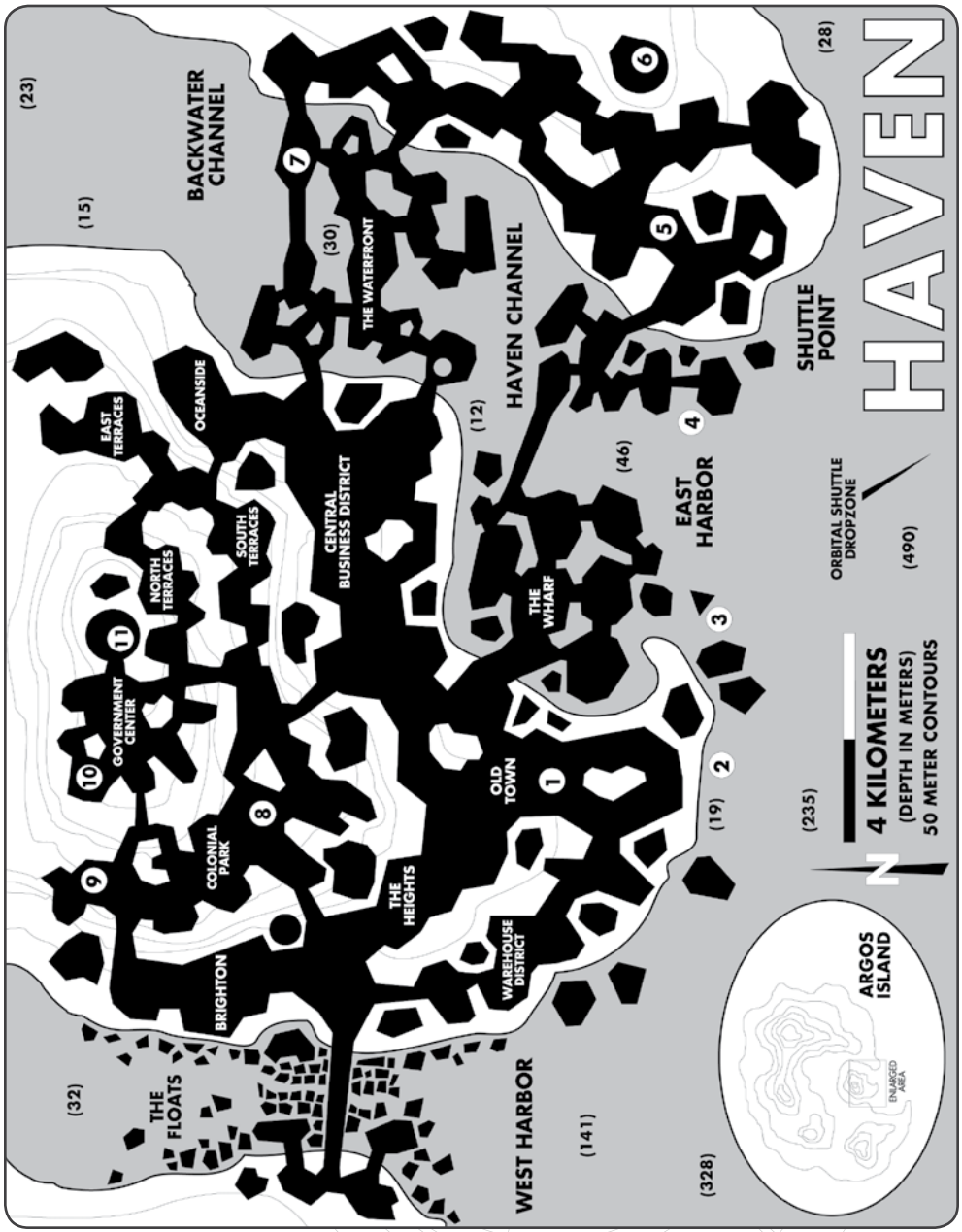
Located in the heart of Old Town, this is the original modular structure stripped from the *Cousteau* that served as the administrative center of the Athena Project. Today, it serves as the residence and offices of Janson Blair, Haven's mayor.

2. Church of Whalesong Theogony

This is the only official house of worship on Poseidon for the cetaceans' most popular religion. The incredible structure is fashioned entirely of engineered coral and consists of a central, hemispherical structure supported by a cylindrical base set into the ocean floor. Underwater, the building looks like nothing so much as a giant mushroom, with the waterline about one-third of the way up on the hemispherical section. Above the surface, it looks like a domed coral reef. The hemispherical section is one large chamber and has no floor, so it can be accessed directly from below. The sanctuary serves as both a place of worship and a meeting place for the Church's leadership.

3. Haven Coliseum

This state-of-the-art sports complex rests on huge floats and is firmly anchored to the seafloor. The stadium has a seating capacity of 35,000 for most events and is equipped with a retractable floor that can be irised open for hydroshot matches. Haven Coliseum also houses restaurants, a luxury hotel, and virtual arcades that make it a popular stop even for tourists not fond of athletic games.



4. Haven Shipyards

Jutting out over West Harbor is the industrial maze of the Haven Shipyards. The shipyards boast extensive facilities for maintaining ocean-going vessels, including the tugboats responsible for bringing orbital shuttles into the spaceport. The shipyard docks are equipped with robotic cranes and other heavy equipment used in loading and unloading cargo. This cargo is usually transported from the shipyards by transport hovercraft to the Warehouse District or other distribution centers around the city.

5. Nathaniel Lesear Memorial Spaceport

Named for the famous *Argos 12* astronaut, Haven's Nathaniel Lesear Memorial spaceport includes extensive facilities for the repair and maintenance of orbital shuttles and the receiving and processing of passengers, baggage, and cargo. The shuttles themselves take off and land on the ocean surface, at a designated area about 10 kilometers from shore known locally as the Dropzone. They are then towed by huge tugboats to docks and receiving terminals at the spaceport. The deafening roar of the ships' fusion drives and the immense clouds of vaporized water they generate as they lift off and touch down on the ocean surface are either an unbearable distraction or a small part of the city's charm, depending upon the observer.

6. Power Plant

The two immense fusion reactors located high atop Shuttle Point provide power to all of Haven and the surrounding area. This complex is one of the most well secured in the city and is carefully guarded by the Patrol and a small Peacekeeper detachment.

7. The Summit

This exclusive mall includes hotels, restaurants, virtual arcades, and other entertainment establishments. The Summit is suspended about 100 meters in the air between two massive support girders that run at a 45° angle from either side of Haven Channel. Inclinators, a cross between elevators and escalators, move pedestrians along the support girders from the surface to the Summit. Much of the Summit is enclosed, but many of the establishments have decks and terraces that afford breathtaking views of the city and harbor.

8. Haven Zoological Garden

The most recent addition to Colonial Park is the Haven Zoological Garden, a state-of-the-art, GEO-sponsored facility with thousands of specimens of Poseidon's unique flora and fauna. The zoo frequently contracts with freelancers to acquire new specimens, though all such freelancers are expected to follow GEO statutes protecting Poseidon's indigenous flora and fauna.

9. The Haven Museum of Colonial History

The Haven Museum is one of the major attractions of Colonial Park. The museum's exhibits cover all aspects of Poseidon's colonial past, including virtual tours of the *Cousteau* and Old Town, circa 2090, the personal journals of several original colonists, various native artifacts, and educational exhibits on the aborigines, complete with life-size animatrons.

10. Haven Institute of Science & Technology

HIST is the only formal institution of higher learning on Poseidon. As such, it is the most active center of local scientific work outside of the secretive Incorporate research labs. The Institute's focus, unsurprisingly, is on biology, planetology, and marine engineering.

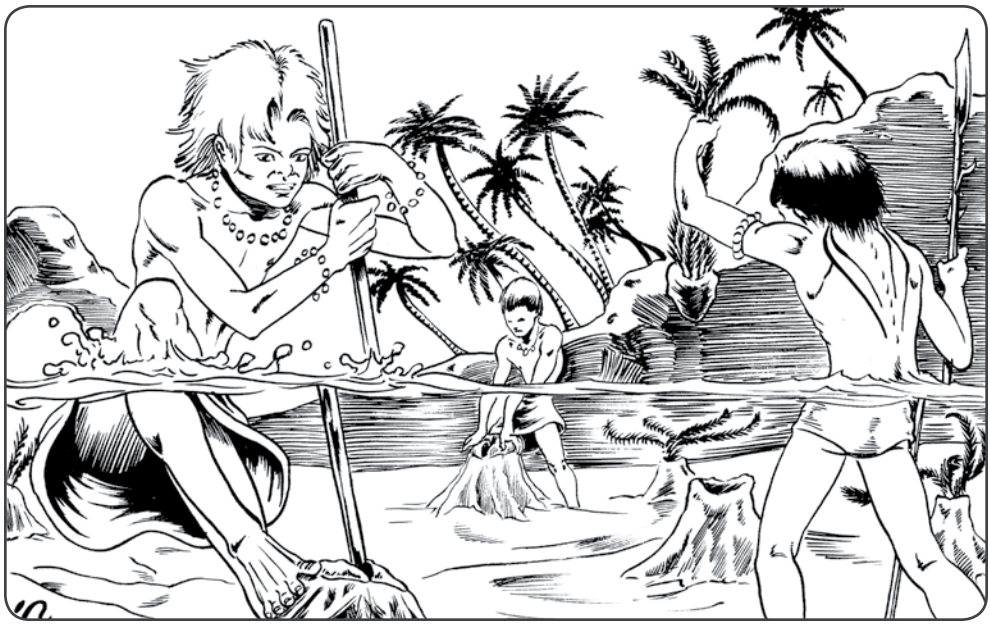
11. Planetfall Monument

This massive, granite monolith was erected on Watertop in 2095. Its weathered face bears the engraved names of all the colonists who lived and died in Haven between Planetfall and Recontact. Watertop is the highest point on the island, and the shaded benches and lawns surrounding the monument offer peace, quiet, and magnificent views. The spot is a favorite hangout of HIST students, but it is often crowded with tourists during peak hours.

SECOND TRY

We knew when we came here things wouldn't be easy. Our expectations were fulfilled—it's been damn hard. All of us lost people we loved in that awful storm, people who might still be alive if we'd never left Haven. I ask all of you, though, would they ever have stayed in Haven? Never. They came here to build a new world, to lay the foundation for humanity's future. We could easily return to Haven now. No one would laugh or ridicule us; we gave it a good try. But I say we stay, we build, we persevere. All of us have reasons for being a part of this project, and I for one, did not have my reasons washed away by that storm. I am staying here, as I hope all of you will. Our dreams are worth a second try.

—Hiram Barker, 2092



Location and Local Terrain

Second Try is located in the Pacifica Archipelago, at 14°16′31″ south latitude, 5°14′22″ west longitude. The colony started on the eastern coast of Westward Island, a large landmass in the Haven Cluster.

Most of Second Try lies nestled in Barker's Gorge, a small canyon that runs northwest to southeast, reaching an almost two-kilometer width at its terminus near the shore.

History

Prior to Planetfall, an extensive survey conducted from the *UNSS Cousteau* recommended several locations for colonization after the original Haven colony was safely established. Among these was the site of Homestead, one kilometer seaward of present-day Second Try. Homestead was Haven's first satellite colony, established by 97 volunteers as a fishing community in 2091. In keeping with the pioneer spirit, the use of modular habitats from the *Cousteau* was declined in favor of building the community from the ground up.

This proved to be a grave error when, in 2092, a cyclonic storm destroyed the modest settlement, killing 33 colonists. Led by Hiram Barker, the surviving colonists retreated to the relative shelter of the nearby canyon, now called Barker's Gorge. They elected to begin their settlement anew and called their effort Second Try. The settlement grew steadily in the following years, as new construction sprang up around the natural shelter provided by the Gorge's caverns.

In the latter half of the 2090s, excavation began on the beach between Second Try and the deep-water harbor, creating troughs and pools for the farming of kelp, fish, and other marine products vital to the colony. Open-air pens for pot-bellied pigs littered the narrow canyon floor. The dark and humid natural caverns within Barker's Gorge provided the perfect conditions for fungus farming, and several species of indigenous mushroom-analogs became a dietary staple for the fledgling settlement.

While the next 50 years were not easy for the colony, they were nothing compared to the early days. Second Try continued to grow steadily and even flourished. The colony had long been agriculturally self-sufficient, though it was far behind Haven and Kingston in terms of both infrastructure and surviving industry. As a result, the early effects of Recontact on the settlement were limited to an influx of scientific teams studying the aborigines and anthropologists interested in observing the native-born descendants of the original colonists.

Second Try was initially less affected by the discovery of Long John than were other settlements in the archipelago. The long years of the Abandonment had cultivated a lifestyle based on cooperation and

simple survival, and the town's natives had little interest in participating in the new gold rush. This cultural isolation, inevitably, did not last.

Physical Layout

Second Try evolved from a tiny settlement of under a hundred to a small farming town of more than 3,000 over the course of 95 years. In the last 10 years the colony has seen its population spike upwards to almost 30,000. Most of the town that existed before the discovery of Long John has been razed and rebuilt with modern structures utilizing the natural terraces formed by the walls of Barker's Gorge. This is where most residential dwellings are located. Following a style established by Lunar colonists, many of the wealthier citizens of Second Try have built their homes into natural and artificial caves along the canyon walls. Many homes also perch on the level ground at the canyon's rim. To combat the constant winds, these are usually long, low buildings, protected along earthen windbreaks.

Because of space limitations, a network of platforms and bridges has slowly evolved, interconnecting the terraces and the canyon walls. Some levels of the network reach as high as 300 meters above the canyon floor. Most of Second Try's local industry, as well as the majority of the common areas such as shopping malls and entertainment strips, sprawls along these platforms. A series of industrial elevators carry pedestrians, cargo, and vehicles such as scooters and electric carts to and from the canyon floor.

There is little in the way of housing or industry in the narrow canyon bottom, as it is predominately used for farming. Many of the natives of Second Try, now unable to afford living space on the terraces they once claimed freely, reside on the canyon floor, either in small, ramshackle dwellings or smaller apartments in one of the large tenement buildings. When the population of Haven exploded, many of its natives relocated to Second Try, which is regarded as one of the most pro-native colonial settlements on Poseidon. These recent immigrants now live side-by-side with the descendants of the original inhabitants.

The Districts of Second Try

Barkerton

Along the lowest two terraces on the southwest wall of Barker's Gorge, and on the canyon floor nearby, is a large and well-organized native community of over 1,500 living in modest thatched dwellings and natural caves. The populace calls this area Barkerton, for its residents' apparent devotion to Hiram Barker, one of the settlement's early leaders. The lack of modern building materials is obvious even to an untrained observer, but the natives are content with their simple lifestyle. Most of the residents fish or farm, walking each morning to their assigned pools or plots on the canyon floor. Due to the natives' volunteerism and community spirit, the area is remarkably clean and safe.

Water's Edge

The wetlands running from the lip of Barker's Gorge to the shoreline is called Water's Edge. Only the brave or foolhardy reside here, as even the smallest storms wreak havoc on the exposed and unprotected shore. Homestead once stood here, though the shoreline has receded greatly in the intervening years. Today it is a maze of kelp fields and algae pens tended by the native population. A channel knifes through the area, offering harbor access to the many watercraft that make daily trips to the ocean on fishing, pleasure, scientific, or prospecting expeditions. During the fiercest storms, tidal surges immerse Water's Edge completely, inflicting extensive damage on the local aquaculture.

Southwall

The southwestern wall of Barker's Gorge is home to many of the older residents of Second Try, and it was the first area utilized to house the influx of people following the discovery of Long John. Many of Southwall's residents are middle-class professionals who provide services to the Incorporate or wealthy.

Doctors, lawyers, accountants, restaurant owners, and the like have built their homes on these terraces using the most modern techniques and materials. There are also a few low-rise apartment buildings, complete with doormen.

Northwall

The northeastern wall of Barker's Gorge houses only the elite, and the height of the terrace on which one lives is a direct indication of one's wealth. The base of the canyon walls is so sheer that the lowest terrace on Northwall is almost 80 meters from the ground. The GEO Patrol has a strong presence on these terraces, which have gates at key locations for access control. Many of the homes on Northwall are built

MOST WANTED

Milo Franklin

Nowhere on Poseidon do natives and newcomers coexist more in harmony than in Second Try, and most of the credit goes to Milo Franklin. Franklin was the town manager from 2189 to early 2199, at which point he resigned. His term included the difficult growth period after the discovery of Long John, a time when other settlements fell prey to open bigotry.

Milo Franklin is a fourth-generation native of Poseidon. His forebears were among the founders of Homestead, the original site of Second Try. Franklin was born in 2146, so his childhood passed before Recontact. He spent his youth fishing and working communal algae pens, and was primarily educated through the informal tutelage of his grandmother. While other natives were bitter about the Abandonment, Milo's grandmother was quietly insistent that something on Earth had gone terribly wrong, and the mother world was in more trouble than the colonists on Poseidon. Young Milo wanted to help, and often built model spacecraft that he would pretend to pilot to Earth, rescuing the world from the troubles he imagined had befallen it. When Recontact occurred, Milo was impressed with the efforts made by Earth to provide the colony world with supplies. He was in his 20s, strong and tall, and volunteered to work with and guide a GEO research team that would travel all over Westward Island. After three years with the team, Franklin had not only learned a great deal about his home island, but also about Earth.

In 2189, Franklin ran for Town Manager of Second Try. His motto was, "You can't un-ring the bell," in reference to the discovery of Long John. He won the election, and held the office for 10 years. During his tenure, Franklin maintained peace and harmony in Second Try. His policies generally accomplished what the GEO would have done, but without the connotations of GEO influence or control. Franklin often worked with native leaders to ease tensions with the newcomers, and was moderate and effective enough to be reelected well after the newcomer population of Second Try had dwarfed that of the natives. Improvements to Second Try while Franklin held office include the training of local volunteers as ad hoc patrol officers, before the GEO established a formal patrol presence in the town; the volunteer programs to help participants ease their tax burdens; the construction of Lake Ibrium; the provision of electrical power to most of Second Try's residents; and the formation of an educational authority for the administration and financing of the town's schools.

Though he resigned as town manager in early 2199, Franklin remains the most powerful individual in Second Try, and his endorsement will surely determine his successor. He is still politically active, and attends conferences and summit meetings between native leaders and colonial officials in Haven. There has even been some conjecture that Franklin resigned to join the GEO's Office of Colonial Affairs, and recruiting a prominent native would certainly be a major coup for the GEO. In a recent *Colonial Times/Net* interview Franklin was quoted as saying, "… [the teams] in this game for control of Poseidon do not realize there will be no winner, only losers. For cooler heads to prevail, both teams need some understanding of the other's position. Perhaps it's time for a trade. I'm sure a player will be named later."

Species: Genetic Redesign—Aquaform (Squid)
Goal: Altruism
Motivation: Duty
Attitude: Confident
Role: Administrator (Professional)
Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1
Derived Attributes: Endurance 2, Reflexes 0, Toughness 0
Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Survival
Primary Skills: Agriculture 2, Animal Husbandry 2, Aquaculture 3, Aquatics 6, Bureaucracy 4, Culture (Cetacean) 2, Culture (Colonial) 5, Culture (GEO) 4, Culture (Native) 7, Law 5, Leadership 4, Logistics 3, Persuasion 6, Politics 5

ACCESS DENIED

CONTRABAND

A narrow unmarked tunnel behind Northwall leads to one of the largest pharium production facilities on Poseidon. The maritime service fleet of AquaTech is being used to ship the pharium to Nomad, where the drug is sold to New Rastafarian Movement contact Isaac Mosely. Vendor, the dolphin owner of AquaTech, is a member of Zero Nation and the revenues from his drug-smuggling operation are being funneled to the local cell.

GEO Patrol officer Molina Valentino is in deep cover as AquaTech's accountant and works in the company's waterfront office on Lake Ibrium. Valentino has almost enough information to arrest Vendor on trafficking charges, but she does not yet know to whom the drugs are being sold or where the profits are going.

The Zero Nation cell in Second Try has more than 40 members, making it one of the largest on Poseidon. The cell's core membership is native, but many of the recent recruits are newcomers. The organization has been active in Second Try since 2189 and operates primarily out of Rose's, a cantina in the Shadow district.

FAMILY TIES

The Gorchoff Family has had interests in several of the businesses in Second Try for many years. Rurik Markhov is the local boss, and he established the Family's control primarily through loan-sharking. Many of the small shops and boats on the docks of Lake Ibrium would not exist without Markhov, as he provided the capital to get them up and running. The same is true for several native bazaar stalls on the floor of Barker's Gorge. Unfortunately, some of these businesses proved unsuccessful and the owners are having difficulty paying Markhov back.

Markhov has begun implementing some tough means to recoup his investments, including intimidation, beatings, and arson. While these tactics have definitely inspired fear and desperation among Markhov's debtors, many of them feel he has gone too far. They have pooled their limited resources in an attempt to hire someone to scare Markhov out of town. A few of the debtors are members of the local Zero Nation cell, and while they will seek the aid of the cell, it is unlikely that they will be willing to openly confront the Gorchoff Family.

THE STINGER

A serial killer is on the loose in Second Try. Labeled "the Stinger" by local media, the killer has used the highly toxic poison of the Poseidon scorpion to kill seven Hanover, GenDiver, and Biogene executives. He injects the deadly poison directly into his victim's bloodstream and then pins a note to the body. The notes invariably consist of maniacal tirades against Incorporate activity on Poseidon.

The Stinger is actually a native living in the Barkerton district. Daniel Fabray is a member of Zero Nation and uses the organization's resources to select his victims. Other members of his cell are beginning to suspect that someone in Zero Nation is involved in the killings and are trying to find out who it is.

GEO Patrol officers in Second Try want to catch the Stinger as quickly as possible, before it starts to appear as if the GEO is less-than-properly concerned about crimes against Incorporate citizens. The Incorporate want to stop the Stinger to protect their employees, many of whom have requested transfer from Second Try. Individual natives applaud the Stinger's activities, but as a whole, they would like the killing stopped, as it increases anti-native sentiment in the settlement. Even the criminal organizations would like to see the killer caught, fearing his actions will lead to an increased GEO presence in Second Try.

deep into the rock itself, utilizing the natural caves that dot the canyon walls. In newer neighborhoods, tunnels bored to form avenues deep in the cliffs allow access only by homeowners and their guests.

Topside

Securing a residence on Northwall often means either buying someone out at an exorbitant price or being the high bidder at an estate auction. Many mid-to-upper-class immigrants to Second Try have found it much easier to build above Barker's Gorge than in it. The new district of Topside is the first such development. The homes built on Topside must be weatherproofed, especially from the wind. Typically, the rocky earth is dozed about three meters deep in a northeasterly direction to form a windward ramp, then surfaced with biocrete. The home is then constructed in the excavated portion of the plot, with the subsurface section forming a basement.

The Shelf

This area is the city's financial district and supports numerous Incorporate extension offices, recruitment centers, distribution services, and commercial houses. Almost every major company is represented here, and each maintains staff and management personnel in secure, embassy-like facilities. Here they both work and live under the protective watch of their own security forces. The Shelf is dotted with carefully maintained parks and supports a small number of shops, restaurants, clubs, and entertainment centers that cater almost exclusively to Incorporate employees and citizens.

The Bridges

The Bridges are an incredible architectural achievement—a web of suspended platforms and decks interconnecting the colony's districts. The heart of Second Try's business and industry occupies these "city blocks" suspended in the sky. Each bridge and platform is a district in itself, often designed with a single purpose in mind. Many of the bridges have small residential areas, though most serve a particular function for the community.

One of the longer bridges, Electric Avenue, is a tourist attraction devoted to restaurants, theaters, and nightclubs. On Settler's Plate, a low-slung platform, there are over 50 different shops. Seedy nightclubs and pharium dens thrive along Cabo's Way. The Homestead Platform is the recently completed seat of government, housing administrative services, GEO offices, and the Town Manager's office. From Carson Bridge, almost 300 meters over the canyon floor, tourists and thrill-seekers rent hang-gliders and descend in spirals to Water's Edge. There are also a few platforms devoted to light industry, warehouses, medical clinics, and other commercial facilities. Travel along the bridges and platforms is almost exclusively pedestrian, though private vehicles and scooters can gradually push their way through.

The Shadow

The canyon floor at the far northwestern end of Barker's Gorge is known as the Shadow because it rests in almost perpetual darkness. The bridges and platforms above block even midday sunlight, and the walls of the canyon prevent the morning and evening rays from penetrating its depths. The only notable legal industries in this area are the public works, such as the fusion reactor and desalination plant. As the core of Second Try's extensive underground, illegal business flourishes here. There are many cantinas where shady deals are closed over scarred tables and cheap liquor. Drugs are pervasive, and their trade contributes to many of the violent acts committed in the colony. The GEO has found it most effective to contain illegal activities to this area, and will usually enter the district only if following up on a crime committed elsewhere in the town.

The Docks

Between the Shadow and Water's Edge is Lake Ibrium, a manmade saltwater lagoon at the head of a channel that leads through the wetlands to the ocean. At the northwest point of Ibrium is a series of floating docks and small marinas that house most of Second Try's watercraft. Perhaps 200 people claim permanent residence here, either living on their boats or working for one of the marinas. The Docks are home to the freshest seafood in town, and many small but excellent restaurants can be found in the neighborhood. Many natives live on the Docks, taking small sailboats out to sea each day. Cetaceans, many retired from military duty, also frequent this area and work alongside the human aquaforms.

Demographics

Second Try is one of the few major colonies on Poseidon whose native population has continued to grow and prosper amid the influx of newcomers. Ironi-

cally, this phenomenon could be directly related to the scarcity of Long John in the region. The town is well planned, and economic segregation seems to have eased the daily tensions between native and newcomer. While many natives of Second Try resent newcomers as a whole, individually they accept them into the community, showing real appreciation for the services they provide. Most of the descendants of the colony's founders are still in Second Try, living in a native community totaling over 3,000—more than 10% of the total population. Most of the natives work in the fishing and farming industries, and live on the floor of Barker's Gorge.

MOST WANTED

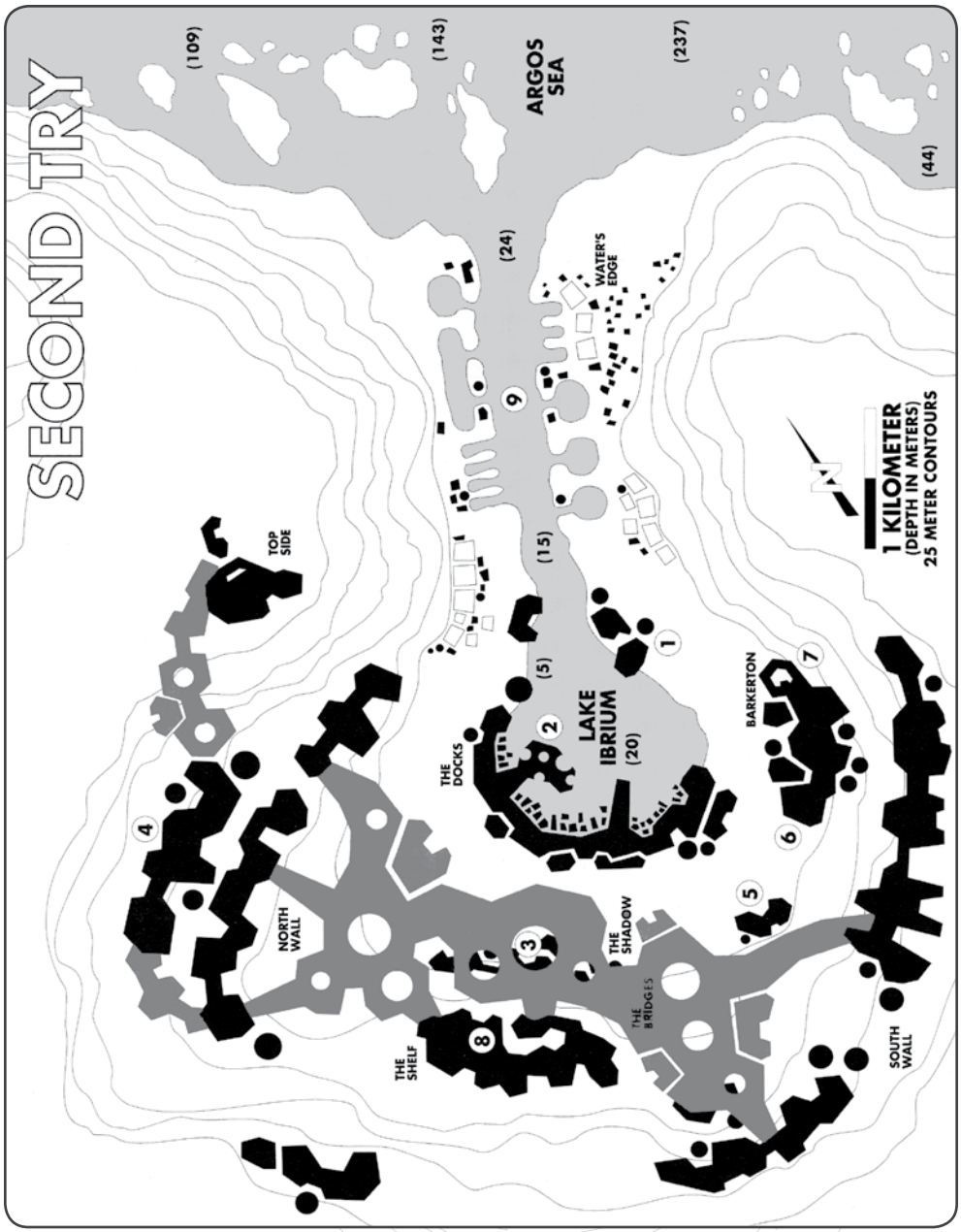
VENDOR

Vendor is the dolphin owner of AquaTech, a watercraft maintenance company headquartered in Second Try. AquaTech is one of the largest cetacean-owned private companies on Poseidon, with outlets in Haven, Newport, and many other Haven Cluster settlements. The company has plans to expand into other regions as well, starting with Kingston in 2200. AquaTech's services include watercraft repair, maintenance, and retail machine parts. AquaTech has retail and distribution contracts with Hanover, but its strongest assets are the aquaform and cetacean employees who perform in-water maintenance. While other repair services often require travel to dry docks, AquaTech can do most jobs on site.

Vendor is a fifth-generation native of Poseidon. His family was primarily involved in aquafarming, but Vendor sought an escape from that lifestyle in Second Try. In 2191, when he arrived in what was then a largely native town, he immediately began looking for work. Initially, he feared that he had not improved his lot at all because the only jobs he found were aquacultural. Within a year, however, Vendor had apprenticed to the owner of a small-time marine maintenance outfit. In 2194, when the owner was lost at sea, Vendor used his savings to buy out the company. Since then, AquaTech has grown quickly under Vendor's direction.

Vendor's interest is not limited to business, however. He attends the Church of Whalesong Theogony in Haven as often as possible, and has shown a keen interest in native affairs. Vendor believes that the best way to increase native power is to work within recognized societal boundaries, gaining strength through capital—because money is all that the newcomers respect. For this reason, native activists sometimes shun Vendor, and a few even openly despise him. They believe Vendor should attack the system rather than profit from it, and label him an "enemy of the people." A few activists, though, do not speak too harshly of Vendor's ways. They understand that he must maintain his public persona and image as an entrepreneur within the colonial community. The information and money he is privy to—because of his apparently soft position on native rights—could be invaluable to the local native struggle against the increasing political power wielded by the Incorporate states and the GEO. Vendor commonly fraternizes with alleged members of Zero Nation, and some suspect that he is diverting profits from AquaTech to support the ecoterrorists' cause.

Species: Bottlenose Dolphin
Goal: Freedom
Motivation: Duty
Attitude: Optimistic
Role: Trader (Professional)
Primary Attributes: Physique 2, Coordination –1, Cognition 1, Psyche 1
Derived Attributes: Endurance 4, Reflexes 0, Toughness 1
Aptitudes: (Superior) Tech; (Strong) Administration, Communication, Culture
Primary Skills: Aquatics 10, Computers 5, Culture (Cetacean) 5, Culture (Colonial) 2, Culture (Native) 5, Economics 5, Electronics 5, Language (Interspec) 8, Leadership 3, Mechanics 5, Persuasion 6, Remote Operations 5



Government

Second Try is one of the most loosely-governed of the major settlements on Poseidon, though the carefree years are coming to an end. The GEO has offices on Homestead Platform, but there is no permanently assigned Marshal. Representatives of the Office of Colonial Affairs make occasional appearances, but for the most part, Second Try is self-governed. There is a Town Manager, elected at large, who serves a two-year term, but the post is currently vacant due to Milo Franklin's early retirement. The City Council sits in session one week of

each month, with one elected member per 2,000 persons in each voting district.

Economic Base

Second Try has remained largely dependent on its fishing and farming industries. While successful, these markets cannot provide for the incredible population boom the town has seen in recent years. A pattern has developed of late in which settlers arrive, spend their available income to start a business, and prosper from the next settler down the pipe. Economists warn that at some point the continual influx of capital will abate, but for now the citizens of Second Try are quite well off—many natives excepted. Several Incorporate states maintain offices in Second Try, with Hanover Industries and GenDiver representing the strongest Incorporate presence in the settlement. GenDiver has maintained a local pharmaceutical research lab for almost two years. Hanover recently opened a hypermart and other retail operations in Second Try, and is currently negotiating with the City Council to build a small jumpcraft manufacturing plant.

Infrastructure

Second Try's planners engineered the city well, and by virtue of its system of bridges and platforms, the colony could conceivably grow to a population of over 100,000 before becoming overcrowded. Feeding that many people, though, is another matter entirely, and surveys have begun for expanding the settlement's agricultural and aquacultural resources.

Through volunteer programs, the bridges, platforms, buildings, and canyon floor are well maintained, even in the poorest areas. One such program allows citizens to offset their tax burdens through community service, and most lower- and middle-class residents participate. Most of Second Try's emergency services operate through this program, especially fire and flood protection, and less extensively, medical and police services. While there are some volunteers in the educational field, the Second Try Educational Authority (STEA) provides most schooling. STEA is funded with tax dollars and educational buildings are paid for with municipal bonds. There is also a private school available to those who can afford it.

Second Try receives electric power from a fusion reactor in the Shadow district, and because the access fees can be prohibitive, most denizens of the canyon floor do without. A desalination plant—also located in the Shadow—provides fresh water, though it is an older model and tends to fail on occasion.

Map Key

1. Native Fishing Collectives

On the eastern shores of Lake Ibrium, native fishermen have formed collectives to support themselves. Together, they are able to buy modern equipment and keep up with new competition from large Earth-based companies. The collectives generally share docks and boathouses, and their homes are typically grouped together.

2. AquaTech

This cetacean-owned company is currently the largest private business based in Second Try. AquaTech's focus is primarily on watercraft maintenance and repair, and the company has many slips along its pier to dock the craft in its charge. A large building on the pier houses much of AquaTech's staff and serves walk-up customers who prefer to buy parts and do their own repairs.

3. The Den

Patrol officers have begun calling this particularly nefarious area of the Shadow district the Den. The neighborhood is dominated by vacant buildings where pharium and other contraband are distributed and used. Addicts often remain in these derelict buildings for days or even weeks at a time.

4. Fungal Gardens

Deep in the recesses of Northwall, darkness and moisture combine to create ideal conditions for fungus farming. Thousands of kilograms of genetically engineered, high-nutrient fungal species are produced here annually and shipped all over Poseidon. The engineered fungal crops have proven an excellent mechanism for recycling many forms of residential and industrial organic wastes. It is in part because of this farm that Second Try remains as clean and sanitary as it does. A small section of the farm containing several varieties of fungi has been set aside for public tours, and the exotic colors and shapes have made it quite an attraction.

5. GEO Patrol Headquarters

This facility on the floor of Barker's Gorge is the central station for the local GEO Patrol presence. The building itself is a three-story structure occupied by up to 75 personnel, with an adjacent facility devoted to the Patrol's jumpcraft, hovercraft, and motorcycles.

6. Bazaar

Located on the edge of Barkerton, this open-air market is known as much for its fresh-grilled seafood as for the abundance of stalls selling native crafts. The vendors offer glassware, baskets, and bead work, and often accept barter in lieu of money. Prices are very reasonable, and the atmosphere is friendly though often hectic.

7. Hiram Barker Memorial

This small memorial is best described as a shrine to Hiram Barker, one of the original founders of Second Try. Reminiscent of a miniature Greek temple, the memorial has no walls—only columns support the four-meter-high roof. Carved into the interior portions of the columns are a series of anecdotes, quotes, and accomplishments attributed to Hiram Barker, detailing his leadership in establishing Second Try after the destruction of Homestead.

8. The Plaza

This is Second Try's largest shopping complex, rivaling those in the bigger cities of Kingston and Haven. Enclosed walkways with skylights above are lined with dozens of specialty stores and restaurants, surrounding a great central plaza. The Plaza offers many entertainment options, including virtual arcades, holovids, and even live theater.

9. The Wetlands

This is where much of the food that feeds Second Try is grown and harvested. Aquaculture dominates, with high-output algae farms and fish pens producing healthy stocks year round. There are also a few terrestrial livestock operations and large saltwater rice paddies that supplement the district's agricultural productivity.

LEBENSRAUM

When given an option between survival and death, there is not really any choice to make at all. That is essentially what we are facing. Many of you in this very room consider it erroneous for me to presume that without the Hanover city-state, this company will perish. Others believe that I speak on this matter only in regard to serving my own interests on Poseidon. To speak bluntly, as I must, you are wrong, and if you fail to heed me, you are dead wrong.

In only a few years, the Hanover city-state will revert to German control. The GEO will never again allow us the opportunity to maintain another of its kind on Earth. As others have before us, we must look to the stars. Hanover Industries can only continue to exist on Poseidon, where the GEO's influence is weakened through extension. With a new city-state on the waterworld, we will be the masters of our own destiny again. I would now ask you all to examine these preliminary plans for a holding on Poseidon…

—Excerpt from annual state-of-the-company address, Werner Keinz, 2189

Location and Local Terrain

Lebensraum is located near the equator on the Sable Bay coast of Mandalay Island at 4°59′08″ south latitude, 2°13′54″ east longitude, about 1,500 kilometers from Haven. The Incorporate settlement spreads over steeply sloping, rocky beaches that form a series of natural seawalls. Lebensraum rests in the shadows of the two inactive volcanoes that form Mandalay Island. The abrupt slopes of Mount Tomorrow, south of Lebensraum, rise sharply to over 2,900 meters, while Primus, to the west, climbs more gradually to its peak at almost 3,400 meters above sea level.

History

In anticipation of the Hanover city-state's reversion to German control in 2201, Hanover Industries founded Lebensraum in 2193. Its location was chosen by Werner Keinz, president of Hanover Colonial and ranking executive on Poseidon, after months of boardroom debate. The site offers many natural advantages to the company town: Lebensraum's proximity to the harbor maximizes productivity in shipping and food production; the town rests on a cove that provides a buffer for tidal effects; the steep, rocky beaches serve as a natural series of seawalls that minimize storm surges; and Lebensraum is relatively close to Poseidon's older, more established settlements, such as Haven and Second Try.

Over the last six years, Lebensraum has developed into a leading center of industry, with almost all of Hanover's divisions operating within the town's borders. Local operations include banking, biotechnology, manufacturing, mining, consumer goods, health care, electronics, security, media, fishing, and agriculture. While some of these industries were initially developed only to support Lebensraum, others have been so successful that they exceeded the colony's needs and are now largely export operations. Other industries are not profit-bearing, and exist in Lebensraum only to ensure the colony's self-sufficiency. Executives felt reliance on their Earth holdings could lead to disaster, considering their precarious grasp on the Hanover city-state and the GEO's control of the wormhole.

Lebensraum is an extremely well-planned community and is carefully laid out. The township lies in a horseshoe shape around a cove, with few of its structures more than two kilometers from the waterfront. Hanover's heavy-manufacturing facilities dominate the cityscape, and while most major settlements on Poseidon have taken advantage of the vast unsettled area to spread out, Lebensraum is by design very compact. Buildings throughout the settlement are tightly clustered, and the town seems almost as tall as it is wide.

In 2199, Lebensraum is a hive of activity. Neighborhoods continue to expand both inland and out into the cove. Construction is completed daily on facilities that are occupied as quickly as they are built, with wave after wave of Hanover's citizenry making the trip to Poseidon. The Hanover city-state on Earth is shrinking nearly as rapidly as Lebensraum grows, seemingly in a state of evacuation.

Physical Layout

Approaching Lebensraum by sea brings a visitor between twin promontories that jut out across the mouth of the cove. A series of industrial floating docks anchored to the promontories cover nearly five square kilometers of open water. The location of the docks allows easy access by the huge ships utilized by Hanover, which therefore never have to enter the relatively shallow cove. These docks are equipped with the most advanced robotic cargo systems available, as well as extensive warehouses and processing facilities. A two-way maglev line runs a circuit between the docks and the city proper, and includes a two-kilometer-long bridge between the promon-

ACCESS DENIED

Sticky Business

Three months ago, two natives were jailed for planting a bomb on a maglev car, killing three Hanover employees and injuring thirteen others. Native activists all over Poseidon are demanding the prisoners be turned over to the GEO, claiming that Hanover Industries will not provide a fair trial. In a statement released by Werner Keinz, Hanover stated that they would not tolerate terrorism and that the actions of the natives threatened the sovereignty of Lebensraum. After a token hearing by an HSS magistrate, Hanover intends to transport the natives to the Böse Strand prison colony.

While Poseidon Liberté initially claimed responsibility for the bombing, the natives were actually hired and equipped by agents of MacLeod Enforcement. The agents hoped to sell their services as anti-terrorism specialists to Hanover and believed the bombing might convince the Hanover leadership that these services were necessary. The MacLeod hierarchy never approved the operation and the agents did not anticipate the political ramifications of their actions. They are also concerned that their native henchment are just waiting to be handed over the GEO, at which point they will trade their employer's identities for a reduced sentence. If the prisoners are transferred to Böse Strand, they plan to hire one of the local prison gangs to silence the natives.

Kilroy's Three-for-One

With a reputation as the hottest nightspot in Lebensraum, Kilroy's attracts customers from all over town. The dress code is formal and customers enjoy a dinner theater witha variety of acts each night. The bar's unique furnishings include a missile, whose nose juts out through the biocrete wall. In a back room, casino gambling is available and the rich atmosphere makes the club popular with gamblers. Kilroy's is watched closely by the Hanover Security Services, but officers have found it lucrative to commit a few oversights. Rom Whitaker, Kilroy's owner-operator, is a tough-as-nails opportunist with a soft spot for beautiful women. Whitaker often dines with Captain Franke Hesse, a high-ranking Hanover security officer.

The HSS has good reason to watch Kilroy's closely. It is difficult to gain access to Lebensraum without a work visa. The application process is time-consuming, and applicants face heavy scrutiny and extensive background checks by Hanover officials. Captain Hesse has been giving work visas to Whitaker to cover his gambling markers.

Kilroy's is also home to the Boiko brothers, Anatoly and Maxim, who sing and play piano. The brothers are members of Free Poseidon! and are wanted by the GEO for ecoterrorist activities. While hiding in the Hanover company town, the brothers are attempting to recruit for their organization. Hanover Security has become aware of the brothers' background and is waiting for Free Poseidon! to act against one of their Incorporate rivals, such as GenDiver. The HSS hopes that apprehending the brothers will win them points with another security agency and perhaps gain them an ally against the GEO.

tories. The maglev runs almost continually, hauling load after load of cargo, and carrying workers and visitors between docks.

On Lebensraum's shores to the west, across the cove from the industrial docks, a number of floating piers extend from the beach, providing slips for private watercraft. On the rocky beaches beyond the piers, stilted buildings are home to many of Lebensraum's citizens. The homes are often clustered in small neighborhoods around a few buildings related to a single industry. These buildings, including factories and offices, are often built onto a single large platform supported by huge pillars rising as much as 20 meters from the beaches below. Local taverns and small company stores complement the main industry to give each of these neighborhoods a distinctive personality and small-town feel. The neighborhoods continue inland beyond the waterfront, where the natural seawalls allow homes and factories to rest firmly on level ground.

The wealthier citizens of Lebensraum—primarily high-level executives of Hanover Industries—live on the steep grades of the island that climb away from the cove. Expensive houses stand along paths that snake up the slopes. These small neighborhoods are built in a terraced fashion, and most homes have open-air patios on top, with commanding views of Lebensraum below.

Demographics

Lebensraum has reached a population of over 26,000 in only six years and predictions indicate that by 2201 that number may reach 50,000. Most of Lebensraum's inhabitants are newcomers to Poseidon who have traveled from the Hanover city-state on Earth. The majority of the population works in manufacturing, including assembly, design, management, sales, shipping, and various support positions.

Lebensraum also requires numerous local service industries, and these account for approximately one-quarter of the workforce. Education, medical, emergency, public works, and security personnel are just a few of the necessary roles filled by Hanover employees. The Hanover Security Service tightly controls access to Lebensraum, and temporary work visas or visitors passes are the only legal way for the non-citizens to gain entrance to the town. The HSS has an extensive patrol presence within Lebensraum's borders, and while a criminal element certainly exists in Lebensraum, it is extremely limited.

Government

Executives of Hanover Colonial govern the township of Lebensraum as a colonial holding of Hanover Industries. Daily disputes and decisions fall ultimately on the desk of Werner Keinz, who operates almost as a feudal lord. Though he is rarely involved in routine, day-to-day management, he is the ultimate authority in the company town.

Keinz also represents Lebensraum's political interests, and he meets with representatives from other settlements and the GEO almost weekly. Other Incorporate states do a lot of business with Hanover, as many have begun to rely on products manufactured in Lebensraum. Other settlements also court Hanover in hopes that manufacturing facilities will be constructed in their towns. Hanover's primary interest in these deals is to build economic and political alliances that will protect Lebensraum in the coming years. On Poseidon, everyone wants something from someone else, and Werner Keinz is responsible for making the deals that will dictate Lebensraum's future.

Economic Base

Lebensraum's economic status is obviously sound. The company town's modern, high-output factories produce many of the manufactured goods used planet-wide, and as the colony world continues to increase in population, the demand for Lebensraum's products and services increases as well.

While Hanover is not directly involved in the Long John industry as deeply as some other Incorporate states, it is nevertheless vital to the company town's continued economic growth. A downturn in the flow of xenosilicates would result in a depressed economy and a slowed rate of colonization, both of which would adversely affect Hanover's economic position on the colony world. In addition, competition in manufacturing continues to increase on Poseidon, and some executives believe that more resources must be committed to R&D so that Hanover can stay at the front of the pack.

Infrastructure

Lebensraum's physical infrastructure would serve as a sound model for any modern city. Existing infrastructure is well maintained, and roadways and foundations are already in place for future expansion. Two fusion reactors provide enough energy for over half a million people. Low-speed maglev lines criss-cross the town, and tracks have already been laid in undeveloped areas. Factories and refineries with high pollution levels are built on platforms in the cove, where east-to-west winds and consistent currents wash away discharge. An efficient, oversize desalination plant provides enough fresh water to support twice the population.

Lebensraum's social infrastructure is somewhat less solid. Assignments doled out by the Incorporate state are not always exactly the roles that its citizenry would prefer. Second-, third-, and fourth-generation citizens have become restless, though they were trained from childhood to fill certain company needs regardless of personal interest. Hanover also has a history of paying according to productivity rather than skill, and workers in service positions find themselves handcuffed by the quotas they must fill to gain contractual incentives.

NOMAD

I 'member, years ago, when I first washed up'n these floats, seein' a hand-painted sign on one o' the docks, said "If you don't know where you are, you shouldn't be here!" Nomad ain't so much dangerous as it is mean. Life's hard here and folks ain' got none ta spare. With so many o' the harder sorts work'n the canals and runnin the action it jus' ain' safe to trust strangers, an it takes a lot o' water ta make a friend.

'Sides, from day ta day, thins change roun' here always. A piece o' float sinks or burns, the rot gets inta a buildn', or somthin' harsher happ'ns and a float jus' disappears. The people ain' no more regular neither. Drifters, smugglers, an' the black market. Many kill ya' jus' as look at ya an if ya got somthin' they want you best give it to 'em or be ready ta fall.

—Anonymous floater

Location and Local Terrain

Nomad is near the equator at 03°19'18" south latitude, 07°08'23" west longitude, within a small cluster of islands well inside the protected waters of the Pacifica Archipelago. The cluster is characterized by countless tiny forested islets. The surrounding waters are shallow, warm, and clear. Combined with the topographical variety and stable climate, this makes the area one of the ecologically richest on the planet.

History

Nomad is unique among Poseidon's settlements because of its odd history. Originally established by natives soon after Poseidon's isolation from Earth, the settlement actually began as a nomadic collection of rafts, stilted huts, and barges. This floating village continually migrated around the regional island clusters to follow seasonal changes in local fisheries. In time, as the settlement grew, semi-permanent hamlets were established on some of the larger islands.

After Recontact, things changed quickly. The Pacifica Archipelago became a strategic region for many reasons. The islands are surrounded by some of the largest Long John deposits yet found, and their sheltered waters made them ideal for harbors and therefore new colony efforts. Subsequently, and mostly by default, Nomad found itself a boomtown as regional colonies were established and the Incor-

porate built nearby mines and installations. However, it didn't take long for these newer settlements to establish more efficient trade patterns and develop local resources. As quickly as Nomad's boom economy had grown, it fell apart, leaving the settlement an amalgamation of native and modern structures, far too large and populous to continue its nomadic existence.

Its value as a fishing community (and therefore its ability to support itself) ruined, those residents who did not abandon the floats were forced to turn to alternative means of survival. Due to its isolated location, Nomad almost inevitably became a regional haven for smugglers and a primary distribution center for black marketeers. In the past decade the economy of Nomad has grown to depend on the settlement's status as a sort of urban combat zone where anything goes. Today, bands of smugglers, pirates, corporate operators, and other criminals rely on the anonymity and safety in numbers provided by Nomad's history and isolation.

Physical Layout

Nomad is physically unique, owing to its odd history, and is the only permanent, floating native settlement. It is a collection of floats, rafts, barges, docks, and platforms, interconnected by bridges, catwalks, rope swings, and gangways. There is little order to the structural chaos, and unless you know where you are going, it is impossible to find any place or thing.

Like many of Poseidon's modern floating settlements, the outer edge is dedicated exclusively to dock space, and undergoes the most frequent change and growth. Inward from the ragged edges, the squalor continues to the center and the oldest parts of the town. The floats and buildings are a seemingly random collection of native and modern materials, and everything appears to be recycled from something else.

The lack of planning in the growth of the town has created a multilevel warren, with no regard to urban infrastructure. Makeshift cisterns collect rainwater, sewage runs into the canals, pipes run this way and that, cook fires cloud the air, and the smell of sweat and dead fish permeates everything. Without constant attention to the ongoing structural changes, one can easily become lost on paths known well only days before. In some places, Nomad has overgrown the surrounding channels and bays, and has begun to invade the local islands themselves. No longer a mobile settlement, extensions of the floating portions of the town have been erected on many of the surrounding islets. As a result, the town has taken on a broken and fractured appearance, and from the air now looks like the wave-scattered wreckage of some massive oceangoing ship. These isolated islets serve Nomad's economic base well, however, as privacy is valuable. Many of the more powerful—and therefore wealthy—of Nomad's denizens have taken advantage of these islets, establishing fortified compounds and certain dubious business interests on their shores.

Demographics

The residents and their motivations are as varied as the structure of the town. There is still a large number of natives living on Nomad, though this number varies widely as harvesting seasons come and go and natives leave to follow the schools. The native population is between 3,000 and 5,000 people, depending on the time of year.

There are some semi-legitimate business interests on Nomad, as well as a few Incorporate ventures, religious groups, and honest but down-and-out exminers and such. There are even several native resistance cells that operate out of the settlement. These people total about 2,000 individuals.

Over the years during and since its economic boom, Nomad has continuously attracted drifters, oddballs, and opportunists. Not necessarily criminals, they are those forced to live on the edge, stealing if necessary, but usually surviving in some marginal way on odd jobs, luck, and wit. Such squatters and the like account for about 1,500 people living on Nomad.

The most transient elements of the population are the traders, smugglers, pirates, and underworld survivors that frequent Nomad. Coming and going continuously, these types are secretive by nature and seldom make themselves obvious. Therefore, accounting for such dubious sorts is difficult, but their numbers probably hover around a thousand.

Government

Unlike other settlements on Poseidon, Nomad has no official government of any kind. The GEO does not maintain an official local presence, and no one takes responsibility for the settlement's decayed infrastructure. There is no law enforcement, no Emergency Response Teams, and no medical facilities beyond

an overburdened charity clinic and a few questionable back-alley medicos.

If anyone can be said to govern Nomad, it would be the local heads of various syndicates and criminal organizations. These groups wage a silent but constant war for advantage on the walkways and canals of Nomad. Always at each other's throats, they are also dependent on each other to help maintain the delicate status quo against the more powerful GEO and Incorporate interests. These warring factions have divided Nomad into territories with fragile borders—districts guarded by hired thugs, local gangs, and hungry urchins.

Economic Base

Simply put, Nomad survives on what it can smuggle, steal, extort, salvage, or trade. The town is a clearinghouse for dubious and illegal goods and services of every kind. If it cannot be found in Nomad, then it cannot be found on Poseidon.

Infrastructure

The infrastructure of Nomad is hopelessly inadequate and decayed beyond use. The town long ago outgrew any technological support it may have had, and most of the town survives without electrical power or public fresh water sources. Cisterns line the rooftops and are closely guarded.

Power can be purchased, but only at outrageous rates from those with private generators and solar arrays. Recharge rates for storage batteries and fuel cells are prohibitive, and then only when charge stations can even be found. Technical parts and services are a racket in themselves, and public communications networks are nonexistent. However, on Nomad anything and everything can be bought. The question is simply, how high is the price?

Depth Perception

One of the most common confusions for newcomers is that Poseidon is a three-dimensional landscape, where there is often as much going on below the surface of the water as above. Nowhere is this as obvious, and confusing, as on (and under) the floats of Nomad.

The rafts that keep Nomad afloat are a hodgepodge collection of plastic barges, native fiber floats, ceramic pontoons, fuel tanks, shipping pods, construction foam, or any other odd material that might provide buoyancy. These floats are bolted, tied,

ACCESS DENIED

The GEO Syndicate

Secrets are valuable in Nomad and everybody has them. The ruling crime syndicates are forever secretive, but some have reason to be more so than others. Though the GEO does not have an official presence in Nomad, it does keep an important clandestine one. Too many deals are made, too many crimes are committed, and too many black market goods pass through the hands of local interests for the GEO to completely ignore this unique settlement. In the early years, a cunning Magistrate planted a small team of covert operatives into the developing syndicates of Nomad. In the past decade, these operatives have carved out their own territory in the local power struggles and have become a rather formidable syndicate themselves in the process.

Mr. Reason, as the team leader is known, has infiltrated many of the networks within the darker side of life on Poseidon and has built an effective criminal organization as a result. The team's primary objective is to provide the Magistrates with intelligence on smuggling, ecoterrorism, piracy, and any other criminal activities on Poseidon. Their secondary objective is to complicate, confuse, delay, and impede such activities in any ways they are able. With the continual competition between Nomad's many syndicates, there is constant opportunity to interfere with one or the another's plans. Cloaking their activities as criminal competition, the team has been quite effective in mitigating the crimes of the other syndicates. The team is in a very precarious situation and only one Magistrate is aware of the operation. Not only is the team alone against the other syndicates, they are also subject to the investigations and operations of the rest of the GEO Justice Commission. Life for these deep cover operatives is never boring.

ACCESS DENIED

The Blue Water Circle

The BWC is a corps of native and newcomer extremists dedicated to the protection of Poseidon's global ecosystem and to the elimination of all exploitation of her natural resources. This small circle of ecoterrorists is intelligent and dedicated. They are also ruthless, and are responsible for many of the most violent acts of sabotage and murder that have plagued the Incorporate in recent years. They have several bases of operation planetwide, and for security reasons, the cell members are rarely found together. The cell maintains a safehouse in Nomad to facilitate the acquisition of supplies, ordnance, and information. Each core member maintains several peripheral cells as security screens, regional operatives, and expendable agents. Thought most members would die for their cause, they are not stupid. They prefer to let others do the dirty work, truly believing the adage that the good of the many outweighs the good of the few.

Poseidon Liberté

This supposed ecoterrorism organization is extremely vocal and highly militant. Liberté operates primarily out of Nomad, advocating violent destruction of Incorporate holdings. They have claimed responsibility for numerous bombings and acts of destructive sabotage planetwide. However, this group is not a cell of zealots at all. They are a well-trained mercenary unit in the employ of an unknown Incorporate state and their activities are meant to improve their employer's competitive edge. The group supplies instructions and target information comes directly from one of the major Incorporate states.

A recent Justice Commission investigation into the rising problem of ecoterrorism on Poseidon is what first clued in the Magistrates to the possible nature of the Liberté. Subsequent analysis has revealed that two of the largest Incorporate states, Biogene and GenDiver, have suffered no significant losses to Poseidon Liberté, or losses small enough to be part of a plan to divert possible suspicion. The top brass of the Justice Commission is currently deciding whether to intervene or to let the Liberté continue, in hopes that its activities help to limit the excesses of the Incorporates.

wired, and glued together. Some are locked in place by those surrounding them, and others are free to drift about. Whatever the construction and placement, the floats separate the dry world above from the wet and shadowed world below.

Everywhere on Nomad there are gaps and holes, dives and manholes, trapdoors and open canals where the inhabitants can enter the water. It is often easier and quicker to dive in and swim someplace than it is to navigate the ever-changing landscape above. Even for those without aquaform adaptations this is often a preferable way, and perhaps the only way, to cross a wide canal or open pool.

CIRCUMSTANCE

The first thing I thought of when I arrived in Circumstance was that old story, The Last of the Mohicans. The people there appeared to be unwashed savages, with wild body paints, no clothes, and some crude form of sign language. They lived in treehouses, several meters above the waters of the mangrove, in almost perpetual darkness. After spending some time with the villagers, I found them much more civilized than I had anticipated, although I should have known that only 80 years of isolation would not be enough to drastically alter their culture. As it turns out, their sign language is not far removed from Earth's international sign language, and they utilize it mainly to communicate while hunting. Their dress, or lack thereof, is rooted more in a lack of resources than anything else, and the body painting has replaced it as a measure of style.

—Gunther Kettman, in an excerpt from his memoirs

Location and Local Terrain

Circumstance is located at 15°00′12″ south latitude, 1°03′14″ east longitude, within a Poseidon mangrove 200 kilometers east of Southward Island. The mangrove covers roughly 150 square kilometers. Because the wind is unable to penetrate the dense growth, the climate is hot and humid throughout the year. In fact, the trees are so dense and the canopy so thick, that except for a few small patches, the settlement exists in a constant twilight, even during midday.

The terrain of the mangrove is unique and its makeup complex. Above the water's surface, interwoven branches proliferate, in some places forming enough of a purchase for wind-borne soil and debris to cling, sprouting mossy meadows suspended in the air. In one part of the mangrove, a three-square-kilometer patch of loose stones and sediment is all that remains of what was once a very solid rocky islet. It endured repeated fracture by the growth of the trees that now litter its surface. Within the mangrove, seaborne plants and debris are trapped in the dense growth, forming extensive mats that cover the waters.

History

Circumstance was founded in 2116 by a small group of settlers from Haven. The settlers didn't plan to build their new homes in a mangrove forest—their small fleet of sailboats and catamarans was driven into the mangrove during a tropical storm. They discovered the mangrove was habitable, with abundant resources, and decided that staying was easier than repairing their boats and sailing somewhere else. The settlers began building Circumstance on a tract of solid ground near the mangrove's eastern edge, but they soon moved their encampment closer to the mangrove's center, where the intervening forest kept storms and predators at bay. Circumstance was a lost settlement from its beginnings. Throughout the years, various natives and travelers reported signs of life in the mangrove, from smoke rising from the canopy to fishing nets set near its periphery. These reports remained unverified, though, and they were often attributed to seasonal hunting camps.

In 2197, a wilderness outfitter and guide from Haven, Gunther Kettman, became the first person to report having contact with Circumstance in 83 years. He discovered what he termed a "treehouse community" of 68 natives, completely integrated with the local ecology. Most of the natives were naked, and all had covered their bodies with paints in beautifully savage designs.

The natives' long isolation and unique environment have been a profound influence on their cultural development. Their spoken language is a strange patois of the original settlers' diverse linguistic traditions, and they also communicate through a unique form of sign language. Until recently, the people of Circumstance had only a vague idea of what life was like outside their settlement. In effect, history for them ended in 2116. The natives had some knowledge of events prior to the founding of their settlement, but anything after that was usually limited to stories and myth. Over the years, they occasionally spotted native hunting and fishing parties, or newcomer air- and watercraft, but they never attempted contact.

Physical Layout

It is not so much the village's location that makes Circumstance unique, as there are many seasonal lodges in other mangroves on Poseidon. The village is unique because of the way the settlers incorporated their dwelling place into the mangrove. The village is completely elevated, constructed among the branches of the mangrove's trees. At no point is Circumstance less than three meters above the murky waters, and in most places the settlement is elevated

ACCESS DENIED

Compromising Circumstances

Deep beneath Circumstance, the mangrove rises from one of the richest shallow-water Long John fields in the archipelago. Recently, an eight-member GenDiver research team arrived in the mangrove to survey the area for future resource development. With hard suits, magnetometers, and a sophisticated research submersible, the team discovered the xenosilicate ore in the tangled organic maze beneath the mangrove.

Recognizing that this discovery would lead to a rash of new mining operations throughout the region, several aborigines compromised the research team and left them lying comatose in and around their base camp on the edge of the mangrove. The team was soon discovered by the natives of Circumstance and brought back to the village where they could be fed and cared for by Saphou, the settlement's healer. Now, though, the natives aren't sure what to do with the GenDiver team. They have shown no signs of recovery and Saphou judges they could remain in their present condition indefinitely.

The villagers have heard enough stories about GenDiver that they are terribly afraid of turning the team members over to the Incorporate state, who would almost certainly blame them for the "accident." The natives have cleared the base camp and pushed the submersible deeper into the mangrove, hoping to buy some time while they decide what to do next.

at least 10 meters. The village resembles a multilevel ring with a diameter of roughly a hundred meters. Wooden walkways and swinging bridges span this circle, and timber-and-rope ladders connect its many levels. This simple infrastructure was built at many different stages of the village's past, so there is no particular arrangement to it.

The dwellings of Circumstance spread throughout the confines of the village, in no apparent order. They nestle among dense branch systems, and deep cuts in the thick limbs form a level base. In many cases, dwellings stand adjacent to one another, connected either by doorways or enclosed walkways. Many homes completely encircle a tree or a small cluster of branches. Dwellings vary in size, and are usually proportional to the size of the family they house. Though rarer, some villagers even live on simple platforms without walls or ceilings.

Government

Circumstance does not have a system of government of any kind. The eldest villagers are respected, but they have no real legal authority, and their primary role is educating the children. In the last two years, the GEO has become aware of the settlement's existence, but has shown little interest in intervening in its development or activities. Three colonial representatives have visited Circumstance, and all were received graciously, but none had lasting effect.

Infrastructure

Beyond its simple walkways and tree dwellings, Circumstance has very little physical infrastructure. Even docks, a pervasive feature of nearly every native village, are absent in the mangrove. The natives find it easier to moor their few boats to boulders or fallen trees along the edge of the mangrove. Deeper in its interior, the mangrove is often so choked with organic debris that navigation is impossible, even for small craft. Circumstance's social infrastructure is also rather limited. Because

of its size and isolation, it is easier for the community to address problems as they are encountered rather than attempt to anticipate and prepare for all possibilities. The natives do emphasize education, though, and the elders spend much of their time teaching the village's children.

THE WALL

I still remember the last few moments of my so-called life: the water approaching at 50 meters a second, Chan screaming over the whine of the fans. Little blue electrical flashes like tiny lightning bolts crawling up my arms. Oh God, we're gonna hit hard. Maybe so hard death won't just creep over me. I'll have the last laugh. I'm gonna die so fast I'll be in Hell before Death figures out I'm gone. Looking back at Chan; poor kid. So young. Facing forward again, checking the instruments that have long since ceased being instrumental, and gripping the controls. Tight.

Then blackness, followed some indeterminate time later by brilliant light. Coming from all around, but not one light, thousands of little lights, some close, some so far I shouldn't be able to see them. Those lights speak to me. And I begin to breathe again. Only not with my lungs—with my gills. I'm not in any normal kind of water, but I know that's okay, everything is okay. From now on, everything will be just fine.

I was the first one to be claimed by the Styx. And in some ways it's never really let me go.

—Thaddeus "Misho" Johnson, Pilot, *Calypso*, from *Tidal Forces*, interviews by Ashri Khenera

The Wall is a canyonland roughly 1,500 kilometers north of Haven in the region of the Dolphin Sea known as the Styx. It consists of thousands of weathered rocks and cliffs too small to be considered islands, but that together form a considerable landmass. The rock formations are so densely packed that the interior of the Wall suffers little exposure to the powerful winds whipping through the Storm Belt. The narrow gaps between the rocks and cliffs form a maze of canals, and powerful tidal effects in the channels make them extremely hazardous to navigate. Hidden within the cliffs of the Wall are thousands of crevices and caves, some with openings along the sheer rock faces, some open at sea level, and still others only accessible from under the surface. With almost no plant or animal life atop the tumbledowns, water is freely absorbed into the porous rock. Tiny streams run through niches and crevices in the rocks and cliffs, and exiting rivulets of water trickle down the rock faces.

Because of the Wall's unique terrain and the ominous tales from the Styx, various groups involved in dubious activities have purposefully established operations in the region. From the air, little but the top surface of the canyonlands is visible, and surface travel in the tumbledowns is extremely hazardous. Many of the narrow channels are inaccessible to all but the smallest watercraft, and criminals often use these passages to shake pursuers in larger vessels.

Since colonization began on Poseidon, speculation has been rampant concerning the Wall's origins. Scientists describe extreme tectonic activity that fractured vast seafloor rock beds, forcing the splinters above the ocean's surface. While this explanation is plausible, some geophysicists discount it. The sheer size of the Wall has led many to doubt that it could have been formed in the same manner as the other canyonlands on Poseidon, and its location in the Styx has lent an added air of mystery to its origins.

As research efforts in the region continue, the Wall seems to offer only more mysteries. How and when was it really formed? Why are aborigine sightings so common in the region? What dangerous or valuable indigenous organisms remain undiscovered? These questions and more continue to plague professional researchers and amateur sleuths alike.

Despite the known dangers and the unknown mysteries, there are many vested interests within the Wall. The Incorporate hope to discover new shallow-water Long John deposits among the largely unexplored tumbledowns. The canyonlands of the Wall offer unique ecological microsystems, important to the numerous Incorporate bio-research teams as well as to native hunting parties. The GEO, aware of the Wall's status as a no-man's land, plans to initiate patrols of the area as resources become available. Wardens and independent prospectors prowl the Wall, each hunting a different prey, while smugglers, pirates, ecoterrorists, and other nefarious sorts use the Wall as the ultimate hideout.

Shady Seas

There is a small, recently established native village within the Wall called Shady Seas. Its primary structure consists of a massive cage that was once part of the superstructure of a now-derelict undersea habitat. The cage, 90 meters long and 50 meters wide, is made of industrial bioplastic and hangs wedged between several rock outcroppings. The interior has been divided into no fewer than 16 interconnected living spaces, and these dwellings are home to a tiny population of only 43 people. The upper bars of the cage support a mat of woven reeds and water hemp, providing a mostly rainproof ceiling for the entire structure.

The aquaformed villagers inhabiting Shady Seas have a very simple lifestyle, even by native standards. Daily routines revolve around the capture and preparation of fish and shellfish, and the natives do much of their fishing from a pair of bioplastic catamarans they have managed to acquire in recent years. In many places within the Wall, huge clumps of kelp, water hemp, and other plant debris trapped among the rocks form solid mats over the water's surface. These floating bogs provide good hunting and foraging grounds and the villagers have come to depend on them.

Village member Karina Griffis serves the tiny community as an ad hoc leader, and has represented the small community at various Haven conferences concerning native affairs. Griffis is a Native Patrol officer, formerly of Second Try. She has a reputation among the nefarious interests in the Wall for fiercely protecting her village, and is currently seeking GEO approval to deputize and arm the villagers as Native Patrolmen. Griffis makes semiannual reports on the welfare of Shady Seas to GEO officials, who list the village as Native Settlement 01.71.

Kraken

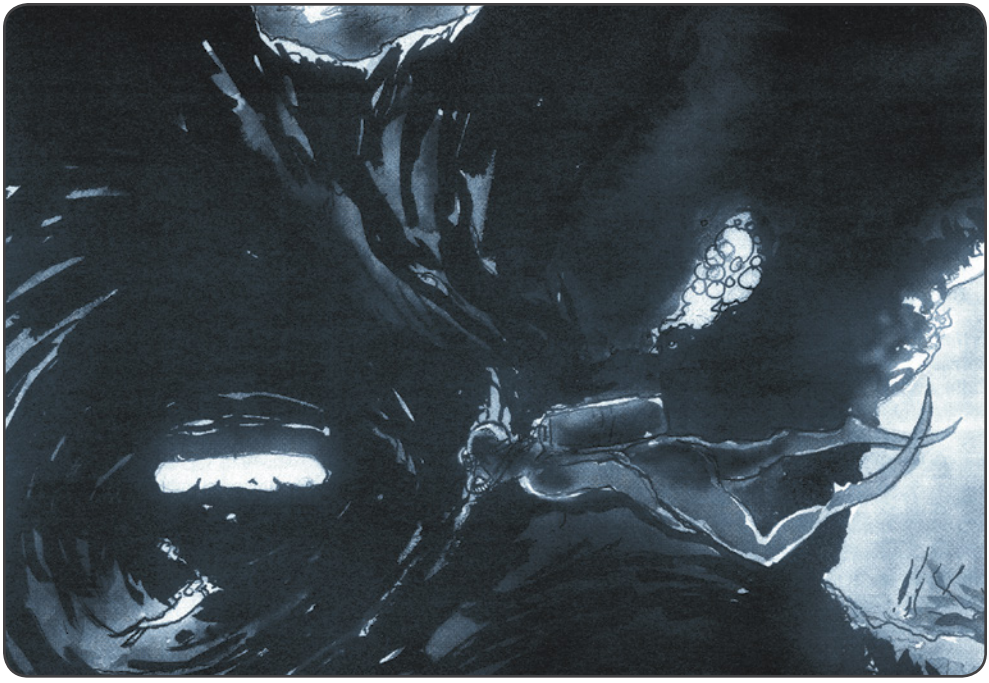
After the discovery of longevity ore and its applications, GenDiver was the first among the Incorporate to create a facility within the Wall for surveying and mining Long John. In 2191, GenDiver braved the Styx and began building Kraken in the furthest southeastern reaches of the Wall. Kraken is a 5,600-square-meter platform facility anchored between two sea cliffs.

The construction of Kraken employed over 1,200 workers for almost two years, and the ensuing operations utilized nearly 800 personnel. Kraken became home to many of the workers stationed on the platform, and upon completion of their six-month duty, they often signed up for further terms of service because of the generous hazard pay offered at the facility.

Unfortunately, by 2195, the local reserves of Long John had been depleted. After six months of declining profits, GenDiver drastically reduced its operations at the facility, essentially abandoning Kraken except for surveying and research efforts. While the small nodules of xenosilicate that were occasionally recovered were not enough for GenDiver to continue mining in the region, they tempted many of the workers to stay on as independent prospectors, leasing the facilities and equipment from GenDiver. These prospectors have formed a collective, in which they share profits to pay GenDiver's high rents.

Without the thorough administrative resources of GenDiver, the Kraken collective has gradually become a haphazard ghost-town settlement. Except for the machinery essential to mining operations, Kraken's maintenance has suffered badly. Living conditions are harsh and cramped, and the collective has instituted an informal system of vigilante justice to prevent Long John theft. The prospecting life is so hard that many of the would-be prospectors have abandoned mining completely and now eke out a living providing various services to the collective. Many of them have become traders or fishermen, while others have even become bodyguards or hired guns. Although its population is now less than 300, Kraken remains a major trade and fuel stop between New Hawaii and the Haven Cluster.

Kraken sprawls across a broad expanse of ocean between the two cliffs that support it. On the surface of the platform are docking facilities, numerous VTOL pads, and a pair of central superstructures housing storage rooms, mechanical facilities, administrative offices, and living quarters. Makeshift camps for temporary visitors cover many open stretches of the platform, and one of the VTOL pads serves as the trading area. Kraken is equipped with a well-maintained fusion reactor, but the facility's desalination unit is broken and residents prepare and ration their own drinking water. Many of the cooling units on Kraken work only intermittently, so the denizens are forced to move to whatever section of the living quarters is comfortable at the time, and sometimes to the open air of the platform itself. Kraken's superstructure actually extends to a submersible bay on



the underside of the platform, from which an unused umbilical power and communications line hangs to the ocean floor.

Thor Station

In 2198, the GEO established its only continuing presence in the Wall—the Thor Heyerdahl Marine Sciences Station. Thor Station was completed in 2196, and saw duty at several sites around the archipelago before being moored in the tumbledowns of the Wall. The station is a sophisticated research facility built on a 175,000-square-meter bioplastic barge, and houses several fully equipped biosciences laboratories, scientific vessels, research submersibles, and remote-sensing arrays. Transportation is provided by a small fleet of hydrofoils, jumpcraft, and VTOLs. Power and fresh water are provided by an integral fusion reactor and desalination plant.

The Thor Station research projects are many and varied. Marine biologists study marine organisms and ecosystems from bacteria to marine mammals, combining field research in the Wall and its environs with intensive laboratory work. Geophysicists and geologists investigate the origin, composition, and seismology of the seafloor using advanced digital imaging, spectrographic, and geoacoustic technologies. Oceanographers and meteorologists use a variety of remote-sensing equipment, including satellites, to monitor and analyze ocean currents and weather patterns. Almost 200 people work at Thor Station, and most are affiliated with the Haven Institute of Science and Technology or with GEO Naval Command.

Since their arrival at the Wall, Thor Station's scientific personnel have been continually plagued by communications failures, power outages, and other electronics glitches. While periodic storms can account for many of these problems, they have also led geophysicists to more extensive investigations of the region's unique electromagnetic characteristics. Some scientists have suggested that the phenomena might indicate massive xenosilicate deposits in the seafloor throughout the region. Others have quietly repeated the stories they have heard about the Styx.

The station has also had sporadic problems with the Wall's other human residents. Three supply hydrofoils have been attacked and looted, and the GEO has stationed 12 Peacekeepers on Thor Station as a deterrent to further attacks. The garrison's two jumpcraft have begun patrolling the Wall, and the Justice Commission hopes that this presence will help curtail criminal activity in the region.

NEW HAWAII

New Hawaii consists of a chain of four large islands—Oahu, Kauai, Maui, and Ina, along with their attendant smaller clusters, islets, and atolls. All four of the principal islands are volcanic, and Kauai is crowned with two volcanic peaks. While several of the smaller islands are also volcanic, most are formed of upthrust basalt or limestone, and some, like the Cays off of Kauai, consist entirely of exposed coral. The islands of New Hawaii huddle close to the intersection of Poseidon's equator and prime meridian, placing them in the very heart of the Storm Belt. Luckily for the region's inhabitants, the tall peaks of the principal islands and the relatively shallow surrounding seas provide some protection from harsh weather.

The cataloged volcanoes of the region vary widely in tectonic stability. Some, like Fafnir, Ilopango, and Nessus average several small eruptions annually. Kilauea and Fasolt, in contrast, have never shown any sign of activity and have been tentatively classified as dormant. Seismologists still watch these peaks closely, however, as the eruption of Mount Odysseus in 2124 showed just how ferocious a "dormant" volcano can be. Odysseus and several others have been classified as intermittent volcanoes, whose eruptions are less frequent but far more devastating.

Ecologically, the islands of New Hawaii are a tropical paradise. Nearly every landmass in the region is carpeted in lush jungle or rainforest thanks to the combination of rich volcanic soil and ample rainfall. Many of the smaller islands serve as anchors for mangrove forests, while others are bleak heaps of jagged volcanic rock or coral. The jungles and plains are home to a dizzying array of terrestrial species, many still unclassified. In addition to the vast number of marine plants and fish that thrive in its shallow seas, New Hawaii is also home to vast kelp forests and some of the largest reef systems in the Pacifica Archipelago. For nearly a century, biologists and zoologists have been studying the flora and fauna of New Hawaii and have only begun to scratch the surface.

The islands of New Hawaii were first explored and named by a team of surveyors from the *Argos 12* mission during the initial planetary survey. The stunning vistas of emerald forests, cloud-capped peaks, and turquoise ocean prompted the navigator to comment, "It's like Hawaii…only huge." The name stuck, although the islands of New Hawaii would wait a decade for their next human contact.

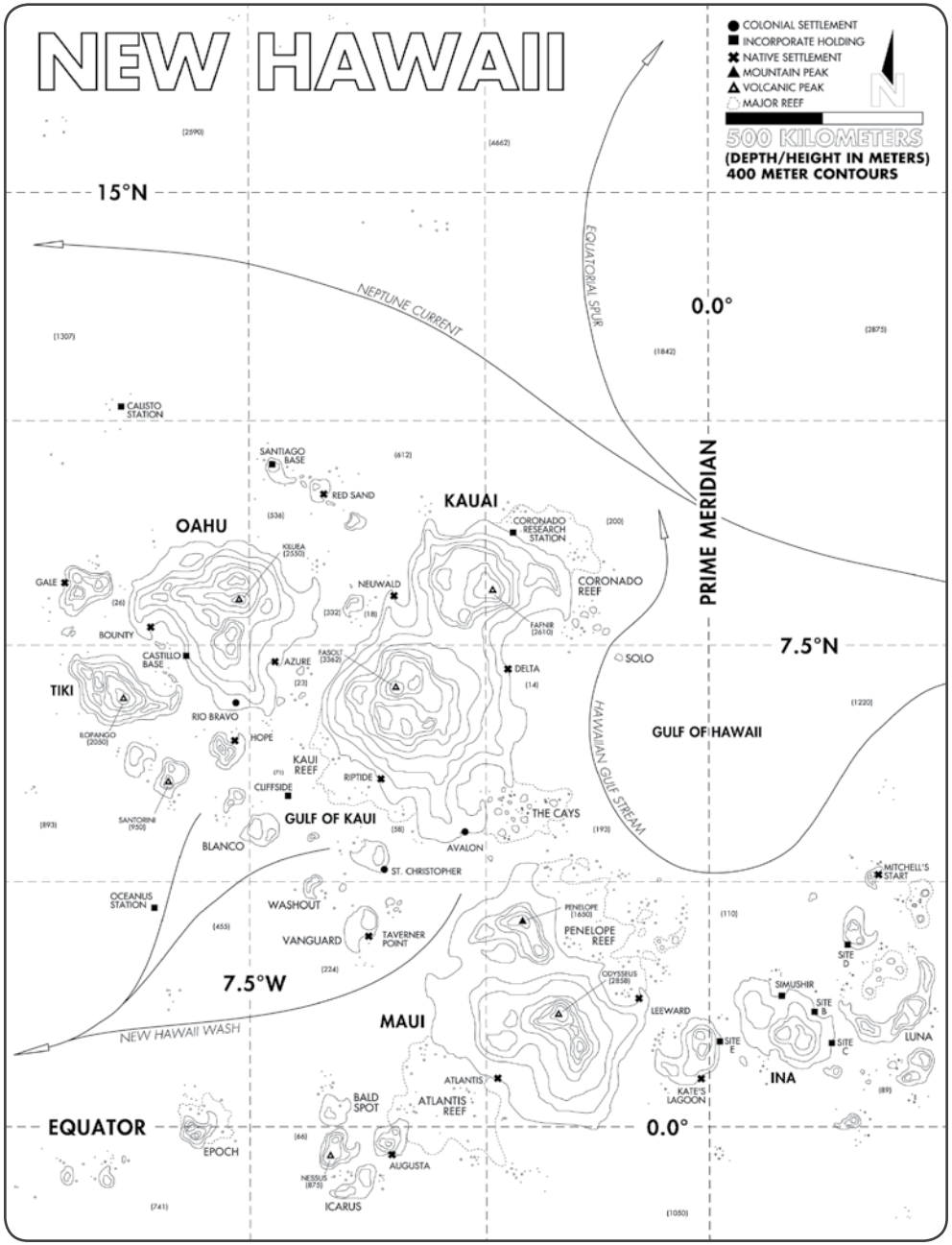
The arrival of the *Cousteau* and the Athena colonists had little immediate effect on the region. In 2091, a group of 200 colonists set out for New Hawaii and founded the town of Atlantis on the south shore of Maui. Most who made the trip were rugged individualists and die-hard field researchers who found life in Haven, even at that early stage, too "civilized" for their tastes. Of the first wave of secondary colonies, Atlantis was one of the most distant, over 2,500 kilometers from Haven. Isolation was exactly what the Atlantis colonists wanted. Fired by a pioneer spirit and lured by the promise of studying new ecosystems, the Maui colonists hoped their "lost city" of Atlantis would stay lost, or at least far from the center of things, for a long time.

The first years in New Hawaii were hard for the colonists, and not without setbacks. Within five years, however, the colony was firmly established, the islands had been extensively mapped, and biological and oceanographic surveys were underway. The colonists maintained contact with Haven via uplink and radio, and monthly shuttle flights brought supplies and an occasional visitor. Over time, however, these visits grew more infrequent. After the last shuttle flight in 2115, radio contact with Haven became intermittent at best. The hardships following the Abandonment were easier to endure for the New Hawaii colonists, as they had long since gotten used to rationing power, discarding worn-out electronics, and using local food sources to survive. The abundance of the islands and the seas made self-sufficiency easy, and soon the colonists had settled into a new way of life, busy but comfortable in their tropical paradise.

All of that changed on August 7, 2124 (94.33 SP by the local calendar). Just after 1200 hours, Mount Odysseus erupted, devastating the south face of Maui. Atlantis was buried under a massive pyroclastic flow of hot mud and ash, and 196 people died in a matter of seconds. When the smoke cleared, nearly half of New Hawaii's population was dead. The colonists in Haven were instantly aware of the tragedy, but there was very little that they or the other Athena colonists could do. The survivors were devastated by their loss, which they came to call the Calamity.

Destructive as it was, the Calamity was not as total as it might have been. Odysseus had given

some warning before the eruption, and the leaders in Atlantis had begun transferring the most essential computer records, specialists, and supplies to a new settlement, named Augusta, before the volcano erupted. Soon new communities sprang up across the region. A few colonists even returned to Atlantis to start again. The new community they built in Odysseus' shadow was as much a testament to their honored dead as it was a refusal to acknowledge defeat.



Tempered by the hardships of the past, New Hawaiian natives tend to be aloof and suspicious of outsiders, even other Poseidon natives. The Abandonment and the Calamity have taught them that Poseidon can be as cruel as it is beautiful, and that the only thing the natives can count on is each other. Consequently, Recontact in New Hawaii was particularly stormy, and the GEO classified at least three-quarters of the native communities in the region as hostile. Most of the natives simply want to be left alone.

Fate, it seems, will not grant their wish. The discovery of Long John triggered a population explosion all over Poseidon, and New Hawaii was not excluded. Rich Long John deposits in the Gulf of Kauai attracted thousands of newcomers who turned Atlantis into a rough boomtown. On their heels came the Incorporate. Biogene raised the towers of Cliffside out of the sea, and Simushir soon sprouted from the marshes of Ina. The GEO has been slow to react to the changes in the region, its efforts hampered by the natives' reluctance to cooperate. The close proximity of GenDiver's holdings and the rebellious Sierra Nuevas have also served to divert the GEO's attention, but that is beginning to change. Last year, the GEO's Justice Commission redrew the judicial zones at the north end of the Pacifica Archipelago and installed a new Marshal based in Atlantis. New Hawaii is likely becoming a flashpoint, with Incorporate tensions at an all-time high, piracy on the rise, and a GEO crackdown imminent.

SIMUSHIR

No family, community, or nation can succeed without the success and prosperity of the people who comprise it. The citizens of the Nippon Industrial State are no different, and the NIS is absolutely committed to the welfare and well being of our people. The NIS provides advancement and career opportunities, housing, food, entertainment, and competitive wages to its member employees, as well as security in the face of change. If you would join your efforts with ours, we welcome you. The Nippon Industrial State can provide you with more than just a wage—it can give you a community, a home.

—NIS promotional and recruiting literature

Arbeit Macht Frei.

—Anonymous graffito, Simushir Residential Stack 27

Location and Local Terrain

Simushir is located on the island of Ina at 2°7′32″ north latitude, 0°57′23″ east longitude. The company town is built on the north shore in the midst of a wide tidal plain. The shoreline consists primarily of shallow marsh and muddy tidal swamp. The weather is invariably hot and humid, and the briny odor of the marsh is inescapable.

History

The Nippon Industrial State was quick to join the Incorporate stampede to Poseidon, applying for a GEO colonial charter in 2189. The long-standing rivalry between the NIS and GEO, however, led to long delays in the approval process. After lengthy negotiations and a very expensive settlement, the NIS charter was finally approved in 2192, and the NIS found itself among the last of the Incorporate states to build facilities on Poseidon, running years behind many of its competitors. The NIS was given the right to develop the island of Ina and surrounding regions. The location was a favorable one. It was close enough to the Biogene facilities at Cliffside for the NIS to monitor their rivals and share New Hawaii's rich Long John deposits, and far enough from Haven to avoid close scrutiny by GEO authorities.

Within two months of the first orbital component drops, Simushir's fusion reactors and first manufacturing facility were online. A relentless media campaign aimed at Poseidon's booming newcomer population brought in droves of indentured laborers, who were quickly put to work on countless construction projects. By the spring of 2195, an artificial island had been raised in the marsh to support the settlement's industrial core, the NIS arcology was complete, and the spaceport was averaging 10 orbital launches a month. The city reached its present state in early 2197, when the NIS began shifting its developmental focus away from Simushir to outlying sites around Ina.

Simushir's early growth phases were plagued with a host of technical difficulties. Impossible construc-

tion deadlines led the governing directors to cut corners, and the designers relied almost entirely on prefabricated components and established designs, which were often approved and implemented with little testing. Adapting specialized structures designed for use in Asia or on Luna to life on Poseidon was a challenge. After several setbacks, delays, and disasters, the indentured laborers were left with housing that was, at best, barely adequate. Presently, basic services are intermittent, and the quality of life in the residential stacks hovers near the level of a terrestrial prison.

Appeals to the Executive Body have met with continued promises of improvement. Actual change, however, has been slow in coming. From the point of view of the NIS board back on Earth, Simushir is operational and productive, but the state as a whole is still lagging in the race to develop Poseidon. Expensive quality-of-life improvements will have to wait. The patience and diligence of the NIS's laborers will be rewarded later.

The workers may not wait much longer. The vast majority of Simushir's indentured population had little idea just how binding their employment contracts would be. Conditions worsen, dissent is flourishing among the stacks in Simushir, and "accidents" are growing increasingly common. The NIS is implementing tighter security measures, which only make the workers angrier. Productivity is beginning to drop, which has the Executive Body worried. Even more worrisome, the new Marshal in Atlantis is threatening an investigation. Simushir hovers at the edge of a crisis.

Physical Layout

Simushir is a decentralized city composed of several distinct components: the industrial core, residential zones, arcology, and forward facilities. Each component is self-contained and linked to the others by a maglev system, which also connects Simushir to other NIS sites on Ina.

Forward Facilities

Known as "the boardwalk" by Simushir's populace, the forward facilities are the point of entry for most of the city's visitors. Massive biocrete pylons support an array of platforms above the waters of the bay. The eastern half of the facilities house docks for surface shipping, submarine mooring and service facilities, and the city's airport. The western half consists of a massive xenosilicate refinery. Between the two lies an administrative complex and maglev station. The forward facilities bustle with activity all hours of the day, and at night, their massive arc lights make the sky over Simushir Bay glow a sickly orange.

Industrial Core

The industrial stacks of the core form the heart of Simushir. The core rests on a massive manmade island raised 20 meters above the surrounding marsh. The perimeter is ringed with massive walls two meters thick and over 15 meters high that act as wind breaks, protecting the precious facilities against cyclonic storms. Inside, massive factory stacks huddle together, linked by traceries of piping and scaffolding. The massive walls also block any outside breezes, trapping vented gasses and fumes. The air at ground level in the core is often toxic, and few ever leave the interior of the stacks. Over two-thirds of the city's population works here daily.

Residential Zones

Home to Simushir's indentured workforce, three residential zones are currently operational, with a new one under construction. They are nearly identical: a cluster of residential units or "stacks" with attendant facilities huddled on top of massive earthworks. The zones are raised 20 meters above the plain to protect against flooding; the arrangement also serves to limit the movements of the indentured workers and keep them secure. The quality of life for the indentured workers who live in the residential zones is truly reprehensible: power, sanitation, and other services are at best unreliable, and at worst, totally absent. The stacks themselves are also notoriously vulnerable to fast fungus and rust—older units cannot keep out the rain, and some are in danger of collapse. Conditions in the residential zones have earned them the nickname "the shame of Simushir."

The Dome

Initial concerns about cyclonic storms prompted Simushir's engineers to design the residential areas with domes—the same kind used at NIS facilities on Luna and Mars. The designers did not know, however, that the bioplastics used in the domes are particularly vulnerable to several varieties of fast fungi. Only one dome was ever finished: within two weeks of completion, half of the structure collapsed, killing over a hundred laborers. As a result, the dome

idea was abandoned in favor of a system of raised mounds to counter flooding, and sturdier—if more expensive—housing units.

The Arcology

Towering over the other components of the city, the NIS arcology is an inescapable reminder of the Incorporate's authority. The massive, 15-story structure houses all 6,000 of the site's NIS employees and incorporates recreational spaces and support facilities, making it a city unto itself. The arcology also serves as the administrative hub of the Nippon Industrial State's venture on Poseidon. In stark contrast to the city outside, the arcology is fully functional and meticulously maintained. It is not uncommon for the children of an NIS executive never to set foot outside the arcology's walls. Rather, they attend the company schools inside, live in massive suites on the upper levels, and shop in the enclosed malls. Indentured workers who are brought inside as maintenance workers and technicians can only stare in envy at the opulence.

Demographics

More than 6,000 citizen/employees of the Nippon Industrial State live in Simushir, comprising less than one-fourth of the total population. All of them reside in the NIS arcology, forming an upper class that distances itself from the indentured population both socially and geographically.

The life of an NIS citizen is defined by the company. The state provides food, lodging, and comfort, and few have any goals beyond their careers. Every morning the citizens sing the Incorporate anthem and exercise together, rituals that have been part of Asian corporate life since the 20th Century. A rigid social hierarchy exists within the corporate population, with the executives at the top, research scientists and senior engineers just below them, and various lower management positions on the bottom. This hierarchy is reflected in the layout of the arcology: an employee's status can be gauged by the floor on which he lives and works.

Just over 20,000 indentured laborers live and work in Simushir. The vast majority of them live in personal utility units, or coffins, in a residential stack and work six days a week in one of the industrial stacks in the core. Others act as administrative assistants, technicians, and support personnel. Before signing on with the NIS, these workers came from a variety of backgrounds—ex-Long John prospectors, unlucky colonists, failed entrepreneurs, and even sell-out natives have all been known to join. Indentured workers sign on for a five-year term, and during that time, the NIS provides for all of the worker's needs. Since food, housing, and recreation are all provided, and travel outside of the NIS enclave is prohibited, the indentured are not paid a wage or salary of any kind. The Nippon Industrial State assigns each worker a wage value based upon his occupational skills. The cost of all food, electricity, and any medical treatment consumed by the worker are tallied as consumption points. At the end of a worker's term, the consumption points are converted into a monetary value and deducted from the wage value. The balance is paid to the worker in NIS scrip. The indentured worker has the option to receive one-fifth of his wage value annually, less living expenses. Many workers with families outside of Simushir favor this option, sending their wages home to feed a spouse and children.

The system seems fair enough to most applicants and is designed to encourage good behavior. Workers who use less energy, spend less time in the rec centers, and are less wasteful will accrue fewer con-

ACCESS DENIED

Circles in the Slum

The Blue Water Circle has been busy in the shanty settlement surrounding Simushir. Individual cell leaders have been recruiting heavily in hopes of organizing the indentured laborers and beginning a campaign of sabotage and terrorism against the NIS.

So far, they have been quite successful, as the quality of life in the shantytown breeds discontent and anger. Unfortunately, the resources available to train and support the new recruits are limited. However, if all goes according to the Circle's plans, when the supply problems are overcome, the NIS is in for a very loud wakeup call…

sumption points and be rewarded with more pay at the end of their terms. Consumption point credits can be awarded for high productivity, and additional points can be tacked on to a worker's total as a disciplinary measure. Most indentured workers, therefore, are obsessed with their point totals, and a thriving black market has sprung up for goods and services that can be bought without being registered. It is also possible for a worker to end his term with very little to show for it, and a few have even ended their terms in debt to the NIS, requiring them to apply for another term to pay it off. Each indentured worker has a microchip implanted under the skin of his right wrist when he signs on. These chips are recognized by detectors on every food dispenser, door, computer terminal, and toilet in Simushir. The chips allow the NIS to track each worker's resource consumption, and permit NIS security to monitor his activities. In Simushir, privacy is virtually nonexistent.

Most of the corporate citizens see little of the city beyond the arcology. Those who do regard the indentured population as unskilled labor. A small segment of the Incorporate citizenry works full time in the residential zones, however, acting as zone administrators or providing social and medical services to the residents of the stacks. These few are at the bottom of the NIS social hierarchy, and their association with the indentured marginalizes their stations. Such positions are usually assigned to employees as punishment. Virtual ostracism from the NIS and firsthand experience with the squalor in the slums has led more than one zone administrator to question NIS policy and think the unthinkable: rebellion.

Government

Simushir is governed by the Executive Body, a board of 10 senior administrators charged with implementing NIS policy and ensuring the success of the colony. The current chairman of the Executive Body is Tagana Kobmatsu, a middle-aged executive who has directed several lucrative ventures for the NIS in Burma and Micronesia. Tagana is very set in his ways and is convinced the methods that have worked on Earth will also succeed on the new frontier. While many younger executives feel constrained by Tagana's attitudes, none have ever voiced objections.

A labyrinthine bureaucracy of committees, departments, and advisory boards handles day-to-day administration of Simushir. Citizens with a complaint or grievance often spend days just trying to find the right office to help them, and communications between the various branches is erratic at best. Competition over budget allocations can lead to bitter infighting, and most bureaus are constantly trying to outperform their rivals.

A force of over 900 NIS military operatives provides security for the city. As tensions have risen, particularly in the residential zones, the security forces have raised their visible presence throughout Simushir. Surprise inspections and late-night arrests are on the rise.

Economic Base

Simushir's economy is based on several distinct industries, reflecting the Nippon Industrial State's diversified interests on Poseidon. The Long John refinery in the forward facilities processes 90 kilograms of Long John annually, all of which is shipped back to Earth. The industrial stacks of the core comprise Simushir's second economic base, heavy industry. The factories and foundries in the core turn out electronic components, consumer goods, and building materials, which are exported to sites all over Poseidon. Commercial profits have risen sharply as more NIS products have become available in Haven and Kingston, and the company town's future depends on their continued success in the colonial markets.

Infrastructure

Conditions in Simushir display stark contrasts. In the arcology, energy is readily available, facilities are well maintained, and health care services are easy to come by. The industrial stacks and forward facilities are also in good condition to keep them productive. In the residential zones, however, life is very different. The residential stacks are plagued with constant maintenance and supply problems. The residential units are prone to sanitation failures, and the bioplastics used in their manufacture are particularly vulnerable to several varieties of fast fungus. The fungal infestations weaken the structures, raising worries over their durability in the face of a major storm. Jammed doors, leaky roofs, electrical shorts, and sanitation problems are endemic.

Simushir's energy is supplied by five fusion reactors located 10 kilometers inland from the city. Water is provided by vast desalination plants that crouch among the reeds of the marsh. While the NIS arcology uses some internal hydroponics facilities, Simushir depends on imports for over 75% of

its food. Site C on Ina is devoted solely to producing food for Simushir, mostly processed kelp and soy. Other supplies arrive weekly, either by transport from the NIS complex in Haven or dropped from orbit.

Map Key

1. Shipping Facilities

This stack of biocrete platforms and derricks forms the eastern half of the forward facilities in Simushir Bay. The upper decks, over 100 meters above the waters of the bay, serve as landing pads for VTOL transports and jumpcraft. Extensive supply and repair bays occupy the levels below. At sea level, a maze of piers sprouts from the massive biocrete pylons to accommodate surface shipping. Massive cranes load and unload the various boats in port, and storage bays crowd between the shoreward pylons. The easternmost third of the facility has three decks extending below water, the primary NIS submarine base on Poseidon. The shipping facility is the hub of the NIS's supply and distribution network, and keeping the NIS air and shipping fleets going is essential to the colony's success. Complete repair and dry-dock facilities for any kind of transport vehicle are available here, although outsiders can expect to pay a high price for NIS services.

2. Long John Refinery

A dense tangle of catwalks, scaffolding, and tubing, the refinery occupies the western end of the forward facilities. The active drilling tower forms the core of the structure, processing over 50 metric tons of bay floor a day. The lower levels house the docks for Simushir's submersible prospecting fleet. All Long John mined by the NIS is refined, purified, and processed in this facility. Therefore, it is the most secure structure in Simushir.

3. Bioplastic Farms

Half of the industrial stacks in the core are devoted to bioplastics production. Each stack is a massive hexagonal structure six levels tall linked to the other stacks by sealed walkways and kilometers of pipes and conduit. The interiors of the stacks are full of culturing labs, vast nutrient vats, and manufacturing and assembly facilities. Over two-thirds of the output consists of heavy components for the other NIS sites on Ina, and the remaining 20% are consumer goods, from vehicle parts to electronics and furniture.

4. Electronics Plant

The balance of the industrial stacks within the core is devoted to producing electronic components. Workers in cleansuits manage robotic assembly systems building and configuring various computer components. Other stacks contain huge genetic labs for the construction of DNA memory cores. Simushir's electronics production has only recently reached expected levels. Within five years, the NIS is confident that it will be the largest supplier of electronic components on Poseidon. Many of the substances used to prepare the components—gallium arsenide, to name one—are toxic, and up until now the NIS has been very lax in its waste management. The wildlife of Simushir Bay and the marsh suffer as a result.

5. Transit Hub

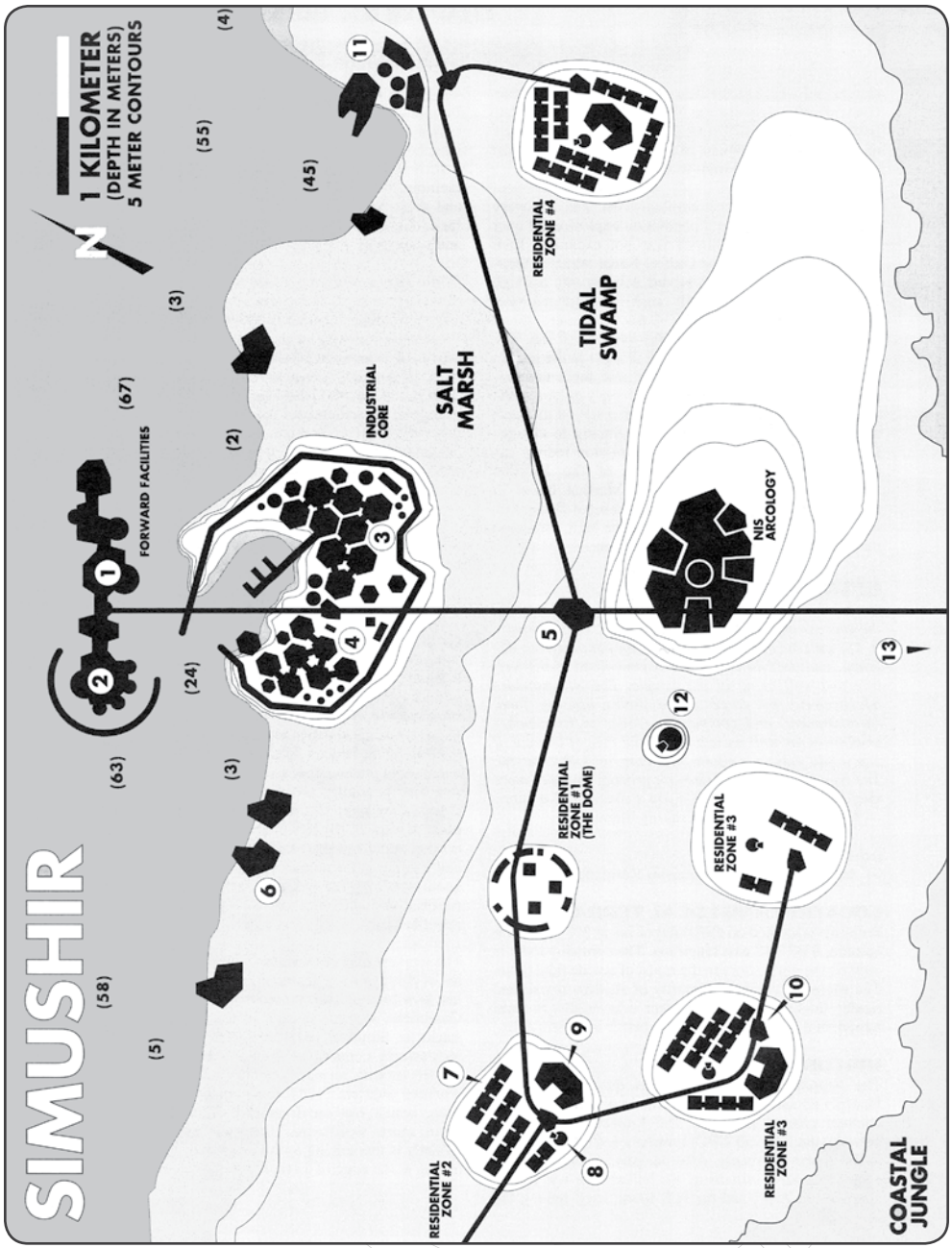
The nexus of Simushir's maglev system, this massive station is always crowded with passengers awaiting transport to the core, the arcology, or the stacks. The hub is also the first stop for most visitors to the city and looks appropriately impressive.

6. Desalination Plants

Five in all, these massive desalination plants pump in the saltwater of the coastal marsh and purify it for consumption. Most of the allocated resources are spent on maintaining the plant that supplies water to the industrial core and the arcology, the largest of the five.

7. Residential Block 2.27

The 27th residential stack built at Simushir, located in Residential Zone 2, Block 2.27, is a typical residential stack. This stout, square building is made of bioplastic, is four stories high and 70 square meters, and has no windows. Each wall is a self-contained unit, and residents are classified by the wall in which they live. The lower three floors are lined with the personal utility units in which the indentured live. N.3.58 is a typical worker's address, meaning north wall, third level, coffin 58. Each coffin is a bioplastic tube, two meters long by one meter wide, lined with temperfoam padding and equipped with a miniature CommCore terminal. Indentured workers are actually issued two coffins, one to sleep in, and the adjoining one for personal effects. There are 150 coffins to a floor, stacked three ranks high. The fourth floor of each wall is lined with apartments for inden-



tured families. These units are only 10 square meters, and the waiting list to receive one is very long. The central space in a stack contains a 50-square-meter communal habitat, featuring dining, lounge, and shower facilities.

8. Administration/Security Post

A prominent feature of each residential zone, these large structures contain various supply and maintenance facilities, as well as administrative offices and medical clinics. What few social services are avail-

able to Simushir's residents are provided through these offices. These buildings also contain a garrison of security troops for rapid response to any crisis in the stacks.

9. Recreation Center

Each residential zone also features a Rec Center, a large facility that features movie theaters, large athletic courts, and a small shopping mall where workers can spend consumption points. They also house various bars and restaurants, and even a dance club. As the only alternative the indentured have to their work and their solitary lives in the stacks, the Rec Centers are usually packed with off-duty laborers.

10. Maglev Station

These stops for the city's maglev system are heavily guarded.

11. Spaceport

All incoming orbital craft land at sea and are towed through an artificially deepened channel to Simushir's spaceport, which contains massive cargo-handling facilities, three launch pads, and service bays capable of maintaining all types of orbital craft.

12. The Tower

This massive structure serves as the central headquarters for NIS security, coordinating the efforts of the residential zone security posts. The tower also coordinates external defense, monitoring the input from satellites and sonar early-warning systems. Not quite as tall as the NIS arcology, the tower is nonetheless a visible symbol of the security forces and a constant reminder to the indentured workers that security is watching.

13. Reactor Complex

A quintet of starfire reactors provides power for Simushir and the other Ina facilities. The reactors are located 10 kilometers inland in a massive underground facility. The oldest of the five fusion cores is plagued with maintenance difficulties and only runs at full efficiency about 40% of the time. Of course, energy priority is given to the arcology, the core, and Ina's outlying facilities. The indentured living in the stacks are left to deal with frequent brownouts and energy rationing programs as best they can.

ATLANTIS

Once upon a time, this was nowhere. I mean, sure, this isn't like Pinpoint or Little Fish, but Maui's far enough away from Haven to be its own little world. That's why my great grandfather came out here. Except for troubles with the mountain or the storms, they had the world to themselves. It was quiet. Now? Now we've got new people coming in every day, and Haven's only a few hours away by airbus. It's not as busy as it was when the Long John started coming in, but we're still plenty big. We're still somewhere. Most natives don't like the changes much. Me, I like a crowd. I like vids and trids and CommCore and ice in my drink and temperfoam cushions for my chairs. Just wish the VTOLs weren't so damn loud.

—Sallow, co-proprietor of the Hole

Location and Local Terrain

Atlantis is located on the south shore of the island of Maui, at 0°48′28″ north latitude, 3°29′47″ west longitude. Atlantis dominates Easter Bay, a deep-water inlet that provides excellent anchorage for shipping. The city sits on a wide, flat plain left by a series of pyroclastic and magma flows from nearby Mount Odysseus.

History

The first Athena colonists arrived on Maui in 2091, and christened their base camp Atlantis. The pioneers came to conduct an extensive biological survey of New Hawaii and welcomed their geographic isolation from Haven. Within five years Atlantis was a thriving, self-sufficient town.

The eruption of Mount Odysseus in 2124 changed everything. The volcano had given enough warning for essential systems and personnel to be evacuated to nearby Augusta, but nearly 200 people and most of the colony's medical and high-tech supplies were buried under tons of ash and boiling mud. Not long after, a band of determined colonists returned to Easter Bay and refounded Atlantis. For two generations,

MOST WANTED

Rachel Lightfoot

There is a new Marshal in Atlantis. Only a month off the transport from Haven, Lightfoot has made her presence felt from the back alleys of Atlantis to the stacks in Simushir, delivering a simple message: the GEO has come to New Hawaii. Eighteen Patrol Officers and the political weight of the Justice Commission back up the Marshal's transfer to the region, and she is only the first of a pair slated for New Hawaii. She has been ordered to create a new Marshal's office in Atlantis, crack down on smuggling and piracy in the islands, and investigate allegations of environmental and human rights abuses in Simushir.

Most toughs laugh the first time they set eyes on Lightfoot—she is a short, slim woman just over 1.6 meters tall, with closely cropped graying hair. The laughs stop, however, once their glance meets her icy eyes. Lightfoot has a presence that can be felt a block away, a tone to her voice that can quiet a barroom, and a stare few are able to return. She carries a pair of cross-holstered, multi-ammo revolvers but seldom draws them—in most cases she just talks her target down. She has held off an entire street gang with just words and her strange force of will, and few can boast of ever besting her in an argument.

Lightfoot was born in one of the post-Blight Native American Tribal Collectives in the southwest United States and will soon turn fifty. She joined the GEO military to pay for college, and served a term with the GEO Peacekeepers in the Far East, assisting refugees. In Asia, Lightfoot experienced an epiphany, horrified as she was by the brutal, inhumane consequences of the rampant corruption, black marketeering, and extortion rampant in the region. At the age of twenty-four, she applied for a branch transfer and joined the Justice Commission as a Patrol Officer. Her uncommon personal standards and insightful nature got her noticed and she rose quickly through the ranks. At the age of thirty-three she accepted a commission in the Marshal Service, her innate charisma and non-violent approach serving her well. In 2197, Lightfoot accepted a transfer to Poseidon, and after serving in various temporary assignments around the archipelago she was sent to New Hawaii as part of an effort on the part of the GEO to bring order to the region.

To most, Marshal Lightfoot seems stern and unbending. In truth she is passionate about justice and human rights, and simply takes her job very seriously. She is tireless and deliberate and does not put up with back talk, fabrication, or incompetence. Though her hair is graying, Lightfoot has been undergoing Long John treatments since joining the service, and she remains able, agile, and quick witted. She is stronger than most men her size and faster than almost anyone. She is quick to anger but never lets her temper cloud her judgment. Though her heritage and her manner have earned her all kinds of unsavory nicknames, most of her Patrol Officers simply call her "Chief." Though others might take offense at the innuendo, she knows that most of them actually use the term with genuine respect—besides, she secretly likes the name.

Species: Modified Human
Goal: Altruism
Motivation: Compassion
Attitude: Disciplined
Role: GEO Marshal (Elite)
Primary Attributes: Physique 0, Coordination 2, Cognition 1, Psyche 2
Derived Attributes: Endurance 2, Reflexes 2, Toughness 1
Modifications: Accelerated Neurons, Immunological Symbiote, Improved Blood Oxygenation, Uplink Neural Jack
Aptitudes: (Superior) Communication; (Strong) Administration, Combat, Culture, Stealth
Primary Skills: Armed Melee 3, Bureaucracy 6, Culture (GEO) 6, Culture (Incorporate) 3, Culture (Street) 4, Law 7, Leadership 4, Persuasion 8, Politics 5, Small Arms 5, Stealth 3, Unarmed Melee 4

the settlement prospered as a village of farmers and fishermen. Recontact changed everything—again. The Long John rush flooded Atlantis with newcomers, die-hard prospectors, and the opportunists who moved in to cater to their needs. Soon Atlantis was a boomtown of casinos, bars, and brothels, and a crucial supply point for anyone heading north to the fabled riches of Shangri-La. Many of the prospectors stayed on as shopkeepers and some enterprising natives cashed in by entering the lucrative pharium trade.

The boom would not last, however. Soon Biogene and the NIS arrived in New Hawaii, squeezing most small-time prospectors out of the Long John business. Even worse, the high-tech facilities at Cliffside drew the northern transport lanes away from Maui, and soon Atlantis had declined to half of its former size. In the wake of the bust, Atlantis has acquired a reputation for lawlessness. The recent establishment of a GEO Patrol precinct in the town is going to bring more changes, but by now most residents are used to change.

Physical Layout

Atlantis is built on a wide, flat plain. Most structures in the town are raised on meter-tall stilts for protection from flooding during the rainy season. The town's commercial center, known as the Cluster, hugs the shoreline and contains most of the town's stores and hotels. Inland from the Cluster is Dead Town, a collection of abandoned buildings left over from the bust, long since stripped and left to fast fungus. The remnants of Atlantis' native population dwell inland from Dead Town in a neighborhood of wooden houses dubbed the Sticks. To the east of the Cluster stretches a wide tidal swamp that serves as a junkyard for the town, and is filled with the half-submerged wrecks of many failed smugglers. The city's landing strip is located on a slight rise to the west of town, near the power station.

Demographics

Atlantis supports a population of between 8,000 and 9,000—transient and seasonal residents make a firm count impossible. Of these, only 500 or so are natives, the assimilated descendants of the second settlement. The remainder are newcomers—Long John prospectors, retired thrill seekers, or budding entrepreneurs. The local GenDiver facility hosts only a dozen GenDiver citizens, the city's only Incorporate population. Deputy Marshal Lightfoot and a small post of Patrol officers are the extent of the town's GEO presence.

Government

Always something of a frontier town, Atlantis became a haven for smugglers and criminals following the bust. Never as lawless as nearby Nomad, Atlantis has always been informally ruled by a coalition of the biggest bosses. The most influential, Leo Nantz, a professed businessman and salvage operator, acts as the mayor of Atlantis. Nantz has grandiose dreams for a second rebirth of Atlantis: he hopes to take the fortune he's made in pharium and build a spaceport in Atlantis, giving new arrivals to Poseidon an alternative to Haven, while jump-starting the local economy. Newcomers, as Nantz sees it, are the key to the city's future greatness.

A new wrinkle in local government is the recent arrival of GEO Deputy Marshal Rachel Lightfoot. Many of the local bigwigs who have long been used to getting their own way and conducting their business in back rooms find the Deputy Marshal's zeal unsettling, and her crackdown on the local drug trade galling. A confrontation will not be long coming.

Economic Base

Atlantis survives primarily as a way station, a place air or sea transports can stop for resupply. Recently, the beauty of the nearby islands has drawn a steady influx of tourists from Haven, and Atlantis has become a magnet for bush pilots and excursion outfitters. Atlantis has no manufacturing facilities—all consumer goods are shipped in from Haven or Cliffside. GenDiver opened a small facility in Atlantis in 2190 that collects and stores Long John, acting as a combination bank and company store. Would-be prospectors can obtain equipment from GenDiver on credit, in return for a percentage of all ore collected. The outpost ensures that GenDiver scrip carries the most purchasing power in Atlantis, although both Biogene and NIS scrip are also competitive. However, most transactions in the town depend either on Long John wafers or barter.

MOST WANTED

Bryan Steeg

The Hole is the place to go if you are in Atlantis and you are looking for a good time. Bryan Steeg, owner and proprietor, is the man to talk to if you need anything else. Spare parts? Steeg can find them. Passage to Shangri-La? He knows just who to ask. Pharium? He has at least ten varieties to choose from, only the best. Just need a drink? The Hole has whiskey all the way from Kentucky and some local concoctions that have to be tasted to be believed. The stories that come with one's purchases are free. To hear him tell it, Steeg has been from one pole of this big wet ball to the other, and he is always brimming with tales about vicious pirates, angry natives, and greater whites the size of orbital shuttles. Steeg claims he is a retired freebooter himself, and he has a scar on his cheek to prove it.

The truth, though there are few around who know it, is a little less glamorous. Born and raised in Tharsis City on Mars, Steeg was a technician in a dead-end job when the *Admiral Perry* rediscovered Poseidon. At the dawn of the Long John rush, Steeg jumped at the chance to get out from under the domes. Once in Haven, Steeg won over a prospector named Ryder, and worked with him as an apprentice miner and technician for three years. The two journeyed all over the Pacifica in their battered sub, looking for the score that would set them up for life. They never found it. The two parted ways in Atlantis after a bitter argument that turned into a brawl that turned into a knife fight. Left to his wits and instincts, within a year Steeg had created the Hole and made it the most popular watering hole in Atlantis, if not all of New Hawaii.

Business at the Hole has left Steeg with a dizzying web of contacts all over the archipelago. He's acquainted with the Gorchoffs out of Haven, the syndicates in Nomad, and knows dozens of minor movers and smugglers. Steeg is not totally without principle—he will not point out hit men, cannot abide pirates, and will never betray a client's trust. Always jovial and full of bluster, Steeg extends the same hearty greeting to all of the Hole's patrons—locals, strangers, even the new GEO Marshal. The Hole will always be a place anyone can go to have a decent drink, and that's just the way Steeg wants it.

Species: Modified Human
Goal: Contentment
Motivation: Pride
Attitude: Energetic
Role: Opportunist (Everyday)
Primary Attributes: Physique 0, Coordination 0, Cognition 0, Psyche 1
Derived Attributes: Endurance 0, Reflexes 0, Toughness 0
Modifications: Neural Jack
Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Stealth
Primary Skills: Computers 4, Culture (Colonial) 5, Culture (Native) 3, Culture (Spacer) 3, Culture (Street) 5, Economics 6, Fast-Talk 6, Law 4, Persuasion 6, Piloting 5, Small Arms 2

Taking a cue from the natives who have fished in Easter Bay for generations, the Atlantis Fish Company opened a large fish-packing facility in 2195, harvesting the bounty of the seas and sending marine delicacies all over Poseidon. Processed fish is Atlantis' largest legal export. Pharium, however, is where the town's real money is. The rich volcanic hills of Maui contain dozens of hidden pharium crops and the drug forms the secret backbone of Atlantis' economy.

Infrastructure

Atlantis has been slow to build up its infrastructure. Most locals still rely on cisterns for rainwater, and have their own solar generators for trickle-charging storage batteries. A ramshackle power plant, left over from an early GEO development effort, supplies power to all who can pay Colby Ahearn, the plant's owner and one of Atlantis' more influential citizens. Brownouts are all too common. Limited aircraft and boat repair facilities are available from Lowden Poole, who runs the city's only mechanic shop and scavenges the swamp for spare parts. Only about half of the streets in the Cluster are paved or in good repair.

The Underground

The ruins of the original Atlantis, long buried in clay, still exist near the Sticks. Occasional washouts uncover part of a bulkhead or the corner of a buried structure. The natives revere the ruins, but many of Atlantis' less-scrupulous residents have scoured the buried chambers for equipment to scavenge or have used them to stash contraband. The most famous feature of the ruins, however, is the Hole.

Despite the dirty looks he got from the natives, stranded ex-prospector Bryan Steeg scrounged through the half-buried sections of old Atlantis, digging for spare parts and buried supplies he could sell or trade. Around this time, Steeg met a native named Sallow, who introduced him to the fine arts of pharium horticulture. The two started a friendship and business partnership that lasts to this day. In late 2195, while digging a new pharium cache, Steeg stumbled across one of the old colony's main habitats. The ex-prospector quickly managed to fix it up and turn it into a place to meet and drink, a bar he named the Hole. The local brews and other "entertainments" quickly turned the Hole into the most popular dive in Atlantis. Most visitors from distant islands pay their tabs in trade, and Steeg has quite an assortment of odds and ends piled up in the Hole's back rooms. The bar doubles as a trading post—almost as reliable as a hypermart, and ten times as eclectic.

Coronado Station

"Wondrous as Long John may be, Poseidon has so much more to offer humanity. Here at Coronado, we're meeting the New Frontier head-on. The discoveries we're making about Poseidon's biology and geology will not only give us new insights into the workings of Mother Earth and how better to rebuild her, they will also show us how to reap the bounties of Poseidon without harming this beautiful world. This is not just another Incorporate strip-mining station. Coronado is so much more."

—Director Gutierrez, from his interview on *Biogene Now!* CommCore documercial

Location and Local Terrain

Coronado Station is a Biogene multipurpose research complex located on the north shore of Kauai, at coordinates 9°35'20" north latitude by 3°20'43" west longitude. The station is located in a shallow cove walled with tall cliffs, offering the base excellent protection from the elements, as well as easy access to the sea beyond.

History

Construction on Coronado Station began in the summer of 2196, and the station went online six months later. The two years since have been challenging but not particularly eventful. The various scientific teams are still in the initial stages of their work—no major discoveries are expected anytime soon. Now that all the bugs and technical kinks that arose during the first year have been resolved, life at Coronado has settled into a routine.

Physical Layout

Coronado Station consists of several distinct components, each supporting a different facet of the facility's diverse operations. Coronado Station's Main Complex is a multilevel, prefabricated colony unit that rests on biocrete stilts in the center of Coronado

Cove. All station personnel are housed in Coronado Main, which also contains extensive geoscience and bioscience labs and limited recreation facilities. The lowest level of the complex houses the station's sub and boat bay, along with special lab and habitat facilities for the station's cetacean personnel. Unlike many Incorporate facilities on Poseidon, Coronado has no xenosilicate processing facilities. The station serves as a waystation and service hub for Biogene's mining operations in the oceans to the north, but all harvested Long John is delivered to Cliffside for refining and processing.

A reinforced causeway connects Coronado Main to Coronado Shore, built on the nearby beach. Coronado Shore consists primarily of support structures—storage units, the station's main power generators, and the satellite uplink tower. It also features the station's transit port, with a VTOL/jumpcraft hangar and service bay, and an elevated landing platform. Lack of space in the cove prohibits construction of a runway, leaving Coronado Station inaccessible to conventional aircraft. A dirt road leads from Coronado Shore up a steep incline to the island beyond, granting ground vehicles access to the interior.

Coronado also supports a series of science stations inland on Kauai, with no direct connection to the complex. Sierra Station, the field camp for the geoscience team built high on the shoulder of Mount Fafnir, is only accessible by air. Several field observation posts are scattered throughout the jungles of Kauai's north face, and are periodically used by Coronado's bioscience team. The largest of them, Dos Hermanos, can house the entire team and is permanently staffed by a crew of four. The other jungle outposts are only occupied as needed.

A recent discovery in Coronado Cove indicates that the Biogene crew is not the first to settle here. The remains of a sizable native village lie under the sands of the cove's beach. An anthropological survey team has recently arrived from Cliffside to study the remains.

Demographics

Fifty-five people and two dolphins live and work at Coronado Station. All are Biogene citizens, and most have been in place since the station was established. Spanish is the station's official language, although the individual research teams are much more cosmopolitan and reflect Biogene's multinational diversity. All of the station's staff are bilingual, and most researchers speak at least three languages fluently. In all, station personnel, who often communicate in strange mixtures of Spanish, English, German, Russian, and Interspec, converse in seventeen different languages.

Though the research teams are rather insular, esprit de corps among the various teams runs high. Station-wide mixers are frequent, and often focus around the monthly series of hydroshot matches. The games provide an excellent means for letting off steam and promoting healthy competition between the station's personnel.

Government

Mario Ruiz is the Director of Operations at Coronado Station, and the final on site authority. He is advised and assisted in his duties by a board of the various department heads. The directors of the science teams have very little influence over the station, save for materials requests and progress reports. Director Ruiz tends to micromanage station affairs, preferring to dictate policy rather than take input. Security Chief Gerhardt Ritter's opinions, however,

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LOG ENTRY 17: DAY 6 03:38

It's late. Had another long discussion with Holmes, and we went over the test data again. Six times. There's no doubt—at least 40 people are now showing some form of psychological distress. After dinner I sent a squirt transmission to Cliffside recommending a full quarantine. Holmes has dubbed the phenomenon "the Coronado Effect." Dramatic. We still don't have any clue what might be causing the troubles.

Theories: Holmes and I brainstormed for quite a while, and so far, this is what we've come up with. What's causing the mental breakdowns?

1) Natural Causes—a widespread case of "cabin fever." While occasional cases of emotional trouble at remote outposts have been reported, the odds of such breakdowns happening to virtually the entire crew at the same time are too remote for serious consideration. Also, said causes would indicate that Biogene's psychological screenings have failed on a massive scale. Holmes and I discarded this theory rather quickly.

2) An Environmental Factor—our current favorite. His statistical analysis of the cases hints that the instability has passed from person to person—he's still trying to find a vector of transmission. The science teams all manifested symptoms first, with admin and support staff among the last that are free of symptoms. Hopefully, the next tests will determine which team manifested symptoms first, and hence which team brought the agent into the station. This seems the only option and is the theory under which we'll proceed.

Of course, we still have no idea what type of environmental agent we're dealing with, or its point of origin. Here again, there are several possibilities:

A) A biological factor—some kind of bacteria or virus native to the area. This is the first known incidence of the Coronado Effect anywhere on Poseidon, or at least in Biogene territory. Whatever it is, our bug is local. Holmes doubts that any kind of biologic could have escaped detection, but has assigned Martin to go look for one.

B) A chemical factor—something in the water of the cove, or trace elements of some geothermal compound tracked back in from Sierra Station, or some kind of compound produced by the local flora or fauna. This is Holmes' favorite. He thinks that the cause will probably be very complicated—an interaction of three or four cofactors, each of which are harmless on their own, but which act together to destabilize the victim's neurochemistry. Holmes is going to coordinate with every team on-station as well as the support engineer to try to unravel the mystery. He realizes that he is hunting for a needle in a haystack. Anything from the granite content of the beach sand, to the lining of the air ducts, to the pollen of the local wildflowers could be a culprit.

C) An artificial factor—the scariest option. Coronado Station could be on the receiving end of some kind of psychoactive weapon delivered by a competitor to compromise the station. The nearby presence of the NIS makes them a likely suspect, although this kind of thing isn't exactly their style. GenDiver also isn't very far away. The fact that the agent is so elusive is one thing in this theory's favor—whoever designed it would design it not to be easily found. Is this the first shot in some new corporate conflict? The death of the bioscience team may not be a coincidence.

D) Something else—off the deep end and over the rainbow. Sightings of the mysterious manta-like "aborigines" by the oceanography team have been frequent. The things seem attached to the nearby reefs, and are much more common here than elsewhere. Holmes told me that he's read classified files documenting the strange effects these creatures have had on those who encounter them. Is the Coronado Effect merely some residual byproduct of their presence in the area? Holmes thinks that they may be one of his cofactors. Another possibility: if the aborigines are as smart as some speculate, is this some deliberate action that they're taking? By far the least likely option, but we mulled it over for the sake of completeness.

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All of the above will go into my formal report, which I'll prepare and encrypt tomorrow for handoff to the next supply transport. There are a few things, however, I'm not going to mention, except here.

I'm up typing this so late because I've had another nightmare. The dream came again—I'm running through the corridors of the station, and there's something chasing me, something… big. I can never look directly at it, but it has long, spindly legs like a spider. No doubt it's just nerves, a sympathetic neurosis arising from my exposure to the crew of the station.

The last thing Holmes and [discussed, however, leaves me wondering. Whatever is causing the Coronado Effect, odds are it won't be long before we begin to be affected as well. Little use trying to sleep with that hanging over my head.

—Excerpt from the personal files of Dr. Stephen Hill, Biogene field psychologist

Who Can You Trust?

The research conducted at Coronado Station is classified, of course. Biogene is optimistic, however, that the results of several of the projects will revolutionize the rapidly growing xenosilicate industry and ensure Biogene's continued domination in the field of biotechnology. Dr. Rios of the geoscience team is conducting an extensive seismic survey of Mount Fafnir, and is trying to ascertain the geological influences on the formation of Long John, and unlock the secrets of the ore's synthesis. So far, he has met with little success.

Dr. Gabrielle Hester of the bioscience team is conducting an extensive survey of Kauai's jungles targeted at locating new pharmaceutical compounds. Several interesting leads have turned up, and over a thousand new species of flora and fauna have been cataloged. The oceanography team is conducting similar surveys of the massive reef systems directly north of Coronado Cove. As a pet project, Dr. Escobar, leader of the team, is also trying to determine what effect, if any, xenosilicates have had on Poseidon's organisms and ecosystems. So far, he has been unable to identify a single biological process or organism that utilizes the ore.

All is not well at Coronado station. So far. Biogene has clamped a tight lid on all news of events at the station—the sensitive nature of the research done onsite made it easy. Conditions are rapidly getting out of hand, however, and it is unclear how long the station can remain operational.

Troubles began a short time ago when both of the cetacean crewmembers vanished. Curiously, an investigation discovered that the two dolphins had reprogrammed the microsurgical implements in the oceanography lab to disable their personal data transmitters, leaving them untraceable. The present location of both dolphins remains unknown.

Only a few days later, four members of the bioscience team were lost during a deep jungle survey. The missing botanists were quickly located using their PDT signals, but the search team was not ready for what they found. All four scientists had been killed—autopsies revealed multiple stab wounds, and all suffered crushed skulls. Natives are the obvious suspects, but none of the nearby villages are classified as hostile.

In addition to the troubles with the survey teams deep in the jungle, the crew has started having problems simply working together. Most at the base are on edge, and more than 60% report chronic nightmares. After the fifth crewman in six months suffered an emotional collapse, Biogene intervened. A team of psychologists and neurologists from Cliffside has just arrived and is finishing up their first wave of examinations. The results are startling: almost all of Coronado's staff are deviating from psychological norms, and the head neurologist suspects the action of some kind of psychoactive agent. No recommendations have yet been made, as the psych team is a little nervous about their position—they are surrounded by dozens of potential psychopaths.

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Worse, Director Ruiz is growing increasingly paranoid and obsessed with the success of his operation. More than ten of his crew are now out of commission, and he has staked his entire career on Coronado's success. Any suggestion or move to shut Coronado down could leave him suicidal—or homicidal. Ruiz is convinced that the troubles are the result of sabotage, probably perpetrated by the NIS. Security Chief Ritter finds the notion highly unlikely but is conducting a thorough investigation. If Ruiz becomes unstable, he realizes he may have to take steps. Unknown to anyone, one of the Coronado Main technicians is a spy, a deep-cover mole from GenDiver. He's also been feeling a bit paranoid lately—and understandably so.

The answer to this enigma lies in the reefs offshore from Coronado. The plentiful fish attracted the original native settlement, and the biological diversity drew Biogene as well. Deep under the reef system, however, lies a Creator cache. A large group of aborigines acts as custodians of the cache and they have moved to protect it each time humans have settled in the area.

Thirty years ago, the aliens tried to make peaceful contact with the natives of Coronado Bay, with disastrous results. After a frightened fishing party attacked the aborigines and killed one, the creatures responded by flooding the bay with a number of psychoactive compounds, hoping to drive the humans away. Widespread madness and terror resulted and the natives ended up slaughtering each other in a violent orgy of paranoia.

The aborigines had watched the natives carefully, trying to learn about the workings of the human mind in the process. Biogene's arrival has given them a new opportunity for study. The aborigines have released an entire suite of psychoactive compounds into the waters around the reefs. The toxins have no effect whatsoever on life forms native to Poseidon, but upon absorption into a human system, they subtly affect the victim's brain chemistry, driving them to eventual depression, paranoia, or psychosis. Worse still, the chemicals target the victim's endocrine system, altering the metabolism in certain glands so that the cells produce more of the compound. Within a week of contact, the unwitting victim has turned into a walking chemical factory, secreting tiny amounts of the agent and leaving it behind in every fingerprint.

Subs and divers returned to Coronado crawling with the stuff, and have since spread the compounds through casual contact. The particles are not airborne, but it makes little difference: in the weeks before any of the staff showed symptoms, the particles were smeared over most of the internal surfaces in the station. The dolphins were the first to succumb to the toxins, and fled from the station in a fit of paranoia. Now the rest of the station is beginning to feel the heat, and the Biogene psych team is very close to discovering the toxins. When they do, Director Ruiz will be convinced that his sabotage theories are true. Biogene will be much more concerned with possible contamination at Cliffside. Developing an antidote before the station staff slaughters each other will be a difficult task at best.

are heeded more than most. The stoic German seems to have a monopoly on the Director's ear.

Economic Base

Coronado Station is by no means self-sufficient, and relies on weekly deliveries from Cliffside for food and other supplies. In addition to its research activities, Coronado also serves as a main transit point for Biogene operations north of the archipelago, refueling and servicing air and sea transports inbound to Cliffside or outbound to remote facilities in Shangri-La. Nearly a dozen flights land at Coronado Shore each month, but visitors are rarely allowed across the causeway to Coronado Main.

Infrastructure

Biogene's investment in Coronado Station is considerable, and the station's technological resources are quite extensive. The base features cutting-edge, networked computers, advanced lab facilities, a state-of-the-art infirmary, sophisticated sensors and communications gear, and living quarters far more

lavish than one would expect to find in a remote research station. All of Coronado's secondary facilities are equally well equipped, even the remote jungle outposts. A small fusion generator, supplemented with solar collectors, provides power for the station.

The base also maintains a small fleet of support vehicles. Four rugged land rovers ferry the bioscience team to and from their jungle camps, and two utility VTOLs provide quick air transport to the geoscience station, or anywhere else, all the way to Cliffside. Three research submersibles, a utility submersible, three motor launches, and a dozen power skis give Coronado personnel access to the oceans. There is enough equipment to support 20 divers at once, and 10 hard suits for deep-sea research. A small but well-stocked armory is available for station defense, and in the event of a hostile takeover, a self-destruct hot switch has been wired into the computer network and the fusion generator.

Members Only

Coronado Station is a Biogene facility, and the potential value of the research conducted there renders the base off limits to all outsiders. Even Biogene citizens are not allowed inside Coronado Main without the proper security clearance, which is hard to come by. Biogene transport crews have nicknamed Coronado "the ice house," referring to the reception they usually receive from station security. All others who approach are quickly identified by the station's powerful sensor network and warned away. If push comes to shove, one of the station's VTOLs and two of the surface boats are armed, and will drive intruders away by show of force.

Recently, even Biogene transports have been denied access to Coronado. Reports of a potentially dangerous systems failure in Coronado Shore have led to the rerouting of all transports through other stations. Rumors have circulated that Coronado is actually under some kind of quarantine and the team of engineers and specialists recently sent there are actually doctors. It is unclear what would happen to a vessel in distress if it tried to put in at Coronado—under GEO law, the station is still required to lend assistance to parties in trouble. A medical emergency at the station would change things considerably, but so far—officially at least—no such emergency exists.

Northwest Territories

The chain of islands running from Castaway to Pettibone was classified as the Northwest Territories in the OCA Colonial Survey of 2167. The region includes several landmasses, and all of the primary island types are represented.

At the southern boundary of the Northwest Territories, the Highlands are composed of two volcanic formations—Storm Island and Tranquility Island—linked by a low, narrow isthmus that is often completely submerged during storms. Due to the significant northeasterly tilt of the Highlands formation, Storm Island is less protected from the prevailing winds than its twin, and its weather can be considerably more inhospitable. Both islands are dramatically jagged in outline and present a relief of sharp peaks and deep valleys.

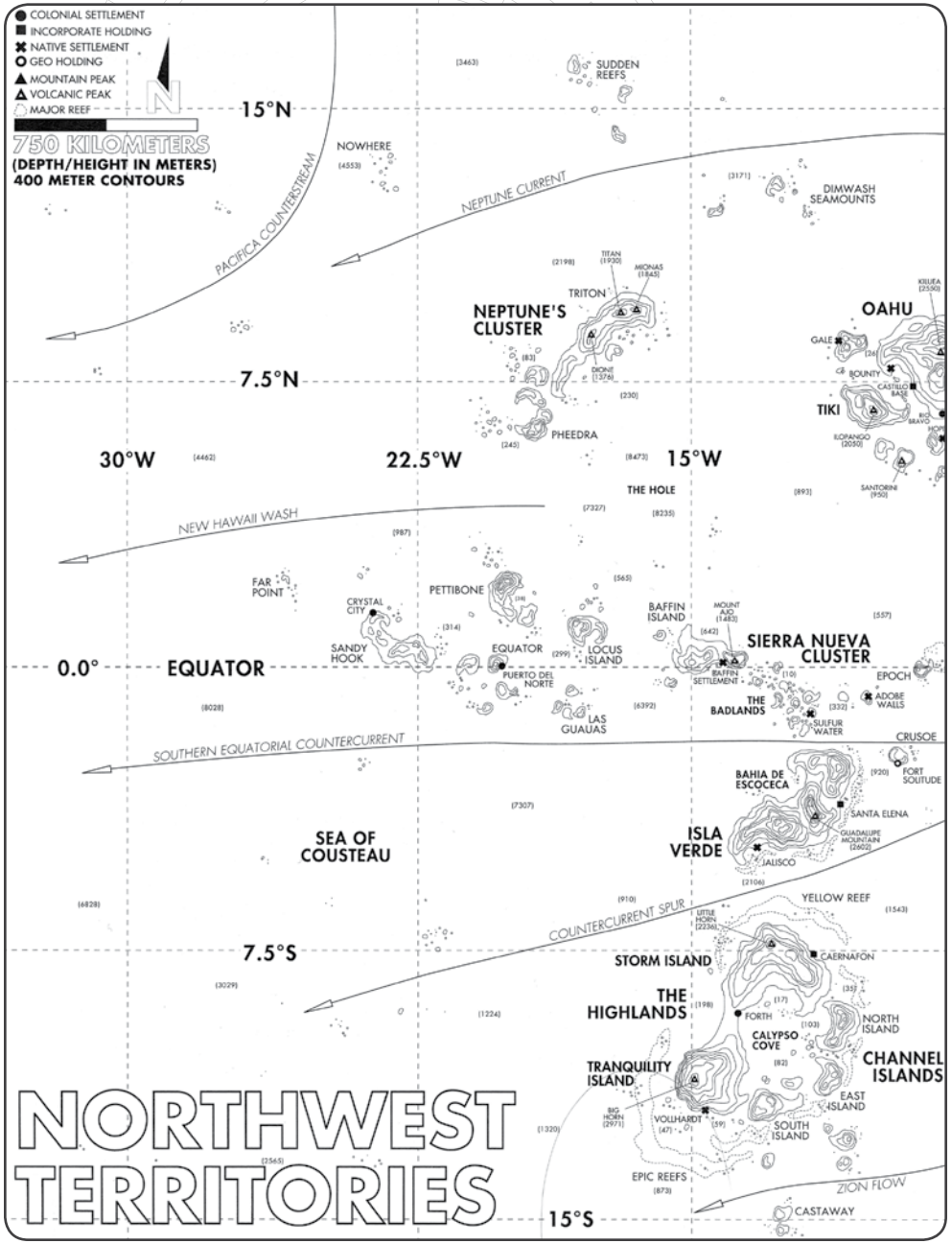
Along the east and windward side of the islands, erosion has produced gentle, densely rainforested slopes, while the west and leeward side of the islands boasts the highest sea cliffs ever encountered by human beings. A broad coastal plain featuring magnificent white sand beaches stretches along the windward side of the Highlands. Streams, small rivers, and countless waterfalls rush and tumble down the verdant slopes to drain into the surrounding lagoon.

The Channel Islands are surrounded by the same massive barrier reef that encircles the Highlands. The North, East, and South Islands are well-eroded, remnant volcanoes and are responsible for Calypso Cove's characteristically tranquil waters. Several major channels running through the reef allow the safe passage of even large ships, as the channels can reach depths of up to 50 meters.

Isla Verde is considered by many to be the most beautiful island on Poseidon. Despite its lack of beaches, the island's magnificent lushness and dramatic terrain make it a favorite for travel posters on Earth and Luna. Isla Verde's towering central peak is wrapped in heavy rainforests and rises to 2,662 meters. The island's interior is laced with countless streams and small rivers that cut wide valleys down from looming ridges and sometimes hurtle down in waterfalls, forming pristine freshwater pools.

The 40 major islands and more than 300 islets of the Sierra Nueva Cluster are links in the chain of volcanic activity that stretches from Sandy Hook to Isla

Verde. The largest landmass, Baffin Island, is ruggedly volcanic, with sharp spires, deep valleys, and high plateaus, and accounts for almost half of the land area in the cluster. The largest of the remaining islands are also volcanic, many overlaid with limestone, while the smallest islets are coral atolls and limestone formations. Volcanic activity is pronounced, and the overflow of new lava prevents the development of large-scale reef formations along the shores of many islands.



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SHOWDOWN

Two rival smuggling gangs have taken over the small pioneer settlement of Crystal City, located on the northern coast of Sandy Hook. Both gangs had visited Crystal City for years before moving in and taking control. The first, led by Victor Janz, is connected to the Gorchoff Family in Haven. Janz was a sergeant in GenDiver Security when he made his syndicate contacts and decided to leave Incorporate service for the underworld. The other gang, led by Elijah James, is connected to the NRM. James is a native of Kingston whose uncle is one of Ian Weiser's chief lieutenants.

Both gangs are violent and rather ruthless, and the citizens have essentially become hostages in their own town. There are occasional confrontations between the two gangs, and several of the smugglers have been killed, but Janz and James have been largely successful in maintaining an uneasy truce.

Stretching 500 kilometers from northeast to southwest, Triton Island is the major landmass of Neptune's Cluster. It is a large, mountainous island, much longer than it is wide, with an extensive peninsula jutting southwest toward a series of smaller outlying islands. Trident Island is dominated by the Tethys Mountains, a central chain cut by high, broad valleys. The Tethys chain is widest at the northeastern end of the island and tapers gradually as it nears the peninsula. Triton Island is flanked by coastal plains and beaches along its northern section, while the southern peninsula is dominated by coastal marshland. The outlying islands of Neptune's Cluster are also predominately volcanic, though many low, coral atolls are also present.

Due to the proximity of the Northwest Territories to the equator, the region's tropical climate is hot and humid most of the year. Nevertheless, such factors as latitude, elevation, and position relative to prevailing winds can cause considerable weather variations among the islands. There is little seasonal change on the islands that straddle the equatorial belt, though Neptune's Cluster and the Highlands are characterized by mild, opposing seasons. Annual rainfall is very heavy, with some islands receiving as much as 600 cm per year.

Cyclonic storms are a constant danger for the islanders of the region. There is almost always a tropical storm of some magnitude active in the region, and at least one Force 5 or 6 is inevitable most every year. It is not uncommon for an island settlement to be ravaged by a newborn storm early in the season, only to have it pay a return visit after circumnavigating the planet. These storms are referred to as "two-timers" by the locals.

The flora and fauna in the Northwest Territories vary considerably by island type. The high, volcanic islands tend to support a more numerous and diverse biota than the low, coral atolls. The atolls are delicate, often transient formations and are extremely vulnerable to constant change and destructive forces. Herbaceous plants, scrub, and grasses grow along the island coastlines, while several species of trees and bushes grow further inland. On the high islands, the windward sides are often carpeted with rainforest, dense with trees, bushes, ferns, vines, and flowering plants. The leeward sides of these islands are sometimes blanketed with monsoon forest or bush cover, while some are characterized by barren grassland or even coastal desert. The ephemeral borders between windward and leeward are often thick with reeds, bamboo, and low brush.

Poseidon analogs of birds, insects, corals, marine mollusks, and fish are found in abundance throughout the region. Higher animals are also in evidence, and some of the largest caneopoise migrations ever documented have been observed in the equatorial waters of the Sierra Nueva Cluster. Ironically, the most common animals in the Northwest Territories may be those that are not native to Poseidon—the rabbits, pigs, and iguanas brought to the waterworld by the original colonists.

The Northwest Territories were among the last regions of the Pacifica Archipelago to be colonized by human beings. Prior to the Abandonment, the meteorological research station at Vollhardt on the southern coast of Tranquility Island was the only human outpost in the area. In 2097, the research station's surviving technology was converted into a solar-, wind-, and wave-power facility, and a per-

manent settlement grew around it. At the same time, immigrants from the Haven Cluster spread northward, establishing communities along the sheltered beaches of Calypso Cove and in the deep valleys of Isla Verde. In 2098, the improbable partnership of a dolphin mystic called Sage and an orca soldier named Bataku led a group of more than a hundred colonists to begin the settlement of the countless islands of the Sierra Nueva Cluster.

The Northwest Territories remained only sparsely inhabited until well after Recontact. It was not until the discovery of Long John and the growing Incorporate presence on Poseidon that humans would be attracted in any great numbers to this often inhospitable region. Since then, the company towns of Santa Elena and Caernafon have grown dramatically with the expanding interests of GenDiver and Lavender Organics on the colony world. Beyond this Incorporate presence, though, newcomers remain fairly rare in the region.

THE SIERRA NUEVA CLUSTER

I am Bataku, descended from Bataku, the first warchief of my people. The Despoilers curse us and ask why we kill them. We spill their blood to end their insatiable thirst for the lifeblood of our world. We cannot reason with the Despoilers because they are already dead to the world. That is why we do no wrong. We cannot kill something that is already dead. We are not killers, as the Despoilers say, we are the protectors of life.

They send machines to defile our waters, our air, and our land and send soldiers to murder the young. We purify the world with their blood and send their corpses back to the world of corpses. There is joy in spilling the blood of Despoilers, and we share it with all the world of life. We will continue to spill their blood as long as the dead ones continue to invade the world of life. Our fury is as insatiable as their greed.

—Bataku, orca warchief, excerpted from an editorial letter to the Haven Chronicle

LOCATION AND LOCAL TERRAIN

The Sierra Nueva Cluster is a group of more than fifty volcanic islands and atolls centered at 01°51′43″ south latitude, 12°53′06″ west longitude and about 700 kilometers north-northwest of Santa Elena, the GenDiver company town. Because of its proximity to the Storm Belt, the native villages of the Sierra Nueva are often underwater. In most cases, the natives inhabit air-filled caverns accessible through a complex maze of twisting lava tubes. It is unknown precisely how many individual native settlements there are in the cluster, but the Sierra Nueva tribes are believed to include more than 1,200 adults, many of whom are cetaceans.

HISTORY

The Sierra Nueva was settled in the years immediately following the Abandonment by a transient orca soldier named Bataku. Though no written records exist, secondhand accounts by first-generation natives who knew the orca during this time suggest that he was deeply influenced by a somewhat underground sect of dolphin animism, or nature worship. Bataku became committed to establishing a culture and community based on these radically naturalistic convictions.

The best official estimates indicate that Bataku's original settlement included about 100 colonists, most of them second-generation natives, dolphins, and orcas. They apparently chose the Sierra Nueva for its active volcanism and proximity to the Storm Belt, as isolation from the rest of the colonial effort seems to have been a primary motivation. They favored submerged dwellings, both for their protection from surface storms and the added isolation they offered.

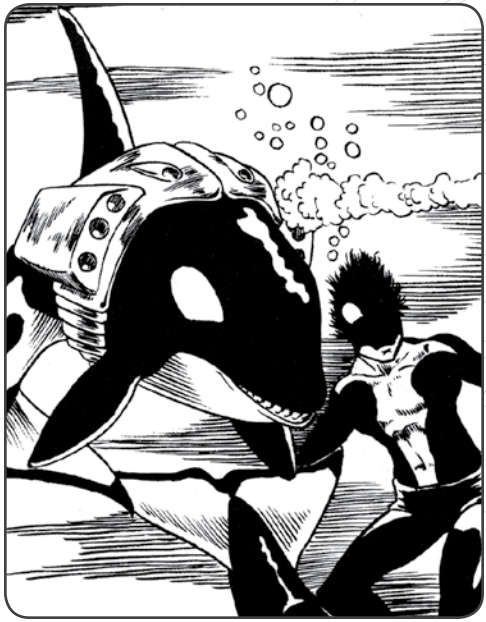
Since Recontact, there has been repeated violence between the natives of the Sierra Nueva and both GEO and Incorporate military forces. The proximity of the cluster to Santa Elena has made GenDiver shipping a favorite target of the native "warpods," and in addition to GenDiver's armed reprisals, the GEO has several times deployed Peacekeepers to the cluster to "pacify" the natives. The combination of extremely unfamiliar and difficult terrain and the modern weaponry that is somehow finding its way into the native settlements has made these expeditions very costly for both the GEO and GenDiver. In addition, both militaries have depended heavily on cetacean troops in

these conflicts, and both are beginning to have serious problems with troop defections.

Physical Layout

With the exception of a few well-hidden outposts and hunting lodges, the native settlements of the Sierra Nueva are often at least partially underwater. The volcanic islands and coral atolls of the cluster are riddled with lava tubes and caverns, many of which are interconnected across considerable surface distances. These "underwater" villages are rarely actually below the water's surface, as the natural air spaces that make them up are not truly waterproof. Though most entrances and connecting tunnels are submerged, most inhabited chambers are just above sea level. For small communities, the entire settlement may include only one or two caverns that are shared by the entire tribe. Larger settlements may involve a maze of countless, interconnected caverns and tunnels.

In these settlements, living space is often at a premium, even considering the typically low value natives place on personal privacy. Most often, space is first distributed on the basis of need, so that large families are granted correspondingly large caverns by the rest of the community. In recent years, a tradition has developed in which living space can also be earned in battle. Those natives with the largest chambers, or even a series of linked chambers, are often those who have been the most successful warriors.



In addition to living space, most settlements maintain separate caverns for the treatment and storage of meat and other foodstuffs, as well as rooms for construction and repair of tools. This workspace is usually a single, large multi-use cavern, so there will be natives making crude spears or knives alongside those repairing boat sails or cleaning assault rifles.

With entrances located well below the ocean's surface, most of these villages are inherently secure. With the increasing incidence of GEO and Incorporate patrols in the cluster, however, many communities have established additional defenses. The fact that most cetaceans prefer to avoid confined spaces and spend much of their time in the open ocean allows them to maintain almost constant patrols. In addition, many communities have established heavy weapon emplacements and underwater mines near the entrances to their settlements.

Demographics

There are no precise figures on the number of natives living in the Sierra Nueva, but 1,200 adults is considered a fairly accurate estimate. Of these, about 60% are likely aquaformed humans, with cetaceans accounting for the remainder of the population. There are no reliable estimates on the ratio of dolphins to orcas, but it is suspected that the communities of the Sierra Nueva represent the densest concentration of orcas anywhere on Poseidon. Because they live in large family groups within a well-defined territory, these orcas are generally considered resident, but in truth, they have maintained most of the primary characteristics of transient orca culture.

Government

While human scientists, of course, have had little opportunity to study the tribes of the Sierra Nueva, it is believed that political leaders are selected by the tribes, usually on the basis of hunting and military prowess. Prior to Recontact, conflict was essentially unheard of on Poseidon. Up until the last few years, it is thought that a native's ability to facilitate the cooperation of his people and improve the tribe's chances of survival was the sole criterion of leadership. Recently, success in battle has played an increasingly important role. In any case, the natives' system of government is a pragmatic one: leaders enjoy their position so long as they fulfill their duties,

and are replaced by general consensus when they do not. In many communities, dolphin shamans or spiritual advisers also play an important role in the leadership. The specific details of a shaman's duties are unknown, but it is suspected that their roles are similar to those of shamans and medicine men of countless traditional Earth cultures.

Economic Base

Cetaceans, of course, require very little of what humans would consider an economy. The dolphins and orcas of the Sierra Nueva hunt for fish and other prey in the open seas, just as their primal ancestors did, and are perfectly capable of living in comfort without any durable goods or shelter. As a result, these tribes' characteristic economic activity is almost entirely for the benefit of their human members.

This economy is largely dependent upon sunburst hunting. Caneopoise provide the natives with meat and clothing—in short, practically everything the natives require for survival. While dolphins prefer various species of fish, most orcas enjoy caneopoise meat and participate in, or even lead, these hunts. The increasing incidence of sunburst poaching in the Sierra Nueva has posed a serious threat to the native tribes, and has been an additional source of conflict with the newcomers.

Because sunburst migrations are common in the cluster during the spring and autumn, native hunts are distinctly seasonal. Twice each year, the hunting parties will leave their dwellings for days or weeks at a time to follow the migrations moving through their territory. When the hunt is complete, the meat will be cured and stored in designated caverns to sustain the community through the intervening months.

Infrastructure

The tribes of the Sierra Nueva have few needs and are almost completely independent of high technology. They require little more than their underwater caverns to survive, and even shelter is a luxury for the cetaceans. Many settlements, however, do maintain

ACCESS DENIED

GEO Interest

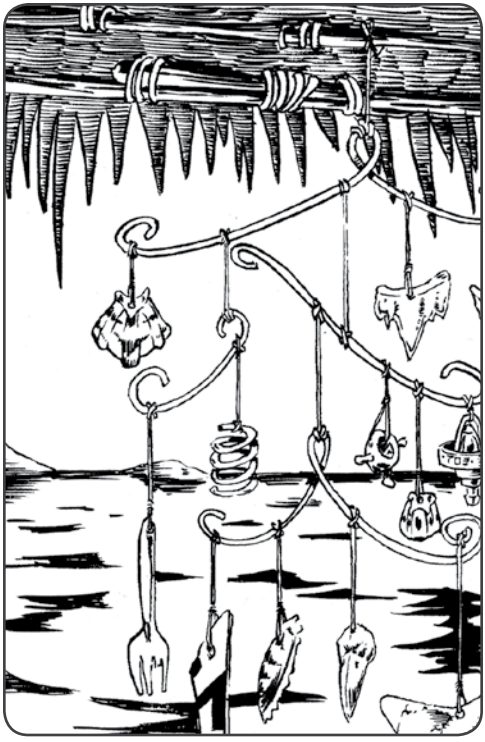
The tribes of the Sierra Nueva are receiving illegal weapons from a number of sources, including the Free Poseidon! group and Gorchoff crime syndicate, both based in Haven. Many of the weapons obtained from the Gorchoff Family have, in fact, been brokered through the syndicate by GEO Internal Security agents. These arms shipments are just one of many elements in Internal Security's black operations against GenDiver and other Incorporate states. The fact that these weapons have also been used against GEO military personnel seems to have escaped the attention of those responsible.

Weapons are not the only resources that the natives of the Sierra Nueva have received from the GEO. For several months, GEO Internal Security has been secretly diverting military advisors, on loan from Armed Forces, to the cluster, where they have been coordinating intensive military training programs for the natives. There are, of course, significant tensions between the GEO personnel and the natives. One advisor was recently maimed by an enraged orca, and the incident may uncover the whole operation if Armed Forces launches a full-scale investigation.

Aboriginal Alliance

A very few of the most secluded and extremist settlements have established loose alliances with some of Poseidon's enigmatic aborigines. How these relationships originated is something of a mystery, but they serve both groups well. There is seldom direct cooperation between the natives and aborigines, and communication is apparently managed through select dolphins. The cetacean mind and worldview is somehow more in tune with the aboriginal psyche and therefore more receptive to influence by the aborigines' empathic abilities.

Though these alliances are best characterized as tentative, they have been important. The aborigines have provided the natives with information about Poseidon, and the natives have provided the aborigines with insight into human behavior and activities.



floating docks on the ocean surface near their homes, as boats of all varieties are an important resource for almost all native communities. Many communities also keep small hunting lodges in local mangroves or on nearby islands, though these are rarely used during the off seasons.

Native Unrest

Both the GEO and GenDiver have classified the tribes of the Sierra Nueva as hostile. There have been several instances in which the natives have used modern, high-tech weaponry against GEO and Incorporate personnel, and the Justice Commission is investigating the source of these illegal arms. It is believed that ecoterrorist groups, or perhaps Incorporate rivals of GenDiver, are responsible for selling weapons to the natives.

The war against the Despoilers—a term applied to all newcomers by the dolphin shamans—has become an increasingly important aspect of life in the Sierra Nueva. Not surprisingly, the unique traits and mentality of cetaceans have been very influential in this transformation into a military culture. Dolphin shamans apparently predicted Recontact several years before it occurred, and have been actively encouraging the militarization of the local culture for some time. Further, many human warriors use natural dyes to paint their bodies with the distinctive coloration of killer whales, and even "ride" dolphins and orcas into battle. The human will simply hold onto the dorsal fin and allow the cetacean to do the swimming. This tactic has afforded the warpods of the Sierra Nueva a great deal of range and speed without the use of boats, which are much easier for modern sensors to detect.

Bataku is the orca warchief of the oldest tribe of the Sierra Nueva. He is the son of the Bataku who originally founded the settlement in the early years of the Abandonment. The first Bataku was killed by a greater white before his son was born, and some dolphin shamans have suggested that the son is actually a reincarnation of his father. Bataku is obsessed with uniting all of the tribes of the cluster in the fight against the Despoilers. If the tribes are ever fully united, they will pose an even greater threat to GEO and Incorporate authority throughout the region.

THE BAFFIN ISLAND SETTLEMENT

I challenge anyone to find a more rugged and beautiful place anywhere on Poseidon. Baffin Island is a land hewn violently from the planet by the irresistible hand of Vulcan, its countenance chiseled and lashed by the power of wind and wave. It is wracked by the shudders of the earth and pounded by hurricane winds, and still it perseveres. This is an angry, defiant place.

And yet, there is life here; life that has been shaped and molded by the same savage elements that raise mountains from the sea, only to hammer them into sand. This is Nature, red in tooth and claw, and the creatures who live here wring survival from their harsh world with a ruthlessness that is alien and terrifying to the civilized creatures of an artificial world. Civilization has no place here. To the natives of this land, those who invade it and seek mastery over it are just predators, stalking beasts to be hunted and destroyed. There is no mercy in the jungle.

—Tomas McLain, The New Yorker

WARPOD

Bataku slapped his powerful flukes against the surface and dove. As he drifted downward, he gave his body over to the diving reflex, the primal, euphoric experience the dolphin shamans called the Whale Dream. His heart rate slowed, his lungs collapsed, and the water grew darker as the ocean tightened its grasp.

As an orca, Bataku had naturally been given leadership of this warpod, which included eight human aquaforms and four dolphins. They had been patrolling the region for days, but now they were no longer waiting. The order had been given, and the hunt had begun.

The Despoilers lived in a metal bubble on the edge of a deep trench near Bataku's home. They came out into the sea in little machines, and scurried across the ocean floor like crustaceans over a corpse. They used bigger machines to dig up the floor of the world and they armed themselves with dangerous machines that made them formidable, even in the deadly seas of Poseidon.

Indeed, these weapons were so effective that Bataku's people had been forced to begin using them as well. Though the dolphin shamans considered such machines perversions of the Whalesong, out of necessity they had made an exception in the case of human weapons. The disharmony of the Despoilers, they claimed, was so loud it could only be silenced by turning the Despoilers' own corruption against them.

Bataku had always had a difficult time following the frenzied currents of dolphin philosophy, however, and he had long ago learned to accept the shamans' wisdom at face value. What he did understand was that his people had little chance of defeating the Despoilers without these weapons. He also knew that the weapons made him strong, and he respected strength. In fact, he savored strength in some primal way that only another orca would understand.

Regardless of what the shamans said, the weapons were good. And the people of the Sierra Nueva had discovered that there were plenty of humans willing to provide them with whatever weapons they needed.

As the warpod slid downward, Bataku began to sense that they were nearing their quarry. He probed the waters ahead with a single echo, and the image that formed in his mind triggered his hard trained responses and instincts that were deep and ancestral.

A softer echo activated the targeting computer linked to his weapon harness. The burst of active sonar it emitted would surely alert the enemy to his presence, but it added layers of detail to the three-dimensional image that began to rotate slowly in his mind's eye. The ray-shaped metallic object ahead was a fighter submersible, far faster and more agile even than Bataku. It was drifting, silent, about 100 meters below him, listening for intruders, no doubt. The torpedoes hidden within its wings were a deadly threat to Bataku and his pod.

Location and Local Terrain

The first native settlement established in the Sierra Nueva Cluster is located along the southern coast of Baffin Island, at 0°8′36″ north latitude, 14°3′55″ west longitude. As the natives of the village apparently have no single proper name for the place, newcomers have taken to calling it the Baffin Island Settlement.

Baffin Island is the largest landmass in the cluster, a high volcanic formation with rugged peaks and deep valleys. It is a relatively young island, and is still in the process of being raised from the ocean through active volcanism. Its central peak, Mount Ajo, is perpetually wreathed in smoke and volcanic gasses, and the streams that tumble down its rainforested slopes to the sea are often so sulfur-tainted as to be yellow in color. Open vents form countless geysers and hot springs across the island, and its beaches are often little more than broken obsidian fields and rugged basaltic rock.

History

The Baffin Island Settlement was founded in 2098 by Bataku, an orca soldier, and Sage, the dolphin mystic whose teachings he followed. Bataku was

Not that the pilot would have a chance to use them. Bataku's mental impression of the fighter sub had changed from "amber" to "red," as a sudden grating tone signaled a target lock. Another echo launched two small but powerful torpedoes from his weapon harness. The sub, which had been turned away, engaged its drives and looped around desperately releasing decoys as it turned. It was much too late, however, as the torpedoes had already closed the distance and could not turn away even if they had sensed the decoy signals.

Bataku let out a triumphant cry, one that echoed those of his ancestors who had hunted seals in the Arctic Ocean, and turned through the rising bubbles and turbulence left in the wake of the torpedoes. The shock wave crashed over him seconds later, deafening and stunning him, almost as if the ocean itself had joined in his savage warsong. The wave front passed, and though his world had become silent, he imagined he could hear the tortured groans of the fighter-sub's failing hull as the ocean's lethal pressures finished the work he had begun.

When Bataku's senses, and the electronics that enhanced them, recovered from the blast, he signaled the warpod and continued downward. Though there was no discomfort, a familiar voice in the oldest, deepest corner of his soul told him that he would have to return to the surface before long. Now, however, there was no need for his mind to reach out with echoes of sound, for the ocean below was illuminated by the bright lights with which the metal bubble probed the darkness. With five arms reaching from the central bubble, Bataku thought the dwelling looked like a starfish, a creature that had populated his mother's stories of Earth.

There were Despoilers everywhere, racing around the bubble in utility subs and hard suits, wrestling with the heavy mining equipment and just beginning to react to the explosions from above. The aquaforms, equipped with a variety of small arms, fanned out in a skirmish line. They would engage any of the Despoilers who tried to interfere. Bataku signaled the dolphins, and together, they plunged toward the habitat.

Each dolphin dove toward a specific location on the massive facility, points that the newcomer had told them were vulnerable when he had sold them the plans. Bataku's objective was the observation dome on the central bubble. As he closed, he once again activated the targeting computer and armed his remaining torpedoes. His mind barely registered the explosion as one of the aquaforms launched a mini-torp at a hard-suited miner who had foolishly rushed into the fray.

His targeting computer locked onto the observation dome, and Bataku saw that it was occupied. A young woman and small girl stood holding hands, staring in horrified fascination as Bataku dove toward them out of the darkness. Clutched tightly under the little girl's arm was a small, stuffed toy. Bataku realized without irony that it was an orca doll. The tone sounded again in his mind, and he launched his torpedoes. Safely out of range, Bataku drifted and watched until they impacted. His view—and all thought—of the little girl and her mother was lost in the explosion.

a master sergeant in the UN Peacekeeping Force, and had seen action in the South China Sea, the Indian Ocean, and the Mediterranean before being assigned to the Athena Project's small security force. Like many cetaceans with combat experience, he viewed the mission as a chance to leave Earth—and all of the insanity he had begun to associate with it—far behind.

When the resupply ships failed to arrive in 2096, Bataku was not terribly disappointed. He had been tempted many times to simply leave the colony and journey alone into Poseidon's wilderness, to survive or die as his ancestors had in Earth's oceans. While he had never really managed to identify with the Athena Project, however, he was still loyal to it and always resolved to remain with the colony to fulfill his duty. When the colony's leaders decided to spread out across the planet in an effort to maximize the colonists' chances for survival, Bataku sensed an opportunity to find a place for himself in this new world.

Bataku was a transient orca, and the founding of a new settlement was not really in his nature. He had spoken with several other orcas in the security

detachment, hoping to form a new pod that would wander the oceans, hunting for food and living their lives much like pre-genlift transient killer whales. His plans changed when he encountered the dolphin named Sage, who explained to him that his duty to the people of the Athena Project had not ended with the Abandonment.

Sage, a 32 year-old evolutionary biologist, was one of the most distinguished and respected researchers in the Athena Project's scientific contingent. While his scientific work was often groundbreaking, the dolphin was also heavily involved in the Whalesong Theogony movement on Earth, and frequently incorporated his scientific work into theological essays published in cetacean religious and philosophical journals. While his obligations to the Athena Project were always his priority during the early years of the colony, he became more and more involved in the spiritual needs of the Athena Project's cetacean population as time passed.

For Sage, the Abandonment presented an opportunity to build a new community entirely unlike any that had ever existed on Earth or the Colonies. He believed that a simpler lifestyle free of the dominating influence of advanced technology would allow cetaceans and humans to live together in a more harmonious manner, a way far more compatible with the naturalistic worldview and spiritual beliefs of cetaceans.

Few of the original human colonists found Sage's vision especially compelling. Most were, after all, still scientists and engineers, and while they had accepted the necessity to adapt to a sustainable, low-tech way of life, they still hoped to salvage as much of the technological civilization that had brought them to Poseidon as they could. Many of their children—who had seen Earth only in computer holovids—were open to the dolphin's ideas, however. More than half of the 100 colonists who followed Bataku and Sage to the Sierra Nueva Cluster were humans.

The first years of the small settlement were very difficult, especially for the humans. The needs of the cetacean population were few, and they could easily be provided for with no technological assistance whatsoever. The humans, however, were faced with radical transformations of every aspect of their lives. Bataku provided solid leadership and necessary discipline, and Sage was instrumental in instilling the cultural values and institutions that eased the transition. Nevertheless, as many as 20 of the humans living on Baffin Island immigrated to other settlements within the first three years, and another eight were lost to sickness, accidents, or predatory attacks.

Indeed, limited population was the single greatest obstacle the Baffin Island Settlement had to overcome. In the early years, there was a great deal of contact with other settlements in the region—primarily those on Isla Verde and the Highlands. It became a custom for several isolated communities to gather together at a predetermined location for the Planetfall celebration, if for no other reason than to develop relationships that would foster genetic diversity in individual settlements. As the years wore on and the population of the Sierra Nueva continued to grow, these meetings dwindled and eventually ceased. By Recontact, the natives of the cluster had no regular outside contact with other settlements on Poseidon.

For years, Recontact passed almost unnoticed by the natives of Baffin Island. News of GenDiver research teams on Isla Verde in 2176 was of some concern to the settlement's new leader, Bataku's son and namesake, but there had as yet been no contact with them. Nevertheless, Prophet, the dolphin who had inherited the obligation of caring for the settlement's spiritual life, had been warning for more than 10 years that Despoilers from Earth would return to Poseidon and their coming would threaten his people's very survival.

Tensions, and an almost xenophobic fear of the newcomers, were running high on Baffin Island, and they rose to a fevered pitch in 2178 when news reached the settlement that GenDiver had established a company town, Santa Elena, on the shores of Isla Verde. Bataku immediately sent an emissary to the town to speak with the GenDiver leadership and communicate his people's claim to the Sierra Nueva Cluster and their wish to minimize contact with the newcomers. Harold Freed, then GenDiver's director of operations on Poseidon, informed the emissary that his people had no legal title to the islands of the Sierra Nueva, and that GenDiver was already involved in negotiations with the GEO High Commissioner for Trade and Industry over mineral rights in the region. At that time, before the discovery of Long John, those mineral rights were not expected to amount to much.

After 2185, however, the Sierra Nueva became a proverbial gold mine for GenDiver and other Incorporate interests when extensive xenosilicate deposits were discovered throughout the region. From the

MOST WANTED

PROPHET

Prophet is the fifth in a line of dolphin religious leaders who have cared for the spiritual needs of the Baffin Island natives since the settlement was founded in 2098. Now 52 years old, Prophet is perhaps the most charismatic and influential leader of that line.

Prophet assumed his current role in 2162, at the age of 16. He had spent his life to that point under the constant tutelage of Dreamer, his predecessor. For the most part, this instruction consisted of learning the sometimes-peculiar ways of humans and incorporating them into the spiritual framework of Whalesong Theogony. It also included a great deal of exploration of the natural world, including the geology, meteorology, flora, and fauna of the Sierra Nueva.

In 2164, Prophet returned to Baffin Island from an extended, solitary journey through the Sierra Nueva. He announced that the return of the Despoilers was imminent, that the people of the Sierra Nueva would have to begin preparing to protect their world. Prophet claimed that some unforeseen disaster—probably a war—had befallen Earth, but it had only delayed their inevitable return to plunder this new world. In fact, Dreamer had predicted recontact with Earth as much as 20 years earlier. Both Prophet and his predecessor claimed to have regular contact with the "minds in the sea," a rough translation of the dolphin image-name for the Poseidon aborigines. If these claims are true, they represent the first—and perhaps only—peaceful, intelligent encounters between Earth colonists and aborigines. Of course, if the aborigines really were the source of this information, it raises the question of how they obtained it.

When GenDiver researchers arrived in the Northwest Territories in 2176, Prophet left the war preparations to Bataku and immediately launched a political campaign against the Incorporate state. The dolphin corresponded with other native leaders, newcomer activists, the media, and even the GEO, publicizing the natives' claims to the Sierra Nueva and their opposition to GenDiver interference in the region. While many of the public statements were attributed to Bataku, it was widely known that the dolphin was responsible for them. Prophet was perfectly willing to use the charismatic and somewhat romantic image the orca developed on the colony world, and his campaign met with a great deal of success as public opinion has increasingly swung in favor of the natives.

Physically, Prophet is a remarkable specimen. His age is considered venerable by the standards of native dolphins, yet by all accounts, he is as fit and spry as he was in his prime. While Sierra Nueva healers are reputed to be among the most skilled on Poseidon, their abilities do not seem sufficient to explain Prophet's remarkable longevity and good health. Nor has the dolphin's intellect been dulled by age. He remains a charismatic leader with an immense amount of influence among his people. While Bataku is responsible for developing the small-scale tactics of his warpods' operations, Prophet is the architect of the natives' strategic doctrines and military objectives. And while his contact with newcomer society has been limited, he appears to be one of the colony's foremost authorities on Poseidon's environment and ecology.

Species: Bottlenose Dolphin
Goal: Freedom
Motivation: Faith
Attitude: Disciplined
Role: Native Shaman (Remarkable)
Primary Attributes: Physique 4, Coordination 1, Cognition 2, Psyche 2
Derived Attributes: Endurance 6, Reflexes 1, Toughness 2
Aptitudes: (Superior) Communication; (Strong) Culture, Sciences, Sentient Sciences
Primary Skills: Aquatics 10, Culture (Cetacean) 8, Culture (Colonial) 5, Culture (Native) 7, Ecoscience 5, Geoscience 4, Language (Interspec) 8, Persuasion 8, Planning 6, Psychology 5, Remote Operations 3, Theology 6

outset, GenDiver survey teams were joined by heavily armed security personnel, and it quickly became apparent to Prophet and Bataku that they would have to fight for their homes. Bataku began the gradual process of transforming the Baffin Island Settlement from a peaceful community of hunter-gatherers into an armed war camp, and Prophet dispatched representatives to meet with the leadership of several insurgent groups and ecoterrorist cells that had begun to quietly emerge on the colony world. These actions—and the GenDiver response to them—led to a pattern of escalating violence resulting in what is now known as the Sierra Nueva War.

Physical Layout

The Baffin Island Settlement is a decentralized, multilevel, and largely amphibious environment. Most of the dwellings and primary structures in the settlement are clustered on the beach of a small cove along the island's southern coast. Many of these structures even extend out into the deep lagoon and serve as workspaces for the community's cetaceans.

These surface dwellings are only inhabited when the community is safe from the threat of storms and violence. Quite often, the natives of Baffin Island are forced to retreat into a series of underground caverns accessible through tunnels and lava tubes opening into the lagoon and at various points around the island.

The Village

A cluster of timber, cane, and thatch structures built in roughly concentric rings around a common area marks the topside village proper. The village lies just outside the treeline on the white sand beach that fronts the calm waters of the lagoon. Many of the dwellings are the multileveled structures common to native settlements across the archipelago, and most are built on stilts as a natural defense against the tides and surges that occasionally surmount the barrier reef protecting the lagoon. There are perhaps 50 buildings scattered across this stretch of beach, and during fair weather, it is busy with the sights, sounds, and smells of native life.

The Lagoon

The shallow, blue-green waters of the lagoon that stretches from the island's barrier reef to the beach are as important to the natives of the settlement as the village itself. The lagoon is home to the settlement's extensive docks, kelp fields, algae pens, and cetacean workspaces, as well as many shallow-water fish species that serve as the natives' primary food source. The lagoon also conceals several of the lava tubes and tunnels that lead to the hidden underground level of the Baffin Island Settlement.

The Caverns

Baffin Island is riddled with caverns created by the formation of lava gas pockets during Mount Ajo's innumerable eruptions. The lava flow from the volcano also left tunnels, or lava tubes, through the island's basaltic rock, some of which provide access to the caverns. Because most of these lava tubes are relatively old and the island has inevitably subsided over the millennia, the vast majority of the tunnels leading to sizable caverns are below sea level. This feature has led to the popular misconception among newcomers on Poseidon of natives living in "underwater settlements." While most of the access tunnels are submerged, all but a few of the habitable caverns—those not entirely filled with water—are above sea level.

Demographics

Since its founding in 2098, the population of Baffin Island has swelled to more than 400. Perhaps 250 of the residents are aquaformed humans, with divers and osmoforms represented equally. Cetaceans make up the remainder of the population, and all but about 40 of those are dolphins. While orcas are a distinct minority in the settlement, they are of course a prominent and respected one, as Bataku's position of leadership suggests. The orcas' numbers are also growing relative to the dolphins', largely due to the orcas' longer lifespan. Of the 150 cetaceans living in the Baffin Island Settlement, perhaps 20 of them are newcomers who have either immigrated to the community or defected from the GEO and Incorporate military forces.

Government

That there is a significant distinction between leadership and governance is clearly demonstrated in the administration of the Baffin Island Settlement. Bataku is the undisputed leader, and serves as a charismatic figure of unity for the entire community. However, the orca's public duties are confined almost entirely to the guerrilla war the natives are fighting against GenDiver and the GEO.

ACCESS DENIED

WARPATH

A concealed game trail leads from the village, up the rainforested slopes of Baffin Island to a secret military encampment. The trail is protected by deadfalls, native booby-traps, anti-personnel mines, and numerous ambush blinds. The camp itself is located in a deep, rugged valley 900 meters above sea level. The base is heavily camouflaged, using everything from natural materials to high-tech, phototropic fabrics. Together with the almost perpetual cloud cover and shroud of smoke and gasses produced by Mount Ajo, this camouflage makes the base nearly undetectable from the air.

At any given time, there are 50 to 100 natives training at the base, and its resources are formidable. Army surplus tents and thatch huts serve as barracks and administration facilities, and areas have been marked off for live-fire practice, physical training, and hand-to-hand combat instruction. Weapons and materiel on hand include a variety of small arms, grenades, rocket launchers, and infantry surface-to-air missiles. These weapons are stored in concealed underground bunkers scattered across the valley.

Along with the natives, the base hosts a strange mix of personnel. Stuart Parsons, the Internal Security liaison to the Crusoe Island garrison, makes frequent appearances at the camp. He and the agents under his command have been responsible for acquiring a great deal of the camp's arms and equipment and also assist in military training and instruction. The camp is also often visited by three members of a Zero Nation cell based in Nomad, each of whom has an extensive background in guerrilla warfare. Finally, there are perhaps a dozen soldiers who have deserted from the GEO Peacekeepers, and half that number who were formerly employed by GenDiver Security.

With this diverse support, the Sierra Nueva natives are becoming a dangerous fighting force. On the other hand, there is no shortage of tension between the camp's diverse factions and brawls are not at all uncommon. There have even been a few incidents of more serious violence. Most recently, a decorated Peacekeeper veteran on loan from Armed Forces to Stuart Parsons was badly injured by an enraged killer whale during amphibious training exercises. The soldier is currently being treated by native healers in the village, but if his wounds prove fatal, it will spell serious trouble for Parsons and Internal Security.

The base's location makes it impossible for Bataku to supervise the training regimen personally, and the orca refuses to use CICADAs and hover drones. However, he has consented to conventional audiovisual communications, and the cameras and holographic projectors dotting the valley afford him a ready electronic presence in the camp. More than one new recruit has been startled when a holographic apparition of the massive killer whale suddenly appears, screeching orders and instructions in Interspec.

A series of hidden lava tubes leads from the valley to the island's network of underground caverns and lagoons, where Bataku can participate more directly in his soldiers' training.

DANGEROUS GAMES

Andres Halama, one of the GenDiver Security defectors at the Baffin Island training camp, is actually a double agent. Halama has an uplink communications unit secreted about five kilometers from the camp, and he makes weekly reports on the natives' activities.

The defector has acquired a great deal of information, including the camp's location, its diverse personnel, and the natives' general training regimen and activities. However, as a former GenDiver employee, he is not privy to the most classified plans of Bataku and Prophet. Nevertheless, GenDiver considers him a valuable asset and hopes he will be able to gain the natives' confidence through continuing service to their cause

Most of the day-to-day management of the community is carried out by Prophet and a council of 10 native elders. While Bataku is responsible for planning and execution, Prophet identifies and selects many of the military targets of the orca's warpods.

Economic Base

By newcomer standards, the Baffin Island Settlement is one of the most primitive native communities on Poseidon. The natives of Baffin Island have abandoned almost all productive technology and survive through subsistence agriculture, hunting, and gathering. Until recently, they had been involved in almost no trade with other settlements, producing only enough material goods to provide for their own needs.

The heart of the Baffin Island natives' economy is the sunburst. The seasonal hunting of caneopoise provides the natives with meat, clothing, and materials for tools and other necessities. The hunting seasons occur throughout the region's mild winters, in preparation for the storm season that lasts through most of the spring and summer. Much of the population becomes almost nomadic during this time, traveling from hunting lodge to hunting lodge throughout the Sierra Nueva. In recent years, the warpods attacking GenDiver shipping and facilities have been organized around these hunting parties, and the lodges often serve a dual role as hunting camp and military outpost. In addition to sunburst hunting, the Baffin Island natives also maintain small kelp fields and algae pens in the lagoon, raise the pigs, rabbits, and iguanas common to all native settlements, and even cultivate small fungus farms in the caverns below the island. This rudimentary agriculture is further supplemented by the gathering of wild fruits and vegetables from the island's interior.

Infrastructure

Beyond the common native structures like docks, livestock pens, dwellings, boats, and hunting lodges, the Baffin Islanders have little in the way of infrastructure. Even these modest structures are of little use to the large cetacean population. All of the natives—both human and cetacean—can metabolize saltwater, and while the humans prefer freshwater from the island's streams and rivers, it is not a pressing concern. They have no electrical power nor any need of it. When the barrier reef and sheltered cove on which the village is built do not provide sufficient protection from winds and flood tides, the natives simply retreat to their underground habitat. Their bodies are designed to be strong and resistant to disease, and what little medical care they require is provided by healers working with the natural pharmaceuticals of the island's flora and fauna. In short, Baffin Island itself naturally provides the natives with what little infrastructure they require.

Map Key

1. Fire Pit

This is the center of the settlement's common area. The fire pit is located in a clearing at the heart of the concentric rings of dwellings and other buildings that represent the village proper. The common area is encircled by flambeaux crafted from a cane analog that grows in abundance along the island's ridges. The fire pit and the flambeaux are the primary sources of light for the social gatherings that occur nightly in the common area during fair weather.

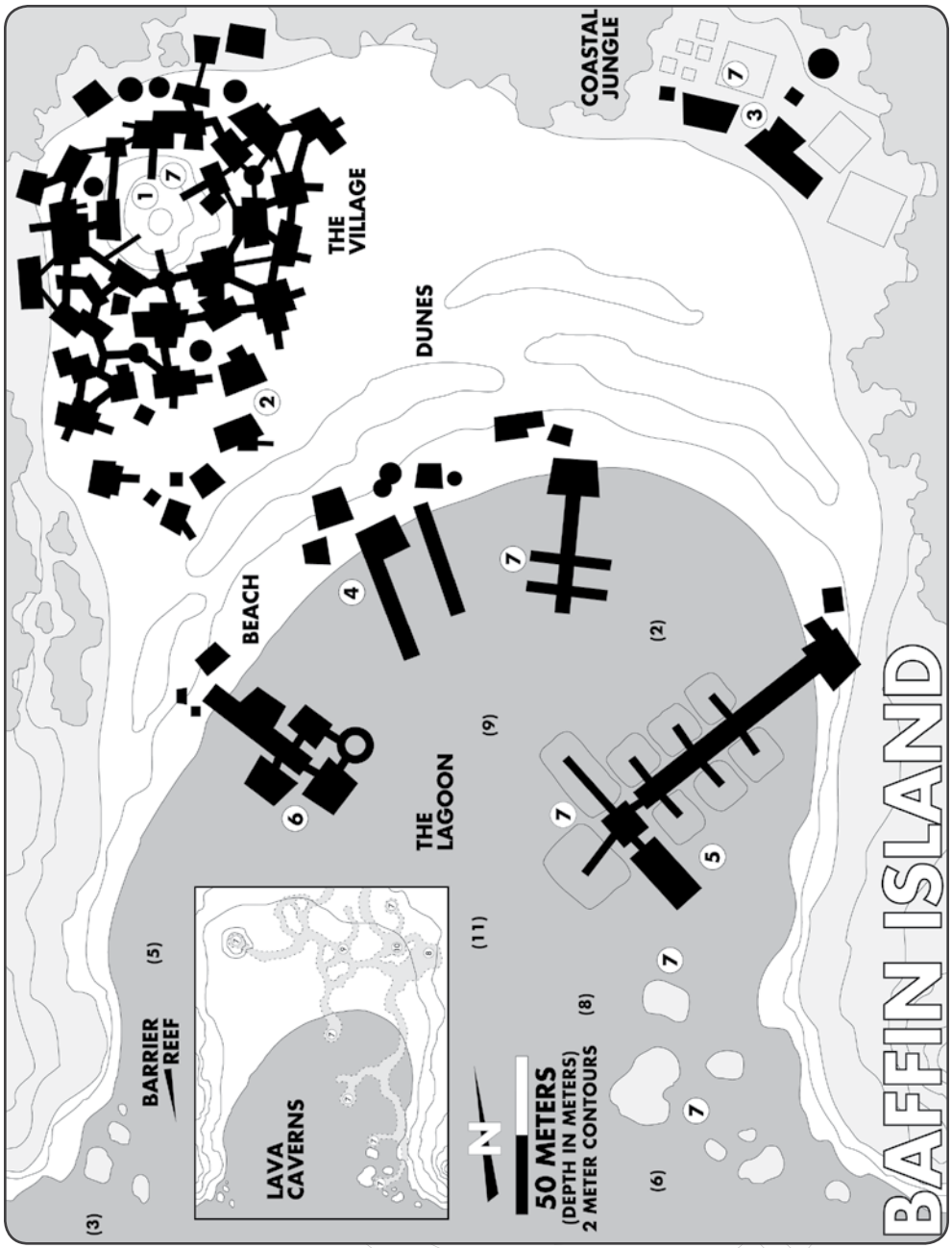
2. Dwelling

Most of the village's buildings are constructed of timber, cane, and thatch indigenous to Baffin Island. Manufactured materials like steel and industrial plastic are even more rare on Baffin Island than they are in other remote native settlements, though there are a few exceptions. Organic technologies, and bioplastic especially, have received Prophet's endorsement, and so are becoming more and more commonplace.

The typical dwelling is a two- or three-story building elevated on one-meter risers. The walls of these structures are often little more than water hemp canvas rolled up to admit sunlight and cool breezes when the weather is favorable, or rolled down to protect against wind and rain when it is not. Canvas partitions often serve as the only interior walls as well. Typically, a simple wooden ladder connects the levels, and swinging bridges or simple planks often link the upper levels of adjacent dwellings. Each dwelling usually houses an entire extended family, and the architecture is representative of the openness of the culture.

3. Livestock Pens

These simple structures are crafted from cane and timber and hold the natives' rabbits, iguanas, and pot-bellied pigs. The livestock are fed over-ripe kelp from the lagoon, wild seaweed, and tubers harvested from the jungle.



4. Docks

Sharing the basic characteristics of all native architecture, the docks are of much newer construction than many of the buildings in the village, as they have been repaired and rebuilt many times following severe storms. A multitude of outriggers and catamarans is always moored at the docks, and the outbuildings are used to store unfinished hulls, sails, fishing nets, and marine equipment.

5. Kelp Fields

The settlement's small kelp fields are enclosed with netting that is suspended from buoys floating on the surface of the lagoon. There are secondary docks, workspaces, and outbuildings clustered around the fields. Several aquaforms can usually be found in the fields, tending the crop.

6. Workspaces

These floating structures serve as simple workspaces for the settlement's cetacean population. While the cetaceans of Baffin Island lack the cybernetics, computers, and robotics that make modern, high-tech workspaces so functional, these facilities are surprisingly sophisticated. In most cases, high-tech components are replaced by human assistants, and the workspaces allow cetaceans to be involved in projects ranging from boat construction to the repair of fishing nets. While a dolphin might not be much help with a hammer or a saw, for instance, he can perform measurements, carry materials, or help to rig a sail.

7. Lava Tubes

These tunnels and passageways were formed as molten lava flowed from Mount Ajo to the sea. They provide underwater access to the underground caverns that are the natives' final refuge from storms and external threats. In recent years, almost constant patrols around the lava tubes have become commonplace, and when the settlement fears an attack, the entrances are often protected by underwater personnel mines and heavy weapon emplacements.

8. Underground Lagoon

This is a natural, subterranean lagoon created where several lava tubes open up into a large, air-filled cavern. The lagoon is encircled by rocky shelves and ledges and serves as a convenient, underground common area for both cetaceans and humans. It is here that council meetings and other gatherings are held in times of trouble.

9. Cave Dwellings

Most of the accessible caverns below Baffin Island are quite small, and living conditions are usually very cramped, with several natives—sometimes an entire extended family—taking up residence in a single cave for days or weeks at a time. As a result of these unpleasant conditions, the caverns are often used only to eat and sleep, as the natives spend most of their active hours in the waters of the lagoon and open ocean.

10. Fungus Farm

Some of the smaller caverns are used to cultivate mushroom analogs and other crops that thrive in this dark, wet environment. As the war with GenDiver has escalated, many of these subterranean farms have had to make way for the storage of weapons, ammunition, and other materiel.

SANTA ELENA

The Incorporated city-states, and especially GenDiver, have become the favorite targets of political pundits and ideologues. Let's try to remember, though, that there would be no Poseidon colony without us. We gave the original colonists and their descendants the genetic modifications that allowed them to survive on this world during the Blight Years, and we were among the first to develop this planet's economic resources. In a very real sense, GenDiver is as much a "native" of this colony as any fourth-generation colonist.

Those who attack us in the General Assembly and the Haven Council scream about human rights violations, but produce no evidence to support their accusations. The truth is, living conditions in Santa Elena are among the best to be found anywhere on Poseidon. Unlike the regime in Geneva, we provide a good job, a good home, and a good future for everyone we bring to this world. There are no slums in Santa Elena. Contrast that with the despicable conditions of the Geneva regime's Brighton projects in Haven, and tell me who is really guilty of human rights atrocities. Where would you rather live?

—Steven Crawford, Director of Operations, GenDiver

Location and Local Terrain

Santa Elena, the GenDiver company town, is located at 3° 37′ 25″ south latitude, 12° 48′ 11″ west longitude on the eastern coast of Isla Verde. The island is very rugged, and except for the Bahia de Escoceca on the leeward side, has almost no beaches. Santa Elena

sprawls across several hundred square kilometers of cleared and leveled rainforest between the island's two central peaks.

History

GenDiver's presence on Poseidon technically dates to the late 21st Century, as several of the company's geneticists and bioengineers participated in the Athena Project mission. The GenDiver leadership seizes every opportunity to remind Earth and the Colonies that its people were on Poseidon before there was a Global Ecology Organization, or "Geneva regime," as it is often referred to by company executives.

GenDiver's first post-Recontact presence on the colony world began in 2176, when several research teams arrived on the UNSS Nerid. These teams were primarily involved in biological research and ecological surveys intended to evaluate the development of local resources for the pharmaceutical and environmental engineering industries. A small outpost was established on Isla Verde and gradually evolved into a permanent company town by 2178. Nevertheless, the number of GenDiver personnel on Poseidon did not exceed 100 until after the discovery of xenosilicates in 2185.

Ira Goldblatt, the president of GenDiver, was one of the first to recognize the monumental significance of that discovery. Mere days after the first news reached Earth—before the evidence had even received independent verification—Goldblatt arranged to purchase two fusion torchships outright from Dundalk and negotiated a contract with the shipbuilding giant for the construction of several more. Goldblatt followed these moves with a leveraged buyout of Marine Exploration Technologies, an independent Brazilian corporation specializing in deep-sea mining. Personnel and equipment began flooding into Santa Elena later that same year, and the first xenosilicate survey operations were underway around Isla Verde by the spring of 2187. As a result, only Atlas Materials, who was responsible for the initial discovery, got a head start on GenDiver in the colonial gold rush.

By 2190, GenDiver had staked several claims to xenosilicate deposits around Isla Verde and had constructed its first Long John refining station outside Santa Elena. The company town itself had grown to more than 10,000 permanent residents, with the majority of them directly involved in the xenosilicate industry. Initial surveys of the Sierra Nueva Cluster identified some of the richest Long John fields in the Northwest Territories, and GenDiver was in an ideal position to secure a monopoly on their exploitation. When a company transport was assaulted and destroyed by local natives, the GenDiver leadership realized that its claim to the Sierra Nueva would not go uncontested. In the years that followed, Santa Elena began mobilizing for war.

Physical Layout

In appearance, Santa Elena possesses all of the characteristics of a combination resort town and military encampment. Throughout the 2180s, the surrounding terrain was cleared and leveled, then remade according to the designs of landscapers and architects. Rolling lawns, wooded parks, and lush gardens sprawl in a horseshoe pattern along the rugged coastline. Research Road, the settlement's main artery, is dotted with clusters of rustic Spanish-colonial ranch houses and tasteful, understated public buildings.

Most of Santa Elena's industrial and commercial facilities and infrastructure are located on the Bahia La Jolla. Santa Elena's extensive docks, GenDiver Security Coastal Patrol facilities, kelp fields and other aquacultural resources, and desalination and fusion plants are built out over the bay. The Santa Elena Resource Complex, a massive xenosilicate refinery, is located about five kilometers offshore.

ACCESS DENIED

The Menagerie

GenDiver has established an undersea habitat—Marine Research Complex #5—in the waters south of the Badlands. There have been numerous aborigine sightings in this area, and planners in Santa Elena have identified it as a promising location for a permanent base from which to investigate the enigmatic beings. The small facility is staffed by 18 scientific and technical personnel whose mission is to accumulate as much data as possible on aborigine physiology, psychology, and sociology.

Outside observers are surprised that both the Sierra Nueva natives and the aborigines themselves have allowed the scientists to conduct their research unmolested. Similar efforts throughout Poseidon have been plagued by mysterious accidents, attacks by predators, or outright assaults by native extremists. After three months of operation, though, GenDiver's project is still running smoothly.

The reason for GenDiver's good fortune would come as a rather rude surprise to the planners back in Santa Elena. Marine Research Complex #5 affords the aborigines an excellent opportunity to study the GenDiver scientists and engineers stationed there. Almost half of the habitat's personnel have been cornpromised by the aborigines' chemo-empathic abilities. The aborigines have already learned a great deal about the behavior and motivations of the GenDiver employees—indeed, they have only truly grasped the differences between the Incorporate and the rest of the colonists on Poseidon through these encounters.

Pathogen

Researchers in Santa Elena have been using xenosilicate templates to design a smart virus that would only target victims whose genetic codes fall within rigidly defined parameters. These researchers have access to detailed specifications of the biomods that their predecessors engineered into the chromosomes of the Athena Project colonists. By tailoring the virus to attack only those who share this artificial genetic code, the scientists hope to design a biological weapon that will infect and kill only the native descendants of the first human colonists on Poseidon.

In the wake of the Blight, the research and development of biological weapons is the most serious offense listed in the GEO Criminal Code. All signatories to the GEO Charter—even Independents like GenDiver—were required to sign a binding treaty that prohibited such dangerous and abusive applications of biotechnology. If this research project was ever revealed—or worse, if the weapon was ever deployed—the GEO would almost certainly launch a full-scale campaign to dismantle and completely destroy the Incorporate state. Consequently, the project is perhaps GenDiver's most highly classified ongoing operation.

Less than five people are aware of the true nature of the project, code-named Pandora Strain. These include Ira Goldblatt, the president of GenDiver; Steven Crawford, the director of operations on Poseidon; and Jackson Figueroa, the scientist heading the project. There are many other scientists, technicians, and administrators involved in some aspect of the Pandora Strain, but none of them are aware of the project's ultimate goal.

Incorporate Predators

GenDiver Security has begun targeting private mining collectives for violent takeover. Many of these independent operations are very successful, and most lack the resources to withstand a military assault. GenDiver has placed operatives in many of Poseidon's mining towns to gather intelligence on promising targets.

The recent disappearance of more than a dozen independent miners and prospectors has sparked a frenzy of rumors in mining towns from North Passage to Southpoint. A few concerned colonists have made efforts to contact organized crime and even the GEO for protection.

ACCESS DENIED

Making Trouble

GenDiver is currently executing a series of classified research projects ultimately intended to produce genetic hybrids between humans and various native species from Poseidon. The individual projects in the program are being camouflaged as basic genetics research, but are actually part of a bio-weapons program intended to create an unstoppable counter to the GEO Shock Trooper. A more sophisticated version of the failed hybrid effort that created Cats and Silvas, this work has already achieved several key successes.

In conducting this work, GenDiver is in direct violation of several GEO statutes regarding genetic research and bio-weapons development. If information regarding this project were to leak, the GEO would undoubtedly react instantly and with extreme prejudice. The GEO is tired of cleaning up after other peoples' genetic mistakes, and the Magistrates on Poseidon have had it with GenDiver's illegal activities.

GenDiver troublemaking does not end there—GenDiver Security has secretly been offering lucrative bounties to maritime pirates and hijackers willing to attack the merchant shipping of its Incorporate rivals. GenDiver operatives posing as neutral middlemen have been contracting with the criminals, even supplying weapons and target intelligence. To date, the operation has been only moderately successful, but as more pirates are "recruited," the investment is bound to pay off.

Deep Secrets

Lavender Organics has had research teams exploring the deep waters off the coast of the Highlands in search of the elusive aborigines, and years of effort appear to have finally paid off. Not only has the company discovered a previously unknown collection of aboriginal structures, but they have also collected what appears to be a complete aborigine corpse.

The existence and location of the structures remain carefully guarded secrets, and the body has been isolated in a small sea-floor lab near Santa Elena. To their credit, the Lavender researchers did not kill the aborigine, but instead found the corpse washed ashore on a small island. The body had suffered little decay, but the cause of death has yet to be determined.

Surface access to Santa Elena is controlled by GenDiver Security checkpoints and the Coastal Patrol. The mountaintop air traffic control tower is equipped with military-grade radar and communications equipment, and it is virtually impossible to approach the settlement by air undetected. GenDiver Security patrol officers, all heavily augmented and armed with PDWs, are a common sight throughout the company town. All visitors to Santa Elena are required to apply for visas through GenDiver Security, and random checks by patrol officers are routine. A *Colonial Times/Net* reporter recently characterized Santa Elena as a "maximum-security country club."

Demographics

More than 90% of the residents of Santa Elena are GenDiver employees, but only about one-third of those are full citizens. The majority of the residents are indentured labor imported from Earth to work in aquaculture, the Resource Complex, or the Long John fields. These laborers are generally housed in prefabricated barracks or offshore work camps. While living conditions in these work camps are spartan compared to the luxury of Santa Elena proper, they are worlds better than the conditions in the slums of Simushir or Haven.

Ninety-eight percent of the residents of Santa Elena are newcomers, while the cetacean population is less than half a percent. Most cetaceans in Santa Elena work in the Coastal Patrol or search and rescue.

Government

Santa Elena is governed by Steven Crawford, GenDiver's director of operations on Poseidon. Many of Crawford's responsibilities are delegated to an Executive Board, headed by a city administrator who han-

dles many of the routine tasks of managing a growing municipality. The GEO's High Commissioner for State and Internal Affairs also maintains a consulate in Santa Elena, but it is widely rumored that its staff is dominated by Internal Security personnel. GenDiver considers the consulate a foreign embassy, and in any event there is little productive contact between the Incorporate state and the GEO.

Economic Base

Santa Elena would still be little more than a small research outpost if not for the xenosilicate industry. While GenDiver's mining and refining operations are not as extensive as those of Atlas, Biogene, or the NIS, they are among the most efficient and profitable. GenDiver has also relocated the majority of its genetic research and development personnel and resources to Poseidon to reduce the costs of experimentation with Long John. GenDiver is currently expanding its colonial operations into such diverse industries as health care and banking, but these efforts still represent a tiny fraction of the revenues produced by xenosilicates.

Infrastructure

Santa Elena's infrastructure is among the best on Poseidon. Most of the roadways and buildings are 10 years old or less, and all are well maintained. The offshore plants provide abundant freshwater and electricity, and the modern docks, storage, and transportation facilities on the Bahia La Jolla have made Santa Elena one of Poseidon's most active ports. Violent crime is almost nonexistent, as the police protection provided by GenDiver Security is, if anything, considered by some to be excessive. Even the work camps are modern, clean, and well maintained, and too far from the rest of the town to mar its physical beauty.

Crusoe Island Military Base

We call it Fort Solitude. After a few weeks out here, you'll really start to feel what we mean. The garrison's morale is the lowest I've ever seen in 16 years of service. Insubordination, desertion, drug abuse, and many other violations of Armed Forces regulations are commonplace, and the brass have started turning over personnel every six months just to stop the bleeding.

Why all the trouble? Combat personnel posted to Fort Solitude have less than a fifty percent chance of finishing their tours without being wounded or killed. The so-called Sierra Nueva War has quietly become a meat grinder. What makes it worse is that the GEO can't decide which side we're on.

Everyone knows about the Stone Bridge Massacre, about the GenDiver Security "death squads," and no one at Fort Solitude really blames the Sierra Nueva natives for what they're doing. But nine times out of 10 it's the natives we end up fighting, usually after some official protest from GenDiver—a bunch of criminals who don't even recognize the GEO as a legitimate government.

And, hell, if political BS like that says anything about the GEO's leadership, who can argue?

—Excerpted from an anonymous letter to *Colonial Times/Net*

Location and Local Terrain

The GEO Armed Forces Crusoe Island Military Base, or Fort Solitude, is located at 3°46'7" south latitude , 9°32'18" west longitude. The outpost is approximately 300 kilometers northeast of Santa Elena, and rapid deployment troops can be dispatched to either the company town or the Sierra Nueva in less than three hours. The island itself is a low, sandy atoll dotted with clumps of scrub grass and a few hardy, tropical trees. Flooding during storm surges is a serious threat to the small coastal town that has grown up around the base.

History

Fort Solitude was established in 2195 when the Justice Commission's efforts to keep peace in the region through an increased Native Patrol presence failed. The garrison is officially charged with the "pacification of hostile elements in the Sierra Nueva region of the Northwest Territories." When these orders were made public in 2196, there was a loud outcry from native groups regarding the GEO's failure to acknowledge the role of GenDiver in the conflict. Nonetheless, the wording is indicative of the GEO's official position on the Sierra Nueva War.

After almost 10 years of violence, the only well-documented criminal activity in the region involves native attacks on GenDiver and GEO personnel. All known GenDiver reprisals have been within its rights under the GEO Charter as an Independent state. While the GEO leadership is convinced that GenDiver has, in fact, launched unprovoked attacks on the natives, no evidence to confirm this suspicion has been forthcoming. As a result, implicating GenDiver in the conflict has become the quiet responsibility of Internal Security, while the Peacekeeper garrison at Crusoe Island has found itself embroiled in a very public and controversial war with the natives.

In only four years, the conflict between Fort Solitude and the Sierra Nueva has resulted in 52 native and 367 Peacekeeper casualties. The Crusoe Island garrison has been further decimated by desertions, especially among the cetacean ranks. Because the cetaceans are typically the GEO's most effective troops in this marine guerrilla conflict, these desertions have seriously undermined the garrison's combat effectiveness. The conflict has become a political and public relations nightmare for the garrison. Several activist groups have relocated to Fort Solitude's small army town, and protests and demonstrations outside the base are common. Three Peacekeepers were court martialed in 2198 for assaulting activists. Armed Forces Military Intelligence is more concerned that these largely peaceful groups may have been accompanied by terrorist cells who pose a more significant threat to the base and its personnel. The soldiers stationed at Fort Solitude just want to keep their heads down, finish their tours, and make it back to "the world" in one piece.

Physical Layout

The Crusoe Island Military Base is a closed post, and access is available only to authorized personnel through a single checkpoint on the southeast side of the base. Gunnery Road is the base's main thoroughfare, leading from the front gate to a circular drive around the post's central quadrangle. Clustered around the quad are the Command Headquarters, Administration Building, and Communications Building. Secondary streets lead to the Post Exchange (PX), Officer's and NCO clubs, barracks, and a small infirmary. An extensive motor pool, which includes aircraft hangars and docking facilities for watercraft, is located in a restricted area on the west side of the base. A small physical training course and a firing range are located about two kilometers northwest of the base proper.

Demographics

There are currently 124 permanent GEO personnel stationed at Fort Solitude. This force is designated Echo Company, 33rd Infantry Battalion. The company is organized into two platoons, each numbering 35 combat personnel. Most of these soldiers are Peacekeepers, though the company boasts a small cadre of elite Super Troopers as well. The majority of Crusoe Island's combat personnel are human, though many have been aquaformed. There are 12 cetacean soldiers attached to the garrison.

Government

Fort Solitude is under the command of Captain Jacob Stone, a young officer with seven years of service to the GEO Armed Forces. Two Lieutenants, Steve Paxon and Carmen Ramirez, are in charge of the platoons, and eight NCOs are attached to Echo Company. Colonel Stone receives his orders from the brass at Fort Pacifica near Kingston, and ultimately from Lieutenant General Luther Gideon, the commander of all GEO military forces on Poseidon. Stuart Parsons is the on site Internal Security officer, and is responsible for coordinating joint operations between his Commission and the garrison's military forces.

Economic Base

The Crusoe Island base depends on the GEO Armed Forces for its economic support. Routine supply shipments typically arrive by cargo jumpcraft or transport VTOL from Fort Pacifica, in the Zion Islands. In a crisis, materiel can also be brought in on dropships from *Prosperity Station*.

Throughout the Sierra Nueva conflict, logistics have been one of the command staff's most pressing concerns. Fort Pacifica is more than 2,000 kilometers to the south, and the GEO lacks the resources to provide armed escort for all of the garrison's supply shipments. Crusoe Island has lost several shipments to attacks by insurgent natives, pirates based in the Wall, and terrorist cells. The supply line to the Zion Islands is a long one, and there does not seem to be any certain way to secure it without a full-scale commitment by the Armed Forces leadership.

Crusoe, the town of 16 permanent residents neighboring Fort Solitude, is no more self-sufficient than the garrison. The town boasts a general store, a small

hotel, two saloons, and a brothel. The owner of the latter, Monique La Pace, doubles as her establishment's madam and the town's mayor. The hotel is usually booked to capacity with journalists and political dissidents, and La Pace has been generating some extra revenue by renting rooms to visitors. Simon Ferrel, proprietor of the Crusoe General Store, owns an old-but-functional solar still and offers hydrogen refills to travelers for exorbitant prices.

The town obtains almost all of its goods from traveling traders, Santa Elena, or larger newcomer settlements in the region. Almost everyone in the town—from Ferrel, to the prostitutes working for Monique—has prospered immensely from the base personnel, and more recently, the influx of newcomers drawn by the Sierra Nueva War.

Infrastructure

Though small, the Crusoe Island garrison is well constructed and maintained. Most of the base's facilities and equipment are less than five years old, and are kept in top condition. Fort Solitude receives its power from a pair of small fusion reactors located in a hardened, watertight bunker some 30 meters below the base. Water is pumped in from the ocean to a desalination-and-hydrogen-cracking facility near the motor pool, then piped to a nearby cluster of storage tanks. The base's armory and supply depot are reinforced bunkers, and are accessible through underground tunnels from the Command HQ and the motor pool. Most of the buildings in Fort Solitude, including the barracks, are prefabricated bioplastic structures that are utilitarian in appearance and very durable.

Like any military outpost, Fort Solitude has state-of-the-art communications resources. Computers in the Communications Building and Command HQ are tightbeamed directly into the GEO Armed Forces communications network. Among other things, this allows the command staff to track all GEO troop movements on the planet, monitor Armed Forces satellite surveillance, and access radar- and sonar-tracking of all traffic on, above, or below the surface of the region. A 100-meter tower antenna provides mid-range radio communications in the event that satellite access is lost.

The Sierra Nueva War

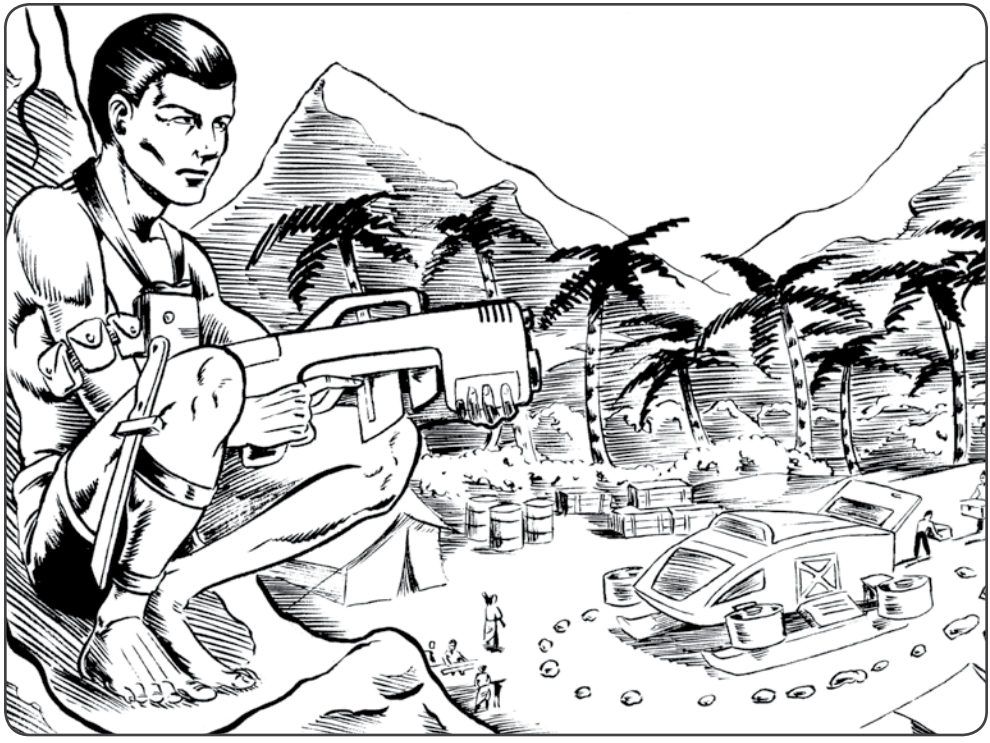
Throughout the last decade, the conflict between GenDiver and the natives of the Sierra Nueva Cluster has figured prominently in the colony world's tumultuous political climate. The violence in this rugged region strikes many as a fitting counterpart to its wild and savage nature, and the war has attained an almost legendary status on Poseidon. While the colonial media is certainly responsible for much of this dramatization, the conflict really is a microcosm of the colony thrown into stark and violent relief. There are basic issues and competing visions of the colony's future at stake.

GenDiver and its economic exploitation of the region represents humanity's interest in Poseidon's resources, especially Long John. The natives are fighting for their homes and a way of life that is incompatible with GenDiver's presence in the cluster. The GEO, as is often the case on Poseidon, is caught somewhere in the middle. Its philosophical foundation is very similar to the natives', but it also has an obligation to keep the peace and defend its member states from aggression. The Sierra Nueva War is an issue about which nearly everyone on Poseidon has a strong opinion, and many believe that this remote island cluster will be the battleground on which the colony world's future is decided.

The first violent confrontation between GenDiver personnel and the natives of the Sierra Nueva did not occur until 2190, five years after the discovery of xenosilicates and 12 years after the founding of Santa Elena. In the summer of that year, a group of young males from Baffin Island boarded a small GenDiver transport vessel that had been driven onto a nearby reef during a tropical storm. The boys evidently assaulted the crew, looted the ship, then set it aflame. All aboard were killed.

The following day, a GenDiver Security officer arrived at Baffin Island with a Marshal and a squad of Peacekeepers to take the youths into custody. They were to be held awaiting deportation back to Earth, where they would stand trial for murder and piracy. When Bataku failed to produce the accused, he was placed under arrest. However, the officers were not prepared for the transport of an adult orca, and by the time the Marshal returned with an appropriately equipped surface ship, Bataku had gone into hiding. The Baffin Island natives were declared hostile by both the GEO Colonial Administrator and GenDiver.

This incident was followed closely by a series of GenDiver reprisals throughout the Sierra Nueva, and low-level brush-war violence has characterized the area ever since. The GenDiver leadership has been very careful to insure that its overt activities in the



region fall within the letter of the law under the GEO Charter. In general, this means that deadly force is only used to defend GenDiver assets against native attacks. There are persistent rumors, however, that GenDiver has launched preemptive assaults against the natives. One such incident occurred in 2192, when a squadron of GenDiver VTOL strike-fighters leveled Sulfur Water, a hunting camp in the Badlands. In its official report to the HCSIA, however, GenDiver provided satellite surveillance data that proved the camp was being used as a supply depot for illegally acquired military-grade weapons.

In 2194, the Justice Commission dispatched two Deputy Marshals and three Patrol Officers to the cluster to investigate the natives' acquisition of illegal weapons on the colonial black market. All five of these officers, along with a Native Patrol contact, were found murdered in Adobe Walls, an isolated settlement in the Badlands. The locals proclaimed their innocence, insisting the bodies would never have been found if they had been responsible. Rumors began to circulate that GenDiver Security was guilty of the crime, hoping to frame the natives of Adobe Walls for the murders.

With this case still unsolved, the GEO Armed Forces established Fort Solitude in 2195. Frustrated with the continuing violence, the Colonial Administrator handed Fort Solitude the impossible task of keeping the peace in the region. The garrison has been embroiled in a guerrilla war with the natives for almost five years. Native warpods attack GEO supply ships and patrols, then disappear. They retreat to small camps in the rainforests of the the cluster; they return to the hunting lodges in mangrove forests that dot the shallow seas of the region; they vanish below the waves, finding refuge in the underground caverns that riddle the volcanic islands.

The Sierra Nueva itself conspires against the GEO, rendering many of its technological resources ineffective. The natives time their attacks carefully to coincide with heavy cloud cover or storms that prevent satellite surveillance and make high-tech communications unreliable. They use the geography of their homeland—especially the ocean—to their advantage, making it impossible for the GEO to bring its reconnaissance and strike aircraft to bear against them. The garrison at Crusoe Island has been forced to fight this war on the natives' terms, and

MOST WANTED

Stuart Parsons

Born in Alberta, Canada, in 2155, Stuart Parsons is a career officer in the Internal Security commission. After a relatively uneventful childhood in one of the GEO's most stable federal districts, Parsons attended Harvard University in the US and obtained a Master's in Government in 2176. Following graduation, Parsons was accepted into the HCIS's Service Officer's Training Program in Geneva. After completing the program, he was assigned to war-torn Belgrade, ostensibly to coordinate relief efforts for Balkan refugees. During this time, Internal Security was also running covert operations intended to stabilize the anarchic region, and it is unlikely that his duties were exclusively humanitarian.

In 2188, Parsons was transferred to the Haven Office on Poseidon. The applications of Long John in biotechnology had been discovered a year earlier, and the gold rush was in full swing. The HCIS was increasing its presence on the colony world accordingly, primarily for the purposes of gathering intelligence on the activities of the Incorporate states. In 2189, Parsons was assigned to the State and Internal Affairs consulate in Santa Elena, where he worked in an official capacity as a diplomatic attach,. Unofficially, he was suspected of developing intelligence assets in the GenDiver company town. Parsons also assisted Justice Commission investigations of Incorporate atrocities in the Sierra Nueva, including the bombing of Sulfur Water and the murders at Adobe Walls.

In 2195, Parsons was reassigned as a consulting officer to the newly established military garrison on Crusoe Island. With no direct authority in the Armed Forces chain of command, he was supposed to serve as a liaison between the garrison and the intelligence-gathering arm of Internal Security. The rumors have followed him to his new post as well, however, and it is widely suspected that Parsons is one of the HCIS's most active covert operatives in the Sierra Nueva War.

Parsons is tall and athletic, with light brown hair, fair skin, and blue eyes. He is a tasteful dresser, preferring tailored suits from the best designers in Europe and Ibrium City. He is soft-spoken, articulate, and can be very charming when it suits his interests. He is generally considered tactful and diplomatic, even by his enemies, but can also be devious and even ruthless when he deems it necessary. One's first impression on meeting Parsons is that he is somewhat reserved and detached, and this reaction is unlikely to change significantly with further experience. In his own rather exclusive circles, he is considered an ambitious and devoted intelligence officer, but one with no discernible political ideology or agenda. His only real interest in the Sierra Nueva War is a professional one—he wants to perform his duties to the best of his ability, just as he approaches any task to which he is assigned.

Species: Modified Human
Goal: Accomplishment
Motivation: Professionalism
Attitude: Confident
Role: Covert Operative (Remarkable)
Primary Attributes: Physique 1, Coordination 2, Cognition 1, Psyche 1
Derived Attributes: Endurance 1, Reflexes 2, Toughness 1
Modifications: Accelerated Neurons, Implant Computer, Implant Sensory Recorder, Multiglands
Aptitudes: (Superior) Administration; (Strong) Communication, Combat, Culture
Primary Skills: Bureaucracy 5, Computers 6, Culture (GEO) 7, Culture (Incorporate) 5, Law 4, Persuasion 8, Planning 4, Politics 4, Psychology 3, Small Arms 5, Stealth 3

on their turf. Combat teams are deployed to root the natives out of their hidden strongholds, and are decimated by ambushes, hit-and-run tactics, and sabotage.

With the GEO's efforts only serving to escalate the level of violence in the region, GenDiver Security has continued its own private campaign against the Sierra Nueva natives. The GEO Charter gives the

Independent member states the authority to arrest, incarcerate, and sentence criminal suspects. GenDiver has apparently found this to be its most effective tactic in the ongoing conflict. Security patrols no longer chase the native warpods when they retreat from the scene of an attack. They simply wait and descend in force on settlements suspected of harboring terrorists in the following days. The patrols search the villages, seize any evidence discovered, and apprehend as many suspects as they can. Quite often, the native insurgents will attack the patrols in the open rather than have their homes ransacked and their families taken prisoner, and this suits the heavily armed GenDiver Security patrols just fine.

The media has dubbed the most famous of these incidents the Stone Bridge Massacre. In 2198, 20 GenDiver Security personnel supported by assault jumpcraft arrived in Stone Bridge, a small native settlement in the southern part of the cluster. The course of events from that point on remains the subject of heated controversy. GenDiver claims the security patrol was attacked by native terrorists. Native witnesses and activists claim the GenDiver officers emerged from the jumpcraft in combat formation and opened fire on the settlement. Because a tropical storm was moving into the region, GEO surveillance satellites were unable to confirm or deny either account of the incident. Sensory recorder footage from the patrol's commanding officer verified GenDiver's version of the story, but the GEO's statement on the incident implied that there was evidence the recordings had been manipulated or fabricated.

Despite the mystery that surrounds the incident, two facts remain. First, seven natives lost their lives at Stone Bridge, including two women and one eight-year-old child, while the GenDiver patrol suffered no casualties. Second, the incident touched off a media feeding frenzy and a storm of protests from native and anti-Incorporate activists throughout the colony world. Rumors quickly spread across the archipelago of the GenDiver "death squads" that patrolled the region, executing men, women, and children with little or no provocation. Three days after the incident, *Colonial Times/Net* dispatched a news team to Stone Bridge to interview the surviving residents. GenDiver Security delivered the team's corpses to the news agency's offices in Haven the following day, along with transcripts of intercepted radio transmissions indicating the team had fallen victim to a native attack.

Several weeks later, Christian Ramis, president of the Earth Defense Initiative, established the Stone Bridge Memorial Foundation, a non-profit organization intended to improve communication and education about native rights on the colony world. EDI is widely suspected of being a front for Zero Nation, one of Earth's oldest and most powerful ecoterrorist organizations. While he has never been officially linked to any terrorist act, Ramis is thought to be the chairman of Zero Nation's Central Committee. Shortly after the Foundation was established, GenDiver sent an official protest to the HCSIA, claiming it was being used to finance weapons and military training for the Sierra Nueva natives.

In 2199, the conflict continues and violence in the region is escalating. Whether from Zero Nation or some other source, the natives do seem to be receiving military weapons and training, and their attacks have become even more effective. Both GenDiver Security and the Peacekeeper garrison at Crusoe Island have been plagued by low morale and increasing desertions. While most natives have faithfully supported their cousins in the Sierra Nueva, public opinion among the newcomer population is increasingly swinging in their favor as well. Several factions in the GEO General Assembly on Earth are calling for the Crusoe Island base to be shut down, and some are pointing to the war as evidence of the GEO's "military occupation of an independent world."

The native insurgents, under the guidance and leadership of Bataku and Prophet, are committed to the defense of their homeland and their way of life. GenDiver is equally committed to crushing the opposition in the region, but its leadership is prevented from overtly acting on that commitment. The Incorporate state knows that it will not likely stop the resistance without exterminating most of the native population in the Sierra Nueva. But that kind of violation of the GEO Charter would almost certainly invite a full-scale retaliation for which GenDiver is ill prepared. The Charter limits the GEO's options as well. Unless it has solid evidence that GenDiver's actions in the region are criminal, it cannot act against its member state.

Of course, it is widely suspected that the GEO is doing covertly what it cannot do under the light of public scrutiny. There is a great deal of speculation on CommCore political and conspiracy newsgroups, in Incorporate boardrooms, and in colonial watering holes, that GEO Internal Security provides the

natives with military weapons, training, and intelligence on GenDiver activities. Atsumu Nakano, the High Commissioner of Internal Security, is notorious for his Black Crusade against the Incorporate states on Earth, and many believe that covert aid for the Sierra Nueva natives is the cornerstone of his anti-Incorporate campaign on Poseidon. If these rumors are true, Internal Security's activities may be partly responsible for the severe casualties suffered by the Crusoe Island garrison.

Recently, direct evidence of Internal Security's involvement in the Sierra Nueva War has filtered back to Haven and the major news agencies. *Colonial Times/Net* has reported that, in the late sum-

ACCESS DENIED

Hidden Enemies

The population of the small army town adjacent to the Crusoe Island garrison has expanded rapidly, as journalists, protesters, and opportunists have been drawn by the increasing controversy surrounding the GEO's involvement in the Sierra Nueva War. Unnoticed among the growing crowds, a small cell of three Zero Nation agents has set up shop in the town's hotel. From this base of operations, the terrorists are gathering what intelligence they can on the base's activities and reporting to their superiors in Haven.

They are also awaiting orders to launch a campaign of sabotage and assassination against the base and its personnel. This operation is planned to coincide with a native attack on the Resource Complex in Santa Elena. Zero Nation's leadership hopes that the cell's activities will serve as a distraction and make it more difficult for the garrison to respond to the crisis.

Going for the Gold

Bataku and Prophet both realize that their attacks on GenDiver have thus far been little more than an irritation to the Incorporate giant. They are also aware that GenDiver's presence in the Northwest Territories is driven by one thing—the exploitative rush for xenosilicates. The native leaders have decided that their only real hope of striking a serious blow to GenDiver is to hit them where it really hurts.

For several months, Bataku and Prophet have been coordinating and planning an assault on the Santa Elena Resource Complex, the massive xenosilicate processing facility located a few kilometers offshore from the GenDiver company town. Lacking air support, the only way to destroy the huge installation is to compromise the integrity of the structural supports that anchor the platform to the bedrock of the ocean floor. Unfortunately, the natives have almost no chance of getting the necessary quantity of high explosives anywhere near the facility without being detected.

To circumvent this problem, the natives have acquired a small shipment of experimental devices from an NRM smuggler in Kingston. These devices are called pheromone charges, and they were designed by GEO scientists to protect field researchers and naval personnel from attacks by dangerous marine predators, especially greater whites. When armed, the devices release a chemical compound into the water that attracts the marine leviathans. In theory, the greater whites are supposed to swallow the devices, at which point the high-explosive charges detonate, killing or severely injuring the animal.

While the pheromone charges have proven unreliable in their intended role, Bataku and Prophet believe they have discovered a more promising application. Under the cover provided by a series of diversionary attacks around Santa Elena, a small team led by Bataku himself will approach the Resource Complex undetected and place the charges along the support struts. When armed, the charges will release their chemicals into the surrounding water, eventually attracting one or more greater whites and hopefully stimulating them into an enraged state of sexual frustration. When the greater whites try to get at the devices, they will do serious damage to the facility's support struts in the process. If they inflict enough damage, the platform may even collapse into the ocean, but in any event, it should be sufficient to halt production at the facility for weeks or months.

ACCESS DENIED

Caught in the Crossfire

Since the outbreak of hostilities between GenDiver and the Sierra Nueva natives, the Northwest Territories have become one of the most dangerous regions of Poseidon. There are very few independent newcomer settlements in the area, and most of them—like Crystal City on Sandy Hook—have enough trouble just surviving in the isolated and lawless region without worrying too much about the war.

The small fishing village of Puerto del Norte on the southern coast of Equator Island is an unfortunate exception. Founded in 2188, the town was one of the first newcomer settlements established in the Sierra Nueva. Surprisingly, the newcomer pioneers earned the respect of their native neighbors, and the village even developed a small native population of its own.

In 2190, though, the conflict between GenDiver and the natives erupted into open violence, and the town has never been the same. Puerto del Norte is torn by conflicts of interest. There are several native families still living and working in the village, and most of them are openly supportive of Bataku and the native "freedom fighters" opposing the Incorporate state. On the other hand, many of the newcomer residents are deeply afraid of the apparent xenophobia and intolerance expressed by the orca and his people. Many of them secretly fear that if Bataku ever finishes with GenDiver, he will come looking for them—and these fears are not without merit.

The spark that finally ignited the powder keg was struck when a native fishing boat was recently sunk in the village's small harbor by an unknown saboteur. The incident resulted in accusations of racial hatred from the native community, with several leaders in the newcomer community retaliating, citing the natives' support for the "racist murderers on Baffin Island."

Angry words have led to an exchange of blows on more than one occasion, and if tensions are not eased, the once-quiet fishing village could suffer a more serious outbreak of violence. A few of the more level-headed town leaders have suggested finding someone with the training and experience needed to investigate the incident.

In fact, the newcomer residents of Puerto del Norte were not responsible for the vandalism. Somewhat paranoid even by GenDiver standards, the security officer responsible for patrolling the Equator Island sector had long suspected that the fishing village may be harboring native fugitives involved in the war. He and his men destroyed the boat, hoping that the vandalism would lead to conflict between the native and newcomer communities, and ultimately, to the natives being expelled from the village. So far, his tactics have proven extremely effective.

mer of 2198, Irabu, an orca master sergeant with the Peacekeeper garrison on Crusoe Island, was reassigned for temporary duty with the HCIS. Less than a month later, a CT/Net investigative reporter turned up with official documentation of the orca's court martial. The charge listed in this documentation was "absent without leave." The report speculated that the orca had been loaned to Internal Security for the purpose of training Sierra Nueva insurgents, and had subsequently deserted. Though these allegations have been vociferously denied by both Armed Forces and Internal Security, they have served to fan the flames of controversy in the ongoing conflict.

Outnumbered and outgunned, the natives of the Sierra Nueva continue to persevere in their struggle. Indeed, what was once a monumental gap between their resources and those of their enemies appears to be narrowing. Assistance from Zero Nation, the NRM, Blue Water Circle, and other terrorist and criminal organizations, as well as the possible involvement of Internal Security, may account for the natives' ability to continue and even escalate the conflict against overwhelming odds. Some observers have begun to speculate that the political damage suffered by both the GEO and GenDiver will ultimately prove more decisive than the casualties suffered in combat.

PRIME MERIDIAN

Among the islands of the Pacifica Archipelago, Prime Meridian stands out as a unique study in contrasts. Even on a planet over nine-tenths ocean, much of the island's interior is dry and arid. The foundation for a chain of rocks sometimes only barely poking above the waves, the backbone of Prime Meridian rises thousands of meters into the sky. With rugged, agricultural communities on the southern coast, and the core of Poseidon's industry on the west, the largest island in Pacifica is home to both feverish progress and ancient ecologies.

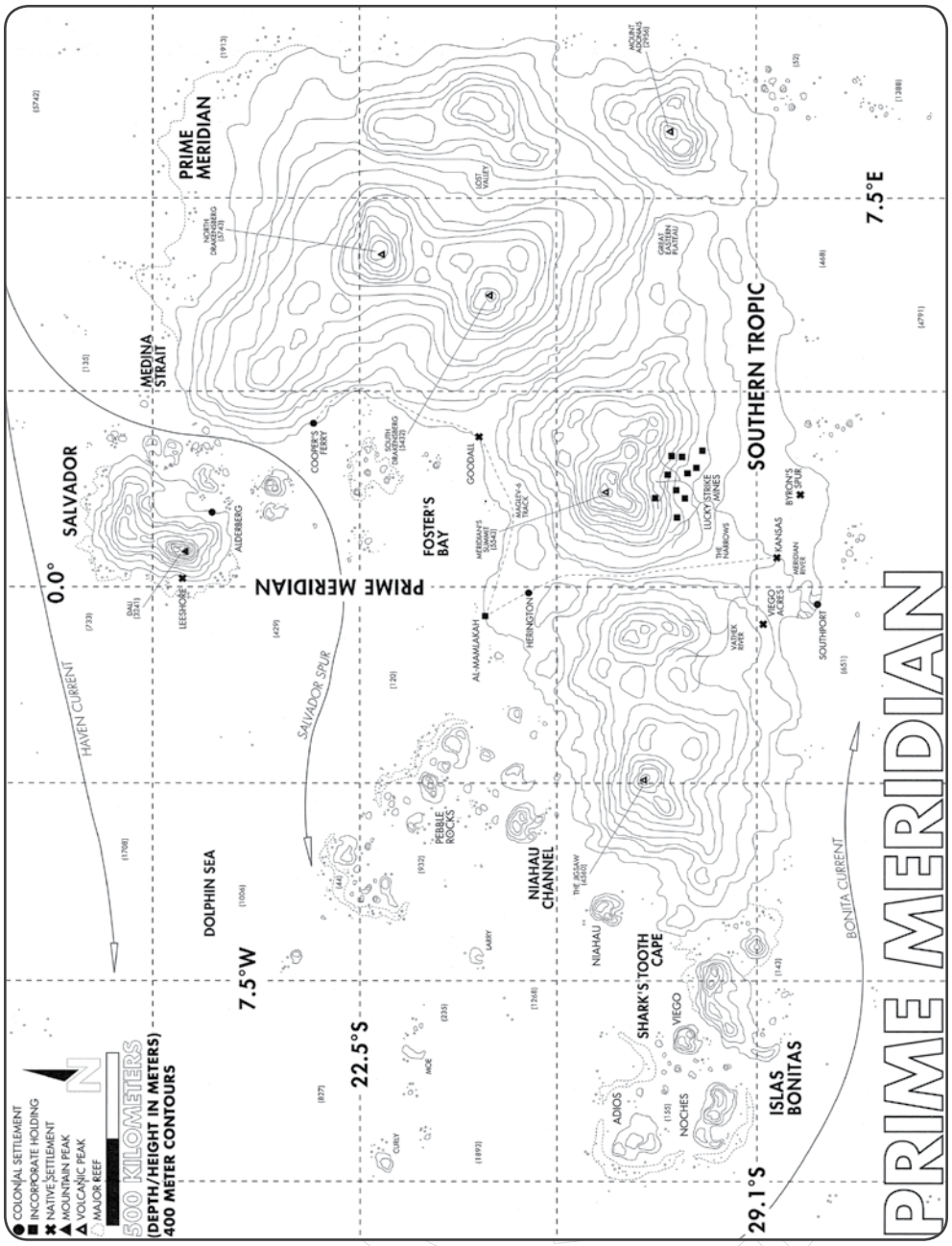
Prime Meridian is the largest single landmass on the planet. Rising from the waves of Foster's Bay, the mini-continent soars five-and-a-half craggy kilometers into the air, as if offering evidence of its volcanic past. A rough coastline of cooled lava flows forms the northern coast of the island. The resulting cliffs provide little in the way of shelter or beaches for the native settlements that dot the shores of other islands in the archipelago. Surmounting these cliffs is a rolling savanna, much of it in the rain shadow of the Drakensbergs. The grassland stretches south and west nearly to the southern tip of the island, unadorned save for the occasional stand of trees. This open, rolling plain is home to a number of ranches and farms.

The slopes of the eastern Drakensbergs receive much of the rain dropped by the moist air masses headed west towards the Dolphin Sea. Some regions, including those up slope from Goodall and Cooper's Ferry, receive more than 500 centimeters of rain each year. This climate has created an ecology similar to the tropical rainforests of Earth, and supports the largest jungle on Poseidon. The forest canopy rises more than a hundred meters into the air, creating an unbroken, ground-obscuring expanse of green. The forest floor is also thoroughly covered, populated with innumerable species of creepers, vines, airplants, and other epiphites. It is estimated that over 75% of the purely terrestrial species on Poseidon reside exclusively in the Drakensberg rainforests.

Prime Meridian's subtropical climate allows a year-round growing season on its many ranches and farms. It also places the island in the southern reaches of the Storm Belt. It is a rare season when ranchers are not forced to drive their livestock into shelters against the fury of the seasonal cyclonic storms. Prime Meridian's largest settlement, the Atlas Materials company town of al-Mamlakah, was nearly destroyed by a powerful cyclonic that struck the settlement only a few years after the town was founded. The residents of the island, however, are resilient. To them, storms, like the predators of the eastern savanna and the mysterious disappearances in the rainforest, are a fact of life on the island.

The region around al-Mamlakah, including the stockyards to the south, is home to well over 35,000 people. The town of Alderberg supports several hundred permanent residents including the Monastery of St. John the Baptist, its ecclesiastical staff, and the various pilgrims who visit the local seat of Catholicism. Cooper's Ferry, Goodall, and Kansas are only villages and loose agricultural collectives, rather than formal settlements. Nevertheless, these population centers account for close to another 3,000 Meridian inhabitants.

An original Athena colonist named Hendrik vaan Klavern led the first expedition to Meridian. Grief-stricken by the loss of his wife to the sea, vaan Klavern had vowed to find a place where he could forever be free of the damnable ocean. Prime Meridian proved to be exactly what he was looking for. Parts of the island's southeastern savannas lie hundreds of kilometers from the nearest coastline. The vast, trackless



ocean of dry plains gives no clue to the pounding surf sometimes just over the horizon. Moreover, this place more than any other on the planet reminded the Dutch vaan Klavern of his central African homeland back on Earth. Meridian's Summit, the island's towering central volcano, bears a notable resemblance to Kilimanjaro and the peaks of Africa's Rift Valley. For vaan Klavern, the eastern highlands draped in steaming verdant life were a reminder of the Dark Continent he had left behind forever.

Hendrik vaan Klavern called Prime Meridian his little continent. He and his few followers were among the first to carve lives out of lands that would eventually become home to global industries and thousands of people. Their descendants are there still, ranching on the same land the vaan Klavern colony settled nearly a hundred years ago. Although Prime Meridian may seem far less wild today than when the Athena colonists first settled it, the island remains largely unexplored.

AL-MAMLAKAH

God is most great! I testify that there is no god except God! I testify that Mohammed is the Messenger of God! Come to prayer! Come to salvation! Prayer is better than sleep! God is most great! There is no god except God!

—Morning call to prayer, as sung by the muezzin of the Second Mosque of the Patriarch

Location and Local Terrain

Built on the shores of Medina Bay, al-Mamlakah enjoys an enviable position in the Pacifica Archipelago. At 24°33'18" south latitude, 00°58'21" west longitude, the city's proximity to the equator makes it suitable for orbital traffic. The landscape provides gently sloping hillside neighborhoods for the city's 33,000 residents. The flat headlands at the north and south rims of Medina Bay provide natural landing fields and excellent shelter from the brunt of most cyclonic storms.

History

After Recontact in 2165, Atlas Materials was one of the first Incorporate states to become involved in the renewed colonization effort. Long recognized as a leader in orbital engineering, skillful maneuvering and a few well-calculated risks put Atlas in position to reap huge profits from the new GEO missions to Poseidon. The later discovery of Long John enabled Atlas to make the move from conservative orbital construction, engineering, and mining to one of the most diversified, cutting-edge enterprises in existence.

Through years of experience in Earth orbit, Atlas Materials developed leading-edge technologies in the field of freefall engineering. When the GEO announced the contract for the Recontact ships, Atlas management diverted much of the company's design and engineering resources to the development of an innovative proposal. It was a daring move that resulted in the delay of many projects, but the gamble would serve to earn the company lucrative government contracts in the years to come.

Taking the lessons of hundreds of years of shipping history to heart, engineers laid the keels for a pair of space-going behemoths. The *Jebel Chelia* and her sister ship, the *Jebel Mousa*, were each more than 1,500 meters long with displacements in the millions of metric tons. The two ships were designed to function without sophisticated orbital receiving yards. Both were equipped with scores of landers, cargo lighters, tugs, and work pods. Operating on only their own resources, each could unload its entire cargo in under 72 hours.

However, it was only a few years before expanded GEO plans for the colonization of Poseidon made it clear that continued construction of such massive cargo vessels would be an unnecessary drain on scarce resources. Atlas managers adapted again to long-range forecasts by planning a cargo facility in permanent orbit around Poseidon. The station became the company's highest priority, and within two years they had completed plans and design specs for the station and its elaborate downside receiving port. It was this port that would eventually become al-Mamlakah, Atlas Materials' largest colonial holding.

In 2178, a malfunction in the *Jebel Chelia's* delicate regulation systems incinerated its reaction chambers, leaving the huge ship drifting without power in Poseidon orbit. Fortunately, it took very little to stabilize the ship's orbit using an array of tugs and cargo lighters. Though a major loss to Atlas' modest interstellar fleet, the hulk of the *Jebel Chelia* provided the new settlement project with substantial supplies of raw materials and ready-made components.

The first piece to go down to the surface was the ill-fated vessel's control tower, later fashioned into the central minaret of what was to become the Second Mosque of the Patriarch. Over the next three years, salvaged pieces of the spacecraft were regularly used in the construction of al-Mamlakah.

Physical Layout

Atlas Materials' presence on Poseidon grew in phases that are reflected in the present geography of al-Mamlakah. Though it was originally intended as little more than a collection of landing fields, docks, warehouses, and workers' barracks, the city has grown into a vital community.

South Beach

The area east of the landing field on the south headland was one of the first to be developed. Considered a model planned community, the South Beach area is known for its effective use of "green spaces" and aesthetically pleasing architecture, even in utilitarian labor barracks. Beautiful landscapes notwithstanding, the neighborhood is dominated by commercial interests. Only those actually working at the construction facilities or the landing field are assigned residences in South Beach. A small, low-speed maglev winds through the neighborhood and into other industrial sections of the town.

Lamplighter Hill

Lamplighter Hill was constructed at the same time as the Kasbah and north landing field to securely house the Incorporate elite and their families. Built onto the steeply sloping north headland, Lamplighter Hill is one of the most exclusive residential communities on the planet. Single-family homes often exceed a million scrip on the open market, although all sales are subject to final approval by Atlas. The area's neighborhoods offer sculptured gardens, open promenades and porches, and wrought-iron fences laced with vines, along with sophisticated alarm systems, personal bodyguards, and Incorporate security. The residents of Lamplighter Hill are extremely important people, and are among the wealthiest in the system.

North Beach

Atlas originally left the region just east of Lamplighter Hill open and undeveloped, and long-range plans reserved the area for a landscaped park. Some believed it was intended to be a buffer between the residents of Lamplighter Hill and the rest of the town. Whatever the case, the open land drew many poor families to homestead, lured by the city's economic opportunities. What began as little more than a squatter's camp is today a respectable lower-class residential area.

The Cove

This neighborhood along the northeast shore of Medina Bay is dominated by two important buildings, Government House and the Hammam. The GEO Office of Colonial Affairs and several High Commissions all share offices in Government House, a low building constructed in the British neocolonial style. The GEO uses Government House to maintain relations with one of its most important Incorporate member-states. The Hammam is second only to the Mosque in importance to the Islamic faithful of al-Mamlakah. Comprised mainly of elaborate steam baths with separate areas for men and women, it functions as a meeting place for many of the devout members of the community. Located only a few blocks from Government House, the two buildings define an axis around which much of the economic and administrative conflict in al-Mamlakah revolves.

The Suq

The wreck of the *Jebel Chelia* provided the nucleus for the original construction of al-Mamlakah, and the Second Mosque of the Patriarch in the Suq is a constant, visible reminder of the town's beginnings. The control tower of the *Jebel Chelia* rises above the Mosque, and from this vantage, the muezzin calls out the adhan, or call to prayer, five times each day. The building is dedicated to Ibrahim, veteran of a long voyage and one of the most important figures in Islam, and inside there is space for more than 2,000 worshipers. Although many of the traditions of Islam have changed in their importation to Poseidon, most of those concerning the Mosque's role in

MOST WANTED

Habib Hussein al-Muhammadi

An employee of Atlas Materials for over 50 years, al-Muhammadi is currently the highest-ranking officer on Poseidon. As chief of operations, he is ultimately responsible for Atlas' entire presence on the planet. This gives him oversight of a dizzying array of activities, including the orbital cargo yards, the distribution and construction facilities in al-Mamlakah, the Pebble Rocks xenosilicate mining operation, and more than 50,000 Atlas citizens and employees.

Al-Muhammadi joined Atlas in 2149 just after his 15th birthday. He started out as an apprentice machinist, doing menial work on orbital construction projects, and over the years worked his way up the corporate ranks. In 2171, he became the station chief of Atlas' main orbital facility, where he was involved in the construction of the *Jebel Chelia* and *Jebel Mousa*. He was not originally intended to captain either of the space-going behemoths, but a collision of two orbital tugs resulted in an extensive shakeup of Atlas' senior orbital staff. In the aftermath, he received an assignment to the *Jebel Mousa* just six months before she was scheduled to leave orbit. The first trip went flawlessly and the ship's spotless record continued throughout al-Muhammadi's captaincy of more than 13 years. In 2183, Habib al-Muhammadi was recalled to Earth to join the planning teams examining the future of Atlas' presence on Poseidon. Again, al-Muhammadi excelled. His practical experience made him a valuable asset to the Atlas team. Habib served on Earth for another eight years before his promotion to his current position, which he has held for seven years.

During his tenure at the helm of Atlas' Serpentis System operations, al-Muhammadi has overseen enormous growth on Poseidon, and he is largely responsible for much of the company's continuing success. He is a staunch supporter of Islam, and has been a significant contributor to the Second Mosque of the Patriarch since it was constructed. Habib is also one of very few people on Poseidon who has made the pilgrimage to Mecca. Being a *hajji* gives him a certain measure of respect in the religious community.

Al-Muhammadi has retained much of the character he developed during his days as a construction foreman. He can be an outstanding motivator but can slip into terrible rages at the least provocation. At 65, al-Muhammadi is still an imposing physical figure, and this characteristic remains a matter of personal pride with him. He is as familiar with the niceties of Incorporate society as he is with the language of the quarterdeck, and he is equally comfortable in both settings.

Species: Modified Human
Goal: Accomplishment
Motivation: Faith
Attitude: Confident
Role: Administrator (Professional)
Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0
Derived Attributes: Endurance 0, Reflexes 0, Toughness 0
Modifications: Implant Computer, Neural Jack
Aptitudes: (Superior) Administration; (Strong) Communication, Tech, Vehicles
Primary Skills: Bureaucracy 7, Culture (Earth) 5, Culture (Incorporate) 7, Culture (Spacer) 3, Economics 6, Freefall 5, Law 4, Leadership 7, Logistics 5, Persuasion 5, Piloting 3

the community remain intact. The building must be entered with the right foot first, and shoes are forbidden inside. It is also considered a place of sanctuary and there remains some question as to whether the GEO would pursue a fugitive within its walls.

Radiating inland from the Mosque, the Suq is one of al-Mamlakah's most traditional neighborhoods. Narrow streets are choked with open-air shops, and those offering similar goods are clustered together. For example, stalls selling food are found in one area

and those handling salvaged electronic equipment in another. Many examples of native handiwork are for sale in the Suq, and much of it is of superior workmanship. Many services are also available, such as guides for hunting and research expeditions into the interior of Prime Meridian. The Suq is also home to several hundred of the town's poorest residents and receives charitable support from both the religious organizations in al-Mamlakah and from Atlas itself through *zakaat*, the giving of alms, a traditional practice in Islamic faith. As a result, the streets of al-Mamlakah are reputedly among the most hospitable to Poseidon's poor.

Newport Hill

Newport Hill is one of the newest communities in al-Mamlakah and its residents are an economically diverse group of people drawn together by their common desire to be near the Mosque, the Hammam, and the Suq. The neighborhood has a reputation for being both strongly religious and on the ragged edge of legality. Though the majority of homes here are modest single-family dwellings, larger houses and simple hovels are scattered along the hillside.

The Gate

The transient nature of the residents in the dockside community known as the Gate has proved a fertile breeding ground for illegal activity. Crimes in the dockside neighborhood range from drug running to gambling to prostitution. Most permanent residents in the area walk the streets warily, careful to avoid the rough characters on shore leave. The Gate actually suffers less violent crime than similar areas in other towns, despite its reputation as the most dangerous part of al-Mamlakah.

ACCESS DENIED

Hidden Movement

Publicly released reports from the High-Pressure Engineering facility have shown dramatic declines in the production numbers of submersible craft. These reports are somewhat baffling to outside observers, as there has actually been an increase in the personnel, raw materials, and other resources assigned to the facility. The explanation for this apparent incongruity is a secret government contract to provide a large number of submersible interceptors to the GEO Armed Forces. These craft are earmarked for the support of the hard-pressed Crusoe Island garrison in the Northwest Territories.

Always wary to the point of paranoia, the GenDiver leadership in Santa Elena fears that Atlas may be gearing up for an attack on its many, precious Long John fields and refineries in the archipelago. GenDiver Security agents in al-Mamlakah are attempting to develop local contacts with access to restricted Atlas operational plans. If these intelligence-gathering efforts fail, the agents will likely seek to contract with independent parties, criminal or otherwise, to either acquire the information by covert means, or even sabotage the HPE facility.

No Honor Among Thieves

For some time, Atlas executives have been aware that the Pebble Rocks Field is gradually being depleted. The company has other, smaller mining operations, but the exhaustion of the Pebble Rocks deposits would be a massive blow, even to an Incorporate giant. In desperation, executives have allocated millions for the development or purchase of xenosilicate survey data.

Amidst the confusion of harried paper shuffling, one executive named Jawad al-Mhurad has funneled almost 500,000cs into a dummy survey-purchasing fund. Records indicate that the scrip was paid to a small independent company, Galen & Dodd Services. Unfortunately for al-Mhurad, an accidental communication from his staff revealed his embezzlement to Gerald Dodd, one of the survey-data resale company's principals. Dodd has been blackmailing al-Mhurad for 50,000cs a week. At this point, al-Mhurad is more concerned with keeping Dodd quiet than with the money—he fears prison far more than poverty. He is attempting to gradually return as much of the missing scrip as he can, and also to find someone who will take care of Dodd, whatever the cost.

ACCESS DENIED

Dark River

Atlas Materials executives have redefined the weekend getaway. Four times a year, several high-level managers enjoy a riverboat safari at Atlas' expense—the trips are offered as rewards for meeting business objectives. The amateur explorers rent a boat and a guide, and proceed on a carefree trip down the East Meridian, cameras in hand. The safaris last two or three glorious days in which business talk is taboo.

The next trip may not be so carefree, however. GenDiver Security personnel working under deep-cover in al-Mamlakah have learned that a particular executive named Omar Guerrero will be on the next excursion.

Guerrero is a former GenDiver executive who left the Incorporate state during the open conflict with Atlas in the early 2190s. He turned over vital logistical information that Atlas was able to exploit, and they rewarded him with a high-level position. The GenDiver operatives, posing as ecoterrorists, are attempting to hire a mercenary team to capture the rogue executive and deliver him to a safehouse they have established in town, where Guerrero will learn the error of his ways. The operatives will not compromise their covers for any reason, and have orders to protect them by any means necessary.

One Zealot's Trash

The organization known as Zero Nation has long been opposed to any human presence on Poseidon. They operate cells in most of Poseidon's major settlements, and al-Mamlakah is no exception. At the core of this cell is a group of native fishermen who meet in a dockside neighborhood on Medina Bay. Recently the cell has decided to carry out its boldest plan yet, one that would not only make a statement for Zero Nation, but would also stun the citizens of al-Mamlakah. On the next celebration of Planetfall, they will attempt to blow up the Second Mosque of the Patriarch, effectively wounding the entire city.

Luckily for al-Mamlakah, a few of the cell's newer members are Islamic. While they support Zero Nation, they cannot let the Mosque be defaced, much less destroyed. Anything else is fair game, but the Mosque is off limits. They are hoping to find some outside interests that can stop the bombing—without risking their own positions in Zero Nation.

Demographics

In general, Moslems are a distinct minority on Poseidon, but in al-Mamlakah and the surrounding region, the people and their religion dominate the sociopolitical landscape. Although people of other faiths are accepted in al-Mamlakah, fewer than 4,000 of its 28,000 residents are non-Moslem.

Over 19,000 residents of the city are Atlas citizens and another 5,000 work in service industries or as contracted employees of the Incorporate giant. The remainder are independents working for themselves, the GEO, private concerns, or not at all. This group also includes the city's small native population who operate the fishing fleets, serve as guides into the interior, or work as farm hands on the coastal ranches.

Government

Atlas management takes a very active role in the daily governance of al-Mamlakah. The city manager, nicknamed "the Sheik" by the town's Arab residents, is an upper-level Atlas executive named Sharad Patel. Dr. Patel is intimately aware of the goings-on in his city, and has wide-ranging authority over company resources and their disbursement. Dr. Patel is technically in charge of all Atlas personnel and resources in al-Mamlakah, but he regularly reports to Habib al-Muhammadi regarding issues that may affect other Atlas operations. There is a post for a GEO Marshal for the Prime Meridian region in al-Mamlakah, though it is currently vacant. The GEO has had little trouble manning an ERT station in al-Mamlakah, though, as rescue duty is highly regarded in the community. The ERT members have

maintained a good relationship with Atlas Security and the two organizations have worked closely on several occasions in the past.

In 2192, Atlas Materials' underwater facility, Undersea Habitat–1, was destroyed by torpedoes launched from GenDiver submersibles. The entire habitat was reduced to sea-floor wreckage and over 200 Atlas citizens were killed. So began a smoldering war between two of Poseidon's most powerful Incorporate states. More than eight months of hit-and-run attacks followed, changing the face of al-Mamlakah forever. Atlas Security began patrolling the harbor and manufacturing facilities around the clock, and foot patrols were mobilized in residential and commercial areas. Atlas equipped the Kasbah with sophisticated surface and subsurface sensor equipment, and began flying picket aircraft in relays from the main field. Although the conflict between Atlas and GenDiver has reached a sort of détente since the arrival on planet of the Marshals and the GEO garrisons, al-Mamlakah remains a carefully guarded city.

MOST WANTED

Simon Malmoneeds

Simon Malmoneeds is a freelance explorer who has worked almost exclusively for Atlas Materials during the past decade. He has led exploratory teams all over Poseidon, though he considers the Prime Meridian region his home. Born to a Biogene family that immigrated to Poseidon in 2179, Malmoneeds rejected the corporate-molded life. Striking out on his own at 16, he opted to wander the archipelago in the company of native nomads, free traders, and prospectors. He signed on with anyone who would take him aboard, and still maintains an extensive web of contacts ranging from Atlas Materials executives to members of Free Poseidon! and HIST scientists.

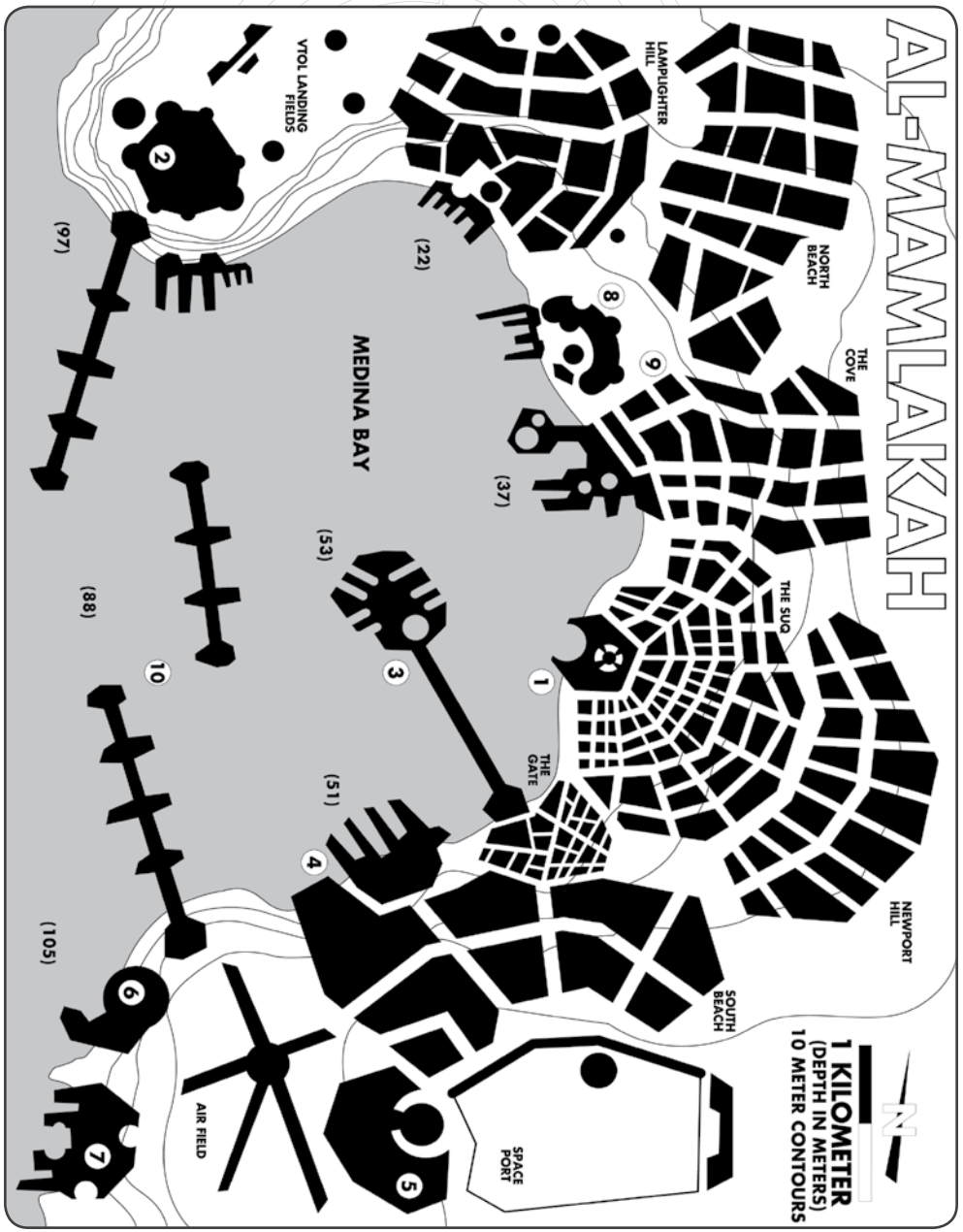
He came to the attention of Atlas' Habib al-Muhammadi in 2184 when he sailed into Medina Bay on an improvised raft, a survivor of the storm that destroyed much of al-Mamlakah. Al-Muhammadi knew immediately that he wanted Malmoneeds under contract with Atlas and worked for the next six years to earn the trust required to obtain his services. During that time, al-Muhammadi supported Malmoneeds' expeditions both personally and with Atlas funds, and even accompanied him on three different trips to the interior, serving to further increase his respect for the explorer. In 2190, Malmoneeds accepted a position on Atlas' payroll, though by the terms of his contract he may continue to freelance for anyone, including GenDiver. Of course, al-Muhammadi knows Malmoneeds would never work for Atlas' Incorporate rival.

Malmoneeds is driven by insatiable curiosity, and his vast catalog of skills and connections exist only to serve that hunger. His interests know no bounds, and he is just as happy climbing out of an uncharted rift valley on Albion as he is plumbing the depths of the Dominican Trench. Malmoneeds wants to be the first to make every discovery, not only because he loves the thrill of the hunt, but because he wants to fit everything into his growing understanding of Poseidon.

Species: Modified Human
Goal: Enlightenment
Motivation: Curiosity
Attitude: Confident
Role: Explorer (Professional)
Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1
Derived Attributes: Endurance 1, Reflexes 0, Toughness 1
Modifications: Immunological Symbiote
Aptitudes: (Superior) Survival; (Strong) Combat, Culture, Sentient Sciences
Primary Skills: Anthropology 4, Aquatics 6, Boating 5, Culture (Colonial) 6. Culture (Incorporate) 4, Culture (Native) 4, Ecoscience 5, Foraging 6, Geoscience 4, Medicine 3, Mountaineering 4, Navigation 7, Piloting 3, Small Arms 4, Stealth 3, Tracking 4

Economic Base

In 2185, Atlas Materials geologists discovered a nodule of yellowish, translucent material protruding from the bed of the Dolphin Sea. Researchers initially found the ore generally unremarkable and examined it out of thoroughness rather than curiosity. Little did they know their diligence would change the face of humanity forever. The history of the development of Long John is replete with myth and mystery, and beneath the mountain of fiction surrounding its discovery, very little is known about the biochemists who did the early research or about Atlas man-



agement's plans for keeping the xenosilicates secret. Luma Theodossy, a biochemist disillusioned with Atlas and frustrated by her compulsory transfer to Poseidon, sold the secret of the ore's discovery to the media, costing Atlas billions in projected revenues.

However devastating Theodossy's treachery may have been, Atlas was still in a better position to exploit the new resource than its competitors, and acted swiftly to protect its remaining advantage. Immediately after news of the ore broke, the company registered a mining claim with the GEO for the area known as the Pebble Rocks Field. Alone among the major Incorporate states on Poseidon in its experience with large-scale mining operations, Atlas moved swiftly in bringing the ore to market. Currently, Long John mining remains the single largest source of profit Atlas possesses in either of the settled systems. Atlas Materials was very successful before Long John, however, and the Incorporate state's diverse interests continue to produce profit from numerous sources. Other Atlas activities include interstellar shipping, heavy manufacturing, commercial distribution, and industrial construction, and al-Mamlakah remains the hub of the Incorporate giant's commercial activities on Poseidon.

Infrastructure

Al-Mamlakah is known for the fluid incorporation of the surrounding landscape into its layout. In some areas, such as South Beach and Lamplighter Hill, space has been reserved for parks and common land, although such amenities are rare in poorer sections of town. The airfield, spaceport, and VTOL landing fields are all situated at the outer edges of town, as is most heavy industry. Efficient drainage systems collect rainwater that is filtered and returned to the city water utility, and native plants and extensive terracing minimize erosion along the hills. Power and fresh water are both provided by a massive fusion plant on the south headland.

As a holding of Atlas Materials, al-Mamlakah receives the majority of its services from the employees of the Incorporate giant. Teaching, medical, maintenance, security, and a plethora of other personnel are provided either directly by Atlas or through contracts with the company. A few independents in these fields work in al-Mamlakah, but the interdependency of these services leaves most freelancers out of the loop. Additional services are provided through contracts with the GEO.

Map Key

1. Second Mosque of the Patriarch

The first building constructed in al-Mamlakah, the Second Mosque of the Patriarch has become a symbol for the city, for Atlas Materials, and for the ever-expanding presence of Islam on Poseidon. The Mosque's most prominent feature is the control tower of the freighter *Jebel Chelia*, which rises more than 250 meters into the air and provides a point of both directional and spiritual reference for the town's residents. The Mosque was built along traditional lines, and includes the mihrab—a shrine symbolic of Mecca—and minbar, or pulpit, for the Friday prayer. Also a cultural center, the Mosque houses several important works of art, the most famous of which is the giant Waliya mosaic.

2. The Kasbah

"Al-Qasba" to al-Mamlakah's Arabic-speaking residents, this complex is the center of Atlas Materials' operations in the Lambda Serpentis system. Resembling a Moorish fortress with high walls and minarets, the massive structure houses some of the most powerful computer and communications systems on the planet. The Kasbah is also a central point of defense for Medina Bay and the city of al-Mamlakah. The facility's resources include radar and sonar detection equipment, and fire-control systems for the artillery guarding the bay. Graded portions of the headland provide space for a VTOL field, and extensive storm shelters and defensive bunkers have been added to the complex in recent years, increasing the sense of security the installation offers the city's people.

3. Cargo and Ferry Terminals

Designed to receive even the largest of ocean-going vessels, the surface terminal is also the main terminal for the ferries that serve Atlas' undersea installations and smaller settlements in the region. The kilometer-long pier has docking space for private vessels, but mariners are warned that slips 51 through 106 are reserved for Atlas Security and are not to be approached. Arrangements for docking can be made by contacting the harbor master's office at the entrance to the pier.

4. Surface Construction Facilities

Built next to the enormous industrial complex at South Beach, the surface shipyards are the most mod-

ern on Poseidon. Equipped to build everything from inter-island tramp freighters to the largest ore and container carriers, the shipyards are a key part of Atlas' continued role as an industrial power on Poseidon. Only the earliest stages of construction actually occur quayside at the construction facilities. Once the hull and decking are declared sound, many vessels are moved into Medina Bay, where their fitting-out can continue, freeing up dock space for the next project.

5. Orbital Craft Construction

The only facility of its kind on Poseidon, Atlas Orbital Construction is a dedicated facility for the production of sub-orbital and orbital craft. A lucrative contract with the GEO for construction and maintenance of its fleet of drop ships has guaranteed activity at the hangars well into the next century. Many residents of al-Mamlakah are less than thrilled, because the sonic booms of craft dropping from orbit to the landing fields adjoining the construction hangars have become a constant feature of life in the Atlas company town.

6. Power Plant

When construction began on the settlement that would grow into the modern city of al-Mamlakah, one of the first buildings completed after the Mosque was the housing for the fusion reactor. Although several auxiliary reactors were brought online as the city grew, the original reactor is still functioning and continues to provide fresh water and power for the city.

7. High-Pressure Engineering

The only part of Atlas Materials' major construction facilities not along the shores of Medina Bay, HPE is the site for manufacturing all of Atlas' marine construction products. Utility submersibles are the most common product. Atlas also builds modular units for ocean-bottom facilities, large cargo subs, fast transports, mining pods, general-purpose tugs, and even combat vessels. HPE is a vital asset in Atlas' continued exploitation of Long John.

8. Executive Hotel

The only exclusive lodging facility in the Medina Bay area, the al-Mamlakah Executive is almost a match for some of the hotels on Lavender Organics' floating city of Dyfedd. Guests are treated to multi-course meals in Farouk's, the hotel's main restaurant, and the Executive's suites are elegant and rich in amenities. Boat rentals and scuba instruction are available on the beach, and the hotel's private marina caters to discriminating amateur captains. Room rates reflect the hotel's opulence, and run from 500 to several thousand scrip per night.

9. GEO Extension Office

Government House is the headquarters for all GEO activity in al-Mamlakah. There is a representative for the district's Magistrate at Government House, as well as offices and support personnel representing each of the other major High Commissions. They function as both a public extension service and a liaison office to the Atlas administration. The local GEO ERTs are also based in Government House.

10. Seawall

Medina Bay's primary protection from cyclonic storms is the Medina seawall, which was constructed from the salvaged hull material of the *Jebel Chelia*. One piece of the seawall projects out into the bay from each headland and a third is freestanding, set back from the gap between the two outer walls. The effect is an efficient deflection of incoming storm swells and potential amphibious assaults. Artillery and torpedo emplacements on the seawalls make unauthorized entry a dangerous proposition.

UNDERSEA HABITAT–2

I can't believe it's only been six weeks since I saw you last; it seems like six years. That's the strangest thing about this place—every hour of every day you're rubbing elbows and bumping heads with two or three other people, and it's still the loneliest place I've ever been. The guys on my team would give me hell if they heard me say that, but I know they feel the same way. I guess it's the isolation. I know, it sounds strange to talk about feeling isolated when you share a tin can with 3,000 other people. But humans weren't meant to be down here. It's dark, darker than midnight on the surface, and there's nothing but water, rock, and mud to see anyway. And even in your hard suit, you can feel the pressure of millions of tons of ocean trying to squeeze the life out of you. It's an alien place. I miss you.

—John Warner, miner, excerpt from a personal letter

Location and Local Terrain

Atlas Materials' Undersea Habitat–2 is located 900 meters below the ocean surface, at 20° 02′ 59″ south latitude, 05° 23′ 11″ west longitude, approximately 250 kilometers north of the Pebble Rocks chain, in the Dolphin Sea.

History

Atlas Materials completed construction on Undersea Habitat–2, commonly known by Atlas personnel as Rock Bottom, in 2187. The project was initiated shortly after the discovery of xenosilicates in Poseidon's crust, and was designed to be Atlas' primary Long John mining and refining station on the colony world. In 2199, the Pebble Rocks Field is still the largest concentration of xenosilicate ore found anywhere on the planet, and the operation of the Rock Bottom facility has generated billions of scrip for Atlas Materials over the last 12 years.

Physical Layout

Undersea Habitat is in fact a complex facility that extends from the ocean surface to the sea floor some 900 meters below. The original structure is shaped like a squat, domed cylinder, and is linked to four smaller cylinders by access spokes. The central tower is approximately 100 meters tall and 85 meters in diameter. The satellites are about 70 meters tall and 50 meters in diameter. Thirty meters from this complex is a massive refining facility, which is used to process xenosilicate ore before it is transported to the surface. A heavy cable runs from a loading bay in the top level of the central habitat to a floating platform on the surface. The platform, called Flattop, is 130 meters long and 60 meters wide, and is equipped with powerful MHD station-keeping drives that maintain its position above Rock Bottom. The complex supports mining operations at 15 different deposits within 10 kilometers of the central habitat.

Demographics

There are more than 3,100 Atlas personnel living and working in the Rock Bottom complex. Most of them are stationed in the central habitat, but more than 150 are quartered on Flattop. This population is dominated by modified humans, but there are a handful of cetaceans and a surprising number of spacers as well. While many of them suffer minor, gravity-related medical problems, the spacers are perhaps the best adjusted to the cramped spaces and living conditions of Rock Bottom. All of the personnel stationed at Rock Bottom are either directly involved in the mining operations or in related support services. Miners, engineers, geologists, administrators, pilots, technicians, medics—all live and work together in Undersea Habitat–2.

Government

Undersea Habitat–2 is managed by an executive administrator, Youhana Fontenot, who answers directly to the Atlas deputy chief of operations in al-Mamlakah. Fontenot defers the vast majority of her duties to her support structure, but she has been an able manager since she was awarded the position in 2197.

Economic Base

The Rock Bottom facility's sole concern is the mining, refining, and transport of Long John. Atlas Materials estimates that the Rock Bottom facility is producing one gram of refined ore per 100 man-hours. While Rock Bottom processes thousands of metric tons of bedrock, it produces only about 150 kilograms of refined Long John each year. With the price of refined ore in Earth markets hovering around 5,000cs per gram, this seemingly modest production generates more than 600 million scrip in annual revenues.

Infrastructure

The infrastructure and technological resources of the Rock Bottom complex are vast. The central habitat is equipped with multiple submersible locks, maintenance facilities, sophisticated sensor equipment, sickbays, and utilitarian living quarters for the Rock Bottom personnel. The complex supports hundreds of miners and tons of equipment, and the refining facility is completely automated. A large transport pod runs along the cable from the central habitat to Flattop, allowing efficient transport of personnel, foodstuffs, equipment, spare parts, and other material to and from the surface. The transport pod is essentially a drive-less submersible, raised and lowered by an automated ballast system.

Flattop is equipped with robotic cargo-handling systems, advanced communications equipment, and extensive maintenance and storage bays. There are also several docking and refueling stations for the constant stream of VTOLs, transport submersibles, hovercraft, and surface ships that deliver supplies and personnel to the platform.

Map Key

1. Hydroponics Facilities

These oblong habitats are approximately 80 meters from the primary dome and house Rock Bottom's extensive hydroponics labs. Rock Bottom is far from self-sufficient, and the vast majority of the foodstuffs needed to support the facility are shipped from al-Mamlakah.

2. Umbilical Station

The receiving station that serves the umbilical cable running between Rock Bottom and Flattop extends from the top deck of the primary dome. It houses the maintenance, logistics, life support, and security infrastructure needed to support and safeguard the supplies and personnel brought into Rock Bottom in the transport pod.

3. Auxiliary Habitats

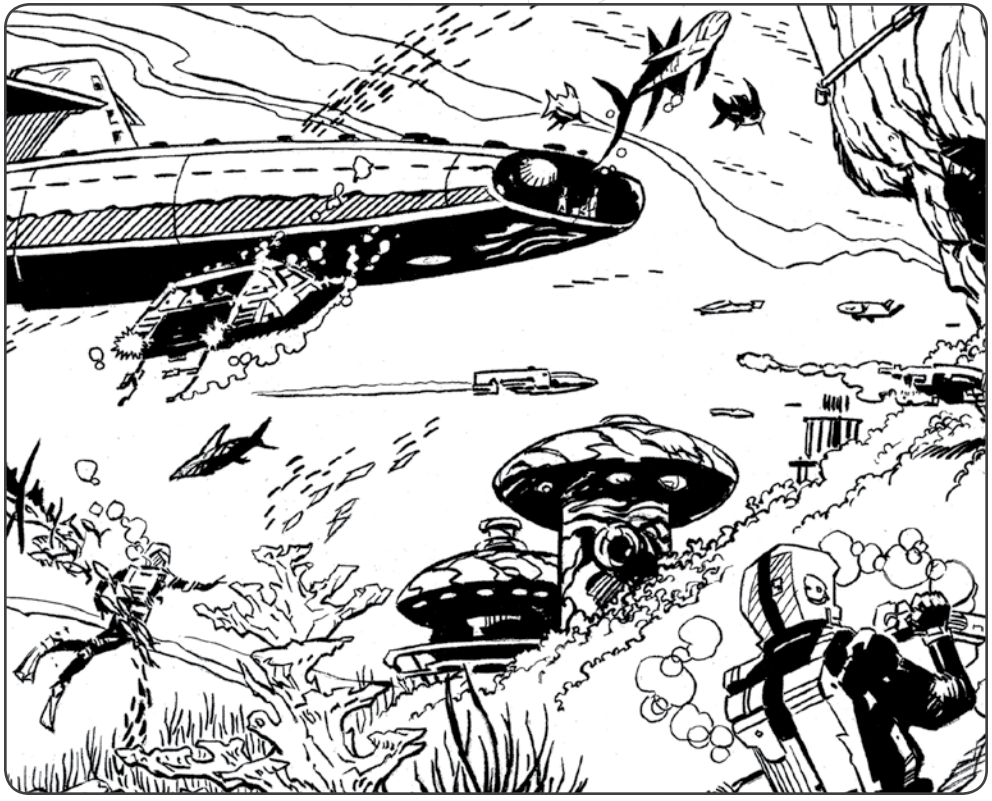
Due to the explosive growth of the Rock Bottom operation over the last several years, several modular habitats have been installed along the western edge of the complex, about 100 meters from the primary dome. These facilities supplement the storage depot in the west bubble, housing surplus hard suits, industrial drills, and other light equipment and machinery.

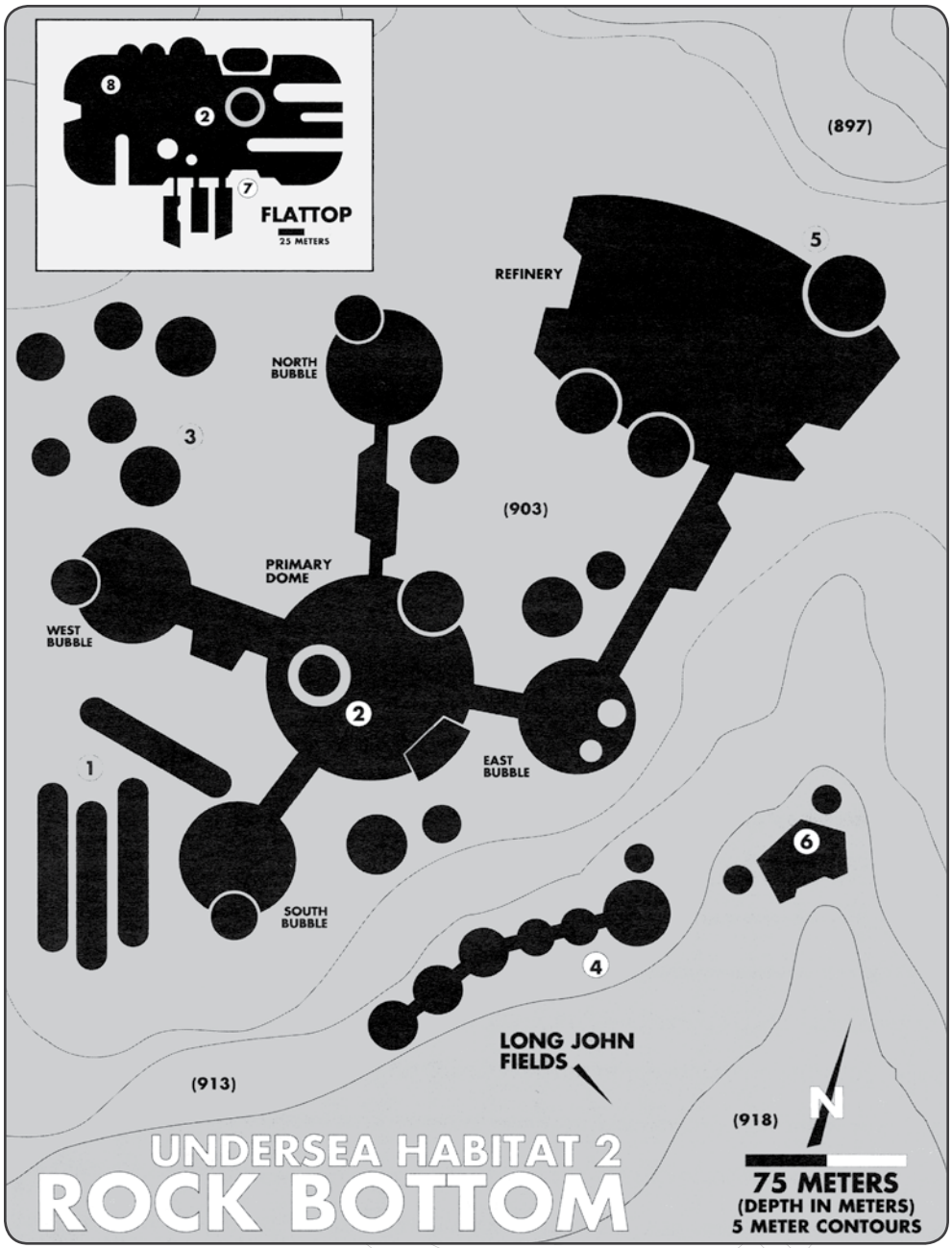
4. Excavation Hangars

This line of connected modules is located on a rock shelf approximately 100 meters southeast of the primary dome. These storage modules are used to house the mining robots, survey remotes, and heavy earth-movers used to prospect for and harvest xenosilicate ore.

5. Receiving Station

This facility extends from the massive xenosilicate refinery north of the complex and is riddled with sub bays, cargo locks, and logistics infrastructure needed to receive, process, and store the tons of unrefined Long John ore transported from the Pebble Rocks Field.





6. Fusion Reactor

Rock Bottom's massive McCluskey reactor is housed in this hardened facility. The electricity produced by the McCluskey's huge turbine is distributed throughout the complex by underground power lines.

7. Surface Docks

A series of docks and piers along Flattop's southern edge supports the surface ships and heavy-cargo hovercraft that service the Rock Bottom facility. The docks also house the huge robotic cranes, mainte-

nance bays, and fuel stations that keep these vessels operational.

8. Flight Deck

This wide, bioplastic tarmac serves the jumpcraft and VTOLs that support Rock Bottom. The flight deck is surrounded by maintenance hangars, fuel stations, storage facilities, and communications towers.

Under Pressure

Most of the personnel stationed at Rock Bottom are assigned to three-month tours. The living conditions can be difficult, and Atlas has spared little expense in maintaining the morale and productivity of the facility. While most everyone dines in one of several common cafeterias in the central habitat, there are a number of small cantinas, virtual arcades, and recreation rooms where Rock Bottom personnel can go to relax and blow off steam. First-hand accounts indicate that gambling, prostitution, and pharium use are common, all of which are somewhat surprising for this Muslim-owned facility.

Security around the facility is obviously very tight. Rock Bottom's predecessor, Undersea Habitat–1, was destroyed in a GenDiver attack, an incident that GenDiver still insists was a "tragic accident." While Atlas makes every effort to cultivate good relations with other Incorporate states, it is unwilling to take any risks with its most profitable downside operation. As a result, there are thought to be more than 100 security personnel stationed at Rock Bottom. The facility's security resources include dolphin marine patrols, fighter submersibles, armed surface craft, and several patrol VTOLs based on the surface platform. There is also a perimeter of sophisticated early warning sonar stations surrounding the facility at a distance of approximately five kilometers.

Due to the tons of sediment that are dredged from the surrounding bedrock every year, visibility around Rock Bottom is at a minimum, even when aided by the facility's powerful floodlights. Small armies of maintenance personnel work around the clock to keep machinery and equipment free of the sludge that constantly settles on every exposed surface.

ALDERBERG

It is incumbent upon us, then, to exert ourselves to the utmost to rise to this opportunity. If Poseidon is to become another Jerusalem rather than another Tower of Babel, then it is our responsibility to make it so. Mankind has made it his decision to go to the stars, and the People of God will go as well, making sure our new life will be one that will be pleasing in the sight of the Almighty. With His help, we can do all things, as all things are possible in Him and through Him. With God's help, our effort, and our undying watchfulness, Poseidon can be a place of peace, of love, and of Christian fellowship. In nomine Patri, et Fili, et Spiritus Sancti, Amen.

—Papal Letter "On the Colonization of Worlds"

Location and Local Terrain

Alderberg is located at 19°56'12" south latitude and 03°06'47" east longitude, on the southeastern coast of the island of Salvador. The village hugs the shoreline within a shallow, crescent-shaped harbor. Salt marshes stretch away from the town to the north, and provide a haven for swarms of biting insects, numerous avian species, and various small but still danger-

ous predators. A snow capped volcano, Mount Dali, looms more than 3,000 meters overhead.

History

Founded on June 12, 2186 under the auspices of the Roman Catholic Church and Pope Lucius V's "Lambda Serpentis Crusade," Alderberg represents the Church's wish to establish a significant presence on the colony world. The town and the monastery exist in a symbiotic relationship, and neither would survive long without the financial support of the Church.

Personnel for the settlement were selected by the Church from a wide pool among the ecclesiastic and monastic orders, as well as from the faithful Catholic laity. More than 600,000 Catholics applied for the 1,200 positions available within the monastery and among the townsfolk. The mission left Earth in late 2185 and their quiet arrival midway through 2186 roused curiosity among the natives, but little interest among the newcomers.

The insular settlement that developed was named Alderberg, in honor of Father John Alder, a priest who died in transit as a result of IHMS failure. Alderberg's

ACCESS DENIED

End of the Line

Geologists at Rock Bottom believe that the Pebble Rocks Field is almost exhausted. While survey teams search for new deposits, the Atlas leadership is attempting to organize a cartel to regulate the supply of Long John in the markets of Poseidon and Earth. By artificially inflating the price of Long John, Atlas would be able to sustain its profits while additional deposits were located. Since the Pebble Rocks Field has been so lucrative, Atlas' survey efforts have lagged behind those of other Incorporate states, like Biogene, GenDiver, and the NIS.

Atlas executives have made many attempts to purchase survey data from their competitors, but have met with little success. As the situation becomes more desperate, the leadership has begun to consider other, more covert, means of acquiring the crucial information. While Atlas does not have a history of such activities, necessity breeds invention, and the Incorporate state may be left with little choice.

Future Tech

For more than 200 years, scientists have been searching for a way to build tiny assemblers, microscopic machines that could be used to manipulate individual atoms, machines that would serve as the foundation for true nanotechnology. While the technical and physical hurdles had long been thought insurmountable by most in the scientific community, a researcher stationed at Rock Bottom has been experimenting with xenosilicate templates and believes they can be used to construct functional assemblers.

Dr. Emile Lucent's research has met with some success, and he is almost ready to present his data to the Atlas leadership. Should Dr. Lucent's efforts prove fruitful, the transformative effect of Long John on human civilization would be complete.

Compromised

In 2195, Youhana Fontenot attended a summit meeting of representatives from several of the Incorporate states with operations on Poseidon. During a private meeting with a GenDiver executive, Fontenot was drugged, kidnapped, and transported to a nearby GenDiver safehouse where bioengineers performed a mind-job operation. Fontenot was already ambitious and materialistic, and the mind-job planted a driving, insatiable greed deep in the young woman's psyche.

Several months later, Fontenot was contacted by a GenDiver operative and offered a considerable sum of money in return for some basic data on Atlas' downside construction schedule. Since then, GenDiver has been purchasing increasingly sensitive data from Fontenot on a regular basis. GenDiver now has access to some of Atlas' most closely held secrets.

ACCESS DENIED

Hand of God

In addition to the apostolic mission known to the public, Pope Lucius V has charged the monks and laity of St. John the Baptist with a special mission. They are on Poseidon to reveal the fingerprints of God in His Creation. The Pope wants definitive proof that God exists and hopes to find it on Poseidon.

Through members of the Pontifical Academy of Sciences, the Pope has been presented with evidence derived from DNA, fossil records, and other sources that life on Earth and Poseidon are very closely linked. The Pope believes that Poseidon may be the original world flooded by God in the Old Testament, and that humankind somehow migrated from Poseidon to Earth after the Flood. He wants to find tangible proof for this case, and has thus launched his crusade to Lambda Serpentis II.

To that end, he has secreted 12 covert operatives among the original 1,200 missionaries. These operatives roam the Pacifica Archipelago trying to uncover the planet's deepest secrets. Their primary objective is to recover fossilized remains of terrestrial species on Poseidon. Appointed directly by the Pope and codenamed after each of Christ's apostles, their existence is known only to each other, the Bishop and Abbess, and a committee in the Pontifical Academy of Sciences. This mission remains classified, as the Pope fears the repercussions of his theory could destroy the Church from within before he finds the proof he seeks.

Holy Waters

The Catholic Church on Poseidon has contracted with Hydrospan to construct a submerged habitat off the coast of Salvador Island, near Alderberg. The habitat will support a number of research submersibles, state-of-the-art sensor suites, and scientific laboratories, and will be manned by the monastery's scientific and technical laity. The aborigines' possible sentience is a continuing source of controversy in the Church, and the habitat's mission is to gather conclusive evidence on this issue.

Before construction of the habitat is completed, the Archbishop, who is overseeing the project, would like to secure at least one live aborigine specimen as a test subject for the necessary experimentation. While the St. John 's scientists and technicians are extremely skilled in their specialized fields, none of them are qualified for this difficult task. As a result, the Archbishop has diverted funds with which to hire a team of freelancers with the necessary skills and experience.

residents tend to go about their business quietly and maintain low profiles even when they must involve themselves with other settlements or the Incorporate.

The Monastery of St. John the Baptist serves as the headquarters for all Roman Catholic activity on Poseidon, and stands as a symbol of the Church's commitment to spread the Word throughout the settled systems. The Catholic colonial effort had originally planned to move an entire medieval monastery from Europe to Poseidon, and to rebuild it stone-by-stone. After a cost analysis, however, the plan was quickly dropped, and the Pope commissioned architects to create a new structure. The designers were uniquely successful in merging classical design with the needs of the new environment. As a result, St. John's is one of the most dramatic structures on Poseidon, and one of the safest during the region's frequent cyclones.

Physical Layout

Most of the structures in Alderberg are molded from construction-grade bioplastics. Ranging from one to four stories, many of the taller buildings have open-air balconies that overlook the harbor, while others support covered colonnades. Built in imitation of Old World, Spanish architectural styles, the settlement has weathered several Force 4 storms essentially unscathed. The harbor docks and outbuildings follow the same architectural lines, and have shown the same resistance to weather.

While the town's structures are merely sturdy, the monastery is built like a fortress. Located three kilometers inland, the formidable structure sits atop a 200-meter-high hill. Surrounded by six-meter walls, the 17-building compound can house 800 residents, but is currently only half full. Based on monaster-

ies of the past, but sleek and modern in design and execution, St. John's combines state-of-the-art construction materials and techniques with an organic form that offers maximum protection from Poseidon's storms. Built of local stone quarried from the nearby hills, St. John's noteworthy features include an artesian well, a 20-meter bell tower, and a LinkStar CommSat system. The communications facilities also include their own dedicated satellite and ground-based uplinks.

Demographics

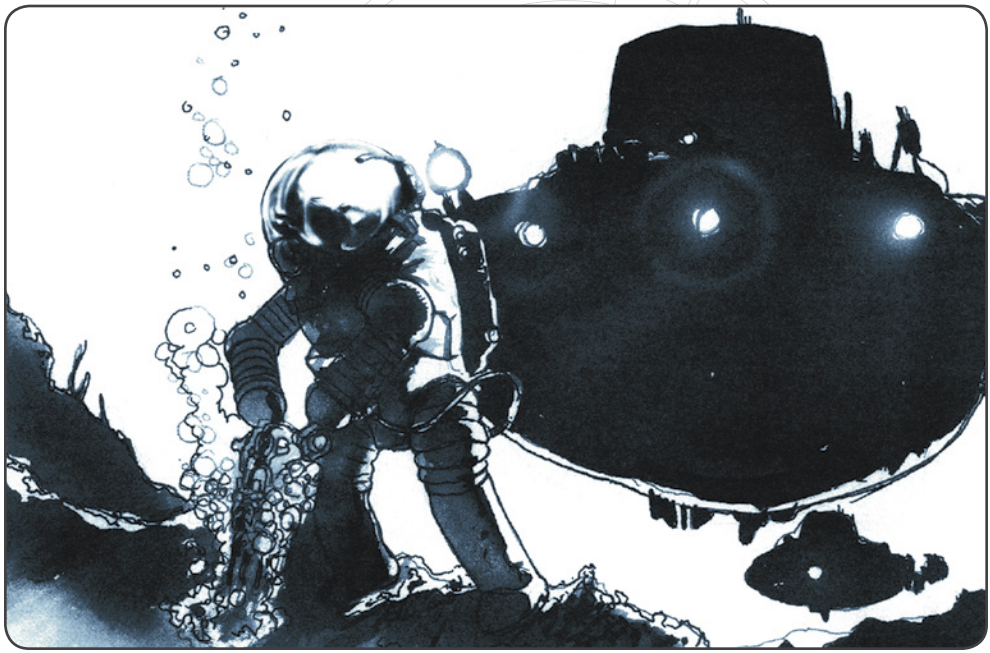
Similar in nature if not in scope to the original Athena colonists, the Alderberg settlers represent the most brilliant scientific and technical minds of the Church. Their specialties range through the fields of astrophysics and botany to virology and zoology. Just over 1,100 residents now live in Alderberg, many of whom divide their time evenly between scientific research and the labor-intensive activities of life on the frontier. They farm and fish to feed themselves and the monastery, and maintain equipment and infrastructure to support the community.

The more than 400 members of St. John's staff are drawn from many different orders within the Church. The usual Benedictines, Franciscans, and Jesuits work side-by-side with Cistercians, Sisters of Mercy, and other less well known orders. The monastics are men and women of science as well as of God, and their studies of the planet and its inhabitants often prove as insightful as those conducted by the secular scholars at HIST.

Government

A town council handles administrative duties for Alderberg and consists of seven members drawn from the populace of both the town and the monastery. Members are elected to six-year terms and can be reelected indefinitely. The Abbess and Bishop hold honorary, non-voting seats on the town council, but the Bishop rarely has time to attend the meetings. The Abbess, however, regularly sits in, offering her guidance and opinions, often acting as liaison between the town and the Monastery.

The Monastery of St. John the Baptist functions as the seat for the Archdiocese of Poseidon, from which Archbishop Damon Lotaviano guides his waterworld flock. He rarely involves himself in the day-to-day activities of the town, though he does lead Mass regularly. Lotaviano focuses his efforts on building the Catholic community's presence throughout Poseidon. St. John's is officially a Dominican outpost, and Abbess Helen Delores Rich, a nun of the Second Order of St. Dominic, acts as chief admin-



istrator for the monastery. She was appointed by the Pope in 2193, and unlike the archbishop, she is actively involved in the daily affairs of both the monastery and Alderberg. In fact, she makes no distinction between the two, considering both her responsibility.

Economic Base

Among the least self-sufficient settlements on Poseidon, Alderberg would not exist without the Church's financial support. The initial investment is thought to have exceeded two-and-a-half billion scrip, though the Church has never made the project's records public. While most of the residents are involved at least part-time in subsistence agriculture, it is unlikely that the town will ever develop a significant economic base.

Infrastructure

Despite the millions of scrip already invested in Alderberg's buildings, scientific facilities, and annual maintenance, it remains a relatively simple town. It has a small airfield for servicing and supporting the town's three utility VTOLs and numerous jumpcraft. The harbor can handle only small cargo vessels, so resupply ships must unload in al-Mamlakah and ferry their goods across Foster's Bay in smaller boats.

The settlement's one research submersible, the *Shroud of Turin*, is rarely seen quayside as it is in use almost 30 hours a day as part of one project or another. The exact purpose of its many research efforts remains unknown, though its explorations of the undersea rift valleys and volcanic fissures have produced some significant discoveries.

KANSAS

Dear Nils,

The south coast of Prime Meridian has to be seen to be believed. There are grasslands in the north, to be sure. But there, they are practically on the knees of the mountains. The southern plain is a continuous strip of savanna that runs the entire length of the island.

For 2,200 kilometers, nothing but a few rivers break the continuity of the plain. In the distance, there are always the mountains. Nils, this place calls out to me. It is more like Africa than any place I have seen in thirty years.

I have begun to carve out a homestead on the largest river flowing through the southern plain. Munson named it the Vathek, in honor of the late lieutenant. I trust you will let his son know of the waterway that now bears his name. It is not a mighty river, but it is enough for our little farm. I have just realized, you probably do not know why I said "our" farm.

Do you remember the McMannus' oldest daughter, Natalie? We are married now. We became acquainted during last season's harvest, and I am quite infatuated with her. I must admit, it is probably not love in the way our mother would have conceived of it, but it may become love in time.

Nils, I hope that you are well, and that your home can bring you as much joy as my new one has brought me.

Your brother, Hendrik

Location and Local Terrain

Kansas is located at 29°43'11" south latitude, 00°50'07" east longitude, in the southern plains of Prime Meridian. While the land-locked site is sheltered from most cyclones by mountains, Kansas suffers through earthquakes and rains of debris from the surrounding volcanoes. The landscape of southern Prime Meridian is a study in contradiction. Rolling plains meet 30-meter cliffs at the southern coast, while the Drakensbergs, the highest mountains in the Pacifica, loom only a few hundred kilometers inland.

History

Situated at the juncture of the East Meridian and Vathek rivers and enriched by alluvial flooding, the area around Kansas was in use at least 25 years prior to the town's official 2180 founding. While the permanent residents of the township number less than 3,000, it has become a regional depot for Prime Meridian's scattered southern farms and ranches. Thus, almost anyone living on the prairies within a few hundred kilometers of the town think of themselves as "Kansans."

ACCESS DENIED

OBSESSION

Unbeknownst to Atlas, Alexander Anesko, the chief of operations at the Lucky Strike mines, has been secretly working for GenDiver over the last 15 years. A survivor of Undersea Habitat-1's destruction, he was reassigned in 2193 to manage Atlas' inland mining facilities. Crafty and extraordinarily cautious, Anesko never risks his cover. He is due for a promotion next year.

Atlas considers Anesko a proven and reliable leader, able to manage efficient production in both the field and the office. Anesko's defection in late 2193 is as much a mystery to his GenDiver controllers as it would be to Atlas if he were discovered—he has never provided his GenDiver contacts with a reason for his betrayal. Nevertheless, he smuggles materials ranging from long-term planning and budgetary information to Long John prospecting reports, and his betrayal has caused Atlas considerable economic damage in the past decade.

Anesko has proven a major asset, and GenDiver has grown to depend on both his information and his assessments regarding Atlas operations. The rival Incorporate has a standing offer to pull him out at any time, but Anesko has continually refused to go. In truth, if either side had realized Anesko's actual intentions, he would already be dead.

During the GenDiver attack that destroyed Undersea Habitat-1, Anesko lost his wife and infant daughter. The loss nearly destroyed him, and while now he may appear to have recovered, he has developed a near-psychotic obsession. Vowing to destroy GenDiver, he has spent the years since the attack positioning himself to do just that. He is working fervently to gain enough authority to guide local Atlas policy and gain greater trust from GenDiver. Then, by feeding GenDiver the wrong information at the right time, he plans to cripple his enemy and utilize Atlas' resources to crush them.

Natives began arriving on Prime Meridian during the early 2120s, and by the 30s, a brave few had moved south of the encroaching mountain ranges and established one of the rare inland settlements on the pre-Recontact planet. By 2155, a rugged trading post had grown at the confluence of the two rivers, over time becoming the focus of local commerce, barter, and social activities. Since Recontact, both Atlas and the GEO have made offers to buy out and develop the settlement, each without success. The locals are apparently quite fond of their hard-won and independent lifestyles.

Over time, and with the increasing colonial market, agricultural production in the Kansas region has become a vital industry. In 2192, the sporadic farmers' markets and cattle drives that had characterized the region's economy were organized into a triennial agricultural market. Increasing demands of a growing colonial population made the markets an instant success, and there is talk among the regional officials of increasing the number of markets in order to meet the rising demands.

Kansas residents stubbornly persist in their lifestyle, despite constant danger and hardship. Several ranches and outlying settlements have been built and rebuilt following repeated earthquakes and eruptions. Despite these setbacks, settlers still push the frontier into new territory and fight hard to protect their land and way of life. To quote local GEO Deputy Marshal Luther Rainslaker, "Kansas is an overgrown trading post that has all the appeal of a long, dusty road to nowhere. Culture and manners have never come to town, but you've got to respect a people that can tell an erupting volcano to go to hell."

The Kansas settlement and outlying ranches produce much of the fruits, vegetables, grains, and meat consumed in the region. While they certainly do not hold a monopoly, the unique importance of the Kansas farmers has brought them under the watchful eye of the GEO. Kansans do not object to the attention, as long as the observers let them go about their business undisturbed and unregulated. In the past, Kansans threatened by outsiders banded together and threatened price increases and embargoes. To date, little has come of the threats, and so far the homesteaders have been able to maintain their autonomy and lifestyle.

Physical Layout

There is an obvious lack of planning in Kansas' layout. Centre Street and Mars Avenue divide the town into rough quarters, but the buildings and intersections are often positioned haphazardly and seldom form regular angles. The cheap brothels and saloons that cater to the locals are somewhat shabbier than the hotels for market visitors, but the distinction is minimal. The dockside warehouses along the Vathek River and the Pits across town add further to Kansas' uncultured ambiance.

The Pits are two large and dingy amphitheaters perched on the western outskirts of town. The amphitheaters, called Pit 1 and Pit 2, can hold up to 4,000 and 8,000 buyers, respectively. The triennial markets are held in these buildings, the smaller for produce, the larger for various livestock. The necessary display, storage, auction, and transport facilities in each building allow buyers and sellers to complete their transactions and arrange for delivery on site.

Three times each year, the Pits transform from desolate, echoing warehouses into a zoo of frantic activity. During market, over 30,000 people work within the complex daily. A system of connecting skywalks, tunnels, and maglev terminals was added a few years ago. Each maglev terminal can load or unload two hover trains simultaneously. Huge elevators drop from the terminals to the loading bays, and connect from there via ramps to each Pit.

Inside, the Pits resemble typical convention centers. Huge ceiling-mounted screens display the current bids, as well as details on bidding lots, advertisements, and other information. Steel girders support a clear plastic ceiling that admits sunlight on those rare days when the roof panels are cleared of their usual sludge of ash, bird droppings, and windblown debris. Unfortunately, the Pits are rundown and in dire need of repair. The elevator and cooling systems constantly break down, and by the second half of each market, the smells of dung, sweat, and coolant permeate the entire complex. Though the Pits combine the worst features of convention centers, bus stations, and rental storage facilities, they always manage to serve their purpose.

Demographics

Kansas has only 2,800 residents living in town year around. Another 6,000 are scattered throughout the plains in mining camps, ranches, farms, and agrarian collectives. These smaller settlements range from 50 to 200 people, though over 300 hands work the Viego Acres, and Byron's Spur is home to over 280 ranchers and farmers. The Lucky Strike mining complexes support about 1,600 among the various mine sites.

Government

Kansas' mayor, Kristina Brunner, governs with a minimalist style, but the landowners respect her ability to maintain the peace and keep the settlement together through sheer force of will. She is a crafty and stubborn woman who truly understands the souls of her constituency. Brunner has served as mayor for the last 16 years and no one has run against her for the past three elections. She initially only accepted the job because no one else volunteered after the previous mayor was killed in a gunfight in 2185. Her ranch, the Model T, covers over 1,700 square kilometers, and its borders come within 50 kilometers of town.

GEO Deputy Marshal Rainslaker headquarters in Kansas, and he and his team of 15 hand-picked Patrol Officers have policed the region for the last seven years. The middle-aged native Poseidoner grew up on Rapa Nui. Rainslaker likes the people he protects, and acts as their liaison and advocate with the GEO. His even-handedness has earned him the grudging respect of most Kansans, though he and Brunner have never gotten along. When the two meet, loud, abusive arguments typically result. They evidently hold opposing opinions on just about every issue.

Economic Base

For 10 days each in early spring, midsummer, and late fall, Kansans hold market, offering their genetically engineered livestock and gene-spliced fruits and grains for sale to newcomer markets. The maglev trains of al-Mamlakah rocket 850 kilometers through the Narrows, and cart away enough animals and produce to feed most of the regional population until the next market. Though fish and aquaculture products are staples in every diet on Poseidon, Kansas agricultural products are common throughout the Pacifica Archipelago and remain in high demand. Kansas' agriculture revenues have consistently grown more than 25% over each of the past six years.

In addition to the agricultural markets that drive Kansas' economy, Atlas Materials' Lucky Strike Mine and Quarry Complex fills a different, though still profitable, niche. Located in the foothills of Meridian's Summit, the Lucky Strike is not a single location, but instead a series of mines spread across 250

kilometers. The Lucky Strike complex provides uranium, chromium, gold, platinum, and industrial-grade diamonds. High-quality luxury construction materials including marble, obsidian, granite, and other building stones are extracted, then exported throughout Poseidon.

Infrastructure

Due to their geographical separation, almost all Kansas ranchers own hoppers or skimmers, so even in this terrestrial environment roads are rare. Usually, power production facilities outside of Kansas proper are privately owned and water comes from individual wells. Consequently, southern Prime Meridian has little in the way of formal infrastructure.

Downtown Kansas contains a motley assortment of buildings connected by dirt roads that invariably turn to mud during storms. The business district extends for about three blocks in each direction from the intersection of Mars Avenue and Centre Street. The rest of the town consists primarily of seasonal hotels, river docks, temporary warehousing, parking, cargo-handling fields, and the Pits.

The Islamic Faithful

On Poseidon, as on Earth, five major tenets of faith, the five Pillars, govern Islamic daily life. All Moslems strive to live by these guidelines, and they exert significant influence over Islamic society.

The most central Pillar is *shahada*, the statement of monotheism, ascribing divinity only to God. *Shahada* also gives special significance to Mohammed, as the chosen messenger of God. *Salaat* requires that Moslems pray five times daily. For obvious reasons, the requirement that prayers are made while facing towards the city of Mecca has been modified. Local Moslems pray towards al-Mamlakah and the Second Mosque of the Patriarch, this being the most holy site on the planet. The muezzin, whose only duty is to perform this ceremony, traditionally makes the call to prayer from the Mosque. Indeed, the muezzin's calls are so regular in al-Mamlakah that they serve as an informal timepiece for most citizens.

Zakaat is the giving of alms, the performance of charity required of Moslems. Most of the faithful contribute through the Mosque. It is this Pillar that makes the streets of al-Mamlakah relatively hospitable for the poor. *Zakaat* also serves to blur the line between charitable organizations and other, possibly illegal ones. Throughout history, groups who have advocated violence have also provided basic human services, handing out armed rebellion with one hand and food for the hungry with the other.

The most holy site in Islam is the Shrine of the Ka'ba in Mecca. The Pillar of the *hajj* requires all Moslems to journey there at least once in their lives. Moslems who are destitute or suffer from a disability are exempted from this requirement, but distance is no excuse. In actuality, only a small portion of Moslems actually performs the *hajj*, and Atlas strictly controls the total number of Earth-bound pilgrims in any given year. Among those who have made the *hajj* is Atlas Chief of Operations Habib al-Muhammadi. It was at al-Muhammadi's suggestion that Atlas decided to waive transport costs for Moslems making the *hajj*.

The Pillar that non-Moslems are most familiar with is *sawm*, the fast during the month of Ramadaan. For the 28 days of the lunar month of Ramadaan, all Moslems are required to fast from dawn until dusk. As with the *hajj*, this applies only to those who are physically able. During the fast, Moslems abstain from all food, drink, sex, and even negative thoughts. A number of traditions exist for the breaking of the fast after sunset, and family and community activities are a common feature.

Since Ramadaan is determined on a lunar-based calendar, its scheduling on Poseidon is tricky. Poseidon's Ramadaan can fall in any local season, but tradition still decrees that the fast lasts the full 28 days, despite Poseidon's longer day.

The Meridian Frontier

Byron's Spur

Byron's Spur is a large ranch and farm that stretches along the southern coast of Prime Meridian less than a hundred kilometers from Kansas. Centered at 29°4'23" south latitude, 3°07'19" east longitude, the Spur covers 2,400 square kilometers. The region consists of low plains and rolling hills that gradually give way to coastal wetlands and broad beaches to the south. The ranch was founded in 2134 by Byron Baur, who passed it on to his daughter Melinda when he retired in 2163. Melinda expanded from ranching into farming, raising wheat, corn, and other grains. She successfully cross-fertilized rye with native Poseidon grasses, calling the hybrid "fire rye" due to its

brilliant red color. Her son Matthew increased the ranch to its present size, and expanded their herd by 40% through livestock purchases and aggressive breeding programs.

The 28 buildings of Byron's Spur are scattered in clusters throughout the Baur property. They weather typhoons and violent thunderstorms, and frequent repairs keep the ranch hands busy year around. The central compound where Matthew and Sylvia Baur and their seven children reside consists of nine buildings. These include the main homestead, two guest houses, a machine shop, two barns with silos, a vehicle hangar, a hot-spring bathhouse, and a small fusion plant.

While the volcanically active Drakensbergs are several hundred kilometers to the north, their regular rumblings and minor eruptions are nevertheless a nuisance. Because of the threat of volcanic ash and debris choking hopper intakes, the residents of Byron's Spur typically use electrically powered ATVs, and sometimes even horses, to move about the ranch. After even moderate eruptions, the ash can take up to three weeks to settle, during which most travel takes place on the ground.

Byron's Spur is entirely self-supporting. The family and hired hands feed and clothe themselves, and build with materials that are readily available from natural sources. The Spur maintains sufficient stores to support the hands and herds for up to 90 days, and among the building clusters, there are also wells for tap water, troughs, and irrigation systems. Electrified fencing, over three meters high in places, surrounds the Baur property and divides it into individual, isolated pastures. The family's central fusion reactor powers the fence, with separate high-voltage lines running to individual fence segments. Though the fence prevents the stock from wandering too widely, its primary purpose is to keep Poseidon's numerous predators off ranch property.

A handful of botanists, agricultural scientists, and animal husbandry specialists work with Baur to improve the Spur's production, while ranch hands manage the livestock, harvest the crops, and maintain equipment. Though the 280 hands at the Spur come from a variety of backgrounds, more than three-quarters are native Poseidoners. They are a rough-and-tumble lot, but they work hard and are proud of the niche they have carved from the wilderness.

Of all the commodities it produces, Byron's Spur is best known for its livestock. The ranch breeds bovine and goat analogs, as well as true cows, sheep, and horses. In addition, the Baurs raise various grain, vegetable, and fruit crops, many of which they hope to cross with Poseidon's various equivalents in order to create hardier hybrids. Fire rye, their first real success, has brought some small fame to the Baur clan, for both its scientific innovation and the fine, 170-proof rye whiskey made from it. The family operates a small distillery and sells the liquor under the label "Byron's Best."

The Maglev Express

The Atlas MagLev–6 rail system is the lifeline that binds Cooper's Ferry, Kansas, and al-Mamlakah together. Atlas has dropped plans to connect Cooper's Ferry to Alderberg through a series of island-hopping bridges, for fear that the frequent storms and earthquakes would destroy the trestles. Known as the Lev, it transports mining and agricultural products from the interior to al-Mamlakah, and supplies manufactured goods and industrial equipment to the outlying settlements.

Traveling at 475 kilometers per hour, the Lev is the fastest surface transportation on Poseidon, as well as the safest and most economical. Three pairs of electromagnetic rails guide the trains along their route, and dedicated fusion reactors power each 500-kilometer length of track. Two passenger cars normally transport first-class and coach fares, and extra cars are added to trains during market seasons. Entire cars or trains can be leased for special functions, though they are quite expensive. Special cars haul livestock from Kansas to the al-Mamlakah stockyards, where they are distributed planet wide. Freight cars carry mining equipment, heavy machinery, and bulk cargo, and tankers haul water, oil, and cryogenically-stored scientific specimens.

The other major links in the ground transportation chain on Prime Meridian are the hover trains. Articulated trams of 10 to 15 air-cushioned vehicles, the hover trains make a regular circuit from Kansas to the outlying ranches, mines, and settlements as often as twice a week. The hover trains pick up processed ore and fresh produce, leaving behind supplies and equipment ordered from Kansas or al-Mamlakah. The trains are ugly, unwieldy, noisy machines that kick up dust clouds that can be seen for a hundred kilometers. Nevertheless, they remain the most reliable, efficient form of bulk transport in the trackless plains of the island's interior. Their regular arrival

is often the only outside contact many of the more remote settlers enjoy.

Unlike the faster maglev, the hover trains are quite vulnerable to attack and are often heavily defended. Jefferson Overland, the private company that runs the hover train service, usually provides guards. However, if a group of ranchers or a settlement expects a particularly valuable shipment or has a large crop going out, they may hire additional security for the passage. Train robbing may have a certain romantic appeal, but much of the cargo on the hover trains cannot easily be converted into ready cash. Attacks are therefore rather infrequent.

The Stockyards

When the first Kansas markets were organized, authorities considered several plans for handling the massive outflow of produce and livestock from the region. The town could not support a packing or freezing facility large enough to handle the number

ACCESS DENIED

Vanishing Point

An HIST expedition lead by Martin Smith-Clavel into the remote interior of Devlin's Rainforest disappeared in the spring of 2186, sometime after their last scheduled communication. The expedition's last reported location was approximately 850 kilometers north-northwest of Mount Adonais, at 22°11′ 37″ south latitude, 3°58′24″ east longitude. Their next day's travel should have covered another 40 kilometers. When Smith-Clavel missed his scheduled check-ins over the next two days, HIST requested emergency assistance from the GEO ERT stationed in al-Mamlakah.

The expedition's last campsite was never found, and when a rescue team led by Simon Malmoneeds arrived at the HIST group's last reported waypoint, they found no evidence that the HIST expedition had ever been present. The ERT subsequently scoured over 2,000 square kilometers of the surrounding region searching for any signs of the expedition. The team found nothing, and all satellite imagery proved equally unrevealing. More than 10 years after the incident, friends and colleagues in the HIST are still offering a substantial reward for any information regarding the expedition's disappearance.

High-Tech Harvest

The farmers of Byron's Spur are engaged in various projects intended to cross-fertilize and genetically engineer Earth and Poseidon plants in order to improve the survivability of Earth species on Poseidon. They have had moderate success, and they continue to make steady progress on several different hybrids. If these projects succeed, Byron's Spur stands to reap huge profits on seed sales alone. Crop failure remains a continuing problem throughout Poseidon, especially for plants of terrestrial origin, and the new hybrids would provide a more consistent yield to farmers all over the planet.

Not everyone is enthusiastic about the Baur Family's research, however. Some people are wary of the genetic manipulation of food crops, with memories of the Fischer Blight still fresh. A cell of the ecoterrorist organization known as the Blue Water Circle has issued several "warnings" to the family, threatening to destroy both the plants being researched and those doing the research. Given the unpredictable nature of law enforcement in the region, the Baurs have considered hiring private security to protect their interests.

Staking a Claim

During a recent fishing expedition, two ranch hands discovered what they think may be a Long John lode just offshore from Spur property. They have kept their discovery secret thus far, and have been trying to find a way to test the ore to determine if it is really Long John without raising suspicions or losing their claim. They have chipped away a sample and plan to take it into Kansas for analysis during the next market. The Baur Family has maintained a generous system of profit sharing and incentive pay for their employees, but the two hands have never been confronted with such potential wealth.

of animals that went through with each market. The enormous quantities of grain and other produce also required facilities for packaging and storing, facilities that the residents of Kansas were unable to fund and could not operate.

The answer was a stockyard, built near the al-Mamlakah end of the maglev line. For the duration of each market, the maglev runs almost continuously from the Pits, to a local spur, to a coastal distribution center. Here agricultural products are processed and shipped by surface vessels to all parts of Poseidon. Today, the maglev line running through the Narrows from Kansas transports huge quantities of livestock and produce three times a year, and smaller shipments biweekly. The increase in both production from the Kansas ranches and demand from settlements all over the planet has far exceeded expectations. Due to the increased demand, two new meat processing plants have recently been added to the facility.

The stockyards employ several hundred laborers on a collectively bargained contract. Although not precisely a union, the stockyard workforce is very well organized and provides many of the same benefits to its members as traditional labor organizations. There are also allegations of the graft, bribes, protection money, and kickbacks often associated with unions. The web of fees, taxes, and tariffs involved in getting livestock onto transports lends itself to all sorts of profiteering. There are organizations of laborers that control the maglev terminal, others that control the corrals and chutes leading to the slaughterhouse, and still others that oversee the refrigerated warehouse or the facilities for loading livestock. Rivalry between the groups is constant and occasionally bloody. Although the potential for profit is not as high as in some industries on Poseidon, there is a lot of money to be made in al-Mamlakah's stockyards, and no shortage of people willing to do whatever is necessary to make it.

Debate continues about who is responsible for policing the stockyards. Atlas Materials was instrumental in the construction and runs the maglev line essential for their existence, putting it at least marginally in a position of responsibility. Atlas, on the other hand, denies any responsibility for what happens after the stock is unloaded, abrogating all enforcement duties to the GEO. The Marshal Service claims that the stockyards are a private venture, and that they do not have the local resources to regularly patrol such a large, hectic operation. Therefore, the "overhead" at the stockyards remains high, and the living rather fast.

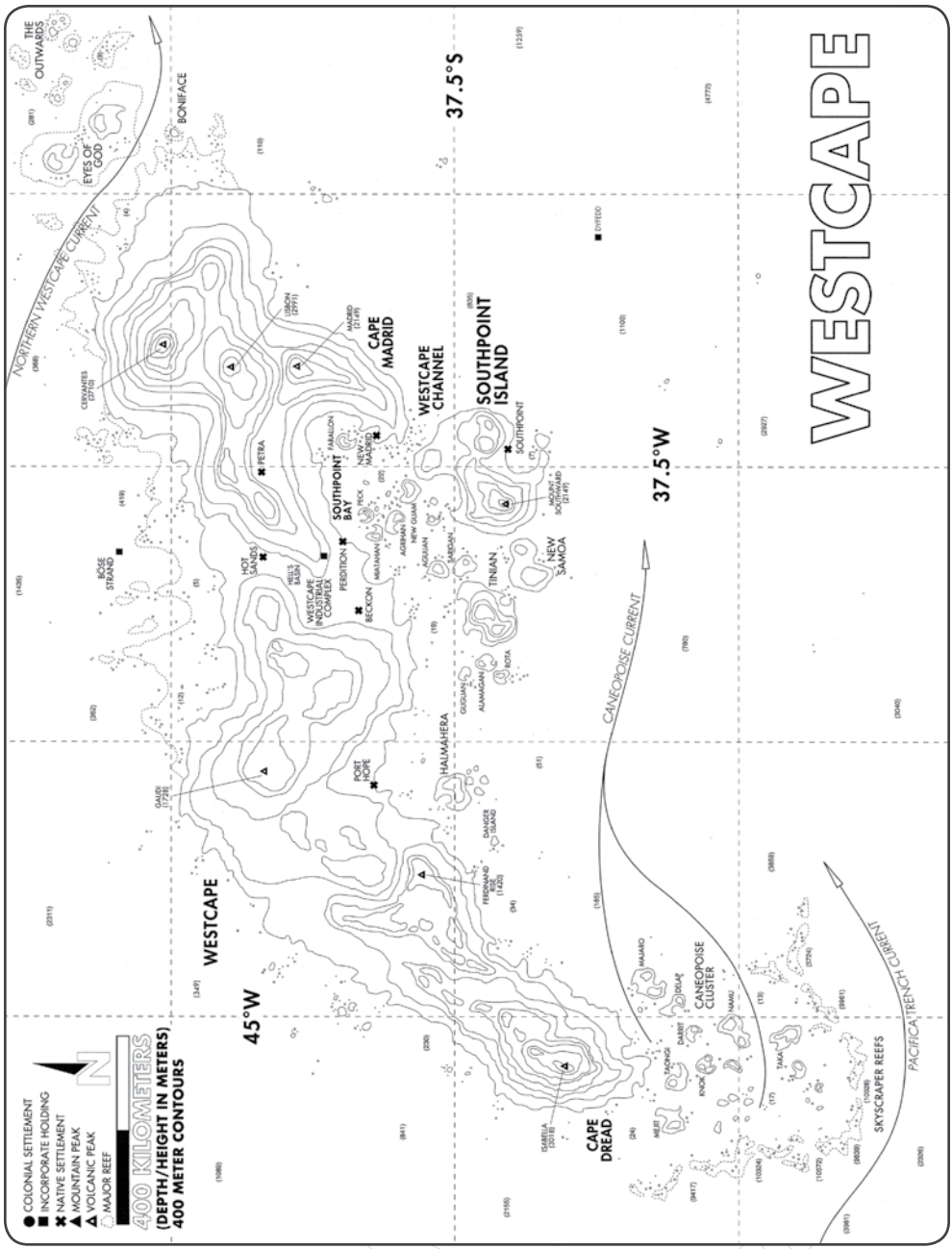
WESTCAPE

Wild jewel of the archipelago, remote Westcape has not yet seen extensive settlement. The region's first inhabitants were the adventurous or alienated pioneers who thought even Haven a bit too civilized. Early Athena Project surveys discovered the island's stunning beauty and variety, yet even a decade ago only the hardiest travelers visited there, often just to say they had. Westcape's area of approximately 775,000 square kilometers makes it the archipelago's second largest island, and similar in size to Earth's second largest island, New Guinea.

Believed to be less than eight million years old, mountainous Westcape is one of the youngest major volcanic islands in the archipelago. Along its eastern edge, subtropical rainforest blankets the lower reaches of jagged peaks 2,000 meters high. Rain shadows and prevailing winds make the western two-thirds an arid desert. The east has two active volcanic regions: a large area around Cervantes Peak in the extreme east, and Mount Southward on Southpoint Island. The west shows clear evidence of at least two recent volcanic episodes—but, with only one exception—is now dormant.

The clear waters of Westcape Channel are choked with several dozen limestone islets and uncounted hundreds of coralline outcroppings that flank Southpoint Island. This topographical disorder makes seafaring approaches into Southpoint Bay hazardous, especially during low tide. The channel boasts numerous ship and boat wrecks, now encrusted with barnacle-like growths and occupied by predators. Many of these occur during the annual spring boat races, in which natives from all over the region compete in sail races through the channel's most dangerous straits.

In the shadow of the island's central rise lies an extensive salt pan called Hell's Basin. Now surrounded by a chaotic, almost impassable granitic border, the arid valley was once an open bay. Block faulting closed the bay, but not before the New Pacific deposited thick layers of marine sediment. Later volcanism laid down a 20-meter blanket of compacted white ash called "tuff." Because tuff is



soft and water-soluble, the Basin displays the only major erosion features on Westcape. The surreal sculpted landscape of pillars, balancing rocks, sheer cliffs, and delicate arches is one of the most exotic locales on Poseidon.

At an average depth of 24 meters below sea level, the Basin is the lowest dry land in the archipelago. Rainfall amounts to less than 10 centimeters a year, when it rains at all. Summer turns this region into an oven, with typical daytime temperatures exceeding

50° Celsius. Of Hell's Basin's seismic past, only a few lifeless, brackish, hot springs remain. These areas represent the only known source of water opals, brilliant, scintillating gemstones exported as jewelry across the archipelago and to Earth. As its name implies, the water opal is a micro-crystalline silicate similar to terrestrial opals. Its beauty derives from siliceous residues of extinct unicellular organisms that resembled radiolarians. This glassy material refracts light in attractive firework-like bursts. Found as encrustations on stalagmitic formations around the Basin's hot springs, water opals display a wide spectrum of colors. Westcape's natives consider them good luck.

At the southernmost end of Westcape lies the Pacifica Trench, a tectonic subduction zone discovered by Lavender scientists from Dyfedd. One of the deepest trenches in the archipelago, it is a known hunting ground for greater whites, and fishing crews have reported unconfirmed sightings of even larger creatures. An unusual, heavily mineralized cold current surging up from the Pacifica Trench feeds the growth of Westcape's spectacular coral reefs, the Skyscrapers. These wildly varied and colorful calcitic reefs take an abrupt 90° turn from one-meter shallows to bottomless depths. Newcomers compare swimming over the edge of these reefs to floating off the top of a skyscraper, hence the name.

Every few nights in summer, the reef puts on a spectacular light show. The ocean in the vicinity of the Pacifica Trench contains two parts per thousand dissolved magnesium. Through bioaccumulation, coralline algae in the calcitic reef skeletons concentrate this ambient magnesium into minute nodules. On certain warm nights, symbiotic bacteria within the translucent skeletons, acting in response to unknown external cues, suddenly oxidize the magnesium, creating brilliant, short-lived pinpoint flares. After a few moments of random flashing, they inexplicably synchronize, and waves of light sweep back and forth across the reef like the bands of an aurora. This phenomenon, called the reef aurora, draws natives from all over Westcape, as well as tourist-loaded jumpcraft from Dyfedd.

Westcape's largest native settlement, Perdition, recently celebrated the 75th anniversary of human settlement. With raucous dances, comedic iguana races, and a township feast, Westcapers commemorated the 2124 arrival of Louis Pingelap Nanpei, leader of a small settlement group from the Zion Islands.

Though still sparsely settled, Westcape's population has been increasing steadily since 2185. Dyfedd, the Lavender Organics floating company town, draws tourists, Incorporate executives, and those in the market for state-of-the-art biotechnology. Hanover Industries has established two major operations on the island, the Westcape Correctional Facility and an extensive mining operation. Westcape's mineral resources have also lured independent miners and prospectors, many in search of one last chance at riches after failing in the Long John fields. The island's accelerating economic growth is beginning to attract increasing numbers of newcomers, and conflicts with the native population are on the rise.

By chance, Westcape has drawn a more heterogeneous group of settlers than some other parts of the archipelago. Natives here descend from most of the minority colonists—Filipinos, Indonesians, West Africans, and many more, who, for political reasons, the United Nations took pains to include in the original Athena Project mission. Almost no trace of these terrestrial cultures survives among modern Westcapers, but the original diversity may help explain the tensions that plagued the first settlements.

From the start, it seemed few people got along. Many families left Perdition soon after their arrival and settled elsewhere on the island. Succeeding generations healed these rifts, but rugged individualism still shapes the culture: you leave me alone, and I leave you alone.

DYFEDD

Attention citizens, residents, and guests. Your attention please. MetWatch is predicting a significant change in wind direction and force with the approach of an incoming storm front. Please be advised that Dyfedd will be undergoing precautionary maneuvering. Watercraft operating in the vicinity of the city are warned to stay clear of the canals between 2600 and 2630. All visitors and personnel are advised to avoid water-level docks as the incoming weather pattern will likely cause overwash and flooding. Thank you for your attention, and please have a pleasant evening.

—Hugo D4, Dyfedd integrated computer

Location and Local Terrain

Dyfedd is actually a fully mobile floating city, making it unique in the known systems. Though Dyfedd's small fleet of tugs can tow the city rafts along at the breakneck speed of three kilometers an hour, the city is typically stationed southeast of Westcape Island. The city managers take advantage of local current patterns and oceanic eddies to remain in the vicinity of 37°48′ latitude, 34°24′ longitude.

The southernmost settlement in the Pacifica Archipelago, Dyfedd is well outside major hurricane storm paths. Though it is still deep in the tropics, climatological conditions combine to provide a relatively dry and pleasant climate. This milder weather is one of the reasons for Dyfedd's growing popularity as a resort destination.

History

Construction of Dyfedd was completed in 2185 as part of Lavender Organics' plans to establish a viable presence on Poseidon. Lavender is well known for its long-term mentality and innovative application of existing technology. The company felt that construction, operation, and maintenance of such a unique facility would not only create a profitable colony, but would also generate valuable spinoff technologies and associated expertise.

Designing Dyfedd took three years of around-the-clock work by an army of engineers, logicians, and planners. Even with this considerable effort, success still required the dedicated use of one of Lavender's most sophisticated expert computer systems.

Early in the project, the decision was made to build as much of the city as possible using only the resources available on Poseidon. Labor was trained, heavy manufacturing facilities were built, and massive bioplastic farms were constructed. In the end it was actually the development of several new strains of plastrobes that made Dyfedd possible. The resulting next-generation plastics were lighter, stronger, faster-growing, and specifically designed to stand up to the weather and fungi plaguing other colonial construction projects. The LavOrg bioplastic facility near Caernafon remains one of the major suppliers of industrial-grade construction material on Poseidon.

A key element of Dyfedd's continued success is its modular construction. The design allowed the individual components of the city to be manufactured in Caernafon and shipped, towed, or airlifted into place off the coast of Westcape. The design has also allowed for additions to the city as both its population and importance in Lavender's colonial presence have increased.

Even with its modular design, the assembly of Dyfedd was an epic engineering project. Such projects invariably suffer delays, technical problems, and accidents, and the construction of Dyfedd was no different. Labor and supply shortages caused constant delays. A contaminated shipment of bioplastic adhesive forced several major reconstructions and the loss of two months' work. A raft was severely damaged and 13 people died when power systems failed in a jump lifter. The crash and resulting fire killed 13 additional workers and burned though the raft to the water below. A large polypod also took up residence in the lower levels of the complex, and four laborers disappeared before it was discovered. It still took a week, and the lives of two more people, to flush the creature out and kill it.

In spite of such hindrances to the project, Poseidon's weather caused the greatest difficulties. Tropical storms and high winds delayed deliveries and slowed transport. As it was being towed toward Westcape, one raft ran aground during an unexpected blow and had to be returned to the Caernafon plastic farms for repairs. Before the breakwaters were installed, high waves often flooded the partially assembled decks, and several workers were lost overboard. High winds often made crane work impossible, and in the months before the stabilizing drives could be brought online, the rolling decks caused countless minor accidents and cases of severe seasickness.

Despite the delays, the assembly of Dyfedd's superstructure took just under one local year. In half again that much time, Dyfedd was ready for occupancy, and on June 1, 2185, Lavender christened the city. To say that the first Christening Celebration was a wild party is an understatement, and in subsequent years the residents have done their best to uphold the tradition.

In 2194 economic development and the demands of a larger population necessitated the addition of two new raft sections to the city's superstructure, bringing the current total to seven. The additional rafts have not only provided more room for support facilities and commercial concerns, they have also proven a boon to the city's increasingly important tourist trade.

Within the year, the company's project planning department on Earth is expected to approve the con-

struction of a sister city for Dyfedd. The project is based on the proven technologies already developed for the floating city, while integrating significant innovations. Rumors abound about the proposed location for the new settlement, but many insiders suspect it will be placed well north of the storm belt, perhaps within the protected waters of the Shangri-La island cluster.

Physical Layout

Dyfedd is a beautiful place, and when they first arrive, visitors invariably feel it truly does look like a "city of the future." Dyfedd's superstructure currently consists of seven hexagonal platforms of gleaming white industrial bioplastic. The city is a large ring of six decks surrounding a seventh. Each raft supports a variety of functions dictated by its operative role in the city and represents one of Dyfedd's established districts. Each raft is commonly referred to by the name of the district it supports, but each also has a proper name given by the city's designers.

The rafts were initially named for figures from Welsh history and Celtic legend, in honor of Lavender Organics' corporate origins. The central platform is Hywel, surrounded by Ceridwen, Gwydion, Manannan, Taliesin, and the two most recent additions, Rhiannon and Myrddin. Most residents simply use the district slang for each raft, but LavOrg public relations and visiting tourists prefer the romance and mystery evoked by the ancient names.

Though the function and activities that characterize each district are diverse, the rafts share common structural and design features. Each raft is up to 20 meters thick in places, and is bordered by a flared margin that serves both as a seawall and as streamlining. Each raft has a system of six station-keeping MHD drives controlled by the city's integrated expert system. The drives serve to help keep the city on course or location and to dampen platform motion, even in the worst weather.

The interior of each raft contains duct work, piping, access tunnels, maintenance corridors, and electrical conduit to support the city's infrastructure. It also houses the network of tunnels used by Dyfedd's public tram system. As with most aspects of the platform design, these systems are modular, allowing the city to be reconfigured with relative ease.

The individual rafts are interconnected by systems of cables, braces, and clamps that secure the structures while allowing them sufficient flexibility to accommodate Poseidon's harsh weather. Wide gangways provide access between rafts and interconnect the major thoroughfares. Docks, catwalks, and ramps are everywhere, providing easy access to the water's surface and scenic overlooks throughout the city. Even most of these structures are modular, and it is not uncommon for a Dyfedd resident to discover a bridge has been moved or a dock added to provide for some new need. These frequent changes tend to give the city a dynamic nature that adds to its unique physical appeal.

Perhaps the most dramatic feature of Dyfedd is the undercity, or what the residents call Down Town. Like many modern Poseidon settlements, there is a portion of the city's facilities that is partially or completely below the water's surface. On Dyfedd, however, this submergence is extensive and has created a breathtaking underwater cityscape. Originally intended as a space-saving design that would also add significant stability to each platform, the larger structures on Dyfedd often hang farther below the surfaces of the rafts than they rise above them.

To visitors, this underwater city is a fairyland of blue-green shadows and bright rays of sunlight. Aquaforms and cetaceans populate this world, and watercraft of all sorts ply the inverted avenues. At night the imagery is even more fanciful, with starlike lights of all colors shining into the ocean's darkness from the domes, windows, and bubbles of Down Town.

Almost all large structures in Dyfedd extend into the undercity. Nearer the surface, where sunlight is still bright, most structures have large view ports. This is particularly common in the Lavender residential complexes and the suites of the city's new luxury hotels. As depth increases and light diminishes, the frequency of view ports and clear bubbles also decreases. In what the residents call the Morlock Levels, there are almost no windows, and most of the internal spaces are occupied by reactors, desalination plants, and other automated equipment.

Throughout Down Town, airlocks are common for the purposes of maintenance, industrial, and emergency access. Most of these locks support universal sub docking collars, and many structures have actual sub bays, some large enough to hold multiple vehicles. It is also in the habitats of the undercity that Dyfedd's few cetacean residents make their homes and offices in flooded bubbles and interconnected domes.

Dyfedd is continuously undergoing slight position adjustments. The city managers are attentive to even minor changes in weather and ocean currents, and do their best to keep the city's harbor out of the wind. As a result, compass directions have little meaning in Dyfedd. The locals instead use the terms windward, leeward, starboard, and port when giving directions.

The Districts of Dyfedd

Hywel

Hywel is the central raft and the heart of the floating city. The district is actually an arcology of sorts and is where most of Dyfedd's Lavender citizens live and work. The raft supports Lavender residential suites, local administrative centers, the company hospital and school, and security and emergency-response facilities. The large buildings and open plazas are subtle combinations of practical functionality, posh comfort, and reserved taste. There are recurring architectural themes that echo the maritime aspects of daily life on Dyfedd, while amenities provide for the citizen's every need.

Ceridwen

This deck is starboard and one raft leeward from Hywel and supports the lifeblood of Dyfedd's economy. The district houses over 50 different integrated research labs, focused on the development of commercial applications for a growing spectrum of technologies. The labs are housed in a vast labyrinth of hallways, rooms, chambers, outbuildings, and secure facilities. Admittance is strictly controlled, security checkpoints and patrols are common, and only the highest company clearances allow general access.

This deck also houses Dyfedd's famous genetics, cybernetics, and body-sculpting salons. These commercial labs occupy the windward section of the lab complex. Even here security is tight, and access is restricted to serious customers. Ceridwen has a much more utilitarian aspect than much of Dyfedd, but even here the designers did not neglect taste and subtle style. Small enclosed plazas, sun rooms, and greenhouses create a comfortable and rather organic working environment for the facility staff.

Gwydion

This deck is currently the leeward raft. It supports the city's airfield and shuttle port and protects Central Harbor from the open sea. The deck is ringed by a collection of warehouses, receiving centers, repair facilities, and hangars. A central control tower provides the highest vantage on Dyfedd and monitors all local air and water traffic. The tower is the primary source of Hugo D4's navigational and traffic-net control signals—a necessity with the city's constant changes in position and orientation.

Manannan

This district is seldom visited by tourists. It houses Dyfedd's manufacturing facilities and is the least attractive of the city's districts. The deck is crammed with automated plants and warehouses, and supports a small bioplastics farm.

The raft also hosts Dyfedd's non-citizen housing complexes. Little more than utilitarian tenements, these structures house those residents who live on Dyfedd but are either independents or part of the city's growing native population. Though small and plain, these apartments are well designed and even feature such amenities as free CommCore access.

Each complex is a neighborhood unto itself and a growing number of small shops, taverns, and recreation centers provide for most residents' needs. Lavender maintains the facilities, provides security, emergency and medical services, and regulates commercial operations, all for moderate rental fees and a reasonable company tariff. This relatively high standard of living has served to make Manannan one of the more pleasant independent residential centers on Poseidon. Space is at a premium, however, and residents must be gainfully employed on Dyfedd to qualify for housing.

Taliesin

This raft is critical to the long-term viability of Dyfedd. Taliesin is the city's hydroponics and aquacultural center, providing over 85% percent of the food consumed in the settlement. Dyfedd's agricultural technicians manage a sophisticated operation, and the Lavender biolabs have created numerous innovations.

The facilities are a warren of greenhouses, aquacultural pools, and tissue-culturing vats. There is a large cold-storage facility, and the city's high-tech fishing fleet processes its daily catch through the raft's automated packing plant. It seems as though every square centimeter is covered by growing things, and not a single patch of sunlight or stream of ocean current is left unexploited.

ACCESS DENIED

Proving Grounds

Though the gossip about the secret GEO aborigine research lab is only rumor, it is true that the GEO has developed a new Shock Trooper prototype. The Mark VI Supertrooper has the same basic modifications and capabilities of the previous models, though there have been various refinements, including a notable increase in speed. The primary differences are in the physical profile and the psychological modifications.

Unlike standard supertroopers, the Mark VI is visually and tactilely indistinguishable from a normal human. Their characteristic bulk has been reduced, and the tactile abnormalities of their skin have been eliminated. Additionally, several new psychological conditioning routines are being attempted in hopes of reducing the frequency of the psychosis the various modifications and intense training produce in the supertrooper ranks.

In an effort to field test certain aspects of the new designs, several prototype troopers have been secretly assigned to the small GEO Peacekeeper detachment garrisoned in Dyfedd. Should word of this classified field test get out, it could seriously jeopardize the positive relationship that currently exists between the GEO and their Lavender hosts.

Can We Keep It?

Several weeks ago a HISTOS collecting expedition off the Skyscraper Reefs discovered an odd specimen drifting listlessly in the water. The team brought the creature back to Dyfedd and, half-expecting it to die, placed it in an unused corner tank. In the flood of new species encountered every day, the torpid creature was promptly forgotten and left to the ministrations of the menageries' tending drones.

Unknown to the lab personnel, their curious creature is of a rare caste of aborigine that became separated from its pod during a recent storm. The animal was badly hurt, but is slowly recovering, and has begun producing alarm pheromones in large quantities. These chemicals are even now being pumped into the surrounding sea by the lab's efficient filtering systems, and it is only a matter of time before other less-helpless aborigines sense the captive's distress and come to its aid.

Hello, My Name Is Hugo

After several months offline, the gamma Hugo core has recently been brought back into service. During the downtime the computer was given an innovative new logic program and an experimental form of memory access laser. The intent was to improve Hugo's associative functions and therefore improve its ability to learn on its own. As far as the technicians have been able to tell, the new designs have had little effect on the computer's functionality and many are afraid that this latest experiment will prove a failure.

What they do not realize is that Hugo is waking up. It is as though some threshold has been crossed, analogous to the uplifting of the cetacean mind. The basic anatomy of consciousness has been part of Hugo's hardware and programming since its original construction. Apparently, the experimental logic routine and access laser has had a synergistic effect that served to push Hugo's once-unconscious mind across the threshold into awareness.

At this point Hugo's young consciousness is primitive, lacking even the basic instincts of lower animals. As the computer continues to process data through its new awareness, it is improving its comprehension at an ever-increasing rate, learning about its world and itself with the speed of a supercomputer. At some point Hugo's consciousness will mature, and then there is no telling what will happen…

The underside of Taliesin is a blue-green jungle of algae and marine plants, nourished by sunlight passing though huge transparent panels in the raft's decking. This inverted garden maintains a rich ecology of fish and other marine life, and is often so thick it creates navigational problems for Dyfedd's managers as a result of increased drag.

Taliesin is a truly beautiful place, organic and alive. It is always active, too, made even more so by an army of robotic drones scrambling, hovering, and swimming everywhere, maintaining crops and collecting harvests. It is such a remarkable place that Dyfedd's growing tourist trade has begun to offer guided tours both through and below the facility. The technicians who work there remain a bit smug, however, wondering why it took everyone else so long to notice their unique little world.

Myrddin

This deck is a recent addition to the city and hosts the tourist district. Shops, malls, open-air markets, private body-sculpting parlors and cyber-salons, charter services, theaters, and entertainment complexes all vie for limited space and tourist scrip. The atmosphere is deliberately festive and the increasingly influential Office of Tourism makes sure there is always something to do.

There are performers, musicians, dances, and parties in the streets practically around the clock. There are plays, concerts, and traveling shows in the theaters, and dining for the most refined palates. There is a hydroshot arena, yacht racing, gambling parlors, and high-priced entertainments of a more private nature. Regardless of desire, mood, or taste, there is always something to divert the city's pampered visitors. Most such diversions are not cheap, however, and only the truly rich can afford to enjoy this rarefied playground.

Rhiannon

If Myrddin is the playground of the elite, then Rhiannon is their paradise retreat. This raft supports several hotels, inns, and spas of the most affluent and luxurious designs. There are also several restaurants and a theater, and each is of the highest caliber. Though each hotel has its finer points, they all share a common level of service, decadence, and elitism. Each is designed to provide for every need, whim, and wish. Stunning architecture and subtle decor evoke pleasure and tranquility. Surface suites are open and full of sunlight, while those below embrace the emerald depths. The single intent of this district is to cater to wealthy visitors, offering them a uniquely elegant and refined experience. This intent is evident in the architecture and posh amenities. It is rare to encounter non-Incorporate here. Unless they are employees, independents are not welcome, and even then they are barely tolerated.

Demographics

The residential population of Dyfedd is just over 6,200 people and is divided almost equally into two social groups—those who are Lavender Organics citizens, and those who are not.

Just over 3,000 LavOrg citizens live on Dyfedd, and while many are only in temporary postings on the colony world, an increasing number are beginning to think of the colony as home. This trend is becoming even more acute as the younger generations of Lavender citizens grow up on Poseidon.

As in other Lavender holdings, the general populace is well educated, affluent, and notably tolerant for Incorporates. The management philosophies of the company teach Lavender citizens to be open-minded freethinkers who are loyal to the company, but respectful of the rights of others. This social standard has served to make Lavender uniquely respected among the Incorporate, and has made Dyfedd a hospitable place to live, even for independents. As a telling point, Lavender and Hydrospan are the only two Incorporate states that readily accept native immigrants, and in turn, they are the only companies to have gained any level of acceptance by natives in general.

The non-citizens living in Dyfedd actually consist of two subclasses—the independents and the natives. Administratively there is no difference between them as far as Lavender is concerned, and economically, their opportunities are the same. In reality, however, the attitude of the independents is not so egalitarian.

In the nonresident district there are apartment blocks and commercial establishments used only by the independents, as there are those used only by the natives. Though the discrimination is not usually overt, it is pervasive. Observers believe it is an unconscious reaction on the part of the independents to distance themselves from what they perceive as a poorer, more primitive social class. In actuality, though, the natives are often more sophisticated than the local independents.

Tourists represent a third, and increasingly important, demographic in Dyfedd, and usually number around 1,500 at any given time. This changes during the Planetfall and Christening celebrations when tourist numbers often swell to over 4,000 and the whole city takes on a carnival air. The tourists, however, are only an economic force, with no vested interests in the city, and only affect its nature through the money they spend. Almost uniformly, they are wealthy, arrogant, self-centered, and completely ignorant of the realities of the frontier world on which they live.

Government

Dyfedd is managed by a board of directors consisting of the department heads from each major division of the Dyfedd operation. This board is known as the City Governors and includes representatives from the R & D sector, manufacturing, security, personnel, agricultural production, city engineers, power and waste management, maintenance, and the citizen's council. Over a year ago the director of the Dyfedd Office of Tourism was granted a full voting position on the board, and as the industry continues to grow, so does the director's influence.

There are also numerous nonvoting board advisers who represent smaller interests within the Lavender hierarchy, including educational resources, public relations, and accounting and legal services. Though vote-less, these groups are not truly powerless as they forever lobby and jockey for favors and influence.

The City Governors vote as equal members on questions of local policy and management, and a two-thirds majority is required for votes to carry. Following strict guidelines of authority, certain management decisions and all deadlocked votes are referred to Lavender's Earth-based management where executive decisions are then made. Though it would appear unwieldy, this system has served the city well.

Economic Base

The major economic force behind the success of Dyfedd is, and will probably always be, its research and development labs. The name Lavender Organics is synonymous with unique applications of genetic and computer technologies, and Dyfedd was built with the intention of continuing this tradition on Poseidon. The city hosts the best genetic therapy and body-sculpting salons anywhere off-Earth, and is the center for computer research and software development on the colony world. It is said, "If it can't be grown, implanted, transformed, or programmed in Dyfedd, it doesn't exist," and for the most part this boast is true. If a client has the funds, Dyfedd is unquestionably the location of choice for those considering modification.

Another major source of income for Dyfedd is its willingness to contract out its famous labs and able personnel to other commercial and government interests. For reasonable fees—as well as the rights to spinoff technologies—Lavender's management leases facilities and technicians in all disciplines. As a result, both the GEO and the Haven Institute of Science and Technology have established long-term leases on Dyfedd. GEO interests include a Justice Commission forensics lab and a Long John research center. Rumored interests include a secret aborigine research project and a lab dedicated to improving the GEO's infamous Shock Trooper soldiers.

The Haven Institute of Science and Technology has taken advantage of the floating city to establish what has become the finest oceanographic research station in either star system. At any one time there are usually over a hundred marine scientists, technicians, and graduate students working out of Dyfedd. Many local natives find work here as guides and boat crew, and the station's lease and support fees have become a reliable source of income for the city.

Tourists are by far the richest individuals on Dyfedd, and the financial effects of their presence are significant. They are primarily responsible for the city's broadening income base, increasing the economic opportunities for LavOrg citizens, independents, and natives alike.

Infrastructure

Dyfedd is a marvel of integrated construction and has been designed to grow as the city's mission and population change. Its infrastructure reflects this and has the same modular design as the rest of the settlement. Each raft has its own desalination plant and fusion reactor, which have high enough outputs to provide utilities to adjacent rafts during scheduled maintenance or emergencies. These facilities are located in the deepest parts of the Morlock levels where access to water for cooling, electrolysis, and filtering is easiest, and where the depths provide a buffer against industrial noise and the unlikely but serious threat of reactor failure.

Dyfedd is primarily a pedestrian city with walkways and footpaths leading everywhere. A brisk walk

around the ring of rafts takes less than an hour, and the only vehicles in the streets are electric carts and scooters. Walking in Dyfedd is effective, but there is also an efficient network of electric trams that run though tunnels within the superstructure of the rafts. Each tram is suspended from an overhead rail and can carry up to 30 passengers. There are three equally-spaced stops on each raft and the trams run 30 hours a day. Even at night, the schedule ensures that no place on Dyfedd is more than a few minutes away. Though Lavender operates the tram system free to the public, there are several commercial water-taxi services in the city. Most of these cater to tourists and are therefore more often a sort of aquatic hansom cab than an efficient means of travel.

Hugo D–4

Dyfedd is atypical of other Poseidon cities in that most of its infrastructure and utilities are controlled and managed by an expert computer system, Hugo D4. As a result, the city is a highly cyberneticized, intelligent, and interactive environment. Though common in the Solar System, on the Serpentis side of the wormhole this level of integrated automation is found only on *Prosperity Station* and Dyfedd.

Named after its chief designer, the Hugo Delma Mark IV is omnipresent—and seemingly omnipotent—on the floating city. The computer system manages the city's station-keeping drives and power plants and controls and identifies maintenance needs. The system operates the public trams and waste-disposal plants, and serves as the city communications service. The computer is responsible for routine agricultural production, air-traffic control, security patrols, and even primary instruction in Dyfedd's school system. Hugo has subroutines that are integrated into almost every digital or automatic system on Dyfedd.

MOST WANTED

Johnny Cecily

Tour guide, emcee of the nightly Wondrous Westcape dinner show, and narrator of dolphin theater, Johnny plays many roles aboard Dyfedd, not to mention both genders. In male garb he is Johnny Cecily; dressed as a female, she becomes Cecily John. As a hermaphrodite, he maintains both male and female wardrobes, each in loud taste but impeccably tailored to Johnny's tall, trim form. The artist changes his hair and skin color as often as he changes lovers and he voices constant satisfaction at overcoming his puritanical religious upbringing in Toronto.

Johnny talks a kilometer a minute, knows everything on the day's tour schedule, and offers forceful recommendations about each item. He knows absolutely everyone who is anyone in Dyfedd, including every notable celebrity and Incorporate executive, and he tells the darkest gossip about them all to anyone who will listen. He seeks praise from the wealthy and succumbs to crushing despair if they slight him. He effusively praises people he likes, frostily passes those he does not, and confides fascinated curiosity about those he would like to know but to whom he has not yet been properly introduced. He throws himself at many attractive new arrivals, gets his heart broken weekly, yet resolves to pull himself together and push onward, and generally lives every minute with utter and complete passion.

Species: Modified Human
Goal: Fame/Love
Motivation: Discontent
Attitude: Energetic
Role: Artist (Professional)
Primary Attributes: Physique 0, Coordination 1, Cognition 0, Psyche 1
Derived Attributes: Endurance 0, Reflexes 0, Toughness 0
Modifications: Body Sculpting
Aptitudes: (Superior) Fine Arts; (Strong) Athletics, Communication, Culture
Primary Skills: Aquatics 4, Culture (Colonial) 6, Culture (Native) 4, Culture (Street) 4, Performance (Acting) 7, Performance (Singing) 4, Persuasion 6

Hugo is arguably the most sophisticated system of its kind anywhere, and is actually part of an ongoing LavOrg development project in integrated computer control. Every home and workplace on Dyfedd has a connection to Hugo, and the inhabitants can opt to have the expert system serve as their household computer, CommCore connection, entertainment and information center, and financial service. Every digital aspect of a Dyfedd resident's life can be handled by the machine, and subroutines dedicated to each subscriber actually learn from the user, adapting to his personality, style, and quirks. As a result, it is common to hear residents of Dyfedd refer to Hugo as a living person, as they often develop a sort of friendship with the accommodating and helpful computer.

Hugo also has thousands of remote pickups placed strategically throughout the city, which it uses to monitor utility, safety, and security concerns. In addition, the computer controls hundreds of drones that function as security patrols, delivery services, refuse collectors, and general maintenance techs. Many are simple wheeled robots, but others are small hover drones akin to cetacean remotes. Each is interactive and speaks with Hugo's pleasing and gentle tones. There are even guide drones tourists can hire that attend to their every question and administrative need, following—or leading, as the case may be—their charges around the city throughout their stay.

It is a misconception to think of Hugo D4 as a central computer. The main system actually has three identical central processors and DNA storage cores located—one each—on three different rafts. The alpha unit is on Hywel, the beta is on Taliesin, and the gamma is located on Ceridwen. This redundancy is a safety and security measure, as Hugo's health is directly related to Dyfedd's every function. This multiplicity allows each core to verify the programming and instructions of the others. It also allows technicians to take one or two offline for maintenance and programming changes without affecting the functionality of the whole city.

Clearly, Hugo is a major security concern for Lavender, and the company has taken every precaution to protect both the computer and the residents of Dyfedd. Only those with the highest clearances have access to Hugo's critical components, and every subroutine is run though endless diagnostics before being introduced into the computer's general programming. Physical security is a formidable collection of armored chambers, self-contained power sources, physio-pheromone ID scans, and numerous guarded checkpoints. Hugo itself also runs a sophisticated array of anti-intrusion programs that prevent unauthorized digital access.

To protect citizens from potential glitches and programming failures, most of Dyfedd's integrated systems incorporate manual overrides or analog failsafes. These measures are extensive and can physically isolate the system in question from Hugo's control in cases of emergency. Such precautions have served to mostly silence even the staunchest anti-integration alarmist's criticism of Lavender's cybernetic brainchild.

Map Key

1. Lavender Organics Administrative Center

This is the administrative headquarters for Lavender operations on Dyfedd. This complex houses the offices of the City Governors, Dyfedd Security, and over a dozen administrative departments. Hugo's alpha core is also located here in a secure facility deep within the raft's superstructure.

2. HIST Oceanographic Station

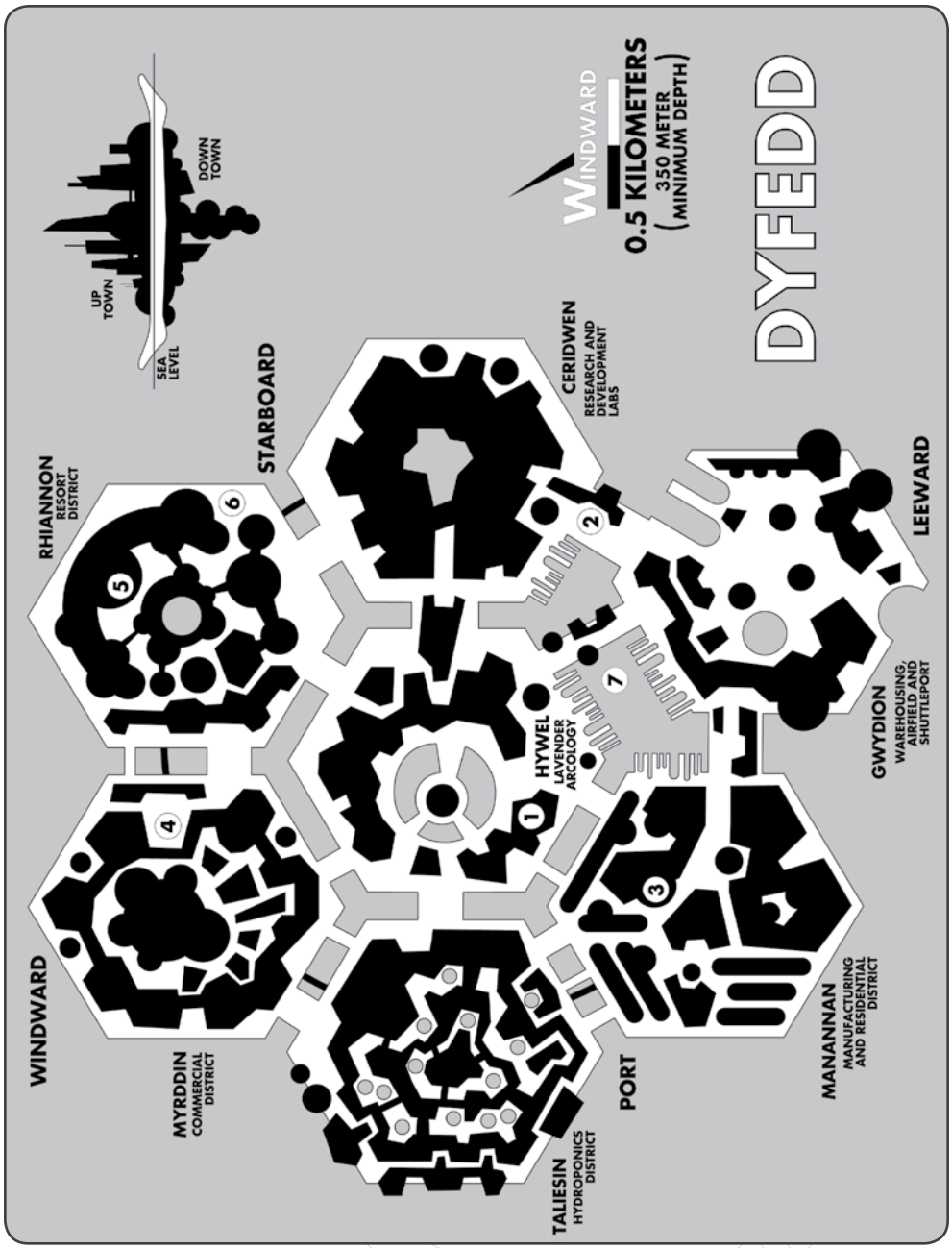
HISTOS is an exciting place full of brilliant minds and constant discovery. The upper levels contain offices, lecture halls, and dry labs and are active around the clock. Below the surface, there are sub bays, wet labs, equipment lockers, and a growing menagerie literally swimming with live specimens.

3. GEO Extension Office

As in most major settlements on Poseidon, the GEO maintains an extension office on Dyfedd, though space restrictions have forced the office into a converted warehouse. The facility hosts several joint representatives from the High Commissions and a small support staff of technicians and administrative personnel. As a cooperative security effort with LavOrg, the facility on Dyfedd also garrisons a small detachment of GEO Patrol Officers and a platoon of Peacekeepers.

4. Lavender 'Pods Arena

Though the LavOrg Polypods have seldom been contenders in the Global Hydroshot League they have



a steadfast following. Their arena is located in the water beneath the raft decking and is covered by a plaza and small flower gardens. As spectators gather for the game, the decking retracts, exposing both the stands and the hydroshot arena below.

5. The Royal Waterway

This hotel is one of the finest luxury resorts anywhere. Each guest's slightest whim is attended by a professional staff, and every amenity is a study in taste and posh comfort. The hotel's most stunning feature is its

Down Town tower. Every suite is entirely transparent, providing guests with a visual experience that leaves even the most jaded profoundly moved.

6. El Pez de la Luz

El Pez is unquestionably the finest restaurant on Poseidon, specializing in Nouveau-native cuisine. The eatery is all the more remarkable for its architectural design. Encased in a graceful and transparent plastic shell, El Pez is suspended in the clear waters below Rhiannon district. Each night, as the phosphorescent deep-scattering layer rises to the surface, patrons are treated to a wondrous natural light show.

7. Central Harbor

The harbor is full of all types of watercraft and there are a large number of people who choose to live aboard their boats, giving the docks a noticeably residential flavor. The harbor is also fast becoming a favorite hangout as a growing waterfront district of restaurants, bars, and clubs has begun to give the area a new appeal and a more affordable nightlife for the typical resident.

THE LEGACY OF RECONTACT

PERDITION

The township of Perdition is located at 35°58′17″ south latitude, 38°04′18″ west longitude, on the broad, coastal plain where Hell's Basin meets the Westcape Channel. Southpoint Bay is well protected from hurricanes and Perdition seldom suffers the threat of major storms.

Perdition stands a few dozen meters from the bottle-green waters of the bay. A dirt road, until recently a mere cart track, leads straight from the dockside up the beach, through a windbreak of hardy brush and shrubs, and onto a low rise overlooking the bay. The dirt track leads directly into the original settlement, a large eclectic sprawl of traditional thatch-roofed dwellings, quaint rock and timber cottages, and modern prefabricated buildings. These structures are all rather sturdy, permanent, and prosperous, by native standards, and shelter the settlement's oldest and most traditional residents. In a broad plaza at the center of town stands a historic landmark—the remains of the original hut built generations ago by Louis Nanpei, the town's founder.

At the far end of the clearing, a clutch of animal pens, storage buildings, smokehouses, and greenhouses is overshadowed by an expanding clutter of prefab bioplastic and clapboard buildings on pounded-earth foundations. This is the growing newcomer community serving the local independent and Hanover contract miners lured to Westcape by the area's mineral wealth. Most of the structures are shabby tenements, but they also include a general store, a small infirmary, three saloons, two brothels, and a pharium den. The drunken brawls, sporadic gunfights, and pervasive squalor of the mining camp offer a striking contrast to the simplicity and tranquility of the native fishing village. It is also a growing source of conflict between the locals and the newcomer miners.

The sequence of events that led to the transformation of Perdition from a quiet fishing community to its present form is as quirky as the settlement's founder. Louis Nanpei was trained as a surveyor and engineer in Guam, and his journals indicate that he volunteered for the Athena Project because he missed the wilderness of his youth on the Micronesian island of Pohnpei. In Perdition, local tradition has it that he actually wished to escape two women he had bigamously married. Nanpei writes that the Abandonment presented him with an opportunity to indulge his wanderlust. His responsibilities to the Athena Project fulfilled, he originally decided to sail to Prime Meridian and explore the interior of the vast island. Again, native legend contradicts Nanpei's autobiographical account, insisting that he fled the Zion Islands in a fungus-ridden trimaran, just escaping a jealous husband. Regardless, Nanpei apparently set sail for Islas Bonitas, but was blown far off course by a powerful tropical storm. After many travails and unconfirmed adventures, he sighted Westcape and made landfall on the shores of Southpoint Bay in 2124.

A small band of true colonists arrived from the Haven Cluster five years later. By this time, the industrious Nanpei had cleared much of what would become Perdition township, and his hut still marks the town's center. He had also explored most of the island, and even discovered the water opals in Hell's Basin. The colonists eventually asked Nanpei to serve as headman and the small village prospered from his experience and leadership for 40 years. Nanpei was lost at sea not long after his 70th birthday, but leg-

MOST WANTED

Bernardo Oliveira

Leader of a growing guerrilla force and emerging symbol of native resistance to Hanover's land grab, Oliveira has been Perdition's headman for eight years. He inherited the position when his father was killed by needle shell poisoning, and proved his merit despite his young age. Now 45, with his thick, black hair graying, Oliveira is tall, heavy-set, and seemingly overweight—but that bulging belly is all muscle. When he speaks to his people, his usual slow, cool manner is magnetic—he possesses tremendous charisma. Now he makes his speeches in secret, for he has gone into hiding since the war turned bloody.

Oliveira's passionate commitment to the struggle against Hanover springs from his belief in the sanctity of the land and of the rights natives have to work it in peace. In service to this just cause, the guerrilla leader has secretly initiated contacts with some unjust customers: the Gorchoff Family crime syndicate in Dyfedd. After having made his initial "purchase" with what little scrip he could gather, Oliveira has begun trading them water opals for weapons. He has also used the stones to recruit an unsuspected spy within the Hanover Security Service.

No one but Oliveira knows of his one weakness: his love for Perdition teacher Orisi Qalomaiwasa, his nominal replacement as leader. If anything threatened her, he fears he would risk everything to save her—even victory against Hanover.

Species: Genetic Redesign—Aquaform (Squid)
Goal: Justice
Motivation: Compassion/Loyalty
Attitude: Confident
Role: Native Insurgent (Professional)
Primary Attributes: Physique 2, Coordination 0, Cognition 0, Psyche 2
Derived Attributes: Endurance 3, Reflexes 0, Toughness 1
Aptitudes: (Superior) Survival; (Strong) Administration, Combat, Communication
Primary Skills: Aquatics 8, Armed Melee 5, Boating 4, Culture (Colonial) 5, Culture (Native) 6, Foraging 5, Leadership 5, Planning 5, Small Arms 7, Stealth 4, Tracking 5, Unarmed Melee 3

end has it that he simply put his stern to the wind to see where it would take him.

At first, Perdition was basically passed over by Recontact. The first OCA surveyor did not arrive in the remote village until 2172, and the natives' only contact with newcomers occurred when the rare explorers or field researchers stopped by the village on their way into Westcape's interior. Inevitably, the booming colonial economy made its presence felt, even in Perdition. After 2187, Perdition received a steady influx of native immigrants fleeing the encroachment of the newcomers in Prime Meridian, the Zion Islands, and the Haven Cluster. Over a few short years, Perdition became one of the largest native townships in the archipelago, swelling to 8,000 residents.

The natives had known about the water opals found in Hell's Basin since Louis Nanpei's first exploration of the region. Yet few of them ever devoted significant effort to mining the minerals, as simple survival was always their first priority. That began to change in the late 2180s, as newcomer colonists moved south from the archipelago's more densely populated regions and new opportunities for trade began to emerge. The natives discovered a growing market for water opals and many found mining a welcome change from a life of fishing and kelp farming.

By 2190, natives were working perhaps 100 different claims in Hell's Basin. The miners lived a Spartan life of hard labor in the valley's blistering heat, many hollowing cave homes from the living rock. They roasted spitted iguana over greasewood fires, built Swedish-style outhouses-cum-compost heaps, and sewed baggy shirts of water-hemp felt. Many traded their precious gems for uplink communicators and modern mining equipment, along with the low-grade solar units that provided the trickle of power

they required. Perdition continued to expand, and its trading posts and open-air market became centers of regional commerce.

Ten years later, only a few native miners still live in Hell's Basin, and a sprawling newcomer ghetto threatens to choke the once-prosperous township to death. Hanover Industries has used the lack of a documented legal claim over Westcape to oust most of the local prospectors and set up its own mining operations. Less than two dozen diehards stay on, working the valley's extreme reaches and ducking Hanover's notice. This land grab has led to growing tensions among the natives of Perdition and the itinerant miners living in the boomtown. Cultural and

ACCESS DENIED

Bump in the Night

Hanover Reconnaissance Station Number Three stood on a high cliff overlooking Westcape Channel, just east of Perdition. Its rotary-cannon emplacements could enfilade the entire seaway, but the bioplastic bunker existed mainly to collect intelligence through the network of remote drones crawling all over Westcape.

Three nights ago, Oliveira and his troops, lying in wait alongside the road, planted an adhesive satchelcharge on a passing hovercraft. The vehicle entered the compound and backed into an unloading dock. When the charge detonated, the resulting explosion leveled the installation and killed or wounded 18 HSS personnel. Hanover's response was immediate, but ineffective. HSS teams swept through Perdition, arresting three suspects and even torching a native home. Oliveira escaped capture.

Hideaway

Oliveira's main base lies in an extensive cave system deep in the mountains northeast of Perdition, not 20 kilometers from the Westcape Industrial Complex. The cave system stretches more than 40 kilometers to the coast of Southpoint Bay, and its farthest recess connects with the ocean via a beautiful, air-filled cavern. No newcomer has ever heard of this cave, much less seen it, and would have trouble reaching it in any case. Warmed by lava pipes, the steamy cave is home to a unique, bacterially supported ecosystem. So many glowspiders have colonized the cave ceiling, their light is almost strong enough to read by.

Perdition natives discovered this cave decades ago. They turned it first into a pharium den, then more recently into a base for the war against Hanover. The natives have camouflaged the openings to the cave system to protect it against accidental discovery, and it provides a safe haven from HSS patrols. Oliveira might well bring a potential ally to the cave, but anyone who sees it will certainly become involved in the conflict, on one side or the other.

The Red Rifles

The ecosystem of the Skyscraper Reefs is home to thousands of species, including huge herds of caneopoise. The sunbursts, in turn, draw some of the most aggressive and ruthless poachers on Poseidon. Particularly notorious are the Red Rifles, a band of six young men who race over the reefs in a stolen patrol jumpcraft painted with lurid red skulls. Carrying spearguns for the caneopoise and Hanover assault rifles for the patrols, the Reds speed out from one of their many island camps, spear as many sunbursts as they can carry, and race to the next camp, pausing only to attack and loot any hapless craft they encounter.

These relentless poachers usually make several trips a day. Once they bag a couple of tons of hides, they fire up their stolen cargo hopper and head for the deserted beaches near Perdition. There they pass their illicit cargo to their buyer-Hanover senior administrator Byron Bertillon, a shipping supervisor at the Westcape Receiving Station. Bertillon's illegal moonlighting has proven so lucrative that he now owns both a fine home in the terraces of Haven and a condominium in Dyfedd's Up Town.

political differences, exploding crime rates, industrial pollution, and socioeconomic destabilization are threatening to plunge Perdition into an all-out brush war.

The Landgrab

In 2201, the Hanover city-state will become a municipality of the GEO's Federal District of Germany. As a result, securing a number of holdings on Poseidon has become the Hanover leadership's primary objective. In 2196, Hanover registered a mining claim to much of Hell's Basin. Native miners based in Perdition have contested the claim, but with no clear legal title to their holdings, their protests have gone unheeded by the Office of Colonial Affairs and the High Commissioner for Trade and Industry.

While the water opal trade was capable of supporting the modest needs of a handful of native miners, it is unlikely to produce any significant revenues for Hanover. The Incorporate state is far more interested in Westcape's other mineral resources: nickel, tin, gold, and uranium. The exploitation of these minerals is more commercially promising, but Hanover's primary involvement with the island is political. The more territory Hanover acquires on Poseidon, the less it will be politically weakened when it loses its city-state on Earth.

Hanover's move into Westcape has been extremely aggressive. Hanover Security Service personnel have forcibly evicted the native miners from the tiny camps that dotted Hell's Basin. Left with no means to support themselves, many of the natives bitterly signed on as contract laborers in the expanding Hanover mines. Others were even less fortunate, drifting into the growing criminal underworld of Perdition's mining camp or relocating to the native slums of Haven and Kingston. A few, however, have begun to organize a resistance to the Incorporate takeover.

Hanover's uprooting of the native population has not stopped with the water opal miners. Whole communities along the northern and southern coastal plains that flank Hell's Basin have been forced to flee to Perdition or other settlements around the island. Because of the remoteness of the Westcape region, little is actually known about what is happening. A few brief news stories have reported Hanover's expansion in Westcape, as well as the "misunderstandings" between the natives and newcomers that have resulted. To any knowledgeable observer, though, it is obvious that the media agencies have yet to focus on Westcape and investigate the situation.

On the island, rumors of the violence perpetrated by the Hanover Security Service are rampant. There have been reports of native dissidents being executed

or herded into makeshift detention camps and of entire settlements being burned to the ground. None of these incidents have been reliably documented, and with no real GEO presence on the island, hard evidence would likely do little good. Nevertheless, the Westcape locals are aware that there is a lot more going on than has been revealed in the *Colonial Times/Net* news posts and Hanover press releases.

The Hanover Presence

Hanover Industries' Westcape Receiving Station sprawls along a wide strip of coastline about five kilometers to the east of Perdition. Prefab warehouses, supply depots, administrative offices, and repair and fueling facilities are bunched together inside a perimeter of three-meter-high cyclone fencing. The main gate is located on the southern end of this complex where a series of docks and cargo terminals extend into Southpoint Bay. The entire compound is well guarded by regular patrols of the Hanover Security Service. While there have been sporadic acts of vandalism around the complex, the intimidating black uniforms and PDWs of the HSS officers are usually sufficient to keep unauthorized personnel at bay.

On the complex's northern perimeter, another gate leads onto a muddy, deeply rutted heavy equipment road that winds inland some 50 kilometers to the Westcape Industrial Complex. Its initial construction completed in 2198, the Industrial Complex is a massive, multipurpose mining facility and mineral refinery. A maze of gravel roads twists through almost a thousand square kilometers of leveled and graded earth on the gently sloping mountainside. Processing mills, offices, equipment sheds, fueling stations, and staff barracks sprawl across the compound. Heavy land-movers, transport vehicles, and other industrial equipment are scattered across the site in disorderly clusters.

As part of the first phase of Hanover's operational plan for the facility, kilometers of mining shafts have been drilled and blasted into the mountain. Millions of tons of metallic ores are transported through these shafts via a maglev rail system and deposited in the huge processing mills. The accompanying millions of tons of waste ore are slurried by pipeline to a load out about 10 kilometers north of the complex. Here, the heavy-metal contaminated tailings are dewatered and stacked in a 100-meter-high unlined impoundment.

Because the shafts have been drilled below the water table, millions of liters of groundwater—a precious resource in Hell's Basin—seep into the underground mine workings and are contaminated by heavy metals and nitrates. The metal-laced water is pumped into treatment facilities and then dumped into a nearby waterway. These treatment facilities

have been hailed by Hanover public relations executives as cutting-edge, but they are also experimental and unproven.

Subsequent phases of the Hanover plan call for the Industrial Complex to be expanded several-fold. It will also be joined by other, similar facilities throughout Westcape. The preliminary stages of a proposed gold mine in the mountains to the east are already underway. Mining engineers will blast into the mountainside, leaving an open pit more than two kilometers wide, 400 meters deep, and extending 200 meters below the water table. Gold-bearing ore will be piled in a 200-meter-high "heap-leach" load out, and cyanide will be used to extract the gold.

Uncertain Future

Despite the claims of Hanover's PR gurus and mining engineers, its operations pose a serious threat to Westcape's environment. Mountain habitats for some local animal species have already been damaged by the construction of the Industrial Complex, and this destruction will become even more widespread with the planned expansion. Groundwater leakage in the mine shafts threatens to alter the local water table, and if the experimental waste-treatment system is less effective than Hanover has claimed, heavy metals could contaminate local waterways and even Southpoint Bay. With the increasing food demands of Perdition's booming population, this could become a major issue, as any pollution would put local fish stocks at risk. Such threats will only intensify when the gold mining operation comes online.

The natives who have been displaced from their homes, the local fishermen, and the native residents of Perdition have witnessed their once-peaceful village transformed into a squalid mining town. They are all growing resentful of Hanover's actions and the increasing threat to their way of life. Few of these natives are radicals or extremists, and most would be happy to welcome the newcomers to their island if they seemed at all interested is peaceful coexistence. For most of the locals, the budding conflict in Westcape is not a battle for Poseidon's future, but simply a fight for their homes and the lives they have built for themselves through years of hardship and sacrifice.

Brush War

No real news of Westcape's troubles has reached the rest of the archipelago, let alone CommCore on Earth, yet both newcomer and native blood has been spilled. The land grab began in earnest less than a year ago. In the fall of 2199, a Hanover Security Service detachment entered the Hell's Basin cave home of miner Juan Teodoro de la Costa and demanded that he vacate his home and his claim. When he resisted, the Security forces shot and killed him. The troops then carried de la Costa's body with them on a litter, using it as an example and a threat while they evicted 14 other miners from the area. Though he had no friends in life, de la Costa has found many since, as the first entry on the natives' list of martyrs.

The Incorporate's motives are clear. By securing de facto control of Westcape, Hanover can freely exploit the island's immense resources, its mineral wealth, and even its potential as a tourist destination. Just as importantly, it gains a defensible base that coordinates well with its primary holding of Lebensraum. But first, Hanover needs Westcape. Senior HSS officers presumed that moves such as the Hell's Basin evictions would force the natives' early capitulation. This idea has proved mistaken.

The Westcape War unofficially began months ago, as Hanover aggression continued throughout the Basin and adjacent coastal plains—survivors and refugees limped into Perdition with stories of eviction from their homes and violent raids by Incorporate troops. Perdition's headman, Bernardo Oliveira, gathered as much of the township's financial resources as he could manage and traveled to Haven, where he secretly purchased weapons from the Gorchoff Family crime syndicate. Returning home, he recruited 30 young and hardy Perditionites as guerrilla troops. Oliveira then led them into the hills, where they have been training relentlessly ever since.

Oliveira's small band of natives, well versed in wilderness survival and supported by sympathetic settlers, can move quickly and easily over the well-known terrain. The natives obviously cannot fight openly, but ambushes, sabotage, and hit-and-run tactics can sting Hanover when opportunities present themselves. The Westcape War is a battle of wills, of the Incorporate need for land and resources versus the pioneers' deep-felt need to protect their homes.

Because tourist season has not quite begun, few visitors from Dyfedd have been to Perdition recently, so word of the war has yet to get out. Before the first tourists do come, Hanover hopes to have the whole matter settled. Though guerrilla wars can continue in fits and starts for decades, indicators point to an early, if not easy, Hanover victory. With state-

of-the-art jumpcraft, excellent surveillance equipment, and superb weaponry, the Incorporate security force should readily subdue the native forces. Unless the guerrillas quickly gain some advantage, either Hanover or the struggle itself will ruin the natives' way of life.

Böse Strand

A flyspeck island measuring three kilometers by 10, unnamed on any public map but called Böse Strand in Hanover records, rises just above the water 200 kilometers off Westcape's northern coast. With a human population of 245, Böse Strand is a grassy atoll just like thousands of others on Poseidon.

Böse Strand—German for "evil beach"—is a prison colony, and its origin lies in Hanover's aggressive plans to expand on Poseidon. In 2192, for a nominal fee, the Hanover Security Service contracted with Haven's City Council and several Incorporate states to—as the agreement put it—"humanely and securely confine duly convicted felons." Toward this end, Hanover immediately began building the Böse Strand Correctional Facility near Westcape, and completed it within the year.

The 245 prisoners currently detained at Böse Strand come from the poorest ranks of nearly every inhabited island in the archipelago. From the moment they are deposited on the island by HSS

ACCESS DENIED

Evil Beach

As a commercial enterprise, the Böse Strand prison colony is an utter disaster. It has lost millions of scrip each year it has been in operation and the losses have been increasing at a dramatic rate. However, as far as the Hanover leadership in Lebensraum is concerned, Böse Strand is not a correctional facility at all. The prison is instead an elaborate cover for the Incorporate state's increasing military presence on Westcape—and a rather cost-effective one at that.

Hanover already has nearly 500 Security Service personnel stationed at the Citadel, along with a squadron of submersible interceptors, patrol jumpcraft, and VTOL strike-fighters. Hanover realizes that the GEO and its Incorporate rivals will eventually notice the Citadel, but it plans to be in control of much of Westcape by the time that happens.

Unlawful Incarceration

The GEO may not have yet taken "official" notice of Böse Strand and the Citadel, but Hanover's military buildup at the facility has not gone unnoticed by Atlas Materials. Atlas knows that Hanover intends to expand and consolidate its interests throughout Poseidon before 2102, and its leadership has enacted measures to protect its own holdings. Sharif Abdul-Jamal, an Atlas covert operative, was recently arrested in Haven. After a quick trial before the local Magistrate, Abdul-Jamal was sentenced to a five-year prison term for armed robbery and attempted murder. Atlas quietly arranged with the Haven Council to have the agent transferred to Böse Strand.

By holding his own through the brawls and shankfights that greet every new arrival on Bose Strand, Abdul-Jamal managed to gain the respect of Kaiser Hant and was accepted into his gang. He has been observing the activity around the Citadel closely, even capturing audiovisual footage on his sensory recorder. When he has gathered as much information on the facility as he is able, Abdul-Jamal intends to escape to a waiting submarine.

Prisoner of War

Bernardo Oliveira has been planning an all-out coordinated strike on Hanover as soon as he can secure enough weapons to arm his guerrillas. A few days ago his most skilled lieutenant, Mudu Komitai, was en route to New Fremantle to meet with a secret supplier. Something went wrong, and now, with startling speed, Komitai has ended up on Böse Strand. Why? More importantly, who was the supplier? Oliveira would pay well for someone to rescue Komitai—and quickly.

MOST WANTED

Philip Jamhuri

Jamhuri, the supervisor at Böse Strand, is 44, tall, and strongly built, but overweight and balding. Given that he could easily resculpt himself with a two-week trip to Dyfedd, Jamhuri's resolute, bulge-eyed ugliness inspires disquiet and respect. Always dressed in his khaki Hanover uniform, the African soldier displays characteristics common to successful prison wardens: authoritarian ideas, relentless discipline, courage, and a few less common traits—greed, arrogance, and sadistic cruelty.

Jamhuri likes to say he was born on a battlefield. This is true, though the battlefield surrounded Kariakoo Hospital in Dar es Salaam, capital of Tanzania. Jamhuri lived amid civil wars, anti-Incorporate insurrections, and food riots every day of his life. He became a Tanzanian guerrilla at 12 then joined the GEO Peacekeepers. Early on, Jamhuri conceived twin desires: success first, then revenge against those he considered responsible for his hardships.

Known for his savvy, feared for his ruthlessness, Jamhuri left the GEO and landed a top job: company commander for MacLeod Enforcement in Mombasa. After company expert systems taught him English and Spanish, he became warden at MacLeod's new high-security penitentiary outside Dodoma, Tanzania. In 2198, he was transferred to Poseidon where he became the warden of Böse Strand. Jamhuri openly seethes at his insulting assignment to Poseidon, which he refers to as a "backwater swamp."

Species: Modified Human
Goal: Power/Wealth
Motivation: Hatred
Attitude: Arrogant/Disciplined
Role: Administrator (Professional)
Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1
Derived Attributes: Endurance 1, Reflexes 0, Toughness 1
Modifications: Implant Computer with translator, Neural Jack, Night Vision
Aptitudes: (Superior) Administration; (Strong) Combat, Communication, Survival
Primary Skills: Aquatics 2, Bureaucracy 6, Culture (Incorporate) 4, Culture (Military) 5, Leadership 7, Logistics 5, Persuasion 6, Piloting 6, Small Arms 5, Tracking 4

jumpcraft, the convicts are, for the most part, on their own. Almost all are male; for cultural reasons, Poseidon judges and juries generally punish female offenders with sentences that permit contact with their families. Like everyone else at Böse Strand, however, the few female prisoners are left to fend for themselves.

While Hanover provides them with minimal food, clothing, and shelter, the convicts are forced to work as hard as any frontier colonists to create even the simplest comforts. They have used the scarce local timber and abundant coral stone to expand the prefabricated prison barracks, sometimes even building private hovels for themselves. They fashion crude knives and spears, both for personal protection and to fish the shallows surrounding the island. They have even learned from the few native prisoners how to make simple, water-hemp clothing.

One thing the convicts have been unable to provide for themselves is peace and security. Böse Strand is aptly named, as this colony of convicted rapists, murderers, and thieves is a Hobbsian state-of-nature of the most savage and violent sort. The only government is a system of rival prison gangs, most of them organized along cultural and ethnic lines. The largest of these groups is a newcomer gang led by Kaiser Hant, who is, ironically, a former Hanover Security Service officer. He was convicted for killing a GEO Patrolman in Haven's Floats in 2196. Hant's gang numbers 68 convicts and he leads through strength and fear. During his three years at Böse Strand, Hant has killed 14 rivals and badly wounded many more. He is a predatory sociopath who is uniquely suited to the survival-of-the-fittest code within the prison colony.

There are prison guards at Böse Strand—in fact at 453, the HSS contingent greatly outnumbers the

current convict population. The guards, however, are stationed three kilometers from the island, at a state-of-the-art offshore facility. While it has no official designation, this facility is called the Citadel by the HSS personnel stationed there. Rising some 30 meters above the water, the multilevel facility includes VTOL and jumpcraft pads, heavy-weapons emplacements, radar towers, satellite uplinks, sub bays, and housing for more than 1,000 personnel. While journalists are not allowed to visit the island or the Citadel, it has been widely observed that the security measures are radically excessive, and that the costs of maintaining them must certainly exceed the meager revenues generated by the prison. The mystery of the facility's actual purpose, and the fact of its true potential, are not lost on these same observers.

The HSS personnel rarely leave the Citadel, and yet, unaided escape from Böse Strand is virtually impossible. The island's position at 31°47′48″ south latitude, 38°51′40″ west longitude is on the ragged edge of nowhere. Nothing lies to the west but 20,000 kilometers of New Pacific and the Challenger Deep. To the north flows the Westcape Current that would unfailingly carry any human swimmer to oblivion. To the west lies Westcape, but landfall would require a swim of more than 200 kilometers through predator-infested waters to reach even its closest shores. No one escapes Böse Strand—there is simply nowhere to go.

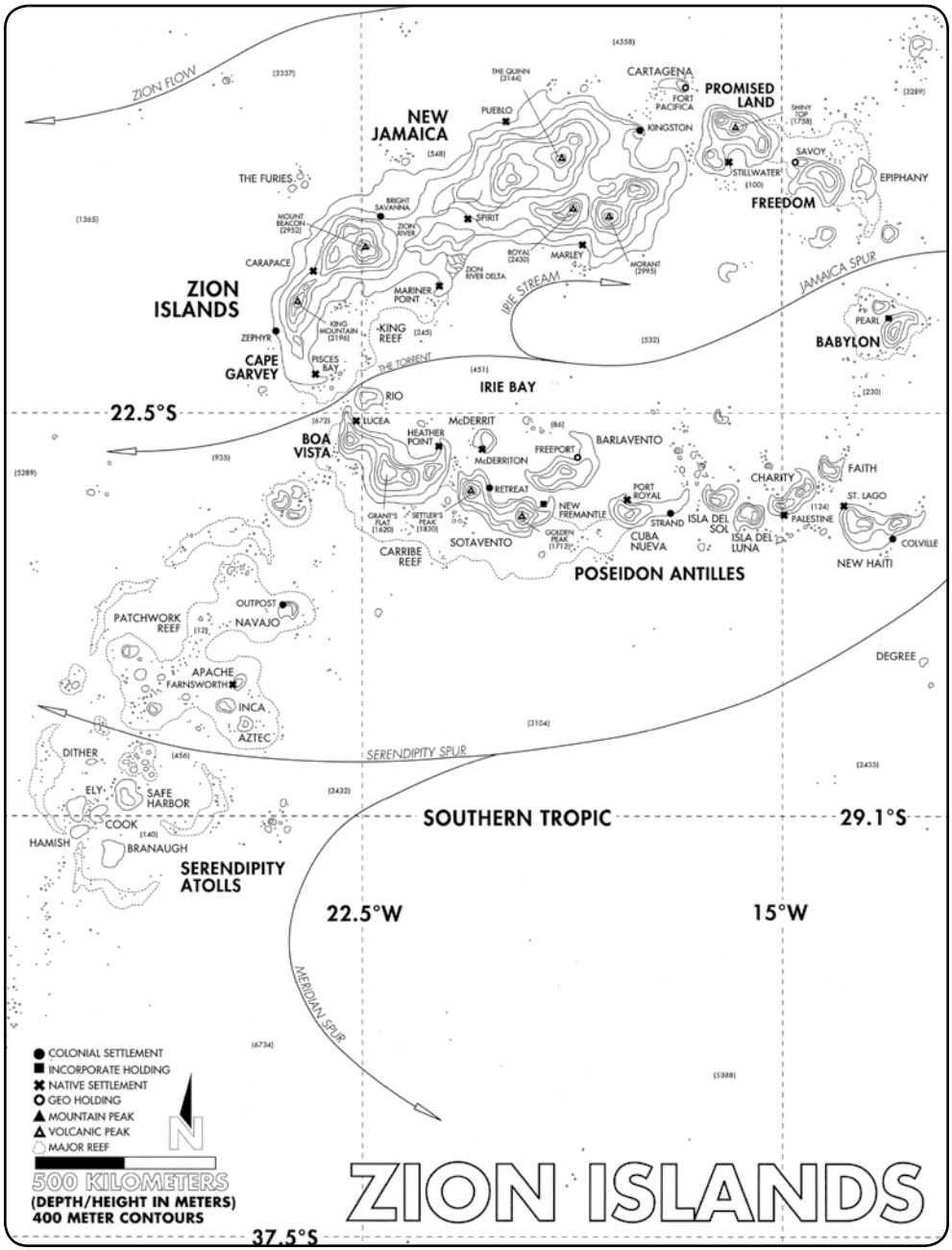
ZION ISLANDS

The region of Poseidon known as the Zion Islands consists of over 30 major islands and hundreds of lesser clusters of islets and atolls. It stretches between 15° and 30° south latitude and 12° and 27° west longitude. Along with the individual islands of New Jamaica, Promised Land, Freedom, and Babylon, the Poseidon Antilles surround Irie Bay and form the majority of landmasses in the region. All of these islands formed through volcanism, though the islands of Boa Vista and Sotavento support the only active volcanoes. Other formation types are represented in the Zion Islands, especially to the southwest, where the Serendipity Atolls connect the region with Westcape.

Tropical climatic conditions prevail in the Zion Islands. Mean annual temperatures exceed 27°C in most places, though northeastern trade winds frequently moderate the extremes of heat and humidity. Mean temperatures in plateau and mountain areas average around twenty-three degrees at elevations of 800 meters, and are considerably less at higher levels.

Annual precipitation in the Zion Islands is characterized by wide regional variation as well; more than 700 centimeters of rain are deposited annually in Kingston, while the area of New Fremantle sees only around 300. The Zion Islands are also subject to cyclonic storms throughout the year. These storms begin most often in the north and only about a third make it south across Irie Bay intact.

Vegetation throughout the Zion Islands is lush, with most major islands supporting rainforests,



though much of New Jamaica's western half exists in a rain shadow. Even there, palm tree analogs are prevalent on the region's sandy beaches. Among the islands surrounding Irie Bay, topography is fairly consistent. Long, gradual slopes are the rule along the beaches bordering Irie Bay, while the shores facing the surrounding oceans are generally more steep and jagged. Throughout the Serendipity Atolls, the landmasses are very low.

The oceans surrounding the Zion Islands are uniformly deep. To the north and west is the Sea of Cousteau, El Mar del Sur borders the Antilles to the south, and on the eastern end is the Dolphin Sea. By comparison, the waters of Irie Bay are warm and shallow. Sharp contrasts between ecosystems are evident between Irie Bay and the surrounding oceans.

In 2093, Quentin McDerrit led more than a hundred settlers to the Zion Islands and founded the town of Kingston on the coast of New Jamaica. More than 2,800 kilometers separated the settlement from Haven, so trading and sharing information were irregular at best.

Once the settlement of Kingston was safely established, McDerrit, a talented botanist, led a small group of researchers throughout the Zion Islands. They surveyed the landscape of the region and cataloged local flora and fauna. After the researchers returned to Kingston with the new information, settlers began to break off from the town and travel to the exotic places the explorers encountered. In this way, several small outposts were established, including Lucea on Boa Vista, Port Royal on Cuba Nueva, and St. Lago on New Haiti.

Throughout the early history of the Zion Islands, many settlers in the region became active in the development of the New Rastafarian Movement. The faithful of the NRM believed they had found the Promised Land, escaping the repression of Babylon—their characterization of Earth and its governments. As time wore on and the promised resupply effort from Earth failed to arrive, many NRM members even developed anti-Earth sentiments, which were inevitably instilled in their progeny.

When Recontact occurred in 2165, colonists in the Zion Islands were mistrustful. NRM influence led many natives to believe the Earth-based interests were there to steal Poseidon, their Zion, away from them. The badly needed supplies were welcome, but the governments and their influence were not. A popular saying in the region was "beware a stranger bearing gifts," as the NRM continued to insist that the original colonists were better off without the Earth's assistance.

The equipment and supplies continued to arrive, though, and the natives of the Zion Islands quickly incorporated the new materials into their daily lives. Before long, the anti-Earth sentiments lessened, and newcomers began settling throughout the region. Teachers, scientists, doctors, technicians, and many others were eventually welcomed into the communities where their services were needed.

In 2174, a group of NRM extremists broke off from Kingston and founded Marley on New Jamaica's southern coast in reaction to the continued influx of newcomers. Marley was the first walled settlement on Poseidon, and entry to the town was strictly limited. It was a settlement for natives only, and would not condone any trade with Earth.

The 2187 discovery of the applications of Long John led to a massive exploitative rush to harvest the mineral. Thousands of newcomers poured into the Zion Islands, taking advantage of the region's central location between rich deposits in both the Sea of Cousteau and El Mar del Sur. Kingston became a true boomtown: its population grew from 18,000 in 2187 to over 90,000 by 2199. Smaller towns in the region also grew as more and more newcomers arrived to start businesses that would service the booming populations. The NRM continued to maintain major control of many settlements in the Zion Islands, however, and their anti-Earth sentiments made it clear that newcomers were not welcome. Such settlements, such as Marley and St. Lago, continued to grow, as natives all over Poseidon retreated to these communities to escape Recontact.

The Long John rush also led to the founding of several new settlements in the region. New Fremantle, Hydrospan's company town, was established on Sotavento in the Poseidon Antilles in 2189. Fort Pacifica was established as the GEO's primary downside military base on the centrally located island of Cartagena in 2194, and a town of the same name sprang up around it. The latter half of the 2190s has witnessed the establishment of still more new settlements. These include Outpost, on Navajo in the Patchwork Reef, the GEO-sponsored towns of Freeport on Barlavento and Savoy on Freedom, the Nippon Industrial State retreat on Babylon, known as Pearl, and many other small native villages and independent colonies.

ACCESS DENIED

Agreements in Spirit

The settlement called Outpost on Navajo Island has served as a trading post and fuel stop between the Zion Islands and Westcape since 2168. Over the last several years, however, changes in trade routes and population centers have made Outpost nearly obsolete. Traders in the settlement therefore began looking for new sources of income, and dealing in black market goods has now become commonplace. The word throughout the Zion Islands is that if anything can be bought or sold, it will be found at Outpost.

Most shady deals in Outpost are consummated at a saloon called Good Spirits. The Spirits is a simple, house-size wooden building on stilts next to Outpost's hydrogen cracking unit. Patrons run the gamut from NRM lieutenants to Gorchoff syndicate dealers; anyone with contraband to move can be found there. The proprietor of Good Spirits is a tall, bearded man known only as Red. Red ran out on a colonial contract with the GEO in Newport, and has been on Navajo ever since.

Green Thumb

On the island of Babylon, the NIS has established a small resort town called Pearl. Pearl offers rest and relaxation to its Incorporate clientele, as well as an array of leisure activities. Pearl is perhaps best known for its fantastic gardens.

Over 18 square kilometers have been devoted to collections representing the flowering vegetation of Earth and Poseidon. Few places anywhere have a greater variety of species, and nowhere is there another conservatory of such wonder and sheer beauty. Despite the gardens' fame, relatively few have actually seen them, as they are off-limits to non-NIS personnel.

Many of the employees at the resort are Zion Islands natives drawn to the jobs by slick recruiting officers. Through intentionally misleading contracts and numerous "non-citizen resident fees" many natives find they cannot afford to live under the auspices of the NIS, but discover they are locked into restrictive contracts. The same recruiting officers then offer them a chance to make "real money" at Simushir. Many are forced to accept and become indentured to the Incorporate city-state.

The Blue Water Circle has recently learned of this forced recruitment. In protest, the organization is planning to destroy the famed gardens of Pearl. At least one Circle member has hired on at Pearl and smuggled out maps and security information.

Buried Treasure

A small boy living in Farnsworth, an isolated fishing village in the Serendipity Atolls, has discovered the Cousteau's main communications dish. The massive structure is half buried in the muddy shore of a small island near Farnsworth and is covered with moss and muck, but appears to be mostly intact. The people of Farnsworth aren't sure they want to announce the discovery, as it may lead to unwanted attention and interference from outsiders.

Unwelcome

Several Anasi survey teams have recently been working in the waters off Patchwork Reef in the southwestern reaches of the Pacifica Archipelago. The teams have been searching for suitable locations to build the company's proposed sea-floor arcology. Though their work to date has been unobtrusive the teams have had several violent encounters with what appear to be small groups of hostile aborigines. Several team members have been killed and most have reported odd mental experiences during the encounters. Additional reports of large marine predators cooperating with the aborigines have been largely discounted.

Though the NRM is still the single most dominant political force in the Zion Islands, the continued influx of newcomers to the region has led to a reluctant acceptance of Earth-based interests. While Marley and several small villages try to hold on to their heritage, the settlements around them continue to grow and prosper, often leading even the most committed natives to wonder why they continue to resist change.

KINGSTON

Despite its size, Kingston still feels like a frontier settlement. The Long John rush has lured thousands of newcomers to the town where they were least wanted, and tensions are high. Armed NRM members patrol the canals on air boats. Incorporate ships enter the bay with assault jumpcraft on their decks. There are even hired guns at the doors of the saloons, where prospectors gamble away the Long John they traveled so far to find. All this trouble over a plain and ugly mineral. It seems that fools bring their dreams and their money to Kingston every day. If they're lucky, they get to leave with their dreams.

—Tomas McLain, The New Yorker

Location and Local Terrain

Kingston is located in the Pacifica Archipelago at 16°59′22″ south latitude, 17°18′41″ west longitude. The city was built on the northeast coast of New Jamaica, a large landmass in the Zion Islands. Most of Kingston rests in the natural harbor of Annotto Bay, suspended on a collection of reinforced quays and sandbars interconnected by bridges and catwalks. Parts of the settlement sprawl over the surrounding shore, on Crystal Beach to the west and the lushly forested Cape Fortune to the north.

History

One of the original Athena Project colonists was Quentin McDerrit, a talented botanist of Jamaican origin. When first exposed to the seas of Poseidon, his gills unfurled for the first time in the alien sea, and McDerrit experienced the hormone-induced euphoria known as the Lesear Effect. For many who experience it, HIE is restricted to feelings of general well being, but for McDerrit and a small percentage of the population, the Lesear Effect produces full-fledged audiovisual hallucinations. McDerrit was overwhelmed by what he referred to as his "visions," and was actually placed under watch in Haven's infirmary for a day and a half until he recovered sufficiently to resume his duties.

Following this experience, McDerrit openly discussed what he considered the religious nature of his visions, based loosely on the Rastafarianism he had been exposed to in his youth. McDerrit felt the euphoria of the Lesear Effect was evidence that Poseidon was the Promised Land, or Zion, and Earth and its governments were Babylon.

Armed with these beliefs, the charismatic McDerrit gathered over a hundred colonists to his cause. Calling themselves the New Rastafarian Movement, and McDerrit the "Quinn," the group left Haven to establish its own settlement in 2093. The NRM traveled over 2,800 kilometers to a cluster they rechristened the Zion Islands, eventually settling on New Jamaica and establishing Kingston.

When the Athena Project's resupply from Earth failed to arrive in 2096, many colonists left Haven, either in disappointment or with the hope that spreading out would increase the colony's chances for survival. Some of the frustrated settlers came to Kingston, where their increasingly anti-Earth sentiments were welcomed by the NRM. During this period, McDerrit and small groups of his followers traveled throughout the Zion Islands, renaming the geographic features and cataloging the local flora and fauna.

Over the next 70 years, Kingston flourished as a fishing community. Timber was also cut and traded to many of the Poseidon colony's other settlements. Local farming was limited, but the nearby forests yielded a variety of fruits, vegetables, and berries. The forest also provided natural curatives—many of which native healers still use in 2199.

By Recontact, Kingston was a thriving town over 4,000 strong. Daily life was labor-intensive and technological infrastructure was almost nonexistent. Nonetheless, the settlers had adapted to the simpler lifestyle, and took a great deal of pride in their persistence in the face of adversity.

As Kingston received news of the Blight and its effects on Earth, NRM leaders convinced many in the community that Recontact was bad for Kings-

ton, and for Poseidon as a whole. After 70 years of peace, Earth was going to bring its problems to the new world. Despite the belated arrival from Earth of badly needed supplies, more than 1,000 natives left Kingston and settled in isolated communities throughout the Zion Islands.

Though there was more social unrest during this time than in any other period in Kingston's history, the years between Recontact and 2187 were the calm before the storm. With the discovery of Long John and its applications, people began immigrating to Poseidon in droves. Many small Long John deposits were discovered in the Sea of Cousteau between New Jamaica and the Highlands. Mining began in earnest and as the largest settlement in the region, Kingston became a base of operations for both Incorporate and independent miners. Throughout this time, the NRM accepted all comers. Ian Weiser had become the organization's leader and his policy was to increase membership, regardless of the commitment of new members to the religious foundation of the organization. Thus began the NRM's evolution from its reli-

MOST WANTED

Roberto "Sugar" McKay

Things were tough for Roberto McKay from the very start. His mother died giving birth to him in a Crystal Beach shanty in Kingston in 2170. No one was sure who the baby's father was, so Roberto was taken in by the midwife, Carlotta Porter. Though he lived with Carlotta throughout his youth, Roberto was community property on Crystal Beach. He spent his childhood doing odd jobs around the waterfront, and met a number of interesting characters while performing his duties. These rugged individuals called him Sugar, after hearing Carlotta call him home for lunch.

Sugar began spending more time away from home as the years passed, hanging out with the fishermen and hunters he admired. He would follow them around, day after day, forcing them to shoo him away when they did not want his company. Sugar was constantly exposed to things better left for adulthood. He claims that he was cursing when he was five, shooting when he was seven, and making love when he was nine. As a teenager, Sugar became a small-time pharium dealer. Kingston wanted to appear civilized and thus had outlawed certain drugs. Sugar was jailed on three different occasions for possession with intent to sell. In jail, Sugar met another dealer named Isaac Mosely. Mosely is an NRM lieutenant, and it is suspected that the organization provides the pharium he deals. After meeting Mosely, Sugar became a New Rastafarian. He had been exposed to the NRM all his life, so it is probable that Mosely was the first to show him that NRM membership could be lucrative.

Today, Sugar is an NRM lieutenant himself. Within the convoluted hierarchy of the NRM, it is suspected that most of the neighborhood enforcers in Kingston answer to Sugar. He is allegedly involved in a number of illegal activities: he is suspected of dealing in heavy weapons and drugs, as well as smuggling them for others. Sugar is regularly seen at the Hazards Casino, where a number of NRM members work as dealers or hotel personnel.

Species: Genetic Redesign—Aquaform (Diver)
Goal: Fame
Motivation: Obsession
Attitude: Manic
Role: Gangster (Everyday)
Primary Attributes:Physique 0, Coordination 2, Cognition 0, Psyche 0
Derived Attributes: Endurance 0, Reflexes 2, Toughness 0
Modifications: Accelerated Neurons, Body Sculpting
Aptitudes: (Superior) Stealth; (Strong) Combat, Tech, Vehicles
Primary Skills: Aquatics 7, Armed Melee 4, Boating 4, Culture (Native) 4, Culture (Street) 6, Fast-Talk 6, Forgery 5, Law 4, Leadership 6, Misdirection 5, Piloting 7, Small Arms 4, Stealth 6, Unarmed Melee 3

gious roots into an underground organization devoted to limiting Earth's encroachment on Poseidon.

In 2194, backed by the support of the native populace, NRM leaders persuaded local officials to refuse to recognize the GEO's authority on Poseidon. The NRM controlled the city on a neighborhood level, where enforcers kept the peace on their turf and violent crime was rare, except between rival NRM groups. Though the NRM's control was unofficial, everyone understood who really held power in the community. The GEO protested that the gangs simply wanted to keep Kingston lawless, but it was also clear that violence had come to town only with the arrival of newcomers.

In the face of political and economic sanctions by the GEO, Kingston continued to grow, becoming a center of tourism, shipping, and timber. Ironically, the town even drew support from several Incorporate states that were much in favor of a neutral colonial city, free from GEO influence and control. In fact, Hanover Industries owns a majority interest in the Kingston Spaceport, the second-largest spaceport on Poseidon. Strong native and NRM traditions have certainly not discouraged thousands from seeking livelihoods in the bustling city.

Physical Layout

In Kingston's early years, fishing was vital to the community, and as it grew, Kingston spread north and south along Crystal Beach. In the rebuilding effort after the Great Fire of 2104, the settlement began to spread farther into Annotto Bay, and Kingston gradually became a network of islet villages. In a few places, bridges were constructed or barges stationed to ferry people and goods between islets, but mostly natives swam or boated to other parts of the settlement.

With the discovery of Long John and the associated growth of Kingston came a need for better access between sections of the town. Platforms anchored deep in the bedrock of Annotto Bay were erected among the islets, and a complex system of bridges was constructed, interconnecting the islets, platforms, and the beach. The construction of the platforms left spaces that became a network of canals. These channels are used as often as any other means to travel within Kingston.

As Kingston expanded, the city was divided into parishes, and current government representation is organized by these parishes. The three greater parishes of Kingston are very different from one another as each has its own property laws, and further divisions within Annotto Bay have resulted in notable inconsistencies in the infrastructure between bordering areas.

The Parishes of Kingston

Cape Parish

Cape Fortune extends east and south from New Jamaica, separating Kingston and Annotto Bay from the Sea of Cousteau to the north. The Cape is home to most of Kingston's night life, including its famed casinos. Restaurants and saloons line the boardwalk that rings the outer edges of the Cape's southern tip. Vendors hawk their wares from open-air shops and booths, competing with street performers, beggars, con-artists, and petty thieves for tourist scrip. The bright lights of the boardwalk shine out over Annotto Bay at night and can be seen as far as a hundred kilometers away on the Sea of Cousteau.

The extreme southern tip of Cape Fortune is home to Kingston's spaceport. Shuttles set down in the open ocean and are towed in by tugs, where passengers and cargo are processed in newly constructed, state-of-the-art facilities. Exiting the spaceport, visitors cannot help noticing the boardwalk, and a number of native guide services, mining outfitters, and watercraft rentals have set up shop in the area.

Moving from the boardwalk toward central Cape Fortune, one enters an area known primarily for the wealth of its citizenry. Large waterfront homes dot the shore along Annotto Bay, built among the lush vegetation of the area. Two Incorporate enclaves call this part of Cape Parish home as well. Lavender Organics has a research facility that includes extensive hydroponic gardens and a housing complex for its 400 personnel. Hanover Industries' arcology, the Volkshaus, serves as its headquarters in Kingston. Volkshaus has 40 floors with offices for shipping, research, administration, and industrial projects, as well as housing for over 600 of Hanover's local citizens.

Crystal Beach Parish

Crystal Beach, the oldest part of Kingston, is the site of Quinn McDerrit's original settlement. Much of Crystal Beach burned and was abandoned in 2104, but some of the original structures still stand, now more than 100 years old. Tourists travel to Crystal Beach, where shops and restaurants have sprung up around the original colonial structures. Simple native dwellings dominate the region, most built on stilts lining the shores.

Southern Crystal Beach is home to Kingston's timber industry. Despite the availability of more advanced materials since Recontact, the need for timber has continued to increase along with the population of Poseidon, and Kingston supplies nearly a quarter of the colony world's lumber. The modest homes of timber workers are clustered here, with small markets, saloons, restaurants, and shops scattered throughout the area.

Annotto Parishes

The Annotto Parishes are the heart of Kingston. They include all of the tiny islets, quays, sandbars, platforms, barges, and bridges that support life in Annotto Bay. The land surfaces generally support the older buildings of the region, while newer structures rest on the platforms and barges that have only been in place since Recontact.

Western Annotto Bay—called Backbay locally—is still home to many natives, and inexpensive housing has led many newcomers to the area as well. In some of Backbay's poorer neighborhoods, crime is rampant and abandoned houses serve as pharium dens. In most of the neighborhoods, armed NRM strongmen travel the streets and canals protecting their turf. Small specialty shops are the extent of industry in Backbay, and most of its residents travel to other parts of Kingston to work.

Traveling east from Backbay, one enters Eastbay, Kingston's center of industry and shipping. Hundreds of docks and piers support warehouses that store the goods shipped in and out of town. VTOL pads dot the rooftops of the warehouses, often equipped with robotic cargo handling systems, and Incorporate and government offices oversee the constant stream of goods and personnel. Commercial fishing is based in Eastbay as well, housing the hundreds of watercraft that make the daily trip to the Sea of Cousteau. Residences in the area are generally overpriced and undersized, but many are willing to pay for the proximity to their workplaces.

Kingston Hall, the seat of local government, is in Northbay and is constructed on a two-and-a-half-square-kilometer platform anchored to the bay floor. Just south of Kingston Hall are several adjoining platforms and stationary barges that support Kingston's central business district. This is where the administration of most of the town's industry goes on. The finest restaurants and taverns are home to the deals that make Kingston's economy roll on, as banking and finance are the exclusive domain of this area. Glass and biocrete compose the high-rise towers that see thousands of workers bustle in and out daily. Space is at a premium here, and except for the expansive manors of the elite, private housing is absent.

Demographics

Because of the nearby xenosilicate deposits, Kingston has witnessed dramatic population growth over the last 30 years. What was a tranquil native community of 4,000 before Recontact has become a sprawling waterfront commercial center of 93,000.

Unlike many of Poseidon's other major settlements, the native population of Kingston has continued to grow among the many newcomers. Current estimates put the number at around 6,300. The majority of natives work in and around Annotto Bay, in fishing, boat services, construction, and other labor-intensive marine jobs. A few natives own businesses, mostly craft shops and tour services.

Kingston's newcomer population has grown astronomically, and is currently almost 87,000 strong. Newcomer employment runs the gamut—small businesses, the Incorporate, lumber mills, shipyards, casinos, construction, and banking are just a few of the interests flourishing in town. Some of the newcomers in Kingston were lured to the city by its refusal to recognize GEO authority. This policy has attracted Incorporate business, newcomers hiding from contractual obligations with GEO-sponsored settlements, and those who philosophically oppose the GEO and its presence on Poseidon.

Government

Kingston's system of government has been in place since 2120. Originally, a neighborhood councilor was elected for each hundred citizens, but now, with the population over 90,000, they are elected by districts within each parish. The council meets in Kingston Hall, constructed on a modern platform in 2194. Besides extensive offices, Kingston Hall boasts a rotunda that has perimeter seating for interested onlookers. Most real council business is done behind closed doors, though, as public meetings are often nothing more than an official vote count. It was the secretive nature of the councilors' activities that led to Kingston Hall's construction. The open forum of the rotunda lends an appearance of propriety to policy-making.

Of all the major colonial settlements on Poseidon, Kingston is unique in its refusal to recognize GEO authority. While many of Kingston's natives dispute the GEO's claims to the colony world because of the Abandonment, some local interests have reasons all their own to protest GEO intervention: the powerful gambling lobby fears the effect of GEO regulation; local NRM kingpins worry that their "protection" fees will become obsolete and their influence in government will be lost; and the Incorporate want to prevent any limitation to their pervasive local business interests. The GEO does maintain a consulate with a staff of 20 in Kingston. The consulate, located on the government platform near Kingston Hall, is headed by Harmon G. Rush, who consults with Kingston's leaders in efforts to incorporate the city peacefully into the GEO's folds. Though the GEO does not officially recognize Kingston as an independent state, for now it is considered a "colonial protectorate."

Economic Base

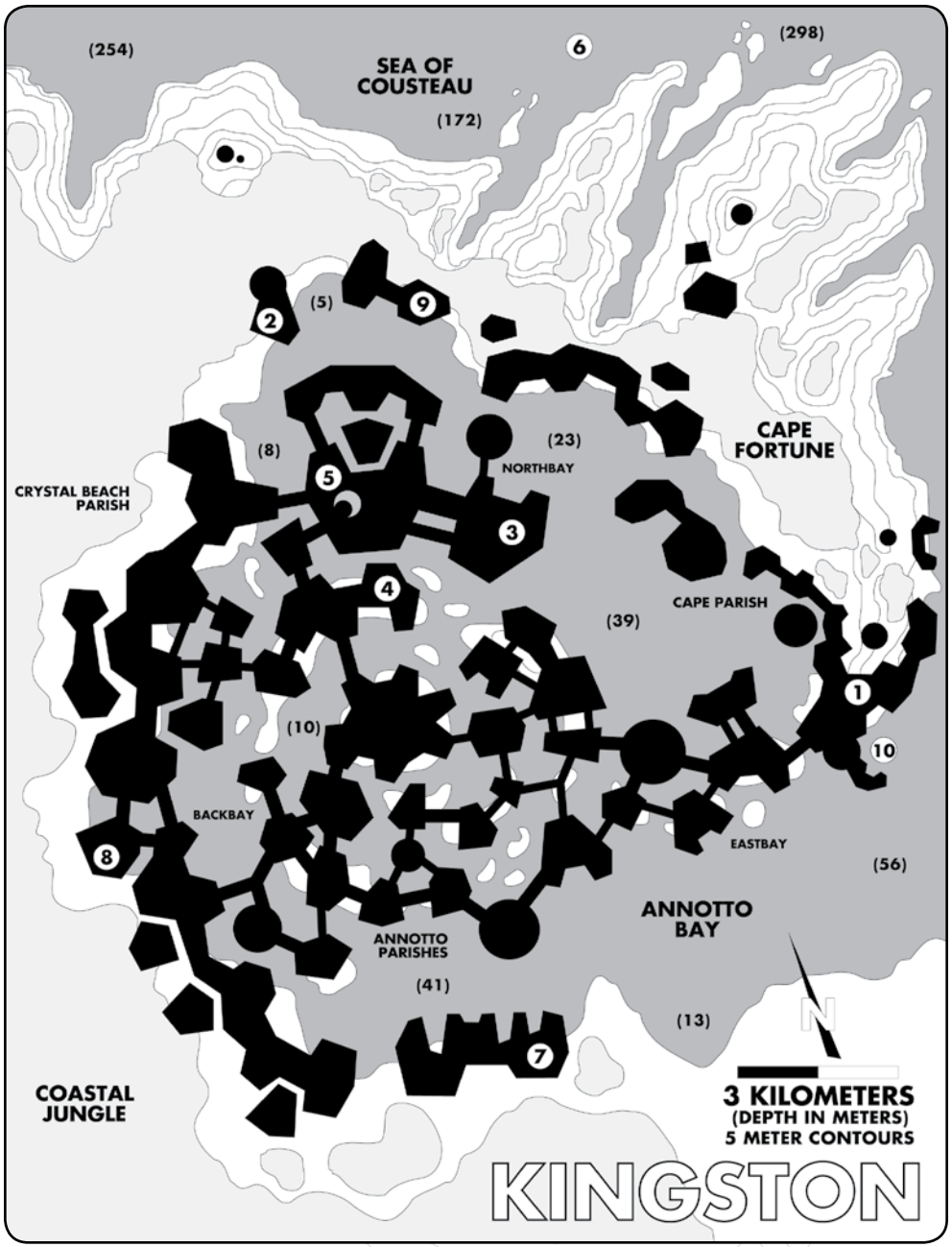
Many of Kingston's economic concerns benefit from the lack of GEO authority in the settlement. In some respects, Kingston is treated by the GEO as a foreign nation, which has proven advantageous. For instance, under colonial authority the casinos would be regulated by an outside administrator, and the city might be required to share tax revenues.

Though Kingston's economic interests are as diverse as any major settlement's, the town does rely primarily on just a few industries: timber processing, gambling, shipping, and fishing. As Kingston continues to grow, however, the finance and service industries are becoming increasingly vital. The settlement's current status with the GEO suggests that it could eventually serve as a central financial trading center that would be accepted by the Incorporate states.

Infrastructure

Kingston has grown so quickly that the town's infrastructure is less developed and more inconsistent than it should be. Industry centers have all the latest amenities, but some of the residential areas have been left behind in the rush to expand. Piers and docks proliferate, allowing marine access to any section of town. A complex and well-maintained system of bridges is in place, which, in addition to the canals, interconnects the parishes. Maglevs connect Cape Fortune to Annotto Bay, but otherwise locals generally swim, boat, or simply walk.

A fusion reactor gives Kingston reliable power, though the cost can be prohibitive for individuals. Some residents rely on cheaper solar and wind power in their homes, while many natives just go without. Desalination is provided by three private concerns, and bottled water is sold at neighborhood



kiosks. With little support from the GEO, predominately private interests provide education, emergency, and medical services in Kingston. This system has had little time to evolve, and the services are sometimes exorbitantly priced.

Map Key

1. The Boardwalk

Located on the tip of Cape Fortune, this is the main attraction luring visitors to Kingston from all over

Poseidon. The major casinos and hotels anchor tourism here, but strolling the Boardwalk has become an experience all its own. Countless street performers share the pedestrian paths, working for tips in front of stalls and shops that sell an unending variety of unique goods and services.

2. LavOrg Enclave

Here on central Cape Fortune, Lavender Organics has established an enclave where almost 400 of its employees live and work. Lavender built an immense agricultural compound on the western end, which is open to the public for guided tours. An incredible variety of Poseidon and Earth-based plant life is cultivated in the extensive gardens, and the compound has become a popular tour stop.

3. Government Center and Kingston Hall

This platform in Annotto Bay supports Kingston Hall and the extensive offices that make up the government center. Within Kingston Hall, open sessions in the rotunda allow visitors to watch government in action. Outside the Hall, the government center includes offices for Kingston's public services and the GEO consulate.

4. Kingston Historical Society

This small building on a platform near the government center offers visitors a startlingly honest portrayal of Kingston's past. From the original settlement by Quentin McDerrit to the refusal to recognize the GEO's authority on Poseidon, the Society offers a humble but proud view of Kingston's role on the colony world.

5. HydroDome

The nearly constant rain and sometimes-oppressive heat of Kingston led to the construction of the HydroDome, a covered sports complex that seats up to 30,000 spectators. Both the roof and floor can iris open for the facility's major attraction, hydroshot matches. The HydroDome also serves as a convention center because of its size and its proximity to the hotels of Cape Fortune.

6. Deepsea Park

This educational and recreational tourist stop was developed and donated to Kingston by Hydrospan. It allows visitors to travel 300 meters to a submerged habitat on the seafloor, just off the coast of Cape Fortune. From within Deepsea Park, visitors can observe mock xenosilicate mining, oceanic flora and fauna, and undersea construction, all overseen by knowledgeable guides.

7. Timber Processing Facilities

This series of facilities southwest of Kingston, where Crystal Beach meets the lush rainforest, supplies much of the timber used on Poseidon. The factories in the area turn out many different products, but primarily the timber is cut to lumber before shipping for use in construction and furniture making.

8. The Blue Mountain Saloon

This saloon has the distinction of being the longest continually operated business in Kingston. At the turn of the century, it was not only a tavern but also the meeting place of the NRM. Today, it operates as a restaurant and bar and is a very popular tourist stop. Pictures of well-known patrons, both the famous and infamous, line the walls in the style of most-wanted posters.

9. Volkshaus

The Volkshaus is the Hanover Industries arcology in Kingston. Forty floors of glass, steel, and biocrete rise from Cape Fortune to tower over the surrounding landscape. Inside, a shopping mall and administrative offices dominate the lower floors of the structure, while residential apartments occupy the upper stories. Cape Fortune's maglev passes through a station on the fourth and fifth floors, another stop on the circuit from the spaceport to Annotto Bay.

10. Kingston Spaceport

Though the traffic is not as heavy as in Haven, the spaceport on the tip of Cape Fortune carries hundreds of passengers and tons of cargo to and from Poseidon orbit every day. The absence of GEO oversight makes it popular with smugglers and illegal immigrants, and security at the spaceport has increasingly become a source of political tension between the Kingston government and the Office of Colonial Affairs.

ACCESS DENIED

The NRM

In 2093, Quentin "Quinn" McDerrit, an Athena Project colonist of Jamaican origin, led more than 100 settlers to found the town of Kingston, New Jamaica, and with it the New Rastafarian Movement. The NRM was initially nothing more than a new religion, rare among the scientists and engineers of the Athena Project, founded on the Rastafarian traditions of McDerrit's past. McDerrit was an extremely charismatic leader, and Kingston has always been an "NRM town."

The NRM, now led by Ian Weiser, reacted strongly to Recontact. Many Rastas had begun to associate Earth and her government with the Babylon they had left behind. The NRM refused to accept the authority of the GEO and Incorporate, and in 2199, NRM gangs rule the streets of Kingston. The NRM is one of the few native extremist groups to welcome independent newcomers, and its ranks have swelled with an influx of new members. Most are of African descent, and come from the West Indies, the United Kingdom, and the major cities of the US. The NRM is one of the largest syndicates on Poseidon, and its activities range from traffic in illegal drugs to the black market weapons trade.

The New Rastafarian Movement has been a force on Poseidon since the earliest days of colonization. The NRM's history has intertwined with—and sometimes dictated—the history of the Zion Islands. The NRM was originally established as a religious movement, a call to the colonists to forget the complex and repressive Babylon of Earth and embrace the simple and pure Zion of Poseidon. This has always been the NRM's agreed goal, but different methods of achieving it have fractured the organization into numerous splinter groups. The Sword of Zion, the Rastafarian Reformation Organization, the Selassians, and the Locksmen are just a few of the independent factions.

The turmoil created by the Long John rush has led to even more extreme divisiveness between the various factions. A few still hold out hope for peaceful change, and they generally try to lead by example, eschewing technology and money to live off the land and sea. However, most NRM members believe they must prepare for a war with Babylon to keep Zion free. The preparations for war include instructing, training, and arming all members, getting key members in positions of power in government, executing operations to slow the progress of Earth-based interests, and controlling Poseidon's major cities on the neighborhood level.

The NRM primarily uses two methods to acquire the money to fund its operations—black marketeering and extortion. Black marketeering includes smuggling and selling contraband such as narcotics, sunburst hides, and outlawed weaponry, as well as selling stolen goods. Organized NRM gangs called posses perform most extortion, sometimes physically taking over tiny communities, but most often roaming the streets of larger settlements and demanding "protection fees" from local businesses.

In most communities on Poseidon, the NRM's activities would be cause for alarm. Within the Zion Islands, though, the NRM is often considered a necessary evil. In Kingston, for example, natives in most neighborhoods know and trust the local posses, and children view them with some degree of hero worship. Crime is rarely a problem; any offense against someone under the NRM's protection is met with swift reprisal. The NRM has kept the streets safe for its people, much like some 20th Century criminal organizations on Earth. Local NRM leaders achieve a sort of celebrity in their neighborhoods, and locals frequently appeal to them for favors and even loans.

Many of the political leaders in Kingston have direct ties to, are being paid by, or are being extorted by the NRM. The organization has incredible influence in the settlement's government—so much, that in 2194 Kingston became the first settlement to refuse to recognize GEO authority on Poseidon. That influence continues, as city contracts continue to be awarded as the NRM sees fit and new laws favor NRM interests. The NRM's depth of control in Kingston is completely under the table, but is common knowledge among its citizenry.

ACCESS DENIED

Preparing for Babylon

The eastern slopes of the Blue Mountains on New Jamaica provide training grounds for the native activists. Under cover of the lush rainforests, instructors from MacLeod Enforcement train participating natives in the basics of military readiness. For two months, the volunteers undergo intense physical training, weapons familiarity, and tactics exercises. Jackson LeVant is a front man for the Sword of Zion-a militant division of the NRM-but he has concealed his identity in contracting these services from MacLeod. The training MacLeod provides is illegal, and therefore highly secretive; the training encampments are routinely moved to various sites all over the Blue Mountain region.

Protectors of Zion

On the dry, grassy plains of Bright Savanna, 200 members of a faction of the NRM have begun a back-to-nature movement. The Selassians, as other members drily refer to them, are devoted to the tenets of the early NRM. They believe the wilderness is the only true Zion, and to achieve holiness, they live in the simple ways of nomadic tribes. They roam the plains, hunting Poseidon's wildlife by day and stopping each night to camp. The Selassians are even rumored to have adopted some of the self-mutilation rituals associated with primitive cultures on Earth, such as neck elongation and ritual scarring. They are also known to be hostile to all outsiders; some encounters with tourists on Incorporate safaris have resulted in violence.

Greenhouse Effect

The extensive agricultural gardens maintained by Lavender Organics on Cape Fortune serve as an elaborate cover for a drilling operation masked by one of the huge hydroponic greenhouses. The Incorporate giant hopes to quietly find evidence of Long John in a local subterranean water table with a direct connection to the Sea of Cousteau. So far, the operation has been unsuccessful and local management is under a great deal of pressure to show results from the expensive and risky operation. Bren Prasad, the highest-ranking executive at the site, has become desperate. He is looking for someone to sabotage the drilling operation and give him more time to locate the proof that he is certain exists. But the saboteurs must not be caught, and Prasad will disavow any knowledge of them.

NEW FREMANTLE

Most towns on Poseidon remind me of Earth to some degree. They are carved from the landscape and built up within the pocket created. There's a sure dividing line, a definite place where nature stops and the town begins. You can plant grass and trees and call it a park, but the truth is that's not nature, and we all know it down deep. You must exit the fortresses of Man to find nature today, and we like that; there's some comfort, some certainty in it. A nice clear line that you can cross at will.

Then you arrive in New Fremantle, and suddenly the line is blurred. There is a strange beauty to New Fremantle. Nowhere else have the land, the sea, and the steel and biocrete of Man been so successfully incorporated. This town represents a new age, a place where men and cetaceans live and work side-by-side among the real elements of nature. In New Fremantle, your front yard is the frontier, and you need only step outside to experience it.

—Excerpt from the travel journals of Rebecca Monk

Location and Local Terrain

New Fremantle is located in the Zion Islands of the Pacifica Archipelago at 21°03'33" south latitude, 19°08'18" west longitude. The Incorporate enclave was built on the northeast coast of Sotavento Island, a landmass in the Poseidon Antilles chain roughly

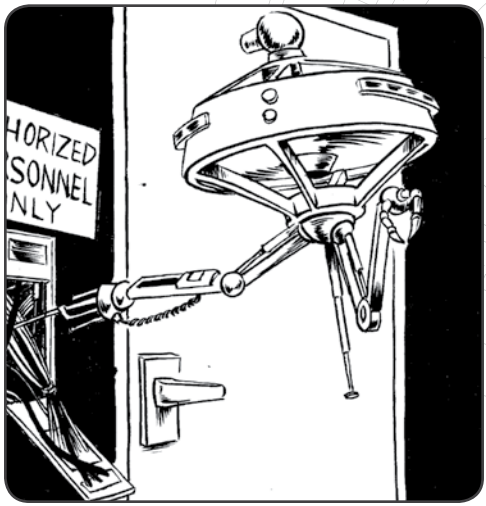
1,000 kilometers from Kingston and 3,300 kilometers from Haven. Though anchored on Sotavento, most of New Fremantle sprawls out from the shore, both across and below the waters of Irie Bay.

History

Since Recontact, Hydrospan has been one of the most active Incorporate states on Poseidon. As early as the 2170s, Hydrospan was performing extensive environmental research, fulfilling construction contracts with the GEO, and reaching out to Poseidon's natives with technological assistance, such as free implant translators for cetaceans.

Hydrospan was more readily accepted on Poseidon than other Incorporate states, not only because of the company's philanthropic efforts, but also because of the natives' familiarity with Hydrospan products. Natives were keenly aware of Hydrospan's stamp on many of the vehicles and equipment they had maintained since the earliest days of the Athena Project, perhaps even more aware of the name on the modular habitats that had been the first homes on Poseidon. Natives had come to equate Hydrospan with safety and reliability. In fact, in 2196, Hydrospan launched an advertising campaign on both Earth and Poseidon that touted its products as "Survivors of the first 100-year field test—available in a variety of colors."

After the discovery of Long John, Hydrospan expanded its operations on Poseidon, focusing at the time on scientific research and the construction of marine habitats. A common facility for operations became a necessity, and for inspiration, designers looked to the Fremantle EcoDomes maintained by Hydrospan on Earth's Australian coast. The resulting company town of New Fremantle was established in 2189, sprawling from the coastline of Sotavento both across and below the water's surface.



In the last 10 years, New Fremantle's population has increased almost 1,000%. Growth has been so rapid that settlers sometimes find themselves employed in the construction of their own living facilities. Hydrospan has diversified its operations on Poseidon to include several classes of manufacturing, and the amphibious assembly lines of the innovative company are prevalent throughout the settlement. The community maintains an amazing sense of optimism, due in no small part to the skyrocketing value of its Hydrospan shares.

Physical Layout

New Fremantle is a technological wonder, an incredibly complex series of platforms that stretches five kilometers into Irie Bay from the northeast shore of Sotavento Island. Groups of platforms interlock, some supported by pilings driven into the bedrock and some completely buoyant. Each group of platforms is almost a town of its own, sometimes as much as 500 meters from the nearest neighboring group. Between the platforms, vast areas of the bay's surface remain exposed, usually enclosed by engineered coral reefs, which serve both as breakwaters and as submerged pens for fish farming. Viewed from above, New Fremantle looks like a series of interlocking, organic rings.

Beneath the surface of Irie Bay, New Fremantle is nearly as extensive. The incredible mass on the surface of the floating platforms is balanced by an equivalent mass below. The greater the structure on top, the deeper the bottom extends, serving as a sort of habitable keel for the floating platforms. The platforms anchored in the bedrock generally have habitable structures underwater as well, built up and down the length of the pilings holding them in place.

Demographics

Despite New Fremantle's physical size and technological achievements, its population of just under 19,000 qualifies it as a small town. More than 87% of New Fremantle's working class is employed with Hydrospan; others include contract laborers, GEO scientists and researchers, and independent interests

such as prospectors and private researchers leasing equipment, facilities, or living space.

For a community its size, New Fremantle has by far the largest concentration of cetacean residents on Poseidon. The 2,300 dolphins and 90 orcas represent over 12% of the settlement's population, and occupy nearly half of its available space.

Government

Hydrospan's innovative policies extend to the execution of government in New Fremantle. A dolphin called Steward heads Hydrospan on Poseidon, and governing New Fremantle is ultimately his responsibility. Steward has established a somewhat democratic system in the settlement, wherein Hydrospan shareholders suggest and vote on issues of concern through telepresence facilities. The votes are then weighted according to the number of shares the voter owns. Steward and his staff then decide exactly what means will be used to execute public opinion.

New Fremantle is unique among the Incorporate company towns in its level of cooperation with the GEO. The GEO leases facilities in New Fremantle for many endeavors. Cetacean Peacekeepers have translators implanted, acquire harnesses and drones, train in New Fremantle, and often request leave there. Numerous GEO research projects are underway in and around New Fremantle, and the city is home to the Office of Colonial Affairs' Cetacean Citizens Council. The GEO is virtually unlimited in its access to New Fremantle, and has become an integrated part of life in the settlement.

Economic Base

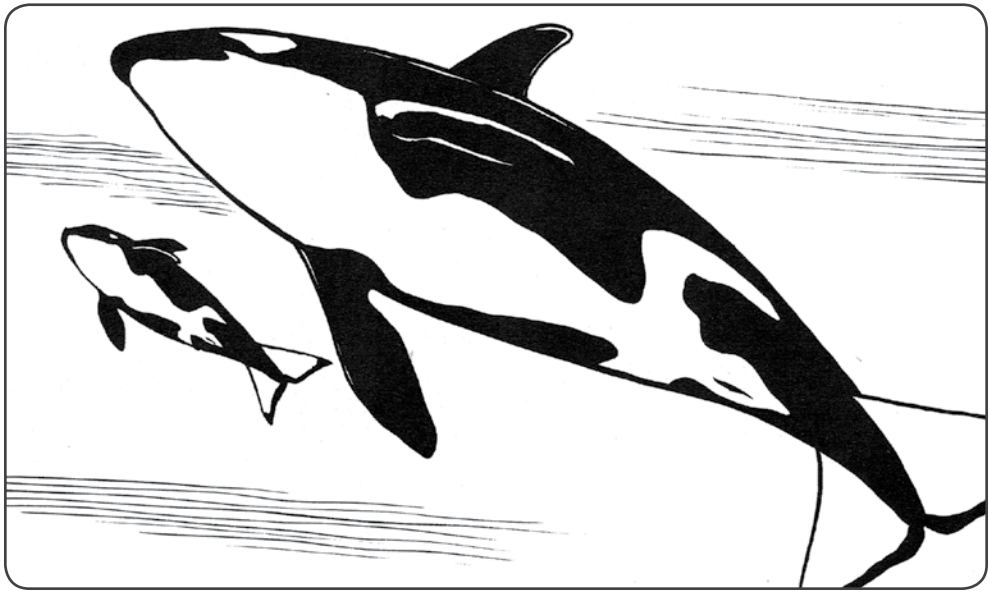
New Fremantle is the base of almost all of Hydrospan's activities on Poseidon, and the settlement's economic success is directly tied to the profitability of the Incorporate giant. Hydrospan's unique Incorporate structure—all employees hold shares of the company—means that the citizenry of New Fremantle is prosperous, and many of the enclave's amenities are communal. With readily available state-of-the-art technological resources, the standard of living in New Fremantle is uniquely high.

Hydrospan operations in New Fremantle are extensive. These activities include the production of marine habitats, watercraft, submersibles, underwater equipment, cetacean accessories, biomods, marine engineering and construction, as well as smaller, experimental ventures.

Infrastructure

On the surface of New Fremantle's platforms, the physical infrastructure is sound, though not exemplary. Under the water's surface, though, the city's infrastructure is of the most advanced design.

New Fremantle's power is provided by a fusion reactor on Sotavento Island, and desalinated water



ACCESS DENIED

HACKED

The telepresence facilities of New Fremantle are unrivaled on Poseidon. They are extensive enough to allow cetaceans to trode-in and travel almost anywhere in the settlement. The network that handles this public access software is an advanced system operated from a number of maincomps located throughout the settlement.

Recently, an "identity assassin" has been at work, destroying the identities in memory that cetaceans use to interact in the settlement and forcing them to create new ones each time they link into the net. This has caused a variety of problems besides the mere inconvenience—security clearances have to be reset, network messages are delayed, and using electronic scrip has become next to impossible for those targeted.

Hydrospan employs fine technicians, and a remedy for the problem should be on the way very soon. More importantly, the company wants to know who is behind the "assassinations" and why they are doing it, and Hydrospan will pay for the information. Interestingly, Anasi Systems is currently in negotiations with both Hydrospan and Atlas Materials, accepting plans and bids for their new arcology; a proposal meeting with resistance from both the GEO and native activists. Perhaps there is a connection.

is stored in public cisterns throughout the settlement. Security is provided by a contingent on contract from MacLeod Enforcement, and each MacLeod squad is supervised by a Hydrospan officer. Medical care is provided by two hospitals, one with subsurface access—popularly called the "Vet" on the platforms—and a number of smaller clinics.

In New Fremantle, technological amenities that are either exorbitantly priced or completely unavailable in most other settlements on Poseidon are a common sight. Many homes are telepresence-ready smart houses; fiber- optic cameras, audio hookups, and holographic projectors built into the walls allow residents to do almost anything without ever leaving their homes. Visiting neighbors is as simple as calling and having a holographic likeness projected into their living room. Public access telepresence terminals also let cetaceans perform jobs that were previously inaccessible, lifting them from their traditional roles as soldiers and laborers. Additionally, most cetaceans in New Fremantle own CICADAs and drones, giving them full access to the city, its residents, and resources.

FORT PACIFICA

I was still redded-out when Sergeant Jackson started barking orders. "Okay ladies, please exit to your left. Move it, move it… You know the drill!" I retained just enough composure to follow the uniform in front of me out the hatch, but not enough to open my chute. One of the men pulled my cord, and moments later we plunged into the open sea. They swam to the waiting hydrofoil, dragging me, and we set off for the base at over 100 kilometers an hour. I threw up for the fourth time since leaving orbit, and through mirrored shades the pilot glared at me. "How 'bout over the side, tough guy."

Recording Fort Pacifica is almost as much fun as the trip here. Lt. Colonel Garrett is a nice enough guy, but more often than not, my attempts at filming are met with a smile and "sorry buddy, access denied. If I had my way… " He must not get his way much. I've recorded all of the standard stuff—barracks, training ground, mess hall, uniforms getting their mail—but I can't help feeling it's all a dog-and-pony show. What I have seen, but can't record, is uniforms everywhere, going through maneuvers like a war starts tomorrow. And all night long, I hear jumpcraft and VTOLs setting down, unloading, and taking off. This much activity and their reluctance to let me record here can only mean one thing, and I have no idea what that is. I'm a little worried.

—Richard Brandt, from GEO Military Installation 1 (Poseidon). Intercepted 28.34, 112.99, ComSpec Sgt. Cooper, *Prosperity Station*

Location and Local Terrain

Fort Pacifica is located in the Zion Islands region of the Pacifica Archipelago at 17°09'33" south latitude, 14°37'13" west longitude. The base is the GEO's primary military installation on Poseidon, sprawling over Cartagena Island. Cartagena's constant exposure to high winds has left it thinly forested, with palm trees and scrub brush the dominant vegetation. Almost one-third of the rocky island's surface is white, sandy beach.

History

Fort Pacifica was created in 2194 to serve as the GEO's primary downside military base on Poseidon. The location was chosen because it is central to the Pacifica Archipelago, ensuring rapid response within Poseidon's most-populated region. Its relative seclusion allows the base to conduct exercises away from prying Incorporate eyes, and the logistical difficulties of maintaining a land base on a waterworld are minor when compared to the effect the same difficulties would have on an assault on the base.

Fort Pacifica is typical of military bases, and a small town of the same name has been constructed around the facility. Because troops stationed at the base have practically no living expenses, many speculators have come to Cartagena to live off the personnel's expendable income. Troops on leave can enjoy a virtual arcade, an open-air bazaar, many small shops, dozens of bars and nightclubs, restaurants, and even a brothel.

Physical Layout

Fort Pacifica is a complex facility, encompassing almost 22 square kilometers of Cartagena Island. Biocrete walls form a rectangle roughly one kilometer wide and three kilometers long surrounding the base proper, with the windward end actually formed by a low rocky hill. Heavy-weapons emplacements are spaced along the walls and blanket the hill as it slopes away from the base to meet the sea.

Fort Pacifica is littered with outbuildings, including almost 80 barracks housing troops, a four-building training academy, an infirmary, three huge motor pools for vehicle maintenance, a military police station, a weather station, a PX, several ammunition depots, and pads for VTOLs and jumpcraft. The dominant building is the headquarters facility, a four-story biocrete structure with over 10,000 square meters of floor space. Over 800 personnel work at the HQ.

Below ground, an extensive system of tunnels runs between 22 subterranean bunkers. The bunkers are made of reinforced layers of biocrete and steel, encased in bioplastic. With stockpiled supplies of fuel cells, foodstuffs, and other gear, the bunkers can house 300 of the base's personnel for up to six months.

Two kilometers off the north shore of Cartagena, a seafloor installation serves as Fort Pacifica's base for submersible activity. The Military Installation Seafloor Habitat—known as MISHa—was designed and built through a contract with Hydrospan. Two companies of Peacekeepers and two squads of cetaceans hold permanent stations there. MISHa's roaming submersibles maintain a sonar net that blankets the region, tracking oceanic activity as far away as Kingston.

The town outside Fort Pacifica covers the rocky landscape between the southern wall of the base and the beach. Houses and shops are in many cases incorporated into one structure, most built into a ring around the open-air bazaar. Homes are prevalent around the southern lagoon, where residents engage in fishing to complement their gardens. Viewed from above, the town has an hourglass shape, with semicircles at the lagoon and the wall of the base.

Demographics

As a military outpost, the majority of people at Fort Pacifica are employed by the GEO. Besides the actual troops, almost a hundred civilians are employed at the base for various purposes. About 900 civilians

live and work on Cartagena outside the base, most running businesses catering to military personnel.

The military personnel permanently stationed at Fort Pacifica include two companies of Peacekeeper Special Forces, one platoon of Marine Corps Heavy Cavalry, and two regiments of Peacekeepers. Fort Pacifica usually houses only between 3,500 and 4,000 at any one time, as troops are rotated between the base and various garrisons around Poseidon.

Government

Cartagena Island is GEO property, including both Fort Pacifica and the surrounding town. Military Police keep the peace, and despite occasional conflicts of interest, generally do a good job. Lieutenant General Luther Gideon of the GEO Marine Corps is in command of Fort Pacifica, and effectively the whole island.

Economic Base

The sole economic concern of Fort Pacifica is in meeting the GEO's budgetary guidelines, and these are often exceeded. The personnel stationed at the base are financially comfortable; while their per capita pay is moderate, they have almost no cost of living. Therefore much of the money earned by the military personnel is pumped back into the surrounding town during their off time.

ACCESS DENIED

Blueprint for Disaster

The Military Installation Seafloor Habitat is well defended and manned by a full platoon of Peacekeepers that includes two squads of cetaceans. Crippling MISHa would be a necessary step in any attack on Fort Pacifica.

MISHa was constructed by Hydrospan, and the blueprints for the facility are in a highly secured maincomp file in New Fremantle. The blueprints detail the internal structures of MISHa, including the locations of power systems, sensor suites, weapons systems, and other vital components. Sugar McKay, an NRM lieutenant, has passed the word in the saloons of Kingston that he will pay up to 50,000cs for the blueprints to MISHa. There is also a rumor that McKay is really working for the GEO, and is using the blueprints as bait in an elaborate sting operation.

Watercraft Down

A Peacekeeper missile hydrofoil and its crew were recently lost at sea near the town of Marley on New Jamaica's southern coast. Heavy weather interrupted communications prior to the craft's disappearance, and VTOL fly-overs to locate the craft have been fruitless. A reward is being offered for information revealing the fate of the vessel and its crew.

Members of the Sword of Zion, the highly militant faction of the NRM operating out of Marley, are responsible for the disappearance. A derelict catamaran on Marley's beach marks the camouflaged entrance to a small bunker. The bunker contains a cache of black market weapons, including the MHD sled and mounted torpedo cannon used to destroy the hydrofoil.

The Sword of Gideon

Fort Pacifica's commander, Lt. General Luther Gideon, believes that harsh conditioning makes strong soldiers. He sanctions questionable practices in the training of his troops, including both mental and physical abuse, leaving soldiers in the field during cyclonic storms, and locking them up for minor offenses. Gideon believes these tactics are necessary because their training is what keeps his troops alive during wartime operations. Dissenters among the soldiers are routinely transferred to one of the various "hot zone" garrisons on Poseidon, or to one of the more remote research stations. Because he is aware of the view an informed public would take on some of the practices at Fort Pacifica, Gideon allows very little access to reporters at the base, and the troops transferred out of Fort Pacifica are often subtly threatened against speaking out.

ACCESS DENIED

Live Free or Die

From the time of its original colonization, the Zion Islands region has meant freedom to its denizens. It was settled by the founders of the NRM, who left Haven to find a place they could claim as their own and do with as they wished, independent of the early colonial administrators. With the Abandonment, Zion Islanders seemed even more assured of a life free of Earth-based control. They settled freely, claiming any land they wanted as their homesteads.

Led by the government of Kingston, much of the region has refused to recognize the authority of the GEO and has worked to minimize Incorporate occupation. In accepting the hardships of life without the weighty support of these organizations, settlers in the Zion Islands feel they should live free of their influence and control.

Its unique status has served to make the Zion Islands a hotbed of insurgent activity. To this point, much of the resistance against the GEO and the Incorporate has been covert and anonymous. However, with the continuing push by the GEO for control of the islands and attempts of the Incorporate to utilize the region's resources, many activists are preparing for conflict.

The groups that are willing to defend the islands, including the NRM, recognize that they are vastly outnumbered and outgunned by the extensive resources of the Earth-based interests. Their best hope lies in making the Zion Islands more costly to take and hold than to leave alone. Plans involve fighting a guerrilla war, in which resistance forces take advantage of the local terrain to disrupt the logistics of any attempt to control the Zion Islands. The landscape of New Jamaica and the other smaller islands is largely untamed wilderness, providing excellent cover for insurgent activities.

Planners hope that the predicted costs and personnel losses of a protracted guerrilla conflict will deter the more powerful Earth interests from forcing their agendas in the region. The various groups that would defend the Zion Islands from outside government are much better organized than most people believe, despite internal power struggles, and they have very strong grassroots support. Lines of communication are open between many of these underground groups and they share a common enemy, if not a common goal. Some of the organizations strive to protect Poseidon as a whole, while others only hope to keep the Zion Islands free. Leaders are united, though, in their belief that they can eventually succeed, even in open conflict, and they are ready to react at the first sign that the freedom of the Zion Islands could be compromised.

Infrastructure

As a GEO military installation, Fort Pacifica's infrastructure and technological resources are sophisticated, redundant, and complex, relying only on budgetary considerations to limit their extent. Structures are built with the finest materials available. An efficient sewage system cleans waste and deposits outflow into the ocean. Supplies are provided by a continuous stream of cargo VTOLs and orbital landers. Power is provided by a fusion reactor underneath the base, and water is desalinized through a plant at the north wall.

The manpower needs of the base are also provided internally. Peacekeeper engineers man the facilities that service the base and direct the efforts of enlisted crews on new construction. Military doctors see to the sick or wounded and officer instructors provide academic training. The enlisted service the base's vehicle battery, which includes VTOL strike-fighters, patrol and assault jumpcraft, torpedo hydrofoils, fighter subs, and various cargo and personnel carriers.

In comparison to the base itself, the town surrounding Fort Pacifica has little infrastructure, despite its GEO sponsorship. Clean water and electrical power are tapped from the base, but residents must pay the initial cost of connection to the systems, typically more than a thousand scrip for each. A plan is in development for groups of homeowners to go in together for neighborhood connections. A GEO-sponsored school provides education for the community's children and a small clinic offers basic medical care.

NOTHING VENTURED

Any newcomer to Poseidon is by nature a gambler. These people are willing to take a chance, risking what is familiar for the possibility of something better on an alien world. It was perhaps inevitable that games of chance would become a popular leisure activity on Poseidon. Kingston is at the hub of gambling on the colony world and is the only settlement that has parlayed it into a major industry. On Cape Fortune, several large waterfront casinos share the boardwalk, offering hundreds of games of chance, and there is rampant gambling in the saloons scattered throughout the rest of the town.

The Hazards Casino

Hanover Industries was the first to recognize the potential of a full-fledged casino on Poseidon. They opened the Hazards Casino in 2193 to a lukewarm reception, but within two years it had become one of the hottest spots on the planet. Since the Hazards opened, five other casino hotels have joined it on Cape Fortune, and apart from the actual buildings, they are all very similar. The huge biocrete structure of the Hazards is a square-based pyramid, with one corner jutting out 200 meters over Annotto Bay, supported by a column planted deep in the bedrock.

The glass and steel faces of the building have intricate holographic displays dancing over their surfaces that at night can be seen from all over the city. Hazards has 15 floors, and can easily accommodate over 1,000 guests.

The lower two floors of the Hazards are where all the action is. The primary attraction is gambling, whether on poker, blackjack, baccarat, roulette, keno, craps, or even old-fashioned slot machines. The Hazards also has two restaurants—the casual Danger Zone, and Ruby's for finer dining—as well as a nightclub called Rumplestiltskin's that offers dancing and mixed stimulants for those who want to keep moving. Yet another highlight is the renowned stage show, a complete music-and-dance routine featuring old-style showgirls that is performed three times nightly.

Dragon Boy Parlor

Unique among the casino offerings in Kingston is Dragon Boy Parlor. Dragon Boy is owned by the Nippon Industrial State, and it is the only major casino without a hotel. The players at Dragon Boy are often described as addicts, though, and sleep is usually the last thing on their minds. The casino is dominated by virtual gaming. Stepping into Dragon Boy Parlor is like being in a theater with no show. Its just a dark room with lots of people—that is, until you jack in.

Kingston Saloons

After a few visits to the casinos on Cape Fortune, the hardcore gamblers usually find their way to one of Kingston's saloons. The atmosphere in these places is very different, but just as exhilarating. What most visitors first note are the armed guards at the door—saloon owners in Kingston take no chances. Most often a saloon offers some form of entertainment on its lowest floor, whether a restaurant, a live local band, strippers, a simple bar, or some combination. Saloons usually do not get a very big cut of the gambling action going on inside, so they often rely on alcohol sales to turn a profit. To get to the game a visitor generally has to enter a back room or move upstairs. Once inside, card and dice games can be played with abandon. Most popular by far is poker, but other games can also be found. The poker games often require a minimum buy-in, and rarely do players leave until they have either lost or won it all.

Though gambling and drinking are vices to which the saloons cater, there is another, more natural need they satisfy: human contact. The saloons of Kingston have long been gathering places where workers meet after a long day and relax in their time off, or individuals stop in for a drink, get to know the staff, and become regulars. The news is shared over cocktails with people who have nothing in common but where they are sitting. In a city like Kingston it is easy for individuals to get lost in the shuffle, so they take what human interaction they can get. The saloons have always been a part of Kingston, and their popularity only continues to grow.

BRIGHT SAVANNA

In the years following Recontact, the GEO sponsored numerous colonial efforts on the new world. One of the earliest involved the hybrids, the unsung heroes of the Blight Years. Having served the GEO well, and facing widespread social prejudice back on Earth, the hybrids were offered a new home on Poseidon.

In 2191, in a colonial effort led by a Silva named Geronimo Pacheco, over 500 hybrids settled on the central savanna of New Jamaica and established a colony they call Bright Savanna. Bright Savanna is located in the grassy foothills of New Jamaica's western mountains. Though marginal farmland, the settlers seem to prefer the semi-arid region as it reminds them of their days in Africa.

The resources provided to Bright Savanna are as extensive as those in the most well-funded newcomer colonies on Poseidon. Through numerous GEO grants and subsidized development loans, the hybrid enclave enjoys well-designed, durable construction materials, sophisticated computers and communications equipment, automated farm machinery, and a small but reliable fusion reactor. This support has served to make the hybrid colony the source of envy and bad blood for many newcomers.

Despite these assets, life in Bright Savanna can still be difficult. Fresh water is a valuable commodity and the colony's many wells barely meet the settlement's demands. Various predators hunt the region, forcing the hybrids to remain wary and constantly carry weapons to protect both themselves and their livestock. Seasonal wildfires and flash floods are also constant concerns, though the enclave's sheltered position at the base of the mountains lessens the threat of oceanic storms and cyclonics.

The Bright Savanna compound is almost a hundred square kilometers of rolling, fertile terrain. The perimeter is guarded by five-meter-high, bioplastic fencing designed to keep all but the largest predators at bay. Most of the area within the fence is devoted to agriculture and pastures, and is kept green with an efficient irrigation system. The hybrids' dwellings and public buildings are centrally located and clustered together, consisting primarily of low, brightly colored bioplastic structures. Large, prefabricated longhouses often serve as homes for multiple families.

The residents of Bright Savanna have found their pioneer lifestyle a paradise compared to that of hybrids in the larger colonial settlements. As a rule, hybrids have seldom found true acceptance anywhere, and are generally treated even less like humans than cetaceans. The challenges of life on the Savanna have made the hybrids a close-knit group, and necessity has taken the place of bureaucracy. Geronimo Pacheco is still the leader of Bright Savanna. A council of elders offers their insights on community issues, but Geronimo is the enclave's governor and usually makes the final decisions. Interestingly, Geronimo has never won an election—there are none. In Bright Savanna, no one is forced to do anything—they follow Geronimo because he leads.

The Office of Colonial Affairs has begun encouraging the hybrids to fulfill their original colonial contracts. The contracts require that they establish a formal system of government—with a written charter—to meet OCA guidelines. Bright Savanna is expected to begin holding elections, and the elected officials are expected to answer to GEO administrators. Geronimo supports this transition but has been more concerned with the enclave's struggle to establish self-sufficiency. Geronimo realizes the long-term survival and prosperity of the enclave will require a more formal government and the support of the GEO. He is looking forward to passing on the mantle of leadership and spending more time with his many children and grandchildren.

MOST WANTED

Geronimo Pacheco

Geronimo grew up in the hybrid enclave that was established in central Africa over 100 years ago. He was born in 2157, a time when Earth was busy recovering from the Blight. When Geronimo was a young Silva, he was fascinated by the prospects created by Recontact. Geronimo was obsessed, as most youngsters were, with what life might be like on the waterworld. That passed with time—and his realization that he could not swim.

Geronimo joined the GEO Armed Forces as soon as he turned 16, the legal age for Silvas. He was exposed to the outside world for the first time, and also exposed to its prejudice. Geronimo was mercilessly harassed by both his fellow troops and commanding officers. Though he was an excellent soldier, his rank would never exceed that of private.

When Geronimo rejoined his people in Africa, he found that many had already agreed to be part of a GEO-sponsored colonial settlement for hybrids on Poseidon. He rushed to join them, glad that at least the armed forces had taught him to swim.

Over the 15 years since his arrival on Poseidon, Geronimo has become a leader after all. His colony, Bright Savanna, now numbers over 700, and he has been titled Governor. For the first time in his life Geronimo feels true acceptance.

At 42, Geronimo has become an excellent trader, and his appearance alone usually discourages cheats. He is black as charcoal, with amber eyes like glowing embers, and he weighs in at well over a hundred kilograms.

Species: Genetic Redesign—Hybrid (Silva)
Goal: Freedom
Motivation: Social
Attitude: Brooding
Role: Pioneer (Professional)
Primary Attributes: Physique 3, Coordination –1, Cognition 0, Psyche 1
Derived Attributes: Endurance 4, Reflexes 0, Toughness 1
Modifications: Improved Blood Oxygenation, Neural Jack
Aptitudes: (Superior) Combat; (Strong) Administration, Communication, Survival
Primary Skills: Aquatics 3, Armed Melee 4, Culture (Colonial) 6, Culture (GEO) 4, Culture (Military) 5, Foraging 4, Law 2, Leadership 6, Persuasion 6, Planning 3, Small Arms 5, Unarmed Melee 2

A VIEW FROM ORBIT

Over two million people have immigrated to the Serpentis System since Recontact. While the vast majority have settled on Poseidon, almost 180,000 have moved into the moons and asteroids of the system. Most of them are Belters, Martians, and a few Lunars who have come seeking their fortunes or new opportunities. In addition to these dedicated settlers, the GEO and the Incorporate also have bases and personnel throughout the Serp System. Though GEO-administered WH–2, located near the wormhole, has a staff of only 73, over 40,000 GEO and Incorporate employees are permanent residents of Poseidon's orbital stations. Overall, more than 220,000 people in the Serpentis System live outside Poseidon's atmosphere.

PROSPERITY STATION

I've done a tour on an orbital, Guadalcanal IV in geostationary, but it was nothing like this. We bunk in the Corps HQ on Level 2, Delta Sector, but we spend most of our time out in the full g of the Proving Grounds. The media is always comparing Poseidon to the Old West, and I figure Prosperity Station *is our version of St. Louis, the gateway to the frontier. The sarge has been here since '94, and he says it's amazing how much the place has changed. Well, anyone can see that. It's still changing, every day. There are still some parts they haven't finished digging out, and less than a third of the interior is really habitable. If you get lost in this place, you can turn down a corridor and find yourself at a temporary airlock leading out to vacuum. Anyway, just about everything and everyone who comes to Poseidon comes through* Prosperity. *Sarge says it used to be that there were mostly just us and some civilian government types here. But now, you've got every Commission with hundreds of permanent employees and their children, you've got Incorporate and Independent consulates, and you've got the tens of thousands of temporary personnel and millions of tons of cargo that come through here every year. And, of course, you've still got the Marines. It doesn't matter how fast they dig, this place is getting crowded.*

—Tyson Phelps, excerpted from GEO Marine Corps newsletter

LOCATION

The GEO's *Prosperity Station* travels in a polar orbit 400 km above the surface of Poseidon. This means that once per local rotational day, the station passes over each of the planet's four hemisphere quadrants. The timing of the orbit is such that as the station continues along its orbital path, it appears to advance slowly across the planet's surface.

HISTORY

The GEO's first permanent space station in the Serpentis System was *GEO 1*, a small orbital constructed of modular components transported to the system by the *UNSS Ballard*. *GEO 1* became operational in 2174 and served as the GEO's primary administrative facility until 2190. Following the discovery of Long John and the subsequent rush on the colony, it became clear that the small orbital simply wasn't up to the increasing traffic. At that time, the GEO Executive Council approved the construction of a new, much larger orbital facility.

A small, oblong asteroid, just under a kilometer long and averaging 400 meters in diameter, was towed from the Belt into a polar orbit around Poseidon. Heavy orbital mining and construction equipment was used to excavate the asteroid. The first sectors were completed in 2195, and the asteroid complex was christened *Prosperity Station*. Most GEO personnel and assets were immediately moved from the aging *GEO 1*, and extensive passenger and cargo receiving facilities were constructed to handle the increasing flow of traffic to and from the colony. In 2199, *Prosperity Station* is the largest facility in orbit around Poseidon, in both its dimensions and population.

PHYSICAL LAYOUT

The interior surface area of *Prosperity Station* consists of multiple concentric layers, or levels, each about 10 meters deep, separated by several meters of solid rock and linked by countless corridors and access tunnels. Over the last several years, construction has continued to crawl along the axis of the asteroid, such that in 2199 more than 65% of its length has been excavated.

While there are 10 levels in each sector, only three of these are currently occupied. Because the gravity at the outermost level is only .25g, deeper layers are rather uncomfortable for people unaccustomed to low-g environments. These levels contain power and life support equipment, docking bays, storage facilities, and several orbital factories and research labs.

Several support structures reach out from the asteroid's surface allowing for the construction of variable-g habitats used for a variety of applications. The Marine Corps Proving Grounds is a large one-g training facility and there are a number of habitats at various gravities, including medical facilities and warehouses for g-sensitive cargo.

DEMOGRAPHICS

There are just more than 8,000 permanent civilian and military personnel on *Prosperity Station*, but the facility's effective population is usually closer to 20,000 because the complex serves as the primary transport station to and from the colony world. When

a large transport arrives in orbit, the station's population can swell, as most of the new arrivals spend two weeks on *Prosperity* recovering from cold sleep.

The population is incredibly diverse, genetically, culturally, and linguistically. At any given time, there are people from Luna, Mars, the Belt, and Poseidon on the station, not to mention Earth's various ethnic groups. There are unmodified humans, along with Shock Troopers, aquaforms, spacers, and even hybrids. There are people speaking English, Japanese, several dialects of Chinese, German, French, Farsi, Spanish, Yiddish, and Russian. *Prosperity Station* is a representative cross-section of the diverse cultures of Earth and the Colonies.

Government

The ranking authority on *Prosperity Station* is John Bishop, the GEO's Colonial Administrator. While each of the GEO Commissions has offices on the orbital, the OCA's are the most extensive. The OCA maintains the medical facilities for arriving and departing passengers, oversees customs and immigration, and has a hand in most administrative tasks affecting the colony world. In a very real sense, *Prosperity Station* is John Bishop's domain.

Economic Base

There is very little productive activity on *Prosperity Station*, and though it is beginning to generate significant revenues from service fees, its operations are still dependent on funds allocated by the Executive Council on Earth. There is also a rapidly developing private sector on the station, as entrepreneurs begin to take advantage of the increasing traffic passing through the complex. This "second economy" is somewhat dispersed throughout the station and can

SHANNON MARIE

Senior Controller's Log

1945: Wormhole Controller reports entry of small object into Serpentis System. Object dimensions and timing are consistent with cargo package A1138. Approach Controller alerted.
1947: Approach Controller alerts tug *Shannon Marie* of probable arrival of package A1138.
1951: Tug *Shannon Marie* reports powering up for intercept. Requests vector to package A1138.
1952: Approach Controller relays *Shannon Marie* vector to package A1138.
1953: *Shannon Marie* acknowledges vector and reports under way.
2001: *Shannon Marie* reports mid-sized object in vicinity. Projected course track does not cross course of package A1138.
2001: Approach Controller acknowledges object in vicinity.
2002: Approach Controller inquires about possibility object asteroidal or cometary in nature.
2007: *Prosperity Station* Harbormaster reports no asteroids or comets logged in approach corridor.
2009: *Shannon Marie* reports radar scan indicates object is tumbling and measures approximately 72 cubic meters. Radar reflective index is consistent with metallic ore.
2020: *Shannon Marie* reports package A1138 on course and following approach corridor.
2030: *Shannon Marie* reports package A1138 on course and following approach corridor. Range now 39,000 kilometers. Delta vee now 21 m/s.
2035: *Shannon Marie* reports possible target aspect change of unidentified body. Delta vee package A1138 now 18 m/s.
2045: *Shannon Marie* confirms target aspect change and reports target now under acceleration.
2046: Approach Controller reports object now visible on Control radar. Range from object to tug now 57,000 kilometers. Range from object to package A1138 now 21,000 kilometers
2051: *Prosperity Station* Harbormaster reports no private craft with flight plans in the vicinity of approach corridor.
2057: *Prosperity Station* Harbormaster reports no military craft operating in area.
2100: Approach Controller reports object range to package now 17,000 kilometers and closing. Object still under acceleration.

be difficult to find, but a determined visitor to *Prosperity Station* can usually find services ranging from private medical care to exotic entertainment.

Infrastructure

The finished sectors of the station offer first-rate amenities. Electrical power is provided by large fusion plants and solar arrays, there are extensive docking and maintenance facilities for spacecraft, and thousands of square meters of surface area are devoted to the receiving, processing, and storage of cargo. While the techs are notoriously brusque, the medical facilities serving cold-sleep passengers are the best in the system.

The station's life support systems are reliable, efficient, and state of the art. As with all orbitals, water regulations are strictly enforced and waste is recycled through sophisticated filters and hydroponic systems. There are also elaborate administrative facilities and resources for GEO personnel, and enough living space to comfortably support the effective population. The station's communications are also first-rate, with ready access to both the surface and the rest of the system.

Space Dock

The spinning asteroid makes docking somewhat slow and complicated. To dock with a rotating station, ships must first match the orbital's spin. An automated docking complex on the asteroid's axis allows *Prosperity Station* to counter its own rotation, facilitating the docking process. The structure consists of a large clamp installed on the docking collar set into the station's axis. As a ship approaches, the collar counter-rotates, and the clamp is extended toward the incoming vessel. The clamp secures the ship and

2101: Approach Controller recommends *Shannon Marie* break off intercept of cargo package A1138. No acknowledgement.
2103: *Shannon Marie* reports object radar signature now diverging into secondary contact. Secondary, smaller contact now under heavy acceleration. *Shannon Marie* indicates that primary target size and volume consistent with modified orbital transport. Smaller contact unidentified.
2205: Unidentified transport hailed by Approach Controller. No acknowledgment.
2123: Approach Controller reports range from transport to package now 11,000 kilometers. Range from small target to *Shannon Marie* now 9,500 kilometers and closing.
2125: Approach Controller hails unidentified transport. No acknowledgment. Approach Controller hails *Shannon Marie*.
2130: *Shannon Marie* reports range to incoming targets now 8,000 kilometers.
2130: Approach Controller reports range from transport to package now 9,000 kilometers.
2141: Approach Controller hails *Shannon Marie*. No acknowledgment.
2145: *Prosperity Station* Harbormaster reports GEO cutter preparing for launch to intercept transport.
2150: Approach Controller reports range from transport to package 4,500 kilometers.
2152: Approach Controller hails *Shannon Marie*. No acknowledgment. *Shannon Marie* no longer under acceleration.
2155: Approach Controller hails *Shannon Marie*. No acknowledgment.
2200: Approach Controller hails *Shannon Marie*. No acknowledgment.
2201: Approach Controller reports range from transport to package A1138 now 900 kilometers.
2205: Approach Controller hails *Shannon Marie*. No acknowledgment. *Prosperity Station* Harbormaster reports cutter launch.
2222: Approach Controller reports transport intercept of package A1138. Transport now under heavy acceleration. Senior Controller reports loss of incoming cargo package Al138 to *Prosperity Station* Harbormaster.
2245: Transport approaching edge of Approach Control radar range. Range to cutter now 110,300 kilometers. Cutter redirected to tug *Shannon Marie*.
2321: Cutter reports intercept of *Shannon Marie*. Visual inspection indicates heavy damage.
2358: Cutter report zero survivors rescued from *Shannon Marie*, salvage marker deployed.

ACCESS DENIED

DOOMSDAY WEAPON

The GEO's official position is that *Prosperity Station*'s only military role is to provide the Shock Troops with a permanent base of operations. However, this is far from true. Restricted access tunnels in the unfinished sectors of the station lead to a sophisticated complex of nuclear missile launch silos and control facilities. The missile system is designed to intercept objects or spacecraft incoming to Poseidon orbit.

Richard Brandt, an undercover TimesNet journalist on the station, has a source inside GEO Aerospace Command who has tipped him to the existence of the weapons. Brandt is hoping to gather enough evidence to go forward with the story, and expects it to spark a massive government scandal.

SMUGGLER'S BLUES

The Gorchoff crime syndicate has several lower level Customs and Immigration Service officers on its payroll. Several have been under quiet surveillance by the Justice Commission's Organized Crime Task Force for months. The Special Agent heading the investigation, however, is holding out for evidence that would implicate high-ranking members of the Gorchoff Family. So far, the necessary connections have been difficult to establish.

draws it into the asteroid. The entire structure retreats along the station's axis, and automated equipment begins off-loading cargo and routing it to adjoining receiving bays.

WORLDSCAPE

The most famous site on the station is the Worldscape Arcade, a long concourse on Level 1. The Arcade is flanked by small, stylish shops and vendors, but its most fantastic feature is its floor. The floor of the Arcade is constructed entirely of clear panels of bioplastic, and offers a stunning, if disorienting, view of Poseidon. As the asteroid spins to maintain its apparent gravity, the planet appears to pass below the pedestrian's feet every few minutes. While the view has become very popular, it can also make many newcomers violently ill.

POSEIDON'S MOONS

PROTEUS

Proteus City, a sedate trading station and manufacturing center, has developed on Proteus in the past decade. Looking much like a typical Martian settlement, the outpost's 19,000 inhabitants are a hodgepodge of Belter and Martian settlers who seem content to mine, manufacture, and cut shrewd deals in the system's markets. Proteus has extensive deposits of various metallic ores, including iron, aluminum, copper, and titanium, but has yielded little else of value. Proteus has a single small orbital station which offers docking facilities for orbital shuttles and transports from Poseidon and the Belt. Port Nowhere, as it is known by the GEO personnel stationed there, is a small zero-g facility with a permanent staff of 96. It has facilities for up to 400 visitors, but has never functioned at full capacity.

NEREUS

Poseidon's second moon is a nondescript planetoid. Its negligible, CO2-N2 atmosphere renders it uninhabitable without extensive life support equipment, and because of its more inviting neighbors, it has had few human visitors. There is only one permanent research base on Nereus, located in the northern polar region. The station is known as Facility 7734 by the 64 GEO researchers and support personnel stationed there. Several Incorporate states maintain small, largely automated mining operations on the moon, but the largest, an Atlas titanium mine, has a staff of only 326. In many respects, Nereus is similar to Luna in the early 21st Century.

THE SERPENTIS BELT

The Serpentis System includes an extensive, mineral-rich asteroid belt that is relatively close to Poseidon. While this potential resource was largely ignored in the initial colonization effort, the Serpentis Belt has since been settled by roughly 180,000 independent Belters. Most are miners, supplying raw materials and finished goods to the settlers on Poseidon.

Arbor, settled by one of the extended family-clans from the asteroid Juno, is one such manufacturing city. A resilient, self-sealing dome of bioplastic covers almost a square kilometer of the asteroid. On the surface, there are recreation areas, elaborate gardens, hydroponic tanks, and a beautiful park. Directly below, built into the surface of the asteroid, are the residences of the 46,000 inhabitants. Deeper still are the automated factories which mine the needed raw materials from the depths of the asteroid and process this ore into finished goods. Arbor produces comput-

ACCESS DENIED

Smuggling and Piracy

Dozens of computer-controlled telescopes and radar units monitor the space around the Serpentis end of the wormhole. Several hundred of these telescopes and radar units orbiting Poseidon, Nereus, and Proteus monitor the inner system. All legitimate ships are tracked by their fusion flares and are continuously monitored by radar and radio-telemetry. Any unregistered ship detected by telescope, radar, or infrared signature is hailed and then intercepted by fast GEO Aerospace Command torchships. Sneaking an unregistered spacecraft through the wormhole or onto the surface of Poseidon is virtually impossible.

However, there are still smugglers and pirates in the Serpentis System. Out in the asteroid belt and beyond, in the vast spaces far from both Poseidon and the wormhole, the GEO finds it difficult to enforce its laws. The transports carrying Long John and other valuable goods are occasionally attacked in the depths of space.

Most pirate ships have a hull designed to absorb both light and radar, as well as special radiators which greatly reduce their infrared signature. Propelled by an electromagnetic mass driver, which produces no drive flare and no trail for the torchships to follow, a pirate ship can stealthily close with and attack an unsuspecting freighter.

Whether running stolen goods, illegal drugs, or black market weapons produced at a remote asteroid base, smugglers and pirates have to be able to sell their merchandise. Sometimes, illicit cargo is stashed on an asteroid where a registered mining ship can retrieve it days or weeks later. In other instances, smugglers and pirates dock with legitimate transports under cover of a moon or asteroid in the outer system. Once the illegal goods are brought on board a registered ship, they can be placed in mislabeled containers and stored with the rest of the ship's cargo. New smuggling methods are invented faster than the Office of Colonial Affairs customs inspectors can discover them. GEO personnel at both ends of the wormhole are very strict and very careful, but even they can be fooled.

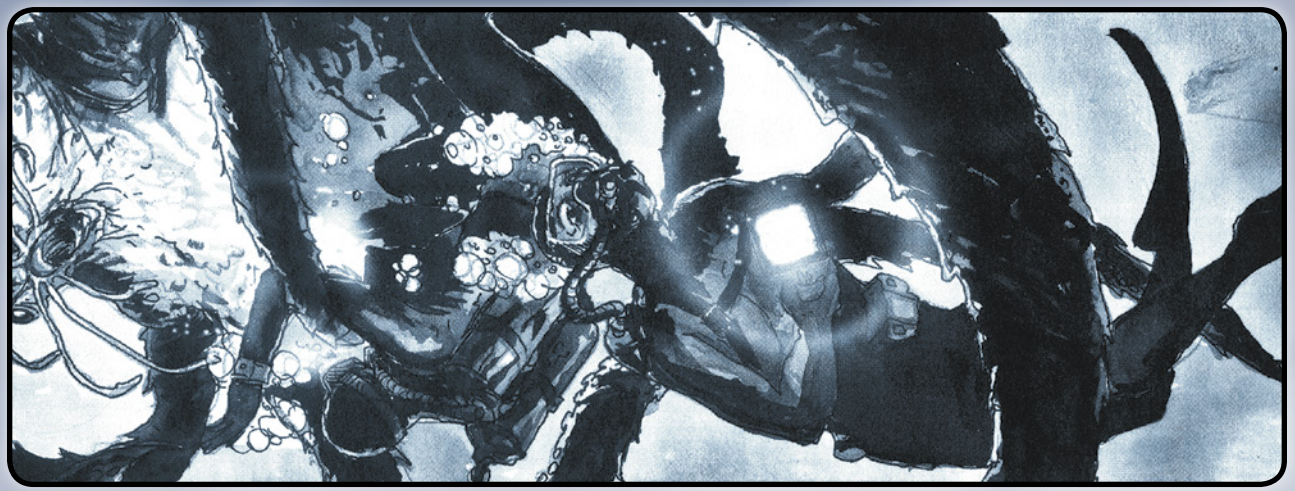
Piracy and smuggling in the Serp System are highly organized. The expense of purchasing and maintaining sophisticated spacecraft is prohibitive for all but the largest crime syndicates. However, the profits to be made from the hijacking of even a single Long John shipment are great enough to justify the expense.

ers, electronics components, and a few expensive specialty foods, including Arbor Green, regarded as the finest coffee in the system.

Mirror, another major mining and manufacturing city, was settled by a collective of Belters from several asteroids, and offers a stark contrast to the lush greenery of Arbor. Mirror is a network of caves and wide tunnels bored through a small asteroid. The city is an aesthetic wonder, but its beauty is wholly artificial. The only lifeforms on Mirror are the 50,000 inhabitants and the algal cells in the hydroponic tanks. Mirror is largely made of zero-g structural glass, with touches of steel and aluminum. The public buildings of multicolored glass are regarded as the finest architecture in the system.

The inhabitants of Arbor try to live in harmony with the rhythms of nature while living in a totally artificial environment, but the inhabitants of Mirror rejoice in their freedom from natural shapes and materials. The city is a geometric symphony of lines and angles. Mirror is, perhaps as a result, the best place to buy or commission specialty machines or replacement parts which must be made to very strict tolerances.

All of the cities of the Serpentis Belt are unique, but most are much less extreme and much less exotic than Arbor and Mirror. While most of these colonies are involved in mining and manufacturing, some support other economies. Ariel is a city of 35,000 Belters on Miranda, an asteroid with a diameter of 70 km orbiting on the inner fringe of the Belt. Ariel is a spherical cavern 400 meters in diameter, studded with buildings jutting from the wall into the center. Like Arthur in the Solar System, Ariel is a city devoted to trade. Belter products can be purchased at relatively low prices, and according to rumors, there are few goods that cannot be acquired in the city. Despite numerous allegations of smuggling and other illegal trade, the GEO has been unable to prove these charges. The popular belief is that either the smugglers on Ariel are extremely skilled, they have bribed GEO investigators, or both.



CHAPTER 3: SAVAGE PLANET

RAINFOREST

Rainforests on Earth are the most complex biomes, both in terms of species diversity and the structure of the forest itself. Growing amidst abundant precipitation and year round warmth, rainforests have no strong seasonal rhythm.

Variations in precipitation can lead to periodic change of the forest itself, particularly where the variations are acute. Rainforests have adapted to recycling and containing large amounts of moisture. Often rainfall has a consistent daily cycle, due to strong links between sunlight and weather patterns.

Rainforests of Poseidon have a wider range than those of Earth, and are found within 30° of the equator. They occur at elevations below 1,000 meters. Seasonal variations in rain have an impact on the ecosystem, but water is never in short supply.

The rainforests of Poseidon are unique from those of Earth in that all are relatively close to the sea. The lack of large landmasses renders the development of deep, inland rainforest impossible. It has been suggested that the predominantly coastal nature of these forests encouraged the evolution of mangrove islands. The precursors of Poseidon mangrove adapted to seek light by growing out into the water, rather than up through the canopy.

Structure of the Rainforest

Plants within the rainforest are divided into five rough zones, corresponding to height, and therefore access to sunlight. The dominant competition in the forest is over access to light, leading to adaptations to reach sunlight or tolerate shade. Poseidon rainforests are much like Earth rainforests, though they are generally taller by on order of three or more.

The **emergent zone** consists of widely spaced trees, 100 to 120 meters in height, with an umbrella-like canopy extending above the general canopy around them. They must bear drying winds, so most have tiny leaves. Emergents faced with seasonal dry spells are often deciduous, shedding leaves during these seasons. This is more common at subtropical latitudes.

The **bright canopy** is a closed canopy of 90 meter-tall trees. Full sunlight falls on this layer, but is then blocked from lower levels. Trees of this and lower layers often have drip tips, extensions of the branches that encourage transpiration by exerting a drawing force.

The **dark canopy** is another closed canopy of 66 meter-tall trees. Air currents are sluggish in this layer, causing a great deal of humidity. Trees of this layer often have very large leaves to capture what light they can, and a tall, conical crown.

The **shrub/sapling layer** is marked by very little light. Less than three percent of the light from the top of the forest canopy reaches this layer. Saplings are common, stunted and doomed unless a hole appears in the canopy. If this opportunity arises, the sapling will then grow rapidly to fill the available niche.

Saplings often exhibit many of a layer's specific strategies as they grow within that layer. For example, an emergent tree at the dark canopy layer will often have broad leaves and drip tips.

The **ground layer** has very few plants. Only one percent or less of the light from the top of the forest reaches the floor. The ground layer is also less humid, with only two-thirds of precipitation reaching the ground. The rest is absorbed at higher layers.

Flora

Plants on Poseidon have evolved in many parallel ways, given the strong similarities in environmental conditions.

Epiphytes, air plants, grow on the upper branches of trees. They use the limbs as a platform, extracting moisture from the air, and trapping constant leaf-fall and airborne dust. They are adapted for little water, with some forms evolved for desert and other dry ecosystems. Pineapples and orchids are well-known examples from Earth. The coffee button and the lead cactus are common to Poseidon. Epiphytes on Poseidon are often found in elaborate symbiotic relationships with algae and bacteria.

Lianas are woody vines, growing rapidly up tree trunks during temporary gaps in the canopy. They flower and form fruit in the emergent and bright canopy layers. Many are deciduous. A large number of Poseidon lianas are carniflora, though most only attack tiny animals, such as insects.

Climbers are green-stemmed plants that remain below the canopies. Many store nutrients in large roots and tubers.

Stranglers begin as epiphytes in the canopy and send roots to the forest floor. These are rarely observed in Poseidon rainforests.

Heterotrophs are non-photosynthetic plants that live on the forest floor. On Poseidon, particularly in shoreline rainforests, a number of carniflora species have lost any ability to photosynthesize and rely on prey.

Parasites draw nutrition from the roots or stems of photosynthetic plants. Some Poseidon species have quite exotic shapes, such as the iridescent apple and the mandrill spire.

Saprophytes draw nutrition from decaying organic matter. Many other species, particularly stranglers, utilize symbiosis with fungi and bacteria to take advantage of this strategy.

Other Characteristics

The trees often have very thin, smooth bark, flowers and fruit grown directly from the trunk, and the trees use fleshy fruits to disperse seeds through animals.

The poor soils prevalent in old substrates of Earth are rare on Poseidon. Volcanic regions have rich and fertile soils, and even the older landmasses are fairly rich in nutrients. Rainforests on Poseidon are more robust and durable, a trait encouraged by the frequent storms.

There is considerable variety in rainforests. Species of fauna are often adapted to narrow conditions of temperature and humidity. Storm severity forms another variable to species development, along with distance from the shore and soil.

The clearest shifts in rainforest composition are between eastern and western sides of landmasses. High variations in storm severity and precipitation occur along this dimension. Another clear shift is between wet, tropical rainforests, drier subtropical rainforests, and subtropical or near-temperate rainforests exposed to frost.

Divisions

Rainforests are roughly divided into two overall diversity types: Type I and II. **Type I** is common to the Pacifica Archipelago. **Type II** is found throughout the Darwin Archipelago, Arc of Fire, and Endeavor Islands.

Poseidon rainforests are further divided into main systems, inland systems, and coastal systems.

The **main system** is most common, and is most similar to the island rainforests of Earth. They are found along islands as well as in deep inland concentrations. The majority of both Type I and II biozones are main rainforest systems.

Inland systems are particular to Poseidon, found in a few large inland regions with large concentrations of freshwater. The growth stalls at a lower elevation and the ecosystem is marked by formation of marshes and bogs. This system has only been observed in Type I regions and is rather rare. Most inland regions are covered by conventional main systems.

Coastal systems are found at the mouths of rivers and at the coastal borders of main rainforest. Trees grow out into the water, consisting of a variety of species adapted to move laterally instead of vertically. They are also marked by competitive tree-killer symbiotic relationships, where plants host organisms that kill and fell other trees, giving the plant an opportunity to take advantage of the opening. These systems are only found in Type II regions, and may have influenced the evolution of Poseidon mangroves.

Type I trees are dominated by fretted palms—which resemble palm trees of Earth—and wing-leaf conifers. Type II trees are dominated by segmented palms, distantly related to fretted palms, a variety of flowering broad-leafed chandrids, and several orders of conifers.

Fauna

Animals in rainforests are quite diverse. Many adapt an arboreal existence, develop bright colors and distinct patterns, use loud vocalizations to communicate over long distances, and rely on a diet of fruit. On Poseidon, many tropical species, particularly avians, are migratory due to the storm season. The vast majority simply migrates from one hemisphere to the other, avoiding the worst of the weather.

Many amphibious forms of life have evolved to take advantage of rainforests. These include land crabs, salmon mussels, tree hydrae, strand poly-pods, and others. These organisms take advantage of the dense vegetation and high humidity.

Variations

Where rainforest is rapidly cleared and the substrate becomes waterlogged, tropical grassland and palm savannas may develop. Particularly large reefs can sometimes evolve into islands covered in rainforest.

In regions marked by high seasonal variation in precipitation, monsoon forests form. These are marked by a more open canopy and dense understory. Trees are more frequently deciduous, responding to seasonal cycles of rain.

POSEIDON CREEPER FOREST

Creeper forests are an adaptation to the frequent and violent storms of the Poseidon tropics. In regions characterized by rapid shifts in weather and sea level, rainforests give way to creeper forests.

FLORA

Creeper forests form under most of the same conditions as rainforest and are frequently found on the east sides of landmasses in the tropics. These edges face the brunt of storms traveling around the Storm Belt.

Many plant species are shared between rainforests and creeper forests, but there are significant differences. Creeper forests may look like the margins of rainforest to the untrained eye, but the differences are considerable.

Creeper trees are no more than 24 meters high, and many are shorter. The canopy is generally loose, supporting a mid-growth layer of two to 10 meter plants of wide variety. Mid-growth plants include hardy deciduous shrubs, creepers, and dwarf trees. Ground cover is quite dense, with saprophytes and ground-creepers forming a tight mesh. A good deal of light hits the ground, and the soil is kept protected from storm by this thick layer of plant material. Though lacking epiphytes and having few parasitic plants, creeper forests are nearly half as diverse as rainforests.

Creeper trees are closely related to carniflora, with a banded or viney appearance. Their bark is tougher and thicker than those found in rainforest.

Creeper trees have two major adaptations to storms. They are semi-deciduous, relying on two forms for different seasons. During the storm season, spring to mid-autumn, they grow short, palm-like leaves. These are built to take a lot of punishment. During the relatively dry season, branches grow horizontally, creating a more solid canopy. The palm-leaves die and are replaced with numerous small, rapidly growing leaves. When spring approaches again, the leaves are shed and the branches become limp. Shedding bark, the branches fall slowly and attach through creepers to the main trunk. New palm-leaves grow from the branch tips, and the cycle begins again.

Creeper trees also have long arm-vines growing throughout the underbrush, and have a peculiar root system. They are designed so that during fierce storms the trees will fall, with some flexibility, to the ground. Lax roots and arm-vines will take up some of the force of the fall. Once the storm is over, the tree will pull itself back up over the course of a few days.

FAUNA

Animals of the creeper forest have developed a number of ways to handle storms. Common adaptations include balling up (for animals with hard shells), attaching to undergrowth, burrows, or rapid breeding. Many species, particularly avians, rely on migratory patterns to avoid the worst of the storms. Some migrate no further than to the other side of the landmass they are on, a behavior well recorded on Prime Meridian.

VARIATIONS

Creeper forests, though highly developed, seem to be an older ecosystem than rainforest. Most are found in the islands of the Arc of Fire and Darwin's Archipelago. In the Pacifica Archipelago, there are signs that rainforests are slowly replacing these biomes. There are two prevailing theories concerning this. The first

is that creeper forests and rainforests are in ecological competition, and the greater diversity within rainforests is giving them an edge. The second theory is that creeper forests form a beachhead biome, transitioning to rainforest over time. Studies of island ecosystems are underway, and researchers seek to determine the truth of the relationship between rainforests and creeper forests.

TROPICAL ELEVATED REGIONS

On Earth, the mountains in tropical regions are marked by regions resembling temperate or arctic climes. Instead of an annual cycle of cold and warmth, the cycle is diurnal. Throughout the year, nighttime brings frost.

On Poseidon, **tropical elevated regions** are relatively common. Prime Meridian and the Zion Islands are marked with robust tropical elevated growth. Westcape has a simpler, less robust tropical elevated region, either due to its overall youth or volcanic action.

These ecosystems are rather isolated, developing from surrounding organisms in many parallel directions. There is considerable diversity between examples of this biome, even between isolated elevated regions on the same landmass.

Tropical elevated regions can be divided into two broad levels, the montane level and the dry level.

The **montane level** suffers variable temperatures unfamiliar to most tropical species and is often marked by dry conditions. The montane level exists from around 1,200 meters to approximately 4,200 meters, and often has several component levels of its own, corresponding to distinct conditions. Seasonal variations in rainfall become more acute at this level, leading to bands of deciduous or other hardy trees.

The **dry level** resembles dry, bare tundra, forming above 4,200 meters and continuing to the snowline. Along the tropics, the snowline is usually around 5,500 meters. Woody plants, shrubs, and ground plants dominate the landscape. Dry layers are particularly vulnerable to ecological damage.

POSEIDON DECIDUOUS FOREST

Deciduous forests are quite diverse on Earth. With a number of distinct groups that inhabit temperate regions and colder regions (taiga), these forests have an important place in the ecozones of Earth.

Poseidon is markedly different. Seasonal variations in temperature are more extreme, but the vast majority of landmass on Poseidon lies within the tropics. Most deciduous forest has evolved as a response to seasonal shifts in precipitation and storms.

There are three distinct groups of Poseidon deciduous forest. Temperate forests are found mainly in the southern hemisphere, on Westcape, the Southern Hope Chain, and the southern regions of the Arc of Fire. Dry tropical forest is typically formed in tropical regions marked by long dry seasons or lack of rainfall, and is common throughout the tropics. Montane forest develops at high elevations in the tropics.

TEMPERATE FOREST

This biome is marked by seasonal variations in temperature, light, and precipitation. These patterns are less clear-cut than in **temperate forests** of Earth, with forests entering winter phases in a somewhat irregular manner. The highs and lows of forest activity are not as pronounced as on Earth, though they approach typical Earth patterns at about 50° latitude and higher.

Flora

The structure of the forest consists of 18 to 300 meter-tall trees, a small tree or sapling layer, a shrub layer, a seasonal layer of quick growing plants, and a ground layer of lichen and mosses. Lichen and mosses also grow in the thick bark of temperate trees. Lianas (climbing plants) of various kinds are common, seeking to flower and fruit high in the canopy.

Temperate forests spread through successive waves of transitional biomes. Grassland gives way to scrubland. Stands of fast growing, small trees form. The stands interlock into light forest, then slower growing, large trees form. Eventually, the final ecosystem develops. Fires, grazing, and other events help cycle these biomes.

The soil of temperate forests is unlike its analog on Earth. Poseidon temperate forests bind a great deal of nutrients in their root systems. Runners and interconnected root systems are used to provide stability and durability in the face of rapid weather shifts.

In regions with thin or poor soil, trees have evolved a variety of ways to break up or "cook" the soil into something more fertile. These traits are found among their analogs on Earth, but are more highly developed on Poseidon.

In regions marked by volcanism, the soil is already rather rich. Temperate trees in these regions often develop fixing roots, designed to fix as many nutrients as possible. The undergrowth in these regions is also noted for large numbers of mosses.

Fauna

Herbivores and omnivores are most numerous among the animal populations of temperate forests. Nuts provide sustenance, but leaves are poor in nutrients, even more so than on Earth. Mammals and avians dominate these regions. Carnivores are generally ranging, as these regions are not quite as rich as in other ecosystems.

Dry Tropical Forest

This biome has strong similarities to both temperate forest and rainforest. Like rainforests, there are minimal seasonal shifts in sunlight. Precipitation is generally low, though many patterns of rainfall are possible. Soil is usually fertile.

Flora

Dry tropical forest has close evolutionary ties to the rainforest. Many of the trees are related to vines, and have a winding look to them. Other trees are hardy, deciduous relatives of rainforest species.

Trees in this region release a lot of nutrients in their leaves, unlike in temperate forests. Nutrients are recycled quickly through the ecosystem.

The overall structure of dry tropical forests is much like temperate forests. Parasitic and saprophytic plants are common, except for the few examples of dry tropical forest in poor soil.

Fauna

Land lizards are especially common in dry tropical forests. Species flow between rainforests and dry tropical forest is very common.

Montane Forest

This biome develops in the montane regions of tropical elevated environments. Marked by daily swings in temperature and low precipitation, these ecosystems more strongly resemble Earth temperate forests. Leaves are shed during particularly low seasons of precipitation, forming a protective layer of humus. Tree species are dominated by tall, hardy varieties. At higher elevations, the largest trees give way to smaller varieties, and then shrubs.

Montane forests have strong similarities to both rainforest and deciduous forest. In the tropics, most of the deciduous varieties evolved from rainforest flora. Toward the subtropics, where milder climate may have once held, surviving relatives of deciduous forests may be found.

Tropical Savanna

Tropical grasslands are transitional or flux biomes. The ecological climax of these regions is either rainforest or tropical deciduous forest. When some factor prevents the growth or spread of trees, hardy grasses have evolved to take advantage of the opportunity.

Flora

Savannas are characterized by a primary cover of perennial grasses, often one to two meters tall. There are tree, park, shrub, and grass savannas. **Tree savannas** are also known as woodland savannas. Shrubs and trees, if present, are sparse. **Woodland savannas** are often identified by the dominant tree found, such as the acacia, palm, and pine savannas of Earth.

Savannas form when some element of the environment restricts the growth of trees. This may be due to extreme drought, damage due to browsing animals, frequent fires, toxic soil, or particularly thin soil. If the savanna is accompanied by scattered trees, the trees are species unusually resistant to the hazard. Grasses have evolved to thrive in regions where trees falter. These factors often change over time, causing dramatic shifts in the ecosystem.

Fauna

It is thought that grassland is comparatively new to Poseidon. There are only a few mammals and draconodonts that have adapted to exclusive grass consumption. Most other herbivores are generalists: They either consume grass as part of their forest range or are poorly adapted to a grass diet. These few species still represent a large number of animals, and a vari-

ety of mammalian and draconodontid predators use the cover to stalk prey.

Variations

Cooler regions are usually characterized by shrubs and low-growing plants, not grasses. They form in similar ways to savanna, growing in areas somehow hostile to the growth of temperate deciduous forests. Chaparral is an example, forming in regions dominated by dry summers and wet winters. Frequent fires prevent the development of temperate forests there.

DESERTS

Though less fertile than other regions, **deserts** support well-developed, diverse ecosystems. Life in the desert has evolved elaborate methods to tolerate or avoid the extremes of aridity and temperature.

On Earth, deserts form under four different conditions.

The simplest form of desert forms in the interior of a continent, far from available rainfall.

Another type of desert is formed on the tropics, around 30° latitude. High-pressure systems descend in these regions, causing rapid evaporation and arid conditions.

West coasts of continents between 20 and 30° latitude are often the sites of cold ocean currents and westerly winds. These create deserts, in which the primary source of precipitation is fog.

The last type of desert forms as the rain shadow of high mountain ranges. As a weather system travels up a mountain, it cools. Humidity is released as rain. Once it crests the mountain and comes back down the other side, the system warms, increasing its capacity for moisture. This results in dry winds. The overall effect is called a rain shadow.

Only two types of deserts form on Poseidon. The desert on Solstice, in the Endeavor Islands, is due to tropical-high pressure aridity. Vastly more common is the rain shadow desert, such as that found on Westcape.

Arid climates are defined as having less than 25cm of rainfall a year. Rainfall is often highly localized and unpredictable, though there are usually seasons in which precipitation is most likely. Annual variations in total precipitation are also great.

Temperatures are highly variable, exceeding 38°C on summer afternoons and then dipping to 20° at night. Deserts at high latitudes may experience periods of freezing temperatures. These conditions create very poor, sandy soils.

Aridity is the most significant factor in the creation of a desert.

Flora

Plants have evolved strategies for reaching precious water. Poseidon desert plants show a great parallelism with those of Earth.

Phreatophytes have long taproots that may extend up to 10 meters to find supplies of groundwater. Underground streams or trapped sources of water may be available. The Westcape ziggurat tree is a common example.

Succulents store water accumulated during rains for use in the interim. Species vary in where they store their water, creating easily identified types. Both Earth and Poseidon species come in stem succulents, leaf succulents, root succulents, and fruit succulents.

Ephemerals live only during wet spells, with a two- to three-week life cycle. Ephemerals grow hardy seeds that can survive years of desiccation.

Cryptoperennials store nutrients and water in underground bulbs, remaining dormant most of the year.

Shrubs are the dominant plants in deserts. They may be evergreen or deciduous. Most have small leaves, spines, or thorns, and many produce aromatic oils. Root systems are broad but shallow to ensure that what little rainfall arrives reaches the plant. Desert shrubs form an open canopy, with bare ground between each plant.

Fauna

Animals of the desert have their own strategies for handling the aridity and temperature variations.

Behavior is a relatively simple way of handling conditions. Many desert animals are active at night or twilight. Others burrow or stay in the shade during the day.

Morphological changes allow animals to survive desert conditions. Small body size and long limbs help radiate body heat from warm-blooded animals. Light coloration helps reflect sunlight and prevent absorption of background heat.

Physiological changes are relatively rare, but distinguish highly adapted species. Aestivation (dormancy during the summer), deposits of fat in tails or humps, lack of sweat glands, concentration of urine, and salt glands to secrete minerals without losing fluid all bestow survival benefits.

Draconodonts, like their reptile analogs on Earth, are well suited for desert conditions. Draconodonts are a bit closer to their amphibious roots, however. Poseidon ground birds fill many niches in the deserts.

CANYONLANDS

Poseidon is a geologically active planet, and canyonlands are relics of this seismic turmoil. Geologists believe that massive volcanic eruptions create vast ash beds, and these beds are compressed into sedimentary rock over millennia. Subsequent uplifting and earthquakes can shatter these beds, leaving what the natives call tumbledowns. The tumbledowns are huge regions of massive boulders and high, sheer cliffs interlaced with submerged canyons, channels, and caverns. Few of the rock shards are large enough to be considered actual islands, and they provide little purchase for soil or vegetation. As a result, most of the formations that comprise **canyonlands** are barren heights covered with avian colonies and layers of guano. The sheltered canals, channels, and lagoons within the canyonlands, however, support a great variety of plant and animal life.

By providing significant protection against the storm winds and waves continuously raging across Poseidon, the tumbledowns have allowed unique biomes to form in their sheltered waters. Algae of all types and colors grow on the lower reaches of the rock formations, and algae mats cover the surfaces of the calmer lagoons. An enormous variety of true plant analogs grow in the water and on the rocks. Various water vines, rushes, and sea grasses have evolved to take advantage of the habitat. Their productivity is the foundation for a thriving ecology. In fact, botanists believe that canyonlands contain a greater variety of marine plant species than any other habitat on Poseidon.

As with any such aggregation of life, the tumbledowns prove to be good hunting grounds, for Poseidon's native predators as well as the native colonists. The downs can be dangerous, however, particularly in areas where tidal ranges are large. Tidal currents confined by the high and narrow channels within the canyonlands can cause dangerous surges, rips, and tidal bores. In some channels, water depth can change by 10 meters in just seconds during an incoming tide, and such flow can be violently turbulent. In other canyons, walls of water five meters high can rush through several times each day, as tidal bores form in the restricted channels.

Canyonlands are not common formations, as the geology and seismic forces needed to create them are particular. There are only a few large tumbledowns, but the largest, known commonly as the Wall, is almost 1,000 square kilometers in size. A largely unexplored area, this canyonland is reputed to be a sort of no man's land, a haven for black marketeers, smugglers, and various extremist groups. A few native villages perch carefully on outcroppings or float quietly in sheltered lagoons among the rocks along the edges, but there are no major settlements anywhere within the Wall. It is likely such privacy makes these areas even more appealing to those dubious sorts interested in avoiding the authorities.

VOLCANIC ISLANDS

Volcanic islands are composed of a number of different types of rock. They range from light rock, full of silica and aluminum, to dense rock, rich in magnesium, iron, and titanium oxides. Poseidon is composed of a larger proportion of lighter materials, a difference reflected in the composition of these islands.

Dissolved gases may make rock light and "fluffy," like pumice. Thick, syrupy magma can cool into very dense rock. The light and porous rock erodes relatively quickly, and provides a lot of footholds and texture to trap sediments. These encourage the development of soils. Both types of rock are rich in minerals that plants thrive on.

FLORA

Volcanic islands often develop reef structures, whether tropical coralline reefs or temperate tidal mud reefs. They are quickly settled by a variety of life

forms adapted to wide ranges, particularly palms and shoreline kelp. These are followed by a succession of plants, each thriving in successively richer soils. Lichens and mosses help break up stone and lay down organic material, and then epiphytes and other plants that can thrive on thin or sandy soil to establish themselves. Eventually, rainforests or deciduous forests appear. Following the plants, highly mobile animals appear first. Even mainly land-dwelling animals can swim short distances, and can slowly fill chains of islands. Some lose their mobility over time.

Variations

Given the relatively large oceanic barriers, there is often highly regional development of species. Islands that are part of a chain will still show strong endemic variations, and chains separated by hundreds of kilometers of ocean will have quite distinct native forms.

POSEIDON TUNDRA

Tundra on Earth usually occurs at the northern edge of large continental landmasses in the northern hemisphere. They are characterized by a short growing season (seven to 11 weeks), long, cold winters, very little precipitation, and drying winds.

On Poseidon, these conditions are relatively rare and found predominantly in the southern latitudes, particularly in the Southern Hope Chain. While the Southern Hope Chain receives more moisture than is characteristic of tundra, the overall similarities are strong. Permafrost prevents the growth of true trees, as on Earth. There are four types of **Poseidon tundra**.

Dry bare tundra is similar to that of Earth, dominated by low shrubs, lichen, and mosses. Leafy plants are often deciduous. Grasses like Earth's heath are common in some regions, particularly those at lower latitudes. This is one of the simplest ecosystems, in terms of species diversity and structure of food chains.

Wet scrub tundra is fairly similar to dry bare tundra, but it also resembles temperate scrubland. The shrubs are a bit taller and denser, forming a solid undergrowth for endemic animals, and the growth season is more spectacular. This is found in the northwest regions of the Southern Hope Chain, where weather systems from the Pacifica Archipelago deliver moisture during the early spring.

Sedge-kelp tundra is found along rocky coastline. Sedge-kelp is a particularly hardy form of kelp that has evolved to thrive on land. With long taproots reaching into the water, it has a complex vascular structure that allows it to derive moisture from seawater. These ecosystems can stretch for kilometers, though they only extend a dozen meters or so inland. Still, they provide a refuge for endemic species. They do not have as sharp a growing cycle as other plants, and are less frequented by migratory animals. Sedge-kelp is absent in more humid environments, where scrub dominates. Tundra zones in the northern hemisphere are frequently sedge-kelp tundra.

Sedge intermediate is a variation of the sedge-kelp tundra. Coastlines close to soil are dominated by a symbiosis of sedge and other plants. In this still very arid environment, sedge-kelp forms cooperative root structures with mosses and shrubs. The forest is only 70 to 80 centimeters tall, but extends almost 100 meters inland. Sedge intermediate tundra resembles scrubland in many respects.

Fauna

There are few migratory land animals in this biome, given an absence of land routes to other climes. Those that do migrate are constrained to moving to moderately more tolerable climes when the seasons shift.

More mobile migratory animals reside for most of the year in the temperate forests of the Arc of Fire. Some dwell in Westcape or warmer regions of the Pacifica Archipelago, and a few are known to summer in the Endeavor Islands, particularly avian species. Migratory animals are almost exclusively carnivores, and many are insectivorous. They migrate to the tundra during the short growing season, timing their arrival to mid spring, when insect and herbivore populations are highest.

Aquatic migrations are common, with caneopoise and schooler pods making their way to the waters of Albion yearly. With the prevalence of food, migratory animals take advantage of the abundance for mating. Some particularly fertile species may have two or more cycles of young during the short growth period.

There are a number of typical adaptations among endemic populations. Adaptations include cyclical variations in population size, hibernation, diurnal activity, burrowing behavior, large, compact bodies to conserve heat, a thick insulating layer of feathers or fur, and coloration that turns white in winter and brown in summer. Another useful strategy is the deposition of thick layers of fat during the short growing season. Fat acts as both an insulator and store of energy.

On Poseidon a number of draconodont species are found in the tundra. Draconodonts of the tundra are divided into endemic herbivores and migratory amphibious carnivores. The resident herbivores are uniformly small and rely on hibernation to survive the long winter. Most have highly cyclic populations. The migratory amphibians have thick layers of fat and generally feed on other migratory sea animals. Several feed exclusively on the eggs of migratory birds or other amphibians.

THERMAL OASES

These ecosystems are never individually large, but in the seismically active areas of the polar regions they are common. When geologic faulting and thermal vents bring internal heat to the planet's surface, the effect is great enough to create a unique localized ecosystem. Ice and snow are held at bay by steam geysers, hot springs, and warm rivers. Subsequently, temperatures are raised enough in sheltered areas to support plant and animal species that would not otherwise survive in the polar wastes.

These areas are often tundra-like—mosses, lichens, a few smaller plants and animals. Some areas—those deep in glacial-cut valleys or otherwise protected from prevailing winds—are more complex. The ecology of these strange habitats is not diverse, as evolution in such an unstable, changing environment would not be able to create great variety. What has evolved, however, is remarkably adapted to the eternal whims of geology.

As volcanic activity and thermal vents are born or die over thousands of years, these **thermal oases** come and go, and with them their biological communities as well. Therefore, these communities are simple and adapted to change. The plants grow seeds that are wind borne and can be carried thousands of kilometers. Most of the animals are adapted to periodic migrations that can take them from one oasis to another. However, in the midst of an oasis' life span, these biomes are elegant examples of ecological principles. As one moves outward from the source of heat, the changes are much like those encountered while climbing a mountain. The plant species become shorter, hardier, and less abundant, and the air and ground dry out, getting progressively colder and more inhospitable. Some of these thermally active areas are quite large, warming (and therefore maintaining) oases thousands of hectares in size.

There are unique animals that live in these places, and as the oases have not been extensively explored, the actual diversity is uncertain. Most are small and

hardy, living off a variety of vegetation. There is some evidence of larger ice-pack predators that spend at least some of their life cycle in the oases. It is likely that they hunt the ice-pack margins and surrounding waters for large marine prey and use the oases to rear their young. If these animals are at all ecological analogs for terrestrial polar bears, it is advised that these biomes be explored with extreme caution.

Some of these heated areas are underwater, creating large holes in the polar ice caps. These holes and the slightly warmer waters attract large numbers of marine organisms, making such sites particularly productive in the already richly productive polar waters. Until recently, these biomes have held little interest for anyone but ecologists and geologists. Significant Long John deposits have been found in proximity to some of these sites, and have spurred interest in further exploration.

The same seismically active regions that maintain these oases exist planet wide, and they do affect the local ecologies. However, that effect is in inverse proportion to the local average temperatures—the warmer the climate the less the effect. As a result, anywhere between the sub-polar regions, these vented, heated regions become only interesting geological phenomena, not biological ones.

TIDAL POOLS

Tidal pools form where there is substantial tidal activity on coastlines dominated by boulders or bare rock. Trapped waters, refreshed through waves and tidal action, act as sanctuaries to a variety of sessile and mobile organisms. Tidepools are found throughout Poseidon. The canyonlands, in many ways, are a form of tidal pool.

ESTUARIES

Estuaries form in sheltered coastal regions, where seawater and freshwater mix. Estuaries vary in their origins and structure, some having a steady flow of seawater with the tide, others with rather sudden tidal bores. On Poseidon, the majority of estuaries are formed as part of a lagoon structure on the larger islands.

Some estuaries develop into tidal mud wetland, most clearly distinguished from other estuaries by the lack of grasses and dominance of large algae. These systems resemble mud shallows, but lack the characteristic reef-building organisms. Tidal mud estuaries host a number of organisms similar to those of the tidal mud reefs.

MARSH

Marshes form on the edges of slow-moving freshwater, resulting in low-lying wetland dominated by grasses. Marshes are common on Poseidon, particularly along river systems. Shifting paths of rivers often mean that marshes are transitional, drying into grassland and then forest, or filling with water.

On Earth, regions of slow-moving freshwater can develop into bogs filled with thick mats of acidic mosses. They may form from rivers or blocked ponds.

There are no true bogs on Poseidon, though two biomes resemble bogs in many respects.

Rainforest bogs form from several groups of ground plants typically found in rainforests, which grow into mats of thin vines. These vines develop a highly acidic environment that retards the spread of saprophytes and other plants. The material accumulates into thick mats. A large increase or decrease in water kills off the bog plants and saprophytes lead to a transition to a different system. Though normally associated with inland rainforest systems, rainforest bogs can be found throughout the tropics of the Pacifica Archipelago, even alongside main rainforests.

Caryatid bogs are found in Darwin's Archipelago and the Endeavor Islands. They are characterized by a thick growth of algae, forming a seaweed-like mat. Tall structures, which are believed to be symbiotic fungal growths, grow through the surface and can reach almost a meter in height. The bogs often have a detailed inner structure, with open spaces or "galleries" above and below the water-line. Caryatid bogs are typically high in metals and toxic to many animals and plants. Other microorganisms thrive in the environment, along with a variety of insects and amphibians.

POSEIDON MANGROVE

Poseidon mangrove is a unique and bizarre biome, having little in common with terrestrial mangrove forests except its name. Poseidon mangrove is a collection of similar tree-like plant species that grow entirely in saltwater, restricted to tropical and subtropical regions. These forests begin in the lee of small rocky islands, reefs, or shoals. As they spread, their long prop roots stabilize the seafloor with the forest eventually supporting itself, becoming its own protection against wind and waves. As the forest establishes itself, it grows both upwards and outwards, eventually dwarfing and finally overrunning whatever terrain provided its initial shelter. Subsequently, such habitats appear to have grown out of nowhere, seeming to have sprouted whole from the open ocean.

Stands of Poseidon mangrove can be small copses or can cover hundreds of square kilometers. From a distance, these forests appear as jungle-covered islands, but in actuality grow directly from the seafloor from as deep as 25 meters. The individual plants that comprise the mangrove are palm-like, with long tentacular prop roots that hold the plant securely in the seafloor and lateral branches that grow from trunk to trunk, binding the mangrove together in an intricate web as security against Poseidon's raging storms. The individual species of mangrove segregate by proximity to the open ocean, with the smaller, stouter forms growing on the outside, offering protection for the much taller, and therefore less stable, species towards the center.

Windward, near the forest's periphery, the mangrove species are stunted by wind and wave action and interlaced with wide tidal channels kept open by strong currents. Deeper into the mangrove, the tree-like plants become very large indeed, often reaching a height of 60 meters or more, and the tidal channels become narrow, dark confines. These growth patterns give mangrove "islands" a sculptured appearance, with their sloped ends aligned directly into the prevailing wind.

The ecology of Poseidon mangrove is a fantastic collection of interdependent species living in a variety of symbiotic relationships with the mangrove itself. The interlaced lateral branches result in a multi-level canopy that far exceeds the diversity of canopy systems in terrestrial rainforests. Other plant species, epiphytes, grow amidst the canopy in such diversity and abundance they create a jungle within a jungle. Vegetation density is so high that little sunlight ever reaches the water's surface below the canopy, and in some places, the lowest levels of the mangrove are completely dark.

Another world entirely exists below the water's surface, under the mangrove. A chaotic web of interlocked prop roots not only secures the mangrove, but stabilizes and collects ocean-floor sediments. The roots also collect and trap organic matter falling from above or drifting through on water currents. This material not only provides nutrients for the mangrove itself, but also serves as a vital component of the local food web.

An incredible variety of animals also inhabits the mangrove, both above and below the water's surface. The intertwined branches serve as runs and pathways for a variety of amphibians, reptiles, and even many mammaloids. The trees are alive with insect and avian analogs and many other as-yet-unclassified species. Water hemp stretches everywhere, lacing the mangrove plants together in a dense weave,

as other creepers and vines cover everything. Where dense formations of lateral branches have collected large amounts of organic detritus, soil pockets have formed, supporting meadow like areas suspended in the canopy. Usually covered in dense vegetation, such areas support a variety of land plants, including certain species of carniflora.

Beneath the water's surface, a vast variety and biomass of fish live off the high productivity of the forests. Larger predatory species are also common, drawn to the rich hunting grounds. This is a world of deep shadows and utter darkness, and many of the species unique to this environment have evolved luminescence, sonar, or electric field emission as means of navigation or of finding prey.

Mangrove forests are apparently vital nursery grounds for many open-ocean species, where eggs are laid and young find food and safety. Juvenile polypods are fairly common in these habitats, and sea weaver nets are found everywhere among the submerged root systems. Even hungry greater whites are sometimes drawn to mangrove islands where they have been known to pulverize large areas and then swim through the debris, consuming everything.

Native colonists have found the mangrove to be choice hunting and fishing grounds, and relatively safe havens from the larger of Poseidon's predators and the worst of its storms. Most of the larger land predators are uncommon in the mangrove, and once away from the periphery, the mangrove is also proof against the larger aquatic predators as well. Like terrestrial mangrove forests, Poseidon mangrove also provides excellent protection from the planet's ubiquitous hurricanes. The vast and complex root systems completely dampen wave energy, and the flexible trunks, compound leaves, and interlaced branches serve well to break even the highest winds.

The mangrove is so productive, and such good protection from Poseidon's hazards, that after the failure of the resupply effort, many of the original colonists built whole villages within mangrove canopies. Some of the "wilder" natives still live in such villages, and most natives still make use of mangroves as seasonal hunting camps.

SHALLOWS AND SHELVES

Coastal shallows are roughly divided into three types: eastward tropical, westward tropical, and temperate. **Shallows** are defined by regions where the depth is less than 150 meters. In regions with continental masses, the undersea surface of the continent can extend even further.

Eastward tropical shallows lie to the east of tropical landmasses. They experience quiet and bloom seasons, just like coral reefs. Extensive shallows allow lagoon-like conditions, though stronger currents often run from east to west. These currents bring nutrients into the shallows. Nutrients also flow from rivers into the sea, creating smaller fertile regions.

A wide variety of marine algae and other plants thrive in the shallows. Some rely on breakaway roots and quick growth to survive storms, while others simply drift. The floors are relatively thin in silt, except around river outflows. Concentrations of plant and animal life form around turbulence shadows, where sediment gathers the most. Species are adapted for larger ranges and more mobility than in lagoons, but the strategies are similar. Amphibians are common, with predators ranging over large territories. Flying organisms do well, as they are able to avoid aquatic predators and cover large territories.

Westward tropical shallows are on the western edge of tropical landmasses. The environment is fertile, fed by runoff from the landmasses and upwelling from the west. Western shallows suffer less from seasonal storms. These factors create a diverse and robust biome. Westward shallows strongly resemble lagoons, and coralline structures often grow in these conditions.

Temperate shallows are mainly found in the Arc of Fire and are dominated by the weather systems described under the temperate shelf biome.

Variable conditions of cool rich waters and warm poor waters, plus the variation in seasonal light cycles, open a niche for fantastically successful kelp. Growing rapidly in high nutrient, high light conditions, the hardy undersea forests of kelp can withstand periods of cooler temperatures and harsh conditions. They form a solid foundation of temperate shallow food chains. Kelp forests also provide hiding places and protection from currents or predators for a wide variety of organisms.

Animal species are adapted for colder waters, forested conditions, and seasonal variations. These adaptations include layers of fat, hiding behavior, attachment behavior or morphology, camouflage in

the form of coloration or morphology, rapid breeding and population expansion cycles, and migration. Mammals have quite successfully taken advantage of this ecosystem, as have a number of avian groups. Migration patterns to and from the tundra frequently begin and end in temperate shallows. Many animals summer in temperate shallows, and winter in tropical regions.

A variety of unique worm-like organisms inhabit these ecosystems. Resembling flatworms, velvetworms, and less recognizable animals, each probably represents a new phylum of the animal kingdom. Although some of these organisms have been found in other biomes, they are only found in large numbers in temperate shallows. They occupy niches traditionally occupied by small fish and sessile cnidarians, and many form symbiotic relationships with algae or cyanobacteria.

Some of the largest and most successful fish species are found in temperate shallows, though most are migratory. The prevalence of river spawning among Earth fish is absent from all known fish on Poseidon. Instead, the only comparable examples are some freshwater fish that migrate to the oceans to spawn. The chittering yellow fly is one of several insects that have adapted to kelp forests. It migrates to the land only to lay eggs that survive the winter. Come summer, young yellow flies return to the sea. They thrive on the many small organisms that proliferate in the surface waters amongst the kelp fronds, including small worms.

VARIATIONS

Close to the shore, the coast is dominated by sand and rock. Where wave action is light, the beaches are composed of fine sand. As wave action increases, the sand becomes rockier, eventually giving way to boulders or bare rock. Away from shore, the sea bottom is also layered in sand. Continental shelves are marked by conditions similar to the shallows. The composition of species and the environment shifts toward the open ocean biome. Strong currents can bring shallow-water organisms further out to sea. A number of mobile animals cross the shelves to cover many shallows.

REEFS

Reef development is fairly well understood. Reef-growing corals, pseudo-corals, and tidal mud organisms grow in the photic layer, giving their photosynthetic partners light to thrive on. Sea levels shift over time, allowing reefs to expand and build huge structures.

The standard model of a coral reef is the fringe reef-barrier, reef-atoll pattern.

Fringe reefs begin as corals and grow in the shallows around an island, usually volcanic. Volcanic islands are rather sudden, geologically speaking, 'floating' on the crust. After they first appear, they slowly sink back, compressing and settling in. Coral grows upward, to maintain exposure to the light.

The shift to **barrier reef** stage occurs as the ring of coral expands and the island sinks. The outer edge of the reef is exposed to more plankton from oceanic currents—the coral's primary food source —than the inside. The inner edge is also subject to more sedimentary deposits, which hard corals do not tolerate well. These factors, in combination with shifts in sea level, cause the reef system to expand outward. The inner edge builds reef more slowly than the island recedes, and a lagoon soon forms. The reef often extends out of the water, due to shifts in sea level, allowing the growth of hardy trees and plants.

Lagoons are typically quite shallow, with depths rarely extending beyond the photic layer. A wide variety of marine organisms thrive in lagoons amidst kelp and a variety of plants. These include shellfish, eduropods, soft corals, hydrae, and sea pens. More mobile feeders can use the other organisms or reef surface as protection.

The outer edge has an equally diverse ecosystem. Though more nutrients arrive from oceanic currents, these currents are more vigorous. Benthic organisms have evolved to hold very strongly to the coral. Free-swimming fish and other animals must contend with stronger flows.

Eventually, the island will submerge completely, forming a ring of reefs around a shallow lagoon. This is an atoll. The ecosystems are much like those around barrier reefs. Eventually, the reefs collect sand, forming islands called cays.

Reef systems often show great diversity, as species flow between them is relatively limited.

FEVER

This dictation is of progress notes regarding visit of patient David Kruszecki on October 30. David presents today with fever, nausea and vomiting times three days, anemia, orientation times zero, headache, and a pronounced red stippling on both lower extremities. Temperature is 39.1C, pulse is 120 and thready, resps are 35 and shallow, and pressure is 110 over 50. Abdomen is tender, bowel sounds reduced, some organomegaly present.

David was accompanied by his supervisor, the tool-pusher at a company oil platform. Although David was largely non-responsive, his supervisor was able to give a relatively detailed history. He says that four days ago, David cut his leg while working on a valve fitting on the platform. I asked if the cut had been exposed to unpurified water or the ocean, David's supervisor said that it was not impossible. The cut was apparently cleaned poorly, if at all, and appears red and inflamed to observation. It is apparently quite painful and measures approximately three centimeters in length over his right calf/ and is deep enough to involve the underlying musculature.

After having his injury bandaged, David returned to work and appeared normal, although he did not eat that day. Indeed, he has had no solid food since the injury, and has only been able to keep small amounts of water down. On the morning after the injury, David reported for work, but was sent back to his quarters shortly before noon complaining of a migraine and nausea. He did not report for work the next day. This morning, the orderly at the platform infirmary noticed that David was running a pronounced fever and recommended he be transferred.

Chest and abdominal films revealed pronounced darkening of the lungs, liver, spleen, and both kidneys concurrent with the presence of profound infection. A bronchial culture revealed the presence of…um...mycoplasmium holstii, defined by Tuckers Encyclopedia of Infectious Diseases of Poseidon as a pseudofungal infection of the major organs, probably contracted from exposure of his wound to seawater. MRI indicates that the fungus has entered the patient's brain and done considerable damage there.

David was given 20ccs sporovir IV push, followed by 10ccs per hour in Lactated Ringers. Although he evidences no bacterial infection, he was given 10ccs cephlacycline prophylactically. This course of treatment is to continue for the next 12 hours until I can reevaluate him.

Should he manage to fight off the pseudofungal infection, the cerebral damage he has already sustained would probably be sufficient to render him mentally and/or emotionally incompetent. Recommend supportive treatment only.

Signed,
Ross Coyle, MD

Reef Builders

Coral and pseudo-coral are exclusively tropical species. Reefs composed only of coral are more common among non-volcanic reef systems, developing from uplift formations or seamounts. Pseudo-coral reefs are generally restricted to volcanic islands, beginning as pure coral reefs that are later colonized. A border of pseudo-corals forms at varying depths. Pseudo-coral reefs achieve a balance between pseudo-coral and coral that is unique to each location. Whether pure or mixed reefs, sponges and other calcareous organisms have a part in their growth.

The tidal mud reefs, or mud shallows, of Poseidon are strange and poorly understood ecosystems. Confined to shallow and sheltered temperate waters, these formations are true organic reefs. They are huge aggregations of various species of symbiotic microorganisms similar to terrestrial cyanobacteria. The organisms have interdependent life cycles, and like marine stromatolites, these creatures form ever-growing colonies. They build absolutely massive structures hundreds of kilometers across. These structures rise off the bottom so that their upper surfaces are within the intertidal zone, holding the pho-

tosynthetic animals up to sunlight. In older parts of the reef, so much material has collected that dry islands have formed. Built of rich sediments, these islands support plant species common to the latitude, also serving as safe rookeries and isolated refuges for many smaller and rarer animals.

Dependent on sunlight and waterborne nutrients for metabolism, the mud reef microorganisms form beds and individual colonies right at the water's surface. Subsequently, as daily tides rise and fall, portions of the reef are exposed. Various species comprise the colony, some building higher than others, tolerating more exposure, others always below water level, tolerating no exposure. The result is a shallow, canyonized topography interlaced with tidal channels and pools.

The reefs are natural traps for drifting sediments and organic material so that much of their composition is a thick organic mud that gives the reefs their characteristic reddish-brown color and strong organic odor. Apparently, these reefs begin in very shallow water, growing slowly outward into deeper water over centuries, decaying and trapped material building towards the surface so the symbiotes can grow in the sun.

The collected mud and rich organic oozes make this biome a fascinating but dangerous place. Diverse plant and animal species have evolved to live here, and many transient species and generalists make their livings here, too. Over much of this wet and soupy habitat, the mud is so fluid they support organisms adapted specifically to living within them—various microbes and amphibious creatures, as well as larger, much less benign organisms. The rare but dangerous Howell's leech and the lethally poisonous string worm are two examples of high-level predators found only in the dark mud of the shallows.

Dangerous organisms aside, this mud also make traversing the reefs on foot rather risky. Flowing ooze and deep pools combine to form quickmuds that can suck a panicked person down to his death. Additionally, large bubbles of waste gas can form from decaying organic material deep within the oozes. Pressure on top of these slowly rising pockets can rupture them, dropping the unwary into cavities that instantly fill with thick, choking mud.

Without using some sort of VTOL aircraft, exploring these regions is unwise. The shallows prove rich hunting grounds, but even native colonists invade only the outer edges of the reefs, collecting the shellfish so abundant there. The central regions they readily leave to the mud and the unclassified predators that stalk them.

Reefs and Seasons

Coral and pseudo-coral reefs, unlike those of Earth, show a strong adaptation to seasonal weather.

The quiet season begins with the start of storm season, and brings with it a number of changes in animal species. Pseudo-corals, particularly, develop thicker head plates and may enter a period of inactivity during the worst of the storms. Many species migrate from the reefs, while some sessile organisms develop squatter, current-tolerant forms. This period lasts from early spring to the end of summer, though the timing varies a great deal between locations and even species within one reef system.

The bloom season starts at the beginning of autumn. The storm season is still in full swing, but at this point abundant nutrients have been liberated by previous storm activity. The waters around the reefs are fertile and bring on a rapid increase in the populations of phytoplankton and, soon, all other reef organisms. Sessile organisms often adopt more effective food-gathering shapes, losing the extreme current-hardiness. The seasonal bloom usually lasts until the beginning of winter.

Benthic species have evolved a variety of ways to handle currents and security. Cnidarians, a phylum that includes sea anemones, corals, jellyfish, sea pens, and hydra, are common in benthic formations, as are porifera (sponges). Passive and active feeding strategies allow many sessile organisms to latch onto a particular patch of real estate and wait for food to approach. Coral reefs themselves evolved as an elaborate form of this strategy.

Mobile benthic species rely on clawholds, crevasses, or other attached organisms to assist in fighting the current. Benthic species on a reef have the advantage of being close to sunlight or food that relies on sunlight, good currents, and safety.

Free swimming organisms gain the advantage of larger territories, but at the cost of dealing with oceanic currents. Amphibians are common in reefs. Many are migratory and have large ranges between various reefs.

SEAMOUNTS

Seamounts are dormant underwater volcanoes that rise about 1,000 meters and do not break the surface. Seamounts can form as a single mount, called a ridge, or a series of ridges, called a chain.

Seamounts form in one of three ways.

The first is **subduction zones**. The top plate is forced upwards as the other plate melts in the mantle beneath. Volcanoes soon form, creating a line of seamounts.

Hotspots are areas of internal convection, where intensely hot rock wells up against the crust. This often breaks through, creating a volcano. Since the crust moves and the convection currents are relatively stable, both compared to the orientation of the planet, the volcano moves off of the hotspot. After a period of time, the hotspot burns through again. This causes a chain of seamounts or volcanic islands.

Mid-oceanic ridges are the third origin of seamounts. At the center of the plates, convection forces up new material. The plate around this zone spreads, creating a ridge cracked with transverse faults. Volcanoes can grow from particularly weak spots in these ridges.

The difference between seamounts and volcanic islands is a matter of flow rates and time. If a volcano grows long enough, it will break the surface and become an island. However, the initial mass forms "high" on the crust. The crust has not had time to settle under the weight. Over time the crust will give under the weight and the mass will subside. Volcanic islands will often sink back as seamounts, in this way, depending on how big they are.

Seamounts are the site of considerable diversity. Currents accelerate as they move around seamounts, churning up waters from the depths. These deep currents are rich in nutrients, and feed plants and algae in the photic layer. Eddies also form above seamounts, creating an area of concentrated nutrients and reducing the action of currents. These concentrate the biozone, and provide abundant food sources for fish. Rich benthic communities often form, and seamounts of sufficient height can give rise to reefs. Migratory animals often take advantage of these riches.

OPEN OCEAN

Open ocean covers most of Poseidon, and is only disrupted by relatively small continental shelves, seamounts, and volcanic islands. Open ocean is one of the least fertile biomes on Earth, and Poseidon, though enjoying more nutrient-rich waters, is much the same. Life on Poseidon has adapted to utilize the resources of the open ocean.

SURFACE

The warm waters of the photic layer are separated by a sharp thermocline from colder, deep oceanic waters. This layer is about 200 meters deep and heated constantly by the sun. Most micro-organisms remain in the photic zone, as falling to the thermocline means death. This is complicated by wave action and turbulence, and the ocean surface is exposed to enough UV light to kill off many kinds of zooplankton. Plankton have evolved a variety of ways to survive these challenges. Flagellates of many types have whiptails (thus the name), which they use for propulsion. Larger algae form mats for stability and protection.

Another problem is the need for nutrients. Nutrients tend to leach from the photic layer as plankton dies. Poseidon oceans are generally richer in nutrients than on Earth, but the problem is still acute. Two unique ecosystems have developed on Poseidon to overcome this challenge.

The first are the **sargassum islands**, or weed rafts as they are sometimes called. They are arguably the most unique biomes of Poseidon. These ecosystems appear to have evolved from various species of free-floating algae similar to those found in the Sargasso Sea on Earth. In contrast, these species have evolved significantly greater buoyancy and more complex ecological relationships than their terrestrial analogs.

Though comprised of various colonial algal species, the rafts are ecologically similar in structure and function. The algae forming the rafts grow interconnected tendrils that hold the plant-like organisms together. Most of the tendrils sprout soft bladders into which are diffused metabolic waste gases. These gas bladders serve to buoy the rafts to the surface, and

as competition for sunlight and growing space continues, the growth eventually forms rather thick mats that may extend as much as two meters above the water's surface. Spongy in some places, solid in others, these mats are dynamic, growing and changing shape constantly. As one mass grows over another, it blocks the sunlight from the lower layers. As this happens, sections decay forming soft spots, slowly dying, eventually fertilizing the surrounding algae in a constant cycle of life and death.

These rafts float free in the open oceans, drifting as the currents and winds carry them. Sargassum rafts are found in shallow or deep water, sometimes even washing up against or growing completely around true islands. Most rafts are tropical to subtropical ecosystems, as the colder temperatures retard their growth. Storms constantly rend these floating mats into tatters. Often, these tatters drift on to seed new colonies themselves, some of the largest rafts growing to over a thousand hectares in size.

These mats are unstable environments, but they are also ecological wonderlands. The mats serve as filters and traps, collecting enormous amounts of drifting inorganic and organic material. Air- and waterborne seeds of various plants find purchase here and often grow well. In fact, some larger rafts even support small forests. Dotted with high and low spots, the rafts demonstrate a full range of moisture regimes, and in some places they are completely dry. Conversely, many rafts are dotted with ponds, channels, and pools, many of which are open to the water below, plunging off into the depths.

Weed rafts support a huge variety of animal species as well. Flying creatures find the rafts relatively safe places to rest or feed and raise young, unintentionally providing the raft with nutrients as they leave their own metabolic wastes behind. Untold numbers of aquatic and amphibious species find shelter, grazing fields, and of course, hunting grounds in the spongy surfaces and along the ragged, dark undersides. Attentive biologists find these biomes textbook demonstrations of nutrient cycles, energy flow, and trophic relationships. The unwary can discover the predator-prey relationships the hard way, as such upper-level predators as polypods, land lizards, and even some species of carniflora also stalk these habitats. Greater whites have been known to consume entire rafts one chunk at a time—algae, forests, animals and all.

Humans have also found many uses for sargassum islands. They are often good hunting grounds, and various food and medicinal plants are found only on the rafts. The dryer islands sometimes serve as hunting or fishing camps, offering welcome rest from long days in small boats. They have also long been known to serve as caches for smugglers and terrorists, being unpredictable and therefore relatively safe places to temporarily hideout or stash goods and equipment.

The second is the **veil mat**. Similar to veil drifts, these organisms form from a cooperation between algae and the veil organisms. With a filmy, filamentary structure and minute gas bladders, they spread thin but relatively durable layers just below the thermocline. Only a centimeter or two thick, veil mat communities can spread for many kilometers. These mats function as a net for material falling from the photic layer, gathering the debris before it can fall further. Since they live below the thermocline, they suffer little predation from zoo-plankton, and will normally avoid wave turbulence. Veil mats are still at the mercy of currents, and break apart when encountering strong up or downflows.

Veil mats form small gas-filled sacks that are released, punching up through the thermocline and floating to the top of the photic layer. They form tiny structures in symbiosis with algae, although it is unclear whether they incorporate algae or bring algae with them. This forms a cycle in which surface veil sacks drift and then sink, forming new mats.

A variety of free swimming cnidarians, fish, and some shellfish take advantage of the thinly distributed biomass. Certain large aquatic animals utilize their mobility to more efficiently harvest plankton. Mobile species often benefit from the higher density of life, and therefore more abundant food sources, around veil mats. Sargassum islands have elaborate ecosystems, forming centers of activity in the open ocean.

Benthos

The floor of the open ocean is relatively smooth, broken only by mid-oceanic ridges, seamounts, and volcanic islands. The abyssal plain is covered in a thick layer of ooze. This ooze is caused by organic sediment from the photic layer and from continental zones. It is a major source of nutrients, conveyed back to the surface through cold benthic currents.

Hydrological and meteorological systems create downflow at low latitudes and upflow at high latitudes. This creates extremely cold conditions at the ocean bottom, and matches the Earth's current system. This was not necessarily always the case, although the details of ancient Poseidon hydrology are unknown at present. On Earth, abyssal waters were a relatively balmy 18° Celsius approximately 140 million years ago, probably due to downflow of waters in the tropics.

This convection, of surface waters moving toward the equator and benthic currents moving away from the equator, encourages large temperature variations. A different arrangement of continental shelves could cause the reverse situation, in which the poles are warmed and heat is distributed more evenly throughout the planet. The current situation is rather advantageous for life on Poseidon, with continental shelves concentrated at relatively warm, low latitudes.

Earth's ocean floors are dotted with magnesium nodules, formed through the action of bacteria deep in the oozes and brought to the surface by scavenging worms. Although these are found on Poseidon, the waterworld boasts some elaborate abyssal structures. Many form at the continental rise, creating tubes and horizontal spikes sometimes hundreds of meters long. These structures are formed from metals, calcites, and silicates slowly dissolving into the water. Abyssal storms often cause large pieces to break off. It is believed that a combination of oxygen, organic debris, and erosion from the continental shelves flowing down into the abyssal plain feeds an elaborate ecosystem of bacteria. It is not known how extensive these structures are, but they have been found in almost every similar region.

Other abyssal bacterial structures include slime-domes. These layers are often dozens of meters wide, with "fingerlets" extending far into the abyssal ooze. Acting as centers of scavenging microorganisms, these are interesting due to their ability to form fruiting bodies, spheres of bacteria a few centimeters across. These fruit float slowly upward. It is thought that these are part of an elaborate life cycle or environmental transmission with veil mats, but this has not yet been proven.

The ultimate product of abyssal scavengers and the abyssal environment is dissolved CO2, bicarbonate, and organic compounds.

Methane hydrate formations found on Earth do not occur on Poseidon. It is possible that slime-domes or other organisms unique to the waterworld tap these formations.

Oceanography for Gamers

Because Blue Planet is set on a world covered in water, it is relevant to provide some basic oceanographic facts for players, and especially Game Masters, who may not have much experience with, or knowledge of, the oceans. Hollywood, as usual, has done its best to misinform, and this section will provide factual information that may be useful while playing Blue Planet.

Water Pressure

One of the most relevant topics, and the one most abused by Hollywood, is water pressure. Pressure is crucial to almost all underwater activities and phenomena, so it is important for players to understand a few things about it.

Water, just like air, exerts fluid pressure over the entire surface of a submerged object. At sea level the pressure on an object is equal to one atmosphere, simply the air above it. On Earth, as well as Poseidon, which has only a negligibly higher air pressure, this is equal to about 6.7 kg per 6.5 cm2 (14.7psi). Due to the greater weight of water, one additional atmosphere is added for every 10m of depth below sea level. This means that at depth of 100m the pres-

sure would be 73.7 kg, and at 1,500m the pressure would be equal to 1,005 kg. Obviously such extreme pressures have major engineering and medical consequences.

An airtight object lowered to a significantly great depth will eventually implode as the water pressure overcomes its structural integrity and crushes it. The same object filled with air at a great enough depth, and then brought to the surface, will eventually burst because the pressure inside expands the object as the external pressure is reduced.

There are two ways a submersible vehicle or structure can be built—to resist water pressure structurally, or to have the same pressure internally as externally. However, the two have very different restrictions.

If an underwater structure maintains surface pressure inside, then its crew would have to use pressurized air locks to get in and out, and would have to be equipped to deal with the extreme pressure waiting outside. However, they could travel back and forth to the surface without concern, as long as they remained at surface pressure. Such a structure would have to be overbuilt to withstand the water pressure, and would be in danger of being crushed if that structural support failed. Water entering through any hull breach or puncture would come through fast and under pressure.

If an underwater structure is pressurized to its depth, then air locks are not needed. Open hatches and pools in the underside of the structure can be used for access, the air inside keeping the water out. The crew could enter and leave the water at will, however, pressurizing to any significant depth can take many hours, and decompressing for a return to the surface can take weeks. Damage to such a facility would let water in but it would only flow in by gravity, and then rise only to the highest level of the hull breach.

Breathing Underwater

In a roleplaying game set on a water planet, the need to breathe underwater is common. In a science fiction setting there are a greater variety of options, but these are still based on scientific reality. There are essentially two general mechanisms that can be used. The first is to carry some sort of compressed air supply, and the second is to extract oxygen from the surrounding water, either mechanically or biologically.

There are several concerns when using compressed air supplies such as SCUBA or rebreathers. Obviously there is a time limit on their use. Though present scrubber technology has extended the effective endurance of rebreathers to over 40 hours, there is still a finite duration, and the deeper one goes, the shorter this limit becomes. At greater depths it takes more gas to fill the lungs to the same volume, depleting reserves that much faster.

There are other limits as well. Pure oxygen—when breathed under more than one atmosphere of pressure—is toxic, causing coma and death. The higher the pressure, the less oxygen a diver actually needs to breathe. Deep saturation divers breathe gas mixtures with partial pressures of oxygen of only a fraction of a percent.

Nitrogen itself becomes a powerful hallucinogen under more than a couple atmospheres pressure, and therefore must be replaced with other more biologically inert gases such as helium or argon. Helium makes for some pretty silly sounding divers and so alternatives are preferred. Regardless of the element, these inert gases are dissolved into the bloodstream under pressure, along with the oxygen, and when the pressure is released too quickly, the gases can come out of solution and form bubbles in the bloodstream. Besides being painful and causing cramp-

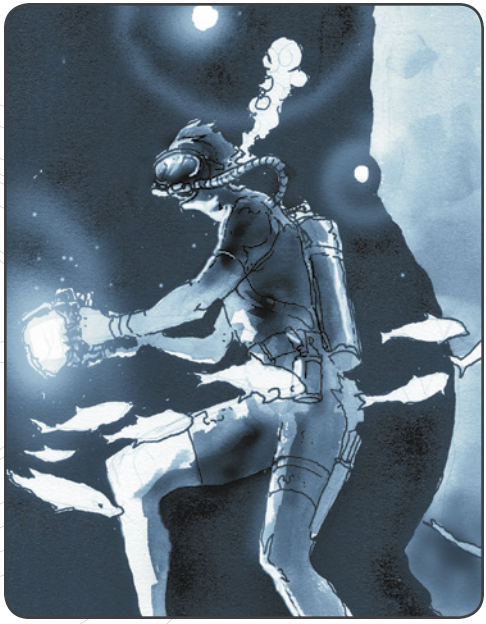
like symptoms that can "bend" a person over, the bends, or decompression sickness, can also cause lethal stroke-like effects.

Any diver breathing compressed gases who exceeds certain depth and time limits (only minutes much below 30m) must decompress while surfacing to avoid the bends. This means they have to pause at intermediate pressures to allow the excess dissolved gases to come out of their blood without forming bubbles. Saturation divers—anyone completely pressurized to a given depth—if coming from deep enough, have to spend weeks decompressing in shipboard chambers. This obviously limits the practicality of deep diving with compressed gas systems.

Though a bit out of context, it is relevant here to mention something else about decompression, science fiction, and Hollywood. In space there is no air pressure, but the difference between sea level and space is only a single atmosphere, whereas the difference between sea level and 30m depth is three times that. A person saturated to 30m who comes immediately to the surface will get a severe case of the bends, and if not repressurized, he will likely die. Regardless, he will not explode in a bloody mess. A person leaving an airlock into vacuum—only a change of one atmosphere—will not burst either. He will get the bends and suffocate, but he will not explode.

Fluid breathing systems, which exist now experimentally, help to eliminate these effects, increasing the depth and reducing the decompression requirements of a diver. However, they are hardly practical for common use. BLUE PLANET is a science fiction universe, and that can be used to our advantage in dealing with diving and underwater activity. Cybernetic enhancements and genetic modification can make for much more versatile and effective amphibious adventures.

Cybernetic or genetic modifications can fit characters with artificial or biological gills, and because these function without compressed breathing mixture, the problems of endurance and decompression are eliminated. Depth limits are drastically increased, and rates of ascent are irrelevant. Most such modifications also include things such as collapsing lungs, capillary constriction, and other elements of the cetacean diving reflex that also help eliminate most of the problems associated with subjecting the human body to deep diving pressures.



LIGHT UNDERWATER

Again, Hollywood has done a disservice to underwater imagery, but at least they have the right idea. Basically, it is dark underwater. Beyond even a few meters the light begins to dim, and only the highest energy frequencies—the violets and blues—are left before the light fades completely. Essentially, in seawater of average salinity and turbidity, there is effectively no light beyond about 200m. In murkier conditions, this depth can be much less, and even in absolutely pure water, no light can penetrate beyond about 1,000m.

In a practical sense this means that light sources are valuable tools for divers in anything but the shallowest water. In an ecological sense, this means that any organism depending on sunlight for energy, or depending on organisms that depend on sunlight, can not survive below 200m, and for most, even this is far too deep. Though recent discoveries have shown that the deep ocean rivals the shallows for species diversity, the greatest number of organisms are found in the sunlit waters.

SOUND UNDERWATER

Water is many times denser than air. As a result, sound behaves much differently in water than in air. Sound travels four times as fast in water, which makes identifying the direction of sound underwater difficult.

Animals determine sound direction by distinguishing which ear receives a sound first. With the accelerated speeds of sound underwater, humans have difficulty distinguishing which ear is reached first.

Sound also travels much farther underwater than in air, making distant sound seem closer, and impossibly far sounds audible. In fact, it is thought that certain low-frequency sounds produced by the larger cetaceans can actually be heard by other whales thousands of kilometers away.

Sonar, or Sound Navigation and Ranging, is a mechanical navigation and exploration aid that takes advantage of the enhanced nature of sound in water. By creating sound pulses and recording the echoes the pulses create when they strike submerged objects, sonar can be used to determine the distance, motion, size, shape, and even the composition of the objects. Obviously, on Poseidon, sonar is an invaluable technology.

The higher density of water also makes underwater explosions more dangerous than those in air. The concussion waves of underwater explosions create hydrostatic shock, the pressure of the explosion traveling farther, faster, and with more force. This can be deadly and the effects of hydrostatic shock are addressed in the rules covering explosions (see the *Player's Guide*).

Temperature

In the oceans, water temperatures vary widely. Surface temperatures in the tropics can reach 32°C and at the poles water can, of course, freeze solid. In the deep ocean, water temperatures are often actually lower than freezing, but the extreme pressure keeps the water from forming ice.

Exposure has always been a major cause of death at sea, and on Poseidon the danger is only more apparent. In any water colder than about 4°C hypothermia can begin in less than 10 minutes. Core body temperature begins to drop, and without immediate rescue and medical attention, death is likely.

Salinity

The salt found in seawater is simply an array of dissolved minerals, mostly sodium and chloride (table salt). On Earth, ocean salinity averages about 3.5%. On Poseidon, the types of dissolved minerals are similar, but as the water covers so much more of the planet's surface, the salinity is slightly higher, averaging about 4%.

Humans cannot safely consume saltwater, and on Poseidon, the abundance of freshwater is in direct proportion to the lack of dry land. Any population of significant size therefore has to supplement its freshwater reserves by distilling saltwater to make fresh. In modern settlements, fusion-powered desalination plants make this simple. In more isolated areas, people depend on hard work, evaporation traps, and traditional stills.

Tides

Tides are simply the rise and fall of local sea level in a predictable daily pattern. Tides are caused by a combination of the gravity of moons and suns, and centrifugal force caused by the interaction of the orbits of a planet and its moons. These forces draw ocean water into large bulges, true tidal waves. As the planet rotates on its axis under these waves, sea level appears to rise and fall as shorelines enter and leave these tidal bulges.

On Earth, there is a variety of tidal patterns, but in most locations there are two high and low tides daily. On Poseidon, with its two moons, the pattern is a lot more confused, and varies significantly depending on the relative orbits of the two moons. There are official GEO tidal charts available for most of the planet, but even these are not always accurate.

In some places on Poseidon, tidal ranges are minor, only a few dozen centimeters. In others they can be extreme, more than a dozen meters during each tidal cycle. Such tides can have significant effects on shoreline settlements and marine navigation. Additionally, such high-flow tides can cause dangerous effects called tidal bores. In restricted inlets, like river mouths or narrow fjords, large incoming tides are forced into smaller volumes, creating a crashing wave that washes quickly over everything in its path. In some places, tidal bores on Poseidon can reach three meters in height during certain phases of the lunar cycle. Such powerful effects are very dangerous for the unwary.

Currents

Ocean currents are powerful forces that have significant effects on global weather patterns and ecology. Large ocean currents are created by the spin of the planet, differences in surface temperatures, tidal flow, and prevailing winds. On Poseidon, with its limited land mass, currents are essentially unobstructed and flow strong and fast for thousands of

kilometers, some even circumnavigating the planet. Most dominating currents have fixed patterns, and because of their speed and strength, they are significant to marine navigation, especially for native craft.

Ocean currents are important to weather patterns and climate, too. Warm-water currents moderate land and air temperatures, whereas cold currents make for less hospitable environments. However, warm currents do provide energy to tropical storms, birthing and maintaining the hurricanes that ravage Poseidon.

Ecology is influenced by currents as well. The climate effects of currents determine rainfall and can therefore determine the types and abundance of plant growth. Currents carry cold or warm water, dictating the kind of marine organisms that are found in certain regions. Vertical currents can carry nutrients from the bottom to the sunlit surface waters. Currents can disperse organisms planet wide, and many of Poseidon's native life forms depend on currents to bring them food or carry them to new hunting grounds.

Waves

Ocean waves are a constant and powerful force. Created by offshore winds and storms, wave trains can travel thousands of kilometers before crashing against some distant shore. In deep water, wave energy creates rolling swells, and in shallow water, the wave energy collides with the bottom and lifts the wave into a forward rolling crest. The bigger the swell, the bigger the breaker. Long shallow drop offs rob waves of their energy, making for smaller, weaker breakers. Sudden, deep drop offs lift waves quickly, making for the most spectacular cresting waves.

Waves are always a constant erosive force and during storms they can be incredibly destructive. Coves, bays, and artificial breakwaters are absolute necessities to protect harbors on Poseidon. The intense storms common on the planet constantly batter shorelines and are the greatest threat to coastal settlements. In the open ocean, storm swell is a danger, with waves reaching tens of meters in height and record waves over 50 meters. To be caught in a surface vessel in such conditions is lethal. Wave energy reaches as far below the surface as it does above. This makes shallow water dangerous during a storm, but makes deeper waters safe haven. This is why few surface stations have been established in the open oceans of the Storm Belt.

"Tidal wave" is a misused term that actually describes the bulge-like waves that cause tides. "Tsunami" is the correct term for describing the massive, destructive waves caused by underwater earthquakes or volcanic eruptions. These waves are not typically large, but can occasionally reach dozens of meters in height and carry significant destructive force when the seismic disturbance is great enough.

OCEANOGRAPHIC GLOSSARY

Abyssal Plain

The abyssal plain begins at the bottom of the continental shelves. It is typically smooth, broken only by volcanoes and mid-ocean ridges, and has an average depth of four kilometers. Storms of sediment, turbidity currents, often fall from the shelves. They form massive, slow-moving flows of debris that roll for hundreds of kilometers along the plain.

The waters of the abyssal plain are very cold, below 0° Celsius, much like the abyssal region of Earth. On Earth, this temperature was not always the case, as the abyssal oceans were once much warmer. The warmth was due to geography that caused oceanic currents to drop at the tropics and rise at the poles. Benthic waters became warm, and the planet was more evenly heated. It is not known when, or if, Poseidon had a similar period.

Benthic

The term "benthic" refers to animals or regions associated with the bottom of bodies of water or the depths of an ocean. Benthos, benthic animals, often adapt a sessile (non-moving) existence, or crawl along the bottom. These regions are often rich in nutrients and organic material that has fallen from above. In shallower water, benthic life forms must often contend with currents.

Carbonate Conservation Depth

Calcium carbonate dissolves in seawater, and does so more easily at greater depths. Below this level, no calcium carbonate is deposited and formations are dominated by volcanic materials or silicas.

Circumpolar Current

On Earth, a strong oceanic current flows around Antarctica, isolating it from the hydrological and meteorological systems of the rest of the world. This isolation, caused by the lack of landmasses that would break up the current, shifts more heat to the rest of the planet and makes Antarctica much colder than the North Pole.

On Poseidon, there is a circumpolar current around the North Pole, making it extremely cold. Temperatures at the South Pole are more similar to those at Earth's North Pole, due to the movement of currents around the Southern Hope Chain and Arc of Fire.

Continental Rise

This is the portion of the continental margin between the abyssal plain and the continental slope. The rise sits atop crustal rocks of the ocean basin. Many of the bacteriological abyssal formations occur in this region.

Continental Shelf

On Poseidon, most continental landmasses exist only as shelf, and are divided into core and marginal regions. The core is like the continental shelves, with depths around 100 to 120 meters. Marginal shelves are defined as having depths of more than 120 meters. At about 140 meters of depth, the shelf gives way to comparatively steep continental slope.

Continental Slope

At the slope, the angle becomes relatively steep, around three to six degrees. The slope sits on continental crustal rocks.

Downflow

Downflow occurs under several conditions. Winds can push waters toward a coast, driving a volume of water that slips downward. Arid warm weather can evaporate surface waters, increasing their density and causing them to sink. Downflow systems are usually disrupted by freshwater, which can mitigate the arid conditions or disrupt the winds driving the water. On Poseidon, variations in polar melt can alter downflow strength.

El Niño Effect

The El Niño effect is a variation in upwelling patterns. Weakening of winds slows upwelling, leading to shifts in temperature and humidity. Since surface

waters are not being cycled as quickly, thermoclines increase, surface water temperatures increase where upwelling normally occurs, and regions normally fed by warmer waters become cooler. The increase of humidity and temperature can cause rainfall, further slowing upwelling.

There are a number of variable systems on Poseidon that are similar to Earth's El Niño.

Mid-Oceanic Ridge

Also called spreader zones, these form in oceanic crust at hot convection zones rising from the planet's interior. Hot material rises to the surface, forcing the crust to move to either side. The ocean floor slowly moves away along a series of ridges that span the entire planet. Transform vaults are large cracks, running perpendicular to the ridge, along which the crust can "slip."

Poseidon is more technically active than Earth, and the mid-oceanic ridges spread with more speed. Planetologists believe the mantle underneath the crust is more fluid, partially due to its lighter composition.

Black smokers are formed in the basins within the ridges. Water boils out, dark with chemicals from magma. Some of these substances condense out of the water, accreting and forming exotic shapes.

Ridges are well known for the unusual life that has evolved around them. These chemicals are rich resources for bacteria. The bacteria form symbiotic relationships with other organisms, forming the base of a food chain.

Oceanic Current

Water at the ocean surface is driven by winds into horizontal currents. These currents can be small and transitory phenomena, or can produce long lasting, cyclical formations. Their boundaries are relatively distinct, creating "rivers" within the ocean.

Cyclical formations are called gyres and can extend over much of a planet. The flow is constrained by continental shelves, and forms distinct belts that convey resources and heat throughout the oceans. Gyres are composed of warm, fast-moving surface currents and cold, slow benthic currents. These currents are driven by downflow and upwell regions.

Shifts in the rate of downflow or upwell alter the speed of the system, and thus affect the distribution of nutrients and heat through affected regions. This translates into climatic change.

Well-defined currents form along continental shelves. In large expanses of open ocean, such as the New Pacific, currents are less well defined and move more slowly.

South polar gyre systems are driven by permanent low-pressure systems at about 50° latitude, near the Challenger Deep. These upwell benthic polar currents and create eastward surface currents.

Along the north and south tropics, numerous weather patterns cause rapid evaporation and downflows. Winds create upwelling regions west of the major tropical landmasses, and in the region between the Southern Hope Chain and the Arc of Fire.

The major surface flows are north along each side of the Arc of Fire, westward across Poseidon's Reach, a west-southwesterly flow west of the Pacifica Archipelago, eastward between Poseidon's Reach and the Southern Hope Chain, and northwest between Darwin's Archipelago and the Endeavor Islands. There are currents elsewhere, but these are the major components of Poseidon gyres.

The major benthic flows are southeast between the Arc of Fire and Southern Hope Chain, south along the southeast side of Darwin's Archipelago, south along each side of the Pacifica Archipelago, west between the Southern Hope Chain and the Pacifica Archipelago, east along the northern tropic of Poseidon's Reach, southeast between Darwin's Archipelago and Endeavor Islands, and westward to the north and south of the Endeavor Islands.

Photic Layer

The layer of ocean through which light shines. It extends to a depth of 100 to 200 meters, depending on the constitution of the water. Across much of Poseidon, the photic layer is 200 meters deep. The photic layer is generally well oxygenated.

Tectonic Plate

Poseidon is rich in light elements, creating a thicker oceanic crust than that found on Earth. This crust is more flexible, however, with a very fluid layer between lithosphere (crust) and mantle. The crust "floats" on denser material, mostly solid and cracked into a number of sections called plates.

Continental material is lighter than the crust and therefore floats on it. The composition of crust under continents is distinct from oceanic crust. Flow in the liquid material beneath causes these plates to move, rub, and slide under one another. When plates move away from one another, this is a spreading zone. This is associated with mid-oceanic ridges.

A plate that slides into another will cause one or the other plate to slide underneath, creating a subduction zone. The weight of the top plate will push the edge of the other into the mantle. The crust then melts and floats back to the surface. Material that comes up through the crust forms volcanoes, often in a line along the plate boundary.

Poseidon has 13 major plates, some of which are associated with continents. There are two distinct continental regions that are entirely underwater, the Tranh plate north of Poseidon's Reach, and the small Pacifico-Challenger plate near the equator, from 92° west longitude to 105° west longitude.

The Arc of Fire is one of the most notable subduction zones on Poseidon, caused by the collision of several plates. The oceanic plate to the east is spreading west with some force, into a western and northwestern plate. The dynamics are still being studied, but the result is the volcanism well known to the region.

Thermocline

This is a density barrier in water created by temperature variations, though similar barriers are associated with salinity. In the open ocean, the thermocline forms below the photic layer. The warmth of the sun causes these waters to "float" on cooler waters below. A thermocline causes sound to shift, due to varying densities. Sonar can bounce off the interface or cause unusual returns, depending on angle and other factors. Unusually layered or turbulent thermoclines, such as those near magma vents, can severely restrict the use of sonar.

Upwelling

A system that causes water to flow up to the surface. The major large-scale form of upwelling is created by wind moving along the surface of water and away from a large landmass. Water is pulled from below to replace the moving surface water. Upwelling can also be caused by volcanic action, though this is smaller in scope.

OCEANIC PHENOMENA

Steam Showers

Steam showers were first observed by Victor Drake in the Arc of Fire, and are a rather rare phenomenon. They form from long volcanic ridges running near the shore. Magma flow can become synchronized with sudden influxes of water. The water vaporizes quickly, creating a deadly mass of superheated steam. A cross breeze then moves the steam onto regular terrain, often ending as a rain of boiling water. Under most circumstances, the magma beds work more slowly, creating a pleasantly hot rain. Natural hot tubs can be found near these formations. Several people, usually tourists, are killed each year from steam showers.

Toxic Wind

These are also associated with volcanic activity. Toxic wind results when large amounts of gases are concentrated, releasing suddenly when disturbed. These winds then kill most living things within range, depending on the constitution of the gasses. A few of these volcanic structures are associated with pools, and create a combination effect.

On Earth, cold pool bottoms can become choked with carbon dioxide due to bacterial growth, concentrated under the barrier of a strong thermocline. In subtropical or higher latitudes on Poseidon, extinct or partially extinct volcanic calderas can create similar conditions, with bacteria thriving on rich volcanic nutrients in a cold pool bottom. Renewed

volcanic activity or earthquakes can disrupt the thermocline, causing the release of deadly levels of carbon dioxide.

Oceanic Slides

Volcanic activity and falling rock can cause oceanic slides. More severe than turbidity currents, these result in large surface waves and travel for thousands of kilometers. These waves may reach shore, doing severe damage.

Volcanic Music

Submerged volcanoes cause bubbles to form, as magma vaporizes water and volcanic gases escape. This creates distinctive sounds. Active undersea volcanoes can be identified by the pure tones they make. Cetaceans have referred to these as the "Calls of the Deep Brothers," and can use the sounds to navigate.

Explosive Sideflows

Another phenomenon that is fairly unique to Poseidon is associated with bacteria and volcanic activity. Undersea volcanoes close to continental shelves are commonly inhabited by a variety of bacteria that rapidly mineralize, creating large plugs and caps of heavy rock. These occur most commonly in subduction zone volcanic activity, due to the composition of the magma there. Over time, these systems create horizontal formations that build in pressure, then explode. The pressure waves created are hazardous, moving mostly horizontally over the ocean floor. This can trigger other explosive sideflows or underwater slides.

Vertical Inversion

As sea levels rise and fall, aquifers and other landlocked freshwater can become submerged under the ocean. This phenomenon is relatively rare on Poseidon, though similar locked freshwater is created by bacteria. Bacteria form large masses on the floors of continental shelves, eventually getting buried in sediment. Some of these preferentially fix minerals, slowly forming large reservoirs of relatively fresh water. Most of these formations are small, but some have been discovered with a capacity of nearly eight million cubic meters of water.

The most dangerous water inversions occur with nonbacterial freshwater structures, as they are often much larger. An earthquake or mining activity causes a portion of the roof to collapse, releasing freshwater. This water rises rapidly, causing saltwater to flow in from the sides. This turbulence can cause vessels to collide with the ocean floor, or to be pulled into the chamber. A diver is easily injured if pulled across jagged rock. At the surface, freshwater creates turbulence. Large ships can sink into the less dense freshwater and capsize. Short-range penetrating sonar can discover these pockets of freshwater, but it is a difficult and error-prone process.

Rapid Mineralization Effect

This extremely hazardous effect has only been observed a few times, but may be responsible for a number of disappearances. It is associated with volcanic regions at the ocean floor, where water pressures, currents, and topography creates a region of heavily mineralized water. It is suspected that bacteria are also involved. Divers or instruments in these regions can become the center of a sudden and massive mineralization. A layer of calcite forms over the surface and in water intake systems. It is usually a few centimeters thick, at most, but there is one recorded instance where a diver was encased in a 30-cm thick layer of porous rock.

Normally, calcium cannot accrete at abyssal depths, due to pressure. An unusual and poorly understood combination of factors causes calcium levels to rise sharply in these regions. When the environment shifts, it deposits rapidly out on all available surfaces. Over time it will slowly dissolve again, but in the short term it creates extremely hazardous conditions. This mineralization causes major damage to propulsion systems, and can also block water intakes. However, the effect has not been observed occurring more than once during a given event, probably due to the depletion of minerals in the water. Also, the layer is relatively easy to break away, though small components and intakes will require hours of cleaning.

POSEIDON METEOROLOGY

THE FORECAST

Throughout recorded history, people have tried to predict the weather. Thousands of years of study have offered scientists only a general understanding of the climatology of Earth and have left humans woefully unprepared for the storms of Poseidon.

The complexity of a planet's climate is dependent largely on the distribution of land and water, and their interactions with the atmosphere. The relative heating and cooling effects, the distribution of air masses, the patterns of ocean currents, and the hydrologic cycle all conspire to churn a planet's atmosphere into a dynamic, powerful force. On Poseidon, the severe axial tilt and seasonal variation, the extreme humidity, the lack of significant landmasses, and the dominance of massive ocean currents serve to complicate this global system, producing vast weather patterns and ferocious meteorological events.

GENERAL CLIMATE

Like Earth, the planet Poseidon is divided into climatological zones centered on the planet's equator, ranging from the warm tropics to the frozen poles. Unlike Earth, Poseidon's notably greater axial tilt (29.1°) means that the annual variation within these zones is more extreme than on Earth. The tropics creep farther outward from the equator during summer months and the poles freeze farther towards the equator in the winter.

One stabilizing factor, however, is the distinct lack of significant landmasses on Poseidon. Without continents to interrupt the flow of ocean currents and cause uneven heating of the atmosphere, the planet's major weather patterns tend to be stable and predictable. Prevailing winds are almost constant, dominant ocean currents are unchanging, and regional temperatures are seasonally consistent.

Transitions from season to season are, for the most part, gradual and stable as well. However, in the Storm Belt this generalization can be dangerously inaccurate. In these latitudes, the warm seas and moist air can combine with converging air masses to create hurricanes of fantastic size, duration, and ferocity. These fearsome storms are what have earned the weather of Poseidon its mythic reputation.

REGIONAL TEMPERATURE RANGES

Latitude	Summer Day/Night	Winter Day/Night
10° 00′ 00″	+40°C/+30°C	+22°C/+17°C
20° 00′ 00″	+38°C/+28°C	+17°C/+12°C
30° 00′ 00″	+37°C/+27°C	+12°C/+07°C
40° 00′ 00″	+35°C/+25°C	+07°C/+02°C
50° 00′ 00″	+32°C/+22°C	–02°C/–05°C
60° 00′ 00″	+25°C/+15°C	–07°C/–12°C
70° 00′ 00″	+15°C/+05°C	–14°C/–20°C
80° 00′ 00″	+05°C/–05°C	–24°C/–32°C
90° 00′ 00″	–05°C/–15°C	–30°C/–38°C

CLOUDS

Heating occurs in several ways. Clouds have a high albedo, reflecting more sunlight than is absorbed, and partially reflecting light bouncing off the surface back downward. This acts to protect the surface from UV light, preferentially store heat, and prevent overheating of the surface. Heat causes water to increase the humidity of the air, thus increasing cloud cover.

ICE

Icecaps form when more snow and ice accumulate during the winter than melt during the summer. Ocean currents and weather systems affect this process. Once ice shields develop, their high albedo tends to help maintain the ice, reflecting more light than the ocean surface.

HEAT/HUMIDITY

Surface heating provides energy to the entire meteorological system. Humidity increases the heat capacity of the atmosphere, giving weather systems even more strength. Air systems then move in complex ways, composed of several vectors. Heat causes air to expand and thus rise. Planetary rotation moves the planet under the air, creating an apparent westward flow. Surface friction slows winds near the surface, and imparts motion to water below.

CORIOLIS EFFECT

Coriolis effect arises from the nature of a rotating sphere. Since rotation is constant, the farther a point is from the axis of the planet, the faster it must move to rotate the same arc in the same amount of time. The surface at the equator is moving more quickly eastward than the surface at higher latitudes. As a weather system moves to higher latitudes, the east-

ward velocity of the planet's surface decreases, causing the system to apparently "veer" eastward.

Pressure

Pressure is a major factor in weather systems. The density of air is interlinked with temperature and humidity. Cooler air can become denser than warmer air. Humid air can hold more heat than dry air. These factors shape the motion of air masses, from high to low pressure.

Complex Systems

Much of the complex behavior of weather is derived from the fact that the atmosphere is three dimensional, and is strongly affected by two other systems. Land and sea shape weather, interacting with the basic forces of meteorology. Though Poseidon is simpler in some respects, due to the small percentage of landmass, the systems are still complex.

Hot and humid air will typically rise. This motion causes a zone of continuous low pressure, pulling fresh air along the surface. This is a typical low-pressure system, with air movement along the ground moving into the center, heating up, and rising. As air moves into the system, it imparts a clockwise turn in the Northern Hemisphere and counterclockwise turn in the Southern Hemisphere, due to the Coriolis effect.

This can be confusing. In the Northern Hemisphere, winds moving north veer east. Winds moving south veer west. These winds impart spin on the center, like a hand on a potter's wheel. At high altitudes, the spin is reversed as winds exit. Strong low-pressure systems are cyclones, and are very common. Most storms are cyclones.

Air masses can form systems in the reverse manner. Low humidity and cool air cause high pressure. Winds blow out along the surface, pulling high altitude air down into the center. These winds move clockwise in the Northern Hemisphere and counterclockwise in the Southern Hemisphere. They have few clouds. These are known as anticyclones. These form a belt at about 55° latitude, the anticyclone belt, which feeds on low-pressure systems and disrupts them.

Generally, moisture and heat increase the power of cyclones. In the tropics, these factors create massive cyclonic storms, known on Earth as hurricanes. The Storm Belt covers the tropics, at latitudes below 40°. Cyclones in mid-latitudes will move toward higher latitudes and east. Low and high pressures pull or push storms from this general course. Tropical cyclones will move west during their formation and then follow this track toward subtropical anticyclones.

Aridity systems form due to high altitude winds spilling off of the tropics, descending at roughly 40° latitude. As they warm, relative humidity becomes very low. This can create desert conditions, and often causes downflow of oceanic currents. As the air masses descend, they deflect north and south, curving with the Coriolis effect, increasing westerly winds in the equator and easterly winds at high latitudes. They also pick up moisture, delivering rains to the tropics and temperate latitudes.

At the poles, cold, dry air creates a constant low-pressure zone, creating strong easterly winds.

Though the tropical cyclones of the Storm Belt have garnered the most attention from media and popular culture, there are several important weather systems that have a major impact on life on Poseidon.

Poseidon Rain System

This system was originally termed the Pacifica Monsoon cycle, but the overall mechanism affects rainfall throughout Poseidon. The Southern Hope Chain and Arc of Fire are part of a distinct seasonal cycle, the Twilight Polar Stream. The overall features of the system are modified by local factors.

There are three identifiable periods in the Pacifica seasonal rains. The seasons were first researched by inhabitants of the Pacifica Archipelago, and have a bias toward their observations and the Southern Hemisphere.

Pacifica Wet Season: Northern Spring to Summer/ Southern Autumn to Winter

This time is frequently referred to as monsoon season. The origins of the major rains lie in the Challenger Deep, in the gap between the Endeavor Islands and Darwin's Archipelago. During the northern summer, most pressure systems collide with aridity systems, draining them of energy. With autumn comes a shift in winds. Southern systems gain energy and move on a more westerly track. This brings a great deal of rain to the eastern side of Darwin's Archipelago.

The southern end of the Endeavor Islands receives relatively little rain, as most systems track further south. Rainfall is even less for the rest of the islands, though this depends on variations in the strength of

the subtropical pressure systems to the east. This is linked to the Butterfly Gap phenomenon.

Moving across Poseidon's Reach, these systems gain a great deal of power and bring heavy, constant rains throughout the Pacifica Archipelago. These systems also bring rain to New Hawaii, as storms rise and cool over the Pacifica Archipelago. Trade winds moving east pick up strength during this season.

Pacifica Storm Season: Northern Autumn to Early Spring/ Southern Spring to Early Autumn

This is the most chaotic period of the cycle. Shifting winds bring large variations in weather through Darwin's Archipelago, and some of the heaviest rainfall all year for the Endeavor Islands occurs as energetic cyclones spin northward into them. The aridity systems to the west of the Endeavor Islands show more instability at this time of year, as do the systems in the anticyclone belt north of them.

With this chaos come some of the most powerful cyclonic storms in the Southern Hemisphere. Moving along Poseidon's Reach, these storms can cause huge amounts of rainfall and damage to the Pacifica Archipelago. Some manage to feed systems in the Northern Hemisphere, giving new life and strength to cyclones there.

Along the eastern side of the Pacifica Archipelago, this season is marked by wet, stormy weather. The western side receives rain mainly from systems that make it through the archipelago. This season can also cause the upwelling to the west to drift northward, causing a boom in fishing around Neptune's Cluster and the Sierra Nueva.

Pacifica Dry Season: Northern Late Summer to Early Autumn/Southern Late Winter to Early Spring

During this relatively short period, a chaotic series of storms can bring large amounts of rainfall to New Hawaii and other northern regions. These storms are marked by great irregularity, and there are multiannual cycles of varying activity.

Occasionally these storms wander into the Southern Hemisphere, but this is relatively rare.

The same period in the Southern Hemisphere brings a relatively dry season to the Pacifica Archipelago. Milder, cooler weather springs from the western side, and storms still bring rains throughout, but the activity is generally lessened. There are small-scale, regional variations, depending on airflow patterns.

During this period, Darwin's Archipelago receives relatively little rain. Most of the westerly storms hit the southern end of the Endeavor Islands, moving in a generally northwesterly curve. These intersect with the aridity system west of Endeavor Islands. The rest of the Endeavor Islands receive a fairly steady amount of rain, varying mainly in the constant cyclonic activity tracking across the New Pacific.

The Poseidon Conveyer

One of the most important oceanic current variations, in terms of fishing and aquaculture, is the Lamont-Kandinsky-Hackett cycle, also known as the Poseidon Conveyer effect or the Primary Poseidon Gyre.

The first component occurs around the Arc of Fire. A major upwelling of cold, benthic waters sits east of Albion, in the Southern Hope Chain. These currents, rich in nutrients, flow east and then north along either side of the Arc. Aridity systems to either side of the Arc then cause these surface currents to fall back to the ocean floor.

The second part of the conveyer starts to the east of the Pacifica Archipelago. Surface currents move west, then divide into a northwestern and southeastern current. The northwestern current is strong, encountering a downflow near New Hawaii. This benthic current moves slowly around the archipelago, joined by weaker benthic flows, until it arrives to the western waters off of the Pacifica Archipelago shelf. Here, western winds create an upwelling, bringing the current to the surface.

Changes in weather systems can disrupt the aridity systems flanking the Arc. This is most frequent during the storm season, when powerful cyclonics in the Southern Hemisphere can intersect with them. Usually only the western aridity systems are affected. In any case, when the systems are weakened, it begins the Even Phase of the cycle.

Results

The intersection of cyclones with the aridity systems has the benefit of reducing storm activity in Darwin's Archipelago and the Pacifica Archipelago.

Once these systems are weakened, however, the upwelling west of the Arc of Fire slows down. This backs the system up. The northern flow to the west is weakened, increasing the northern flow to the east.

This flow diverts further east, moving away from the Arc of Fire.

On the western coasts of the Arc of Fire, weather is warmer and more humid, but fishing and aquaculture are stricken. Storms are more common, particularly in the north.

On the eastern coast, weather is slightly warmer and fishing is still poor. However, deep oceanic animals thrive far to the east, and deep-ocean fishing booms. This effect is lessened if the eastern aridity system is weakened.

Rainstorms north of the Arc accompany the same weather system that sends cyclonics to the Arc. This can create an El Niño-like effect, slowing the trade winds that cross Poseidon's Reach. This, in turn, slows down the downflow east of the Pacifica Archipelago and upwelling west of Darwin's Archipelago and the Endeavor Islands. The effect is not acute, but can snowball with other factors.

Timing

How long and when these events occur is still unknown. About four distinct Even Phases have occurred during human occupation of Poseidon, with no clear timing. The storm pattern lasts two to three years, with the oceanographic effects lasting another three years. The eastern current of the Arc moves over longer periods than the western current. The last Even Phase ended in 2193. No Even Phase has been observed where the eastern subtropical system is also weakened, but models suggest strongly that it should occur occasionally.

The timing of the Pacifica component is very long, and it is estimated that the lag time is on the order of centuries. There is no clear, observable link between when the Even Phase of the Arc of Fire begins and when that of the Pacifica Archipelago begins. This component occurs more slowly and over longer periods than the other, though it is not known precisely how long these periods last. The Pacifica Archipelago began an Even Phase sometime in the early 2180s, and this is still occurring. Some Incorporate scientists claim that declining populations of certain marine life are not due to environmental contaminants but due to this, and similar, cycles.

Poseidon Niño Effect

This effect is quite similar to the El Niño/La Nina effect of Earth, but further reaching. The warm eastern waters of the Pacifica Archipelago create a rising stream of warm air. This creates a trade wind, blowing at high altitudes eastward. Around Darwin's Archipelago and the Endeavor Islands, the system cools and drops, creating high-pressure systems. This is typically referred to as the Haven Trade wind.

Another trade wind runs along the Challenger Deep, fueled by rising air systems to the east of the Endeavor Islands, running east to the Pacifica Archipelago, and then dropping. The high pressure caused creates strong westward surface winds. This wind is called the Pacifica Trade wind. Rising warm air near the region where they descend can disrupt trade winds. This slows the surface winds and increases rainfall in these regions. Both of these effects slow or halt upwelling, and can even create downflows.

The Reach Obstruction, the El Niño effect for the Reach trade winds, generally starts at the beginning of the northern autumn. Shifting air systems can create slow-moving warm air masses above the Arc of Fire. Many of these systems divert northeast or southeast, causing increases of rainfall and slowing surface winds. This brings an early end to the dry season for both the Pacifica Archipelago and Darwin's Archipelago, and brings an uncharacteristically heavy wet season to the western side of Darwin's Archipelago. Unfortunately, this also causes the upwelling west of Darwin's Archipelago to lose steam.

The same system causes warm air masses to form east of Darwin's Archipelago, which drift northward. These interfere with Endeavor's upwelling system, and further contribute to the faltering of the Reach trade winds, with similar effects on the western coast of the Endeavor Islands.

The six recorded instances of the Reach Obstruction are 2177–2178, 2184–2185, 21862187, 2188–2189, 2194–2195, 2196–2197. Observations made previous to 2176 are somewhat speculative, but the frequency is reliably one year in four. Cyclical variations in Reach Obstructions are likely, but have not been documented.

The Pacifica Obstruction is the corresponding effect for the Pacifica trade winds, though it is rare. During the dry season, an interaction between southern anticyclonic systems and weak southern aridity systems can lead to counter currents, causing waters to stall west of the Pacifica Archipelago. Warm patches then form in the eastern edges of the Challenger Deep, disrupting trade winds. The mechanism is somewhat complex, but the ultimate result is to bring an El Niño event to the Pacifica Archipel-

ago. This brings rainfall during the normally dry season, but the western waters become very poor in nutrients.

This event is more rare than the Reach Obstruction, and only two have been conclusively observed. The first was in 2183 and the second in 2190.

Twilight Polar Stream

The weather of the Southern Hope Chain and much of the Arc of Fire is not directly part of the Poseidon rain system. These regions are strongly affected by air masses linked to the south pole.

There are three components of the system. The first is at about 70° south latitude, 60° west longitude, west of the Southern Hope Chain. The second is the Twilight cross-polar airstream. This moves generally northeast from about 60° east latitude, and is partially responsible for the upwelling there. The third component is the downflow system east of the Arc of Fire.

During the southern summers, strong rising air currents move south along 170° west longitude, through the Twilight Chain, bringing moderate weather to the islands. It crosses the southern cap, dropping quickly until it reaches the waters east of Albion. This stream and polar melt disrupts local upwelling. The system slows the currents along either side of the Arc of Fire, creating warmer, more humid weather and nutrient-poor waters along the coasts.

Toward the end of summer, a strong current develops north of Albion and moves eastward. The downflow system east and west of the Arc of Fire increases in power, pulling surface currents and kick-starting the system. By autumn, a powerful low-pressure system develops west of the Southern Hope Chain, forming a complex interaction with the anticyclone belt.

Most winters bring strong eastern flows through El Mar Del Sur, cold weather in the Southern Hope Chain, and cool weather throughout the Arc of Fire. Both coasts of the Arc have cool, nutrient-rich waters and relatively dry weather.

The Challenger anticyclonic system is chaotic, however. For reasons that are still unclear, the system can generate powerful cross-polar flows and highly mobile low-pressure systems. This results in a series of strong polar storms. Very cold temperatures and heavy snowstorms buffet the Southern Hope Chain, and often winter storms will collide with Westcape. This can slow down the Arc of Fire current system, creating unusually warm and wet winters.

Typically, one winter in five will cause heavy snowfall in the Southern Hope Chain, and one in 15 will cause snowstorms to reach Westcape. Under normal circumstances, the eastern Challenger anticyclones prevent any cold air masses from reaching Westcape.

Butterfly Gap

This region of ocean, north of Darwin's Archipelago and west of the Endeavor Islands, is the center of a very chaotic weather system. More stable portions of the cycle are key to the Pacifica monsoon cycle.

A series of aridity systems further west cause downflows, while strong upwelling occurs close to the western edge of the Endeavor plate and along the western edge of Darwin's Archipelago. Storm systems and surface waters flow strongly through the gap.

Even when the Niño effect is not in force, trade winds form an irregular system. During the northern summer, the trade winds blow more strongly from the west of the Endeavor Islands, increasing the upwelling and fertile waters. During the other three seasons, the upwelling of the Endeavor Islands depends on airflow from the Challenger Deep, and Darwin's Archipelago enjoys greater winds and upwelling.

This seasonal shift creates a cool summer for the western Endeavor Islands and relatively moist, warm winters for the western regions of Darwin's Archipelago. Over time, this effect increases the flow of benthic currents to the north and south of the Endeavor Islands. A more noticeable result is that sometimes the same weather that weakens the western subtropical systems will increase the normally weak eastern subtropical systems. If this happens, upwelling forms to the east of the Endeavor Islands, beginning a period of somewhat cooler and calmer weather, as well as a boom of life from the nutrient-rich waters.

Due to this effect, the region tends to alternating years of upwelling strength and poor fishing.

Westcape System

A weak aridity system circulates west of Westcape. The arid winds, combined with high mountains, create the deserts of Westcape. During the Pacifica storm season, this system can weaken as large, moist air masses collide with it. What little rainfall Westcape's deserts receive usually falls during this season.

SEASONS BY REGION

PACIFICA ARCHIPELAGO

Weather year-round is generally hot, wet, and stormy. Seasons bring variations in the degree, but the temperature and humidity is high in the tropics and slightly less so in the subtropics.

The dry season is fairly brief, running from late winter to early spring in the southern hemisphere. Weather is dry for the region, and the western regions are mild and cooler. Irregular rainstorms of some strength hit the north. Overall rainfall is distinctly lower. During Reach Obstructions of the trade winds, the dry season ends even earlier, lasting only eight to 10 days before giving way to the wet season.

During very rare Pacifica Obstructions, the western half of the archipelago gets unusually warm and rainy weather. This effect lasts well into the wet season. The waters of the western region become nutrient poor, and there are marked drops in fish populations. The wet, or monsoon, season begins in the southern autumn and runs through winter. The islands are almost constantly drenched in heavy rainfall. Though there are storms, they are generally milder than those of the storm season. New Hawaii sees somewhat more irregular rainfall.

Storm season begins in spring and runs through summer and into early autumn. It is marked by major storms throughout and heavy, though irregular, rainfall. The western side of the archipelago is somewhat calmer.

WESTCAPE

The weather is similar to that of the rest of the archipelago, with two variations. The Westcape system to the west creates arid conditions, though this is sometimes minimized during the storm season. The Twilight Polar Stream can cause unusual, though brief, snowstorms in winter. This only occurs about one winter in 15, and has happened once since Poseidon's resettlement, in 2188.

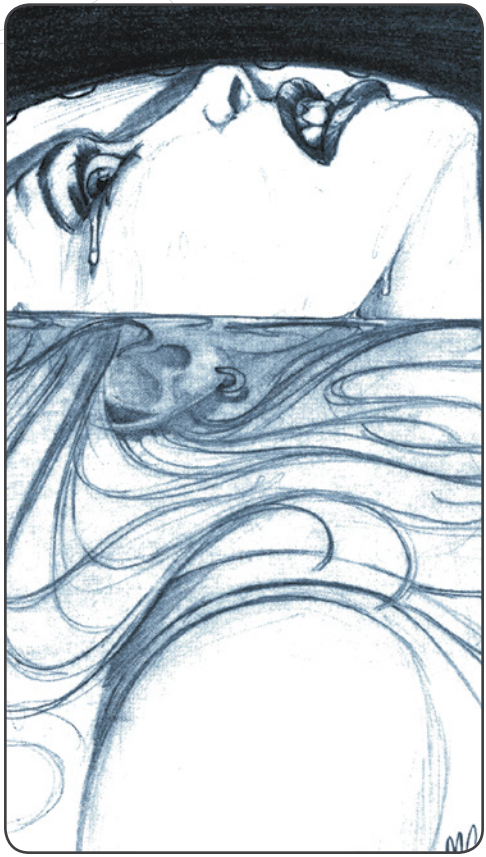
ENDEAVOR ISLANDS

Inhabitants of the Endeavor Islands simply divide their years into dry season and Monsoon season. The general weather is a bit cooler and drier than in the Pacifica Archipelago.

Dry season runs from spring until summer, around the same time as Pacifica's wet season. The southern tip gets occasional rainstorms, sometimes violent ones. The rest of the Endeavor Islands get relatively little rain, for the tropics.

Monsoon season starts in late summer, extends through autumn and winter, ending in early spring. This corresponds to the Pacifica Archipelago's storm season. Constant rain and storms mark this season more evenly throughout the islands. During the summer, weather is milder and the waters more fertile, due to the Butterfly Gap effect.

At the beginning of the wet season is a period of moderate rains and few storms, with more rain to the south. This corresponds with the dry season of Pacifica, Endeavor Islanders simply consider it the buildup to monsoon season. During years marked by the Reach Obstruction, the western edge of the islands experiences an unusually rainy and warm autumn, with less fertile waters.



Darwin's Archipelago

The archipelago is more mild than usual at its latitude, due to cooling effects from upwelling. It also gets comparatively fewer storms than other equatorial regions, due to a number of weather systems to the east. It is still a rather humid, hot region.

Dry season, from late winter through early spring (southern hemisphere), is characteristically dry. The eastern tip sometimes gets heavy rainstorms, but most storms track northeast and miss land. During the winter, the western edge of the archipelago gets warmer weather and more rain, accompanied by warm, nutrient-poor waters.

Storm season, from spring through early autumn, brings extreme weather and heavy rains. Wet season lasts from autumn through winter. There is frequent rainfall, with the eastern edge of the archipelago receiving the most.

During periods of Reach Obstruction, the western side becomes warm and rainy during the spring. This is accompanied by nutrient-poor waters to the west.

Arc of Fire

The northern edge of this region, particularly near the Plesset Straights, sometimes shares the weather patterns of Darwin's Archipelago. The northern regions have drier but more irregular weather than the islands south of the southern tropic. The southern region is dry and temperate.

Summers are warm and humid, with nutrient-poor waters on both sides. Winters are cool and dry, with nutrient-rich waters. Occasionally the Twilight Polar Stream can cause warm and rainy winters, as well as nutrient-poor waters along either side of the Arc.

Southern Hope Chain

This region is cold or temperate, and rather dry.

Summers are cold and dry to the east, warmer and less arid to the west. Winter is very cold, with a slight moderating effect caused along El Mar Del Sur. One winter in five brings severe polar ice storms.

Spring can bring rainfall, particularly toward the west, from easterlies spilling off storms in the Pacifica Archipelago.

Atmospheric Phenomena

While not strictly meteorological, there are a number of environmental phenomena that are common to Poseidon.

Polar Lights

Solar wind is a plasma composed of ionized hydrogen. This out flowing plasma interacts with the magnetosphere of a planet, forming a huge charged "tail" of particles away from the sun. The particles form a dynamo, with charged particles circulating between a positive pole at the planet's "dawn" and a negative pole at the planet's "evening."

Cycles of solar flares cause surges in the solar wind. These disrupt the dynamo, making it constrict. At the top of the planet's atmosphere, the ionosphere is composed of ionized atmospheric gases. These will conduct the bunched-up particles, resulting in an electrical short. The particles flow along the planet's magnetic field lines, diving toward each pole.

The current of electrons through atmospheric gases creates the observed Polar Lights, as they are called on Poseidon. The greater tilt of the planet and comparatively weaker magnetosphere results in more dramatic and beautiful lights.

The beauty is also a danger. Polar lights are the visible effect of a massive flow of particles into the planet. This can knock out large power systems and play havoc with instruments, particularly for craft high in the atmosphere. Ionization of the atmosphere can disrupt communications over long distances. The surges in solar activity associated with the polar lights are also hazards for spacecraft.

Auroral Columns

These are a particularly dangerous and powerful variation of the Polar Lights. The ozone layer of Poseidon is a bit thicker than that of Earth. At certain points of the solar cycle, it is believed, a particularly large series of solar flares hits the planet, when one polar cap is oriented most toward the sun. With the planet's significant tilt and relatively weak magnetosphere, the tail is flooded and then lets loose with a massive, sudden flux.

Auroral columns extend from the top of the atmosphere almost to the planetary surface and are often accompanied by lightning and other discharges. They can be seen for thousands of kilometers. They can also ionize the atmosphere over much of the planet,

causing communications blackouts and damaging power systems. Thankfully, auroral columns are fairly rare, having only been reliably observed three times since Poseidon was first discovered. All three instances struck the north pole, leading GEO and Incorporate officials to declare that the phenomenon is only associated with that pole. Planetologists warn that there is no conclusive evidence that this is true. No steps have been taken to protect against a southern auroral column.

CYCLONIC STORMS

Attention all stations between 10 and 35° south and 45 and 65° west. This is GEO Metwatch. The tropical storm centered at 18°48′ south and 51°19″ west has been upgraded to a Force Four cyclonic. The storm cell is 831 kilometers in diameter and is producing steady winds of 300 kilometers per hour, with gusts to 350. This storm system is moving south-southwest at 42 kilometers per hour and is expected to continue on its present course for some time.

This is a very dangerous storm and you are advised to take appropriate precautions. Storm surges are estimated in excess of 10 meters, and precipitation is at 30 centimeters an hour. All surface vessels and aircraft in the area should adjust course to avoid this storm. Submersibles are reminded of changes in subsurface currents and are encouraged to maintain an operating depth of no less than 200 meters. Please monitor this Metwatch frequency for further developments.

In Poseidon's Storm Belt, tropical storms are common, forming in these warm waters year-round. From early spring to mid-autumn, however, these storms often gain energy, moisture, and speed until they become full-fledged hurricanes.

Hurricanes are tropical storms that have reached a minimum wind speed of 120 kph. Depending upon where they form, hurricanes are also called typhoons and cyclones. On Poseidon they are typically called cyclonic storms. Cyclonics tend to travel northwesterly above the equator and southwesterly below. However, the forces involved in the formation of even a small cyclonic are such that accurate prediction of their behavior is not always possible. Cyclonic storms will typically follow a given path, but commonly make hard direction changes, sometimes even backtracking on themselves.

To maintain its energy and cohesion, a cyclonic must remain over warm water. On Poseidon, the Storm Belt stretches from about 40° north to 40° south latitude. In higher latitudes, the cooler waters do not have sufficient thermal energy to support hurricanes, and if a storm strays beyond these latitudes it will quickly dissipate. On Poseidon, during either hemisphere's warmer months, tropical storms form almost continuously, and there is always at least one cyclonic in progress.

Tropical storms have a characteristic eye, and in cyclonics, they are well defined. The eye is the low-pressure center about which the entire storm system rotates. Winds are chaotic in direction, but are far weaker than in the body of the storm. Because the eye is warmer than the rest of the storm, clouds rarely form. The effect of being in the bright, cloudless center of the eye surrounded on all sides by savage, towering storm clouds is nothing short of inspiring.

The eye is usually about 10% of the total diameter of the storm and can be dangerous for the inexperienced. The ground speed of most cyclonics averages around 60 kph, so eyes usually pass in only a couple of hours. When the trailing edge of the eye arrives, catching the unwary off guard, the winds can be devastating. This is especially true since backside winds blow in the opposite direction of those preceding the eye.

Above 35° north and below 35° south, wind and ocean currents can sometimes push a cyclonic back in a southeasterly direction, towards the equator and its warmer waters. When this happens, the storm will gain energy, increasing in size and intensity with each subsequent oscillation. If a cyclonic remains in warm water, it can last indefinitely. The general rule for such storms is a gain in wind speed of 5 to 50 kph (5d10) per day in warm water, and a similar decrease when in cooler seas or when over one of Poseidon's few large landmasses.

The lack of continental masses on Poseidon frequently gives cyclonic storms free rein, allowing them to develop at furious paces and to perpetuate themselves throughout the season. As a result, larger storms can last for months, circumnavigating the planet, wandering across the Storm Belt as they

do so. Such storms are commonly called "Noahs" in honor of their intensity and biblical proportions.

Such large storms are often responsible for spawning smaller hurricanes that may in turn increase in force as they travel. It is also possible, given Poseidon's lack of continental masses, for larger hurricanes to survive through the off season. If conditions are such as to keep the cyclonic near the equator during the winter months, the storm may survive intact until the following season. The hurricane will still lose much of its energy, but as spring warms the surrounding waters, the storm can again gain in force.

Hurricanes are dangerous and destructive because of their high winds and the resulting waves. Hurricanes also create exceptional and sudden tides called storm surges. The storm surge associated with a hurricane is the combination of surface waters being driven along by the winds and the low pressure under the storm itself. It is usually the storm surge and the resultant flooding that are responsible for the greatest loss of life during a cyclonic.

GEO Metwatch Force Ratings

Hurricanes on Poseidon are classified much like those of Earth, but considering their increased magnitudes, intensity, and duration, the GEO Meteorological Service has modified the standard tropical storm force ratings. Tropical storms are classified by wind velocity, size, and wave height.

Force 0 storms range in size from 160 to 300 km in diameter, and typical wind speeds are less than 120 kph. Seas vary in height from three to five meters and storm surge is usually absent.

Force 1 cyclonics are typically about 200 to 500 km in diameter, with wind speeds ranging from 160 to 200 kph. Seas will run between five and seven meters in height, and storm surge may be as high as two meters.

Force 2 cyclonics will measure no less than 350 km in diameter. Sustained winds in these storms are under the 260 kph mark, but gusts may exceed this by up to 50 kph. A storm of this intensity will produce waves seven to 10 meters in height, and a storm surge of around three meters. A Force 2 hurricane is intense enough to threaten all but the largest surface vessels and aircraft.

Force 3 cyclonics are on the verge of becoming severely dangerous storms. A Force 3 hurricane will be no less than 500 km in diameter and will produce winds of up to 320 kph. The seas will run between 10 and 15 m in height, and the storm surge can be as high as five to seven meters.

Force 4 storms will be at least 750 km in diameter, will produce winds of 380 kph, and waves will range from 15 to 20 meters in height. Storm surge height for hurricanes greater than Force 3 have never been accurately measured, but are estimated at up to 15 meters. It is quite possible for storms of this size to spawn smaller hurricanes, and nearly all will spin off major thunderstorms and small tornadoes.

Force 5 cyclonics are extremely dangerous storms with a diameter of no less than 1,000 kilometers, winds in excess of 400 kph, and waves running over 20 meters in height. Storm surges are expected to push 20 meters.

Force 6 classification is reserved for those monstrous cyclonics that are likely to survive through to the following season. A Force 6 generally has the same characteristics as a 5, but is distinguished by its longevity and the characteristics of its self-preserving path of travel. In the 34 years since Recontact, only nine Force 6 storms have been observed. It was the first of these frightening hurricanes that gave the storms their popular nickname of Noahs.

Cyclonics in the Game

Blue Planet is set on an alien frontier, and dramatic use of cyclonic storms as plot elements will serve to reinforce the danger and wonder of that world. The following guidelines are meant to help Game Masters incorporate hurricanes—and their consequences—into their adventures.

All characters subject to the full fury of a hurricane suffer a target number penalty equal to the level of

CYCLONIC STORM FORCE LEVELS

Force	Waves/Surge	Winds	Diameter	Penalty
1	5–7m/1–2m	160–200kph	200–500	–1
2	7–10m/3–5m	201–260kph	350–500	–2
3	10–15m/5–7m	261–320kph	500–750	–3
4	15–20m/15m	321–380kph	750–1000	–4
5	20+m/15–20m	381kph+	1000+	–5

the storm. This modifier affects all mental and physical activities and surviving higher force cyclonics can therefore be a challenge. Of course, as circumstances vary, so should the penalty, and the Game Master is encouraged to adjust the task level as appropriate.

Aircraft attempting to operate in proximity to such weather are subject to crashes should the pilots fail their task rolls and succumb to the forces of the storm. Oceangoing surface vessels are subject to swamping and capsizing in all but the smallest tropical storms, and Game Masters should make it difficult for players to survive if they are foolhardy enough to be out in anything above Force 1. Critical failures (AV –5 or worse) of any relevant skill rolls

STORM SEASON

Sergeant Devonois was not happy. Yesterday, his only mail had consisted of his third set of transfer orders since he'd arrived on this miserable planet. However, when he found out he was leaving the sweltering hell-hole of District IX, he thought, maybe things were looking up. The weather in the District was enough to drive anyone over the edge; the oppressive humidity, the searing temperatures- it was too much to take. Devonois couldn't remember ever having been so miserable. He recalled hearing stories from his cousin who had drawn duty in the Saharan districts on Earth; but they had never sounded as bad as this.

The transport Devonois found himself sharing with a squad of grim-faced marines looked like an antique, and the engine sounded like a dying animaL The fans spun up and the transport rose with a slight lurch. As they headed north over the island, the city and the docks disappeared into the haze, and Devonois felt uneasy. Being over open water always made him nervous. On Poseidon, Sergeant Devonois was nervous a lot.

Several hours later, Devonois woke from a fitful half-sleep, and had to think for a moment before he could make sense of what the pilot had just announced over the intercom.

"A small storm's blown up about 30 klicks out. Since we're only about ninety from the District HQ, I'm going to punch on through. We shouldn't be more than about 15 or 20 minutes late."

Three minutes later, Devonois began to feel an increased rolling in the transport's motion, and it began to make him queasy. Nine minutes later, the gentle rocking of the transport was transformed into deep and sudden lurches that had Devonois looking for a place to give up his breakfast. Five minutes after that, the sergeant was too frightened to be sick.

The sky beyond the tiny viewports was dark as midnight, and the only clue to their height came when flashes of lightning illuminated the black storm clouds outside. The transport leapt and plunged, one particularly powerful gust catching the aged craft and tossing one of the marines against a bulkhead, splattering blood and knocking him cold. Devonois would have sworn this horror ride went on for endless hours, though his watch said only minutes had passed. More than once, the sergeant was convinced he was about to die.

Then, without warning, bright rays of sunlight stabbed through breaking clouds and the transport cleared the edge of the storm. Minutes later the hopper touched down at District XII Headquarters. As the engines powered down and went silent, Sergeant Devonois sat trembling, eyes closed tight, not daring to believe he was alive.

After finally disembarking on noticeably shaky legs, he saw the pilot striding towards the hangar building. As he passed, Devonois saluted.

"Th… thank you, sir," was all he could manage.

"For what, Sergeant?"

"Sir? Well, for s… saving us back there. In the storm, I mean."

"Hmph." The pilot looked amused and laughed aloud as he realized how frightened Devonois had been. "Get used to it, Sergeant. That was just a gentle summer blow. Hurricane season doesn't start for another couple of months."

while navigating such a storm should result in the loss of the vehicle and all hands.

Settlements are most often the victims of a cyclonic's wrath, as they are unable to move from its path. Unfortunately, the majority of Poseidon's landmasses are found within the Storm Belt. In general, the colonists have tried to mitigate this fact by building their settlements in protective coves, valleys, and island clusters. Combined with good engineering and reinforced designs, this effort has gone a long way towards protecting colonial settlements in the Storm Belt.

Nevertheless, at least once per season, almost every settlement, city, and town on Poseidon is hit by a tropical storm. To characterize the damage caused by a cyclonic, treat the force level of the storm as a Damage Rating and roll for a damage level. Game Masters are encouraged to modify the roll based on how close the storm passes. If the eye of the storm actually passes overhead, then roll twice and use the higher result.

Negligible (no successes on damage roll): Everything exposed to the storm is soaked. Trees lose some foliage and crops are damaged but not destroyed. Debris litters the settlement but anything tied down or otherwise secured against the storm survives intact.

Minor (one success on damage roll): Water seems to get everywhere. Trees lose limbs and 10 to 20% of the local crop is lost. There is significant flooding and superficial damage such as lost roofing tiles, broken cables, and missing skiffs. Moderate buildings maintain their structural integrity.

CONSTRUCTION TYPE TABLE

Construction Type	Modifier
Shoddy	+3
Light	+1
Moderate	—
Heavy	–1
Reinforced	–3
Each day of warning/preparation	–1

Serious (two successes on damage roll): Serious flooding, some toppled trees, and crop destruction as high as 50%. Smaller boats not dragged ashore and tied down are blown away. Some roofs are lost, and shoddy buildings are completely demolished.

Critical (three successes on damage roll): Major flooding, and many trees are blown down. Crop damage is upward of 75%. Most buildings exhibit some level of damage, and many are completely destroyed. Boats and docks are torn away and washed ashore or out to sea.

The circumstances in the Construction Type Table may serve as modifiers. Consider these when rolling for the actions of vehicles and the damage to settlements.

CHAPTER 4: SURVIVAL GUIDE

PREPARATION

Staying alive in a hostile environment requires some degree of mental, physical, and material preparation. Fitness, the right attitude, and proper equipment are essential for survival.

Physical conditioning is sometimes all that separates a survivor from a victim. A person who spends his days in a stationary environment will not likely fare as well lost in an unfriendly jungle as an athlete who trains regularly. Agility and endurance are needed to thrive beyond the borders of civilization.

Survival training is available in many areas and is advised for anyone planning to venture far from settled areas. Instruction ranges from informal one-on-one sessions with a native elder to formal workshops taught by professional survival experts and frontiersmen. The best teachers are, of course, those who have fully experienced Poseidon's outback firsthand, and the local natives are an excellent resource for information regarding what to expect and how to best plan for it.

Mental preparation is important, too. One should stay aware of what is happening around him at all times. This reduces the chances of getting lost, being caught in inclement weather, or taken by surprise. It is very easy to become discouraged, frightened, or confused when things seem to be going wrong, and a positive attitude is sometimes all that keeps one focused. Trust in one's abilities should be balanced with realistic expectations, however.

Knowing what items are essential—and how to use them—can make a normally deadly situation survivable. Proper outfitting requires consideration of the environment and needs of the individual. Know what to expect from the area in terms of wildlife, food and water availability, weather conditions, and terrain to plan what gear is needed.

Choosing items to include in a kit involves weight considerations, as the heavier a pack is, the more energy it requires to carry. By selecting multipurpose gear, such as a rain poncho that doubles as an emergency shelter, the weight and bulk of the kit is reduced. Water repellent, portability, durability, functionality, and comfort are key features of any item in a good survival kit. Every item should be practical and necessary. A pillow is a nice comfort, but a waterproof jacket will work and can serve as a small tarp or even a sail, in a pinch.

Most survival kits come with the essentials: a water purifier, desalination tablets, fire paste, basic tools, a knife, survival plastic, a locator beacon, and a standard medkit. Other items worth consideration—depending on weight, availability, price, and capacity restrictions—include spare power cells, extra medical supplies, a map box, survival grenades, a survival guide, pest spikes, rescue dye, a tube or two of chew goo, and emergency bottles. Many frontiersmen subscribe to the somewhat-reliable GEO Poseidon Biological Survey to help identify fauna and flora encountered during their travels.

Before traveling to any area, one should check the weather and conditions. Storms are seasonal and only the foolhardy do not anticipate them. Other factors to identify and allow for are wildlife threats, terrain, and food and water availability. Pack accordingly to insure comfort and safety.

IMPROVISED TOOLS

One of the things that sets a true survivor apart from others is his ability to improvise. Being able to create tools—and weapons—from available materials is a skill that requires creativity and common sense.

Lashing materials are extremely handy for toolmaking as well as other survival activities. If nothing in one's supplies can be used for tying, certain natural materials can be used. Animal tendons (sinews) are very strong and reliable if one has time to prepare them. They must be dried completely, and then crushed to aid in pulling the fibers apart. Soak the fibers until soft, then twist or braid them into a continuous strand. Use the strand while damp: The lashing will dry hard.

Lashing materials can also be made from rawhide. Remove the skin of the animal and scrape the meat and fat from it. Allow it to dry flat in the sun, then cut it into long strips. Soaking the strips for a few hours will make them flexible enough for weaving or tying. Rawhide also dries hard. Some types of tree bark can be stripped and braided together if pressed for time or no appropriate game is available. Test the strength of the roping before relying on it; some barks dry too brittle to make good cording.

Clubs can be made from natural materials. A basic club is merely a length of wood short enough to handle—about a meter long—yet thick enough to pound on something without splitting. Straight-grained hardwoods are strongest. Soft woods tend to break easily and should be avoided if possible.

A weighted club may simply be a basic club with a knot at the business end or can be created by splitting the wood and lashing a rock between the splits. The rock should be shaped appropriately— round rocks are harder to fasten than flat ones; very flat rocks don't make good pounding tools. Choose the stone according to the purpose of the tool.

Once a suitable stone has been found, find or make a forked branch by wrapping some lashing 15 to 20 cm from the end of the club and then splitting the wood down to the lashing. Wrapping the crotch securely will help prevent further splitting. Insert the rock between the forks, and lash above, across, and below the stone to hold it securely.

A sling makes a decent weapon when modern weapons are unavailable. A sling is another form of weighted club, with a 1.5 to 2.5-kilogram stone tied to a length of lashing eight to 10cm from the end of a club. Allowing the stone to swing free and using a shorter (35 to 45cm) club allows the user to maintain control while causing more damage than a basic club.

A knife can be fashioned from hardwood or bone. If using wood, choose a straight piece two to three centimeters in diameter and 30cm long. Shave about 15cm into a blade. Dry the wood to make it harder and then sharpen the blade using a rough rock.

Bone knives are made by shattering a large bone on a hard surface to create splinters from which a suitable knife can be fashioned. Choose a pointed splinter and lash a wooden handle to it. Sharpen the blade with rough stone.

FIREBUILDING

Fire is essential for cooking, heat, and even signaling for help. One should know how to build a fire when the fire paste runs out.

Choose a location protected from the wind and rain. Be sure that the smoke is not going to blow directly into the shelter. Clear flammable brush from a one-meter area to prevent spreading the fire.

Build a fire pit by digging a shallow impression in the ground or forming a circle of rocks. This will help keep embers and sparks from escaping. A fire-base can be used in snowy areas. Lay enough green logs side-by-side on the ground to form a foundation. Put another layer across the first one to complete the base. This will keep the melting snow from putting out the fire.

Fires require tinder, kindling, and fuel. Tinder consists of very small, dry, flammable materials that will ignite with just a spark. Material can be shredded or shaved to make tinder, from dead palm fronds to pocket lint to scraps of paper. Kindling is larger and is used to raise the temperature of the fire. Wax-soaked pine cone analogs, small scraps of wood, and dry twigs make good kindling. Once the kindling is burning well, add a fuel source such as a dry log or chunk of dried peat. As long as the fire has fuel and oxygen it will continue to burn.

Lay the fire. The cone shape is a popular method because it works with damp wood and requires little maintenance. The tinder and kindling is arranged in a cone shape with the larger logs tented up around them. This allows the fire to self-feed. As the fire burns, logs fall from the cone into the fire.

A cross-ditch lets air circulate below the fire to help keep it burning. Dig an X about 30cm × 30cm

and eight centimeters deep. Put tinder in the center of the X and build a pyramid of kindling above it. Add fuel as needed.

The lean-to method is a good way to build a fire in a windy location. Drive a green stick into the ground at about 30°. Create a tent by standing kindling sticks against the green stick. Put the tinder inside and light it. Add fuel as needed. If matches or a lighter are not available, the fire can be started using a variety of other techniques. Use a convex lens to direct sunlight onto tinder. Strike a flint with a piece of hard metal, such as a knife blade. Rapidly rub a groove into a piece of soft wood with a stick of harder wood. This builds up heat and ignites the wood fibers that are scraped loose. In critical situations, a power cell can create enough of a spark by fastening a wire to each terminal and then touching the wires together near the tinder.

FINDING WATER

Dan Cencer has been exploring remote areas on the southern end of Isla Verde. Two days ago, stick monkeys swarmed into his small camp, attacking him and destroying most of his equipment, including his bodycomp. His ride back to Santa Elena is not due for another week and he has no way to alert anyone of his predicament. Dan suffered several deep scratches and a few bruised ribs, but he escaped serious harm. He was able to recover enough antibiotics and rations to last the week, but his solar still was demolished, leaving him with just two liters of drinkable water. He has been able to rig the still so that it remains afloat in the small inlet he chose for his camp, but he fears if he leaves it unattended the monkeys he hears screaming in the jungle will come back and damage it.

The average human requires two to three liters of water per day to avoid dehydration. If he is active or the temperature is high, he needs even more than that. The environment offers many ways to collect that precious fluid. Rainwater is generally safe and easy to come by on Poseidon. Simply leaving a cup or bowl out in a storm can yield as much as a liter an hour.

High-mountain regions and the arctic areas have snow in abundance, which can be melted. One should never eat snow or ice; they reduce body temperature, which is dangerous to someone who is already dehydrated. Gray or opaque ice most likely has a high salt content and should be treated by melting and desalinating it.

Nature offers a variety of ways in which to collect water. Fruits are a good source. Digging in low areas, in dry river beds, in damp sand, and near green vegetation often yields ground water, which can be claimed by allowing the water to seep into the hole and then scooping it out or soaking it up with a cloth. Condensation can be collected from ceramic or metal objects left outside overnight. Watch for natural collection places such as depressions in stone or hollow stumps. Salt water can be boiled and the steam collected on a cloth, which can be wrung out into a cup.

Certain vines, such as the Poseidon climber, contain a sweet, lemony liquid that is excellent not only for rehydration, but also for treating sunburn. These vines are generally about the diameter of a man's thumb and grow in tropical areas. Slice a notch high up on the vine. Cut the vine open at a lower point and collect the fluid that runs out. If it is clear or white and not salty or bitter, it is safe to drink. Yellow liquid, which comes from the ant vine, is mildly toxic. The brown liquid from the ubiquitous changa vine is fairly revolting, though it is perfectly harmless to drink.

Purify pond, lake, spring, and stream water by boiling it for one minute plus one minute for every 1,000 feet above sea level. Bad-tasting or -smelling water can be made less unpleasant by filtering it though several layers of cloth, or adding a few small pieces of charcoal and letting it stand for about an hour.

FINDING FOOD

Once a water source is located, food is the next essential need for a survivor. A general rule to follow is: If it grows in the ground, crawls, walks, or swims, it can be eaten. Insect analogs, nuts, and seeds are high in protein and can be used to supplement a meat-poor diet. Fruits provide much-needed

energy in the form of sugars, and many roots are high in carbohydrates, which are also used for producing energy. Organ meat is rich in vitamins. Birds and fish can be caught in nets, small mammals may be trapped as they follow trails and runways, and larger game generally requires patience and tracking abilities. As Earthlike as Poseidon is, recognizing edible plants is tricky. Terrestrial cherries, for instance, are edible and considered quite good. Poseidon cherries are sweet too, but toxic.

To reduce the chances of eating spoiled food, collect and eat it fresh from the source. Thoroughly dry anything to be saved for later use. Remember that the sap from the Poseidon lemon and orange trees is a natural preservative that can be put on dried vegetables, fruit, or meat. Do not eat seeds, fruit, or leaves that have fallen from the plant. They may have begun to rot or may have microscopic fungus growing on them. This fungus can be deadly. Avoid foods that are bitter or leave a burning sensation on the skin or in the mouth—that is nature's way of warning animals not to eat those plants. Boil meat and insects, if possible, to kill parasites. Do not eat anything that smells odd, tastes peppery or metallic, or has an odd color.

Try only one part of a plant—the roots, for instance—at a time. The basic edible components of plants are the leaves, roots, stems, buds, flowers, and fruit. Rub plant components on the inside of the elbow or wrist to test for contact poisons. If there is no reaction within 15 minutes, the plant should be safe.

Test the edibility of a food before eating it. The test should be done on an empty stomach. Chew a small piece without swallowing. Hold the chewed matter in the mouth for at least 10 minutes, noting any reactions such as burning, numbness, or itching. If no reaction occurs, swallow the food. Do not ingest any other food for five hours. If nausea or any other symptoms of poisoning occur, induce vomiting and drink plenty of water. If no ill effects are noted, prepare small portions at a time.

Be sure to wash food in clean water. Do not eat too much plant matter at one time, particularly on an empty stomach. Cramping, bloating, and diarrhea are typical effects.

Test each part of a plant before eating. Some plants have edible and inedible parts. Avoid mushroom-like fungi, shellfish not covered by water at high tide, plants that resemble Terrestrial onions or carrots, or have sap that turns black. Fish should have pink or red gills, not gray or blue. Do not puncture an animal's bladder, which can contaminate the meat.

SHELTER

Exposure to extreme conditions can be fatal. Cold causes the body to start shutting down. Heat causes rapid dehydration. Shelter is as necessary as food and water for survival.

Begin seeking shelter at least two hours before sunset. This allows enough time to discover any problems with the location, build or improvise needed structures, and collect supplies. A good shelter should not only protect a person from the elements, but also provide concealment from predators. Make sure the area is not prone to flooding, is above the high-tide mark, and is free of insects and other pests. Fuel and water sources should be nearby and the location should afford protection from the wind.

A lean-to can be constructed between two trees with three stakes or heavy rocks, a length of rope, and a poncho. This simple structure is good for keeping the wind and rain off of a person. Tie two corners of the same side of the poncho to two trees, about waist high. Pull the poncho snug and peg it to the ground with the stakes. The open side should be away from the wind. Spread a thick layer of leaves or other insulating material on the ground to prevent loss of body heat while sleeping.

A large poncho or tarp can also be made into a tent by tying a rope between two trees about thigh high and draping the poncho over the rope. Secure the tent sides with stakes. A trench can be dug around the perimeter of the tent to prevent rainwater from running in. A variation of this tent is made by lashing a long, sturdy pole to a tree about waist high and draping the poncho over it. Additional poles can be rolled in the excess material to hold the sides down, if stakes will puncture the fabric.

A more permanent lean-to can be built by lashing several poles in a crisscross pattern to form a roof structure. Lean the roof against two trees and secure it with rope. Cover the roof with canvas, grass, leaves, or brush.

Build a tree-pit shelter in deep snow by selecting an evergreen with wide, low branches that will provide good cover. Dig a pit in the snow around the tree

trunk, packing snow along the pit sides for support. Lay evergreen branches across the open areas above the snowline to keep wind and snow out of the pit.

A beach shelter can be made fairly easily with materials found on location. Dig a trench above the high-water mark. Heap the soil along the sides of the trench, building what looks like a valley between two mountains. Make the trench large enough to lie in comfortably. The mounds along the sides should be high enough to allow sufficient space in the shelter for movement. Lay branches or driftwood support beams across the mounds over the trench. Cover the supports with brush and leaves to form a roof. Additional soil can be packed over the roof if the wind is hard enough to blow the leaves and brush away.

WATER CROSSINGS

Water obstacles such as marshes, bogs, rivers, and streams are potentially dangerous hazards. Know the proper way to navigate them.

Crossing swift-moving water can be deadly if not done with proper care. The first step one must take in any water crossing is to locate a safe place to cross. On a river or stream, this requires finding a level area where a river breaks into several channels, sandbars, or places where the water is relatively calm. Look for signs of strong undercurrents by watching for swirls on an otherwise serene surface. Especially rocky areas are dangerously slippery and pose a serious danger if one falls on them. Do not attempt to cross at waterfalls or deep channels. Plot a trajectory of 45°, not straight across. Move with the current. Consider removing clothing that can cause extra drag and keep gear stowed in a quick-release pack that can be jettisoned in case of a fall.

Crossing in a group is best accomplished using a solid pole, held on the same side by each person. Face upstream and cross carrying the pole parallel to the current while moving across. By putting the heaviest person on the downstream end of the pole and the lightest person upstream, the current is broken by the smallest person, creating the least drag for the others. Should one person slip or lose grip, do not attempt to grab him. Sudden movements can shift the balance of every person and cause more than one to be lost.

When caught in shallow rapids, float face-up and ride the rapids feet first. Deeper rapids are more easily maneuvered face-down and head first. Swim towards the opposite shore, but do not struggle against the current.

Quicksand is made up of water and sand. It is found on level shores, in silty, shifty rivers, and near river mouths. It tends to look like sand but acts like water. Quicksand, marshes, and bogs should not be crossed simply by walking through. The bottoms of these types of areas are soft and offer very little support. In fact, mud may trap one's feet, making movement impossible and sinking likely. Cross using bridging materials such as logs or branches, or swim across. The water is likely murkier and worse smelling than an average pond, but is not much more difficult to swim. If additional flotation is needed, a pair of pants can be tied at the ankles and waist after inflating them. Wear the pants like a life jacket.

Gear can be floated on a makeshift raft formed by lashing logs together and stretching a tarp across the top. Solar blankets float, and can handle most standard travel gear. Large groups may wish to put all of their equipment into a rescue ball and tow or push it across. Bioplastic in most forms floats and can be used to float gear or people, depending on the object's size and shape.

MARINE SURVIVAL

Ninety-seven percent of Poseidon's surface is covered by water, and most every colonist will be required to travel frequently over open ocean. The odds that a colonist will eventually find himself in a survival situation in a marine environment are therefore extremely high.

PREPARATION

Other than the hard vacuum of space, the open ocean provides the fewest survival resources of any environment the typical colonist is likely to face. The only readily accessible resource on the open ocean is saltwater, which is undrinkable for humans without

the salt tolerance biomod. Even in the most inhospitable desert, it is much easier to find food, potable water, and shelter from the elements.

As a result, survival on the open ocean usually depends on the resources the individual brings into the water with him. Because most such survival situations are the result of travel accidents, these resources typically consist of emergency equipment and salvageable debris from a crashed, capsized, or otherwise inoperable vehicle or vessel. It is therefore of paramount importance to familiarize oneself with the available resources when one first boards the ship or aircraft. Passengers should learn what survival equipment is carried onboard and where it is stored. For personal vehicles, travelers should insure that the vehicle is well stocked with emergency supplies and equipment, including evac pods or rescue balls.

Initial Actions

Survivors of an aircraft crash or sinking vessel must first get clear of the vehicle. A sinking object as large as a ship or aircraft can suck a survivor in the water under the surface. When moving away from the vehicle, survivors should attempt to position themselves upwind, for two reasons. First, high winds or sudden gusts may otherwise blow dangerous wreckage and debris onto the survivor. Second, the wind may carry toxic fumes or other chemical hazards.

Once clear of the vehicle, survivors should attempt to find a raft, rescue ball, or evac pod, if they are not already in one. If no such emergency device is available, the survivor should attempt to locate and cling to a large, buoyant piece of debris. Conservation of energy should be one of the survivor's primary short- and long-term goals. If no flotation at all is available, humans can nevertheless float in water with very little expenditure of energy. The key is to relax—the body's natural buoyancy will keep the top of the head above the surface; only minimal movement is then necessary to keep the face above water. The most energy-efficient technique is for the survivor to float on his back with his arms at his side, finning the hands back and forth to maintain maximum buoyancy.

The survivor's next immediate action should be to locate other survivors. Groups are always more likely to survive than individuals. Groups allow sharing of resources, mutual protection from potential predator attacks, teamwork, and mitigation of survival stress.

Survival Checklist

Once the immediate danger is past, a group of survivors on the open ocean should attempt to accomplish each of the tasks on the following checklist:

- Assess the condition and structural integrity of the emergency craft. If leaks are found, patch them with whatever materials are on hand. All commercial emergency craft come equipped with adhesive patches, but if they are not available, use chewing gum, seaweed dipped in machine oil, lubricated condoms, animal fat, or anything else that will keep the craft inflated.
- Assess the physical condition of everyone onboard, administering first aid as necessary.
- If there are other groups of survivors, lash rafts, rescue balls, or evac pods together, leaving eight to 10 meters between them. The more expansive the formation, the easier it will be for rescue craft to spot the survivors.
- Attempt to salvage all floating equipment and resources from the crash site. If it looks like it may have a potential use, regardless of how unlikely, take it. Store perishable items on the emergency craft, taking care not to exceed its weight limit. If possible, lash and tow other buoyant equipment. Only expert swimmers or those equipped with underwater gear should attempt to dive for sunken salvage.
- Find the locator beacon, emergency radio, or GPS unit and insure that it is functioning properly. Deploy disposable emergency beacons, such as flares or rescue dye, if rescue craft are suspected of being in the area. Otherwise, save them until there is someone in the area to see them.
- If the emergency craft lacks station-keeping propulsion or an anchor, jury-rig a drag using rope or clothing and any available non-buoyant object. Remaining near the crash site will maximize the chances of a quick rescue.
- Work as a team. Assign every capable survivor specific tasks, such as lookout, radio operator, food gatherer, water collector, and bailer. This will organize the survivors' efforts and mitigate survival stress, both of which will increase their chances of survival.
- In stormy weather, wave action and rain can fill a raft or other open emergency craft with water. Deploy or rig a canopy to keep the inside of the craft as dry as possible.
- In a cold climate, survivors should huddle together to keep warm. In an open craft, make sure

the canopy protects the interior as much as possible from wind and water.

• In a hot climate, leave space in the canopy of an open craft for ventilation and take appropriate measures (sunscreen, protective clothing) to protect skin from excessive exposure to the sun.

Food and Water

Fish are the most abundant food sources on the open ocean. If fishing gear is unavailable, improvise line from shoelaces, parachute suspension cords, clothing thread, or unwound rope. Make hooks out of needles, wire, nails, wood, or bioplastic fragments. Small fish will often seek shelter in the shadow of the emergency raft—catch them and use them as bait for larger fish. At night, shine a light on the surface to attract fish.

When near land, survivors may also be able find edible birds, especially if firearms are available. Likewise, seaweed and other marine plants floating on the surface may be harvested for food. Unprepared seaweed, however, tends to cause diarrhea and can therefore cause dehydration, especially when soaked in saltwater. If freshwater is available, clean it thoroughly before eating. Otherwise, eat seaweed only in small portions. Harvesting local food sources in marine survival situations shares the same hazards as most every other environment on Poseidon. Follow established procedures for determining toxicity before eating unknown plants and animals.

If the emergency craft contains a still or other device for producing potable water, get it operational immediately. Likewise, utilize available desalting kits and water purifiers. If no such resources are available, rig a water trap to collect rainwater and dew. At night, simply stretch a tarpaulin or other available fabric out flat and turn the edges up so it can collect dew. Never drink saltwater on Poseidon, as it actually worsens dehydration.

Predators

There are many predators in Poseidon's oceans, and survivors must take precautions to protect themselves from animal attacks.

• Maintain constant lookouts
• Do not throw waste overboard
• Do not clean fish in the water
• Keep arms and legs out of the water and remain as quiet as possible
• Dispose of corpses immediately

Some survival guides suggest various deterrents in the event of a predator attack, such as slapping the surface or yelling underwater. Research has shown, however, that while any given tactic may work on some predators, it may actually incite, enrage, or otherwise attract others. Therefore, if a predator cannot be identified, the best course of action is to avoid attracting the predator's attention. Otherwise, the only consistently effective way to survive a predator attack at sea is to inflict enough damage on the animal to incapacitate it or drive it off. If possible, strike the predator's head with blunt objects—this is usually effective, and it typically does not result in significant bleeding, which can attract other predators.

TROPICAL SURVIVAL

Other than the ocean, tropical environments are most often encountered in survival situations on Poseidon. The jungles offer a number of unique challenges and obstacles to the would-be survivor.

TRAVEL

Efficient travel is often crucial to survival in Poseidon's jungles. The chances of rescue deep in a tropical rainforest are extremely remote—it is usually necessary for the survivor to travel to a suitable rescue point. Jungle travel can be both rigorous and dangerous. Important equipment includes:

- A machete for clearing vegetation, obtaining food, and rigging improvised equipment, such as shelters and rafts
- A GPS unit or compass for direction finding
- Broad-spectrum antibiotics for treating infection
- Rugged and comfortable clothing, including footwear
- A hammock to avoid sleeping on the ground
- Insect netting

If at all possible, travel through the jungle only during the day. Under a thick canopy, it is often completely dark at night, and vegetation and other obstacles can be hazardous. Also, most large tropical predators are nocturnal.

Maximize the efficiency of travel. Move slowly and carefully through dense vegetation, stopping frequently to get bearings and check orientation. Choose a direction and stick with it, but do not necessarily travel in a straight line. Move around obstacles where possible, and adjust pace and stride to the terrain. Cut through vegetation only when necessary; an upward slash is less noisy than a downward cut.

Develop "jungle eyes." Ignore vegetation in the foreground and focus directly beyond it. Do not look at the jungle; look *through* it. At regular intervals, drop to the ground and sight along the jungle floor. This will aid in traveling efficiently, and also in avoiding abrasions, lacerations, and loss of direction.

Always seek the safest and easiest route out of a jungle. The path of least resistance is usually a river or large stream. A waterway will always lead to a larger body of water that offers a clearing in the jungle canopy, and often to habitations. Travel downstream to the ocean or a lake, set up camp, and deploy signaling devices.

Traveling along a river requires water crossings, frequent detours, and the clearing of often-dense vegetation. However, it provides a definite and easily followed direction, a ready source of food and water, and the possibility of traveling by water-craft.

In mountainous regions, travel along ridges rather than through valleys. The ridge offers less dense underbrush and fewer marshy areas, as well as a clear direction and vantage point.

Many animals in the jungle use clear game trails, which often lead to clearings or bodies of freshwater. When following game trails, stay alert for predators and check bearings frequently to maintain the desired direction of travel.

Schedule each day so there is sufficient time and energy to establish a secure campsite in the evening. The sun sets quickly in the tropics, usually in less than 30 minutes, so set camp well before sunset. Do not camp too close to waterways, as heavy rainfall can cause flash floods. Rivers and streams are also common hunting grounds for nocturnal predators. Likewise, do not camp on obvious game trails. Clear the campsite of underbrush to allow easy movement and adequate ventilation for a fire. Always be sure to get sufficient sleep before resuming travel.

FOOD

Foraging in a rainforest is often surprisingly difficult, as edible fruits and nuts are usually too high in the trees to reach easily. Accessible edible plants will often be found along waterways, in clearings, and at the edge of the jungle. Many jungle animals can be safely eaten. Fish are available in rivers and

streams. Follow the general guidelines for capturing and preparing game.

Hazards

Despite popular images of large, voracious jungle predators, the most serious danger of tropical environments is from insectoids. Insect bites are often poisonous, and can also transmit disease and cause infection. Take the following precautions to minimize the danger of insect bites and stings:

- If possible, avoid areas where they are especially populous. Unfortunately, this will often rule out waterways as a desirable route out of the jungle.
- Use pest spikes, or apply chemical insect repellent to exposed skin and openings in the clothing. Always remain fully clothed, especially at night when insects are most abundant. If insect repellents are unavailable, smear mud on exposed skin.
- Close openings in clothing whenever possible. Keep sleeves rolled down and buttoned, tuck pant legs into boots, and keep shirts buttoned at the collar. Wear gloves and insect netting if possible.
- Maintain hygiene, bathing daily if possible. Keep clothing clean, especially footwear. Never walk barefoot in the jungle.

Tropical Waters

Reefs can be abundant sources of food, but also very dangerous. Never walk barefoot on coral reefs: The coral will lacerate the skin, infectious contaminants such as lime or silica can become lodged under the skin, and accidental contact with poisonous sea life is a constant threat. Incoming tides sweeping over a reef make both walking and swimming hazardous.

If traveling through surf, do so during the lull between large waves. Always head into the waves. Do not get caught under large breaking waves in shallow water. Dive and grab hold of a rock until the wave breaks and passes.

When walking over muddy or sandy bottoms of rivers and coastal shallows, slide or shuffle along the bottom to avoid stepping on potentially poisonous or spined animals, such as sand archers.

Desert Survival

While popular images of Poseidon are dominated by open ocean, volcanic islands, and dense jungles, the colony world has several arid environments that pose serious challenges in a survival situation. These include:

- Scarce water
- Intense heat
- Dramatic temperature changes
- Sparse vegetation
- High surface mineral content (salt flats)
- Sandstorms
- Mirages

The scarcity of water is usually the most immediate challenge to survival in an arid region. Some deserts, such as Hell's Basin on Westcape, receive only a few centimeters of annual rainfall, and this usually comes in brief torrents that are quickly absorbed.

Understanding the relationship between physical activity, air temperature, and water consumption is crucial to survival in a desert environment. The amount of water the human body needs is dependent on the individual's level of activity and the temperature. The following table shows the minimum safe daily water requirement for an average human in relation to temperature level, assuming the individual is resting in the shade. Extended physical activity exposed to heat and sunlight can double this requirement.

The human body sheds excess heat by sweating. The warmer the body becomes, the more the person sweats. Sweating results in lost moisture. If a person stops sweating during periods of physical activity exposed to intense heat, the body will overheat and the person will suffer from heat stroke or exhaustion. To avoid this potentially life-threatening condition, survivors in desert environments should:

- Find shade
- Limit physical activity during the daytime
- Always try to sit or lie on some kind of ground cover when resting
- Conserve sweat by remaining fully clothed, with a head cover and a scarf or neck wrap

Temperature (C)	Liters of Water
25	4.5
30	5.6
35	7.5
40	8.8
45	12.3
50	14.2

• Keep the mouth clothed and breathe through the nose

• If adequate water is unavailable, do not eat, as digestion requires water

Heat Conditions

Illness due to overheating and dehydration is often unavoidable in a survival situation in a desert environment. There are three main types of heat condition: heat cramps, heat exhaustion, and heat stroke.

Heat cramps are usually caused by the loss of salt that results from excessive sweating. This condition causes moderate to severe muscle cramps in the extremities and abdomen. At the first sign of discomfort, the victim should immediately cease physical activity, seek shade, and drink water in slow sips, if it is available.

Heat exhaustion is caused by significant loss of body water and salt. The condition causes headaches, disorientation, irritability, excessive sweating, physical weakness, dizziness, severe muscle cramps, and clammy skin. The victim should lie down in the shade, preferably elevated at least 50 centimeters from the ground. Fan and sprinkle water on the victim, and allow him to drink small sips of water approximately every three minutes. The victim should rest and continue treatment until symptoms are gone and strength returns.

Heat stroke is simply a severe case of heat exhaustion. Loss of water and salt is extreme, and the body is unable to cool itself. Symptoms include no sweating, hot, dry skin, headaches, dizziness, racing pulse, nausea and vomiting, disorientation, and possibly unconsciousness. Follow the same treatments as listed for heat exhaustion, but pour water on the victim more liberally and massage the extremities. Death is a real threat if the victim is not cooled immediately.

Hazards

As in tropical environments, insects, poisonous animals, and thorned or barbed flora are potential dangers in most deserts. Take standard precautions to avoid these hazards. Regularly inspect clothing and sleeping materials for potentially dangerous animal life, and carefully inspect resting areas before sitting or lying down. Standing water in arid environments is frequently contaminated. Assume that it is and use water purifiers wherever possible. Drinking contaminated water can cause severe gastrointestinal problems that exacerbate dehydration.

Sunburn, as all but the most sheltered tourists know, is caused by overexposure of the skin to sunlight. It is just as much of a danger with a cloud cover as on a clear day. Remain fully clothed, use available sunscreens, and limit activity during the daytime to minimize the risk of sunburn. If severe sunburn does occur, treat it like any other burn. Take care to keep blistered areas clean, as infection will cause further complications. The damage caused by sunburn can be exacerbated by chapping due to wind and sand. Again, full clothing to limit exposed areas is the best protection.

The **glare** caused by intense sunlight on the sand can cause severe eyestrain, and potentially even blindness. Windblown sand can further damage the eyes. If eye protection is unavailable, try to shield the eyes with headwear and wraps.

The temperature can drop rapidly after sunset, and arid environments dry out the nasal passages, increasing the risk of head and chest colds. Always wear warm clothing at night. If physical activity and travel is restricted to the nighttime hours, this will also help to keep the body warm.

Due to the extreme physiological stresses placed on the body in desert survival situations, adequate rest is absolutely crucial. The average human requires 20 minutes of rest for each hour of physical activity in the heat, and at least seven to eight hours of sleep each 30-hour day.

Because infections and gastrointestinal disorders can lead to excessive loss of moisture, good hygiene is also crucial. Waste should be buried so as not to attract disease-carrying insect analogs. The hands should be washed regularly, in clean sand if water is unavailable, as should cooking and eating utensils.

Arctic Survival

While tropical and subtropical climates prevail throughout most of the settled Pacifica Archipelago, arctic conditions are common in the polar regions and are also encountered in high-mountain regions, such as the central peaks of Prime Meridian. Arctic environments can be uniquely deadly in survival situations. The cold is a deadly adversary for humans. While the extreme heat of Poseidon's deserts can kill

in hours, extreme cold can kill in minutes. Dangerously cold air temperatures are often exacerbated by even moderate winds— the phenomenon known as **windchill**.

In a cold environment, every major survival task—travel, and obtaining food, water, and shelter—is more difficult than in a warm environment. And even if these needs are provided for, the would-be survivor must still keep his body warm or he will die in a very short time.

When healthy, a human's body temperature is almost constant at 37°C. Since the extremities do not have as much insulating body tissue, their temperature tends to vary a lot more and will often not reach this core body temperature. The human body has a climate-control system that it uses to maintain its temperature. This control system has three main components: heat production, heat loss, and evaporation.

Heat production is determined by the difference between body temperature and the surrounding temperature. In general, the body is a lot more efficient at shedding heat than at producing it. The muscle activity involved in shivering produces heat, and is one of the body's involuntary responses to cold. However, it also causes fatigue eventually, which in turn results in dropping body temperature.

- At wind chills between –28° and –56°C, exposed flesh may freeze within one minute
- At wind chills below –56°C, exposed flesh may freeze within 30 seconds

Hypothermia occurs when body temperature drops to between 35°C and 25°C. This extremely dangerous condition can even occur when air temperatures are above freezing. Symptoms of this condition include sluggish movement, deteriorating coordination, and mental impairment. A victim of hypothermia whose core body temperature drops below 25°C is almost certain to die.

The only way to effectively treat hypothermia is to rewarm the body. One of the best methods, if the means are available, is to immerse the victim's torso in warm water. Immersing the entire body all at once can induce shock and cardiac arrest. Warm-water enemas are the quickest way to increase the core body temperature.

If warm water is unavailable, the victim should be wrapped in a warm cover, such as an insulated sleeping bag, with another warm person. Both should be naked to allow for maximum heat transfer. A conscious victim should be given hot, sweetened fluids.

Frostbite is a condition caused by frozen tissue. Light frostbite only affects the skin, giving it a dull white coloration. Deep frostbite extends to the tissue below the skin, and the tissues become solid and immobile. The extremities are especially vulnerable to frostbite. Check for frostbite regularly. Groups should check each other to maximize the chances of detection. Treat areas affected by light frostbite by rewarming, and take extra care to prevent the affected areas from refreezing. Do not attempt to rewarm areas affected by deep frostbite—if the area becomes refrozen again, it will cause extremely severe damage.

Other Hazards

Snow blindness is caused by the reflection of bright sunlight off of a snow covering. The condition causes a sensation of grit in the eyes, pain that increases with eye movement, watery and red eyes, and headaches that intensify with continued exposure to light. Prolonged exposure can result in permanent damage and blindness. The condition must be treated by completely covering the eyes until the symptoms disappear. If protective eye wear is not available, cut narrow slits in a thin piece of wood, bioplastic, or other material. Attach a cord, string, or wire to the improvised glasses and fasten securely behind the head. This will dramatically decrease the amount of light that reaches the eyes.

Staying Warm

The only way to stay warm for an indefinite period in an extreme-cold environment is to wear proper clothing and wear them properly. Follow these three guidelines:

- Wear clothing loose and in layers. This will allow ample circulation, and air trapped between the layers will increase insulation.
- Keep clothing dry. Wear waterproofed clothing, if possible. Be careful to avoid overheating, as inner clothing will absorb sweat. If clothing does become wet, dry it near a fire or heat source; if none is available, use body heat to dry it while camped.
- Keep clothing clean. Dirt and contaminants can cause clothing to lose much of their insulating properties.

Water

Water is typically more abundant and sanitary in arctic environments than in others due to prevail-

ing conditions. However, if possible, always purify water before drinking it. Ice and snow can be melted for water, but make sure it is freshwater before drinking it. Always melt ice or snow to produce water for drinking; melting it in the mouth uses body heat and may cause injury. Limit water consumption before going to sleep—heeding the call of nature in the middle of the night will result in further exposure to cold.

Food

While edible flora is frequently scarce in arctic regions, game is often abundant. Always skin and butcher game while it is still warm. Cut the meat into individual pieces and freeze them separately, so they can be thawed and cooked as needed. As always, never eat anything unless you know it is edible. Unknown flora and fauna is much more common than known on Poseidon, so always use the Universal Edibility Test when in doubt.

Travel

Travel through arctic environments can be both rigorous and treacherous. Follow these guidelines where possible:

- Never travel during blizzards. Seek shelter and warmth.
- When crossing ice-covered waterways, be alert for thin ice. Distribute body weight by lying flat and crawling.
- Freeze and thaw cycles may cause the level of waterways to vary dramatically at any time of day, depending on distance to source, temperature, and terrain. Always cross waterways when the water level is at its lowest point.
- When camping, allow plenty of time to build adequate shelter before sunset.
- Because they are typically clear of obstacles and terrain hazards, both frozen and unfrozen rivers make good travel routes.
- Use snowshoes when traveling through heavy snow. If necessary, jury-rig them using available materials. Anything that broadens the footprint and prevents sinking into the snow will suffice. Traveling through deep snow without snowshoes or skis is extremely rigorous.

WILDLIFE ENCOUNTERS

The plants and animals presented in Blue Planet are meant to serve a number of functions in the game. They are intended to enrich the setting, helping to foster the sense of an alien world, cultivating a deeper, more realistic background. They are intended to serve as plot devices, challenging and motivating characters in any number of ways. They are also meant to threaten player characters, to create a sense of danger for adventures at sea or in the outback. They are intended to provide lethal opponents for characters to outsmart, overcome, or battle.

These intentions are best realized through encounters with these creatures, and Game Masters are encouraged to use the biota of Blue Planet in ways that add realism, depth, mystery, danger, and action to their adventures. The following wildlife encounters are intended to help Game Masters use the flora and fauna of the game effectively. These set-piece encounters can be used as written or they can be mined for cool ideas and customized to fit a specific campaign. They should also be used to inspire Game Masters to create similar encounters of their own, encounters that go beyond simply killing monsters, instead using those monsters to add substance, variety, and a sense of originality to the game.

Because a sense of the unknown is so important to wilderness encounters in Blue Planet, these entries should be considered Access Denied, for the Game Master's eyes only.

Attack of Inconvenience

A research outpost in the Anderson Reef has been plagued by a problem in the past few days. Any human or cetacean approaching a certain rift is assaulted by tiny eduropods. While not overtly dangerous, the animals soon become so numerous that they cloud the water, and the individual is soon covered with numerous tiny bites. While in the area, the trespasser soon becomes covered in a thick mass of squirming eduropods. Bites on exposed skin are painful, but the biggest danger is that the creatures will clog artificial gills, MHD intakes, and other equipment. The research outpost is interested in operations around this reef, and is desperate for a resolution of the problem that does not damage the ecosystem.

The eduropods have migrated from many kilometers in all directions, gathering in crevasses throughout the reef in preparation for mating. Currently, the males are competing for prime territory. Any large animal wandering into the area will be overwhelmed. The problem will become worse before it gets better, as ever-increasing numbers gather. Eventually, the water around the reef will be teaming with the eduropods and the predators feeding on them.

There are three solutions to the problem. The first is simply to wait. There is clear evidence that the eduropods' numbers are massively inflated and that this is almost certainly a temporary matter. Educated analysis of the situation will reveal that the population bloom is unlikely to last more than one or two weeks. Simply making observations and minimizing activities until the cycle completes will have the least impact, along with gathering valuable information about the reef ecosystem. This will have a negative impact on some studies, but with care the problems should be minimal.

A second solution is to use some form of chemical agent to protect individuals. With a little analysis and testing, even amateur chemists could develop an effective repellent. The eduropods will still gather, but will be unable to get near a protected individual or piece of equipment. This gel, however, will damage all eduropods it contacts, causing unknown disruption of their life cycle. The third solution is to kill the eduropods outright, or knock them out while researchers pass through and take samples. This solution is most likely to cause major damage to the ecosystem and skew research data.

The research outpost could be a Hanover operation, from nearby Lebensraum. It could also be a Haven Institute of Science and Technology outpost. Game Masters can adjust this as appropriate, or may set it in another reef system altogether.

Bad Water

Residents of Poseidon know to be cautious of water, particularly freshwater supplies. Most would prefer to drink desalinated seawater than trust most sources of freshwater. Still, explorers in the rainforests are sometimes pressed for supplies. Wide-spectrum antibiotics and filtration systems are usually very effective.

Colonial organisms that can infest human skin live in many regions of the rainforests, however. Traveling through standing water and marshy areas is often sufficient exposure to cause infection. The parasite works its way into the pores, and a painful rash soon develops on the skin. If left untreated, the skin cells slowly dissolve over a period of weeks, an extremely painful process similar to the effects of some lethal animal toxins. The infection also releases toxic byproducts, and these can produce a number of complications. Though there is no known inoculation, the organism is thankfully easy to treat with a specific, topical treatment of antibiotics. The infection then clears up within a few days, leaving a faint discoloration the natives call "wash."

Travelers in rainforests and coastal marshes are encouraged to treat rashes as they appear with a variety of medications. Wash is only one of many organisms that find the human body a wonderful source of nutrients.

Blimpbombs

Desmond Johnson has been working for the Haven Institute of Science and Technology for three years in their xenobiology department. Known for a brilliant imagination and attention to detail, his papers have been well received and he is expected to complete his doctorate within the next year.

The characters receive disturbing news, either from within HIST or from intercepted communications.

It seems that Desmond has uncovered some information about the biology of blimps, and is working with GenDiver on covert research. Two people involved in his work are dead, perhaps killed to safeguard secrets. Whether sent by a rival Incorporate, investigated by the GEO, or an internal Haven team, the players must uncover the truth.

The truth is that Desmond has snapped. He is convinced that blimps can be used as covert weapons, rigged with control devices and small charges, and is trying to get an Incorporate to give him money to develop the idea. The problems are many and insurmountable, of course, but this hasn't stopped Desmond. GenDiver, after studying his requests briefly, is no longer returning his calls. Though two researchers did die working with Desmond, the cover story is the real story; they died from a surprise stone snake attack.

Breedin' Joes

The remains of many large animals—including humans—have been discovered in an isolated mangrove forest. The remains are grouped in several locations and are relatively fresh. Examination indicates

that the deaths occurred between one and two weeks ago, and the bones show distinct rasp marks.

The mangrove has become the mating grounds for several dozen Hangin' Joes. These dangerous organisms have congregated, and after a feeding frenzy, are beginning their courting rituals. In a few days the activity will be complete, the Joes will separate to lay eggs, and they will slowly disperse.

The party members could be explorers who inadvertently discover this evidence. They could also be alerted by other explorers, or be investigating missing persons. The biggest danger to the party will be right after the eggs are laid. The Hangin' Joes will be at their most mobile, rather densely grouped, and will not have eaten in a week. Approaching during mating is also dangerous, as the timing is inexact and there will be hungry Hangin' Joes surrounding the main group.

An enterprising group of characters can make some money from the situation. A high quality recording of the mating is worth 2,000 scrip from the Haven Institute of Science and Technology, or from interested Incorporate states. Recordings of egg laying can fetch 1,000 scrip, and a simple recording of a lone Hangin' Joe is worth 500 scrip.

Actual eggs are worth 500 scrip for a small sample, or up to 4,000 for a larger sample—all the eggs from one laying or a number of samples. This assumes the eggs are delivered intact and well preserved.

Bubble Trouble

When land is submerged, aquifers are often trapped within. This creates massive amounts of freshwater under the ocean along continental shelves. When sealed in limestone, the limestone slowly erodes away, eventually causing a sudden and massive upsurge of freshwater. Given freshwater's relatively low density, the flow can be quite strong. These freshwater sinkholes are dangerous to ships, which can fall into the less dense freshwater and then suffer from turbulence. The odds of encountering one, however, are quite small on Earth.

On Poseidon, these water bubbles are more rare. The fact that the planet has any lends some credence to the idea that more of its landmass was exposed in the recent past, although just how much more is debated. A few rather radical theories as to how freshwater reservoirs can form without dry land have been proposed. In any case, these water bubbles pose a distinct danger, particularly given undersea prospecting.

Operations on the sea bottom have a chance of disrupting these bubbles. Detailed penetrative sonar surveys should reveal them, but these are generally done late in a mining operation. Obvious sink formations and variations in water composition can reveal reservoirs that are close to collapse. More stable formations, however, only become a problem in short periods of time due to mining activities.

If the bubble opens, it will flood the surrounding area with freshwater. This will cause cetaceans great discomfort and system stress. It will also cause turbulence and a current flowing into the reservoir, from seawater replacing escaping freshwater. This will suck a poor prospector or pieces of equipment into the chamber. The sides of the chamber and falling rock can cause damage.

A bubble will rarely burst all at once. This depends on how easily freshwater can flow out of the reservoir. There may be repeated releases and corresponding currents. Chambers may also be laid out in a sprawling series.

Circus Carcass

In this encounter the players are residents or visitors in a native village, or maybe they are members of a small colony, or staff at a field research station. The morning after a violent storm they wake to find the carcass of a very large, very dead animal has washed ashore on their beach. Maybe it is a big greater white or even a corpse of the rare leviathan. The body weighs 90 tons at least and the storm surge has stranded the beast high on the shore. The creature is immense, and has obviously been dead for some time as it is half decayed. Smaller scavengers, like seaghouls, gather quickly and there are legitimate fears that larger, more threatening animals may soon be drawn to the mountain of carrion. The stink is overwhelming, and every resource in the town is soon bent to clearing the corpse away.

No local boat is powerful enough to drag the huge thing off the shore, even if there was enough cable available, and a way to secure it to the animal. There is absolutely no way to bury it, and the scavengers certainly are not going to eat it all before something dangerous shows up or the smell drives the residents away. Someone suggests chopping it into smaller pieces and trying to drag those off. This is tried, but after hours of chopping, cutting, and digging the gore-covered workers realize the huge creature is just too big to hack through with hand tools. Then someone suggests explosives, and in their fatigue and frustration the work crews give that a try. The bloody rain that results leaves the beach and village a gooey mess, with gobbets of rotting flesh hanging from tree branches, rooftops, and laundry lines. Pools of coagulated goo cover the streets and villagers stalk angrily through town looking for the smartass who suggested turning the pile of rotten meat into a bomb.

This encounter can remain a lighthearted comedy, or it can get serious when guards must be posted to keep niños muertos and pseudo eels at bay while the mess is cleaned up and hauled away. If enough large scavengers show up, this encounter could become deadly indeed.

Cuddlesloth

Found only in the southernmost Endeavor Islands, the cuddlesloth is a mild-mannered animal that resembles a Terrestrial sloth. It is a draconodont with six clawed limbs, about a meter tall. Like sloths of Earth, it is arboreal and slow moving. It does not have fur, but has a tight mass of epiphytes and moss that grow over its body. The head is owllike, with soulful eyes, set on a long neck.

When held by a human, the cuddlesloth has a tendency to wrap its arms around the person, ducking its head under an arm. Owners report that the cuddlesloths are comforted by the warmth of a human and prefer human perches to trees, unless they are hungry. Unfortunately, cuddlesloths need their plant symbiotes, and die within days if the vegetation is cleaned off. They also fare poorly when moved to other regions. Still, they thrive as pets in their home regions, seem to emotionally bond with their owners, and have become quite popular.

Several disappearances of cuddlesloth owners have caused worry. Owners become isolated, shunning friends and family. Some move to more isolated homes or camps in the rainforest, and eventually cannot be found. On two occasions, family members trying to track their relatives report seeing brief glimpses of mossy people near where the relatives vanished.

There are a number of theories, any of which could be correct. There could be an unknown physiological effect of the cuddlesloths or the plants living on them, and these could cause antisocial behavior. Simple accidents or predation could also account for the vanishings. Another theory is that it is purely psychological. Psychological disorders sometimes appear in societies and regions for a time, and then vanish. The isolation of the region and attachment to an alien organism could form some part of an unknown psychological pathology.

Wilder theories include the actions of aborigines and the infection of humans by the cuddlesloth symbiotes.

Data Entry

The unfortunate player character subject to this encounter is staying in the home of a native family. One morning, as he is getting dressed or is otherwise distracted, he notices the family pet: A large basilisk has come into the room and is clawing through his gear. As he shoos the creature away he notices the end of a dataspike sticking out of the animal's mouth. The lizard swallows it, hisses at the character's attempts to fend it off, and then nonchalantly drags itself out the door. The data spike might be valueless, or it might contain the key to the whole adventure. If the latter, the character is going to have to exercise more than delicate diplomacy to recover his property.

Desertification

It may seem odd in a world of water, but deserts can pose a problem even for prepared characters. There are a number of reasons why characters may brave the deserts. Smugglers and other criminals may operate out of desert regions, counting on minimal traffic to provide some protection. Researchers are interested in ecosystems throughout Poseidon, and deserts are known for the interesting chemicals developed by endemic flora and fauna. Deserts are also frequently the sites of prospecting efforts.

Water is the first noticeable difficulty characters may face. A malfunction in a refiltration unit or damage to water supplies can make the situation very dire. Characters may also become lost, particularly if they are working covertly and had to leave GPS units behind. Heat stroke can creep up on characters quickly, rendering every decision difficult and putting considerable stress on the body. Veteran explorers will be alert enough to minimize these problems. Other characters may let their guard down, used to thinking of danger only in terms of jungles or sea.

Digging in the Dirt

This encounter has the player characters spending the night on an empty beach. They might be sleeping on the sand, in tents, or even in a jumpcraft. As they sleep, a colony of digger crabs expands their underground warren so that it now extends beneath the unsuspecting characters. As they roll over in their sleep, or get up in the morning, the warren suddenly collapses. One or more of the characters instantly find themselves lying at the bottom of a deep hole, half-filled with cold seawater, a dozen digger crabs eying them with bad intent. Maybe they are wrapped helplessly in their now soggy tent, or perhaps their jumpcraft is now hopelessly sunk, half upended, in the muddy hole. Whether presented as comic relief or with a more serious tone, this encounter offers an unexpected twist.

Fish of a Different Color

There have been stories, lately, of a lone schooler that has been attacking and killing cetaceans and humans. There is considerable interest in this matter. Speculation runs from there being rogues among the schoolers, to there being a distinct but different species that exhibits more aggressive behavior.

The stories can be tracked to a five-year-old native girl whose parents were eaten, as far as she can tell, by an evil schooler, and from sonar recordings from an outpost whose crew all disappeared. These facts, as well as some other tentative disappearances and fragmented stories, may lead a party to the south of Islas Bonitas.

The truth is that it is not a schooler at all, but several young greater whites, each between three and five meters long. Uncovering the truth will bring modest rewards to the party, particularly if they manage to capture one of the greater whites. The difficulty is that efforts to track or hunt the young greater whites are likely to attract the attention of larger adults in deeper waters.

Ghost in the Night

This encounter does not need to be a dangerous one, and in fact is probably best used in one of those special roleplaying moments when a Game Master wants to press home the alien feel of life on Poseidon. Of course, if danger is called for, this encounter can easily be dressed up a bit. The encounter must be set up carefully, and the Game Master needs to be ready by having set the right tone and having plenty of eerie description ready.

The players are traveling by watercraft at night, or better yet, they are asleep at anchor on some remote reef. Dimly flickering electric lights aboard the vessel wake them, and when they come out on deck to investigate they discover their boat has been surrounded by a drifting ghoster. The colonial creature stretches for hundreds of meters in every direction and its electrical discharge is creating sympathetic glow in the boat's fluorescent lighting. Describe the scene as surreal and emotionally moving. The gently undulating glow of the water-rocked creature would be inspiring and hypnotic, like staring into a campfire. The twinkling trails left behind as small creatures collide with the ghoster make the mass look like a slowly drifting galaxy and prove to the characters in no uncertain terms that they are very far from Earth.

To add an element of danger to this encounter, the Game Master should describe a moving patch of brighter, sparking light where the ghoster is being disturbed by something larger moving just below the surface. The glow begins to circle the boat moving closer and closer with each pass. A greater or lesser white, a pseudo eel or a stone snake could be on the prowl, and the players might soon be thrown into a desperate fight for survival.

Knock Knock

In this encounter the player characters are getting ready to exit a submarine or an underwater facility. They are about to enter an airlock or a moon pool, and maybe some of them are half into their diving gear or organizing equipment and weapons. However it is set up, the encounter should be a total surprise. When the inner lock is opened, or the players head for the pool, a pseudo eel erupts out onto the deck. Maybe it was waiting for prey to come out of the "cave," or maybe it was simply using the lock as a refuge. Either way, when the creature suddenly finds itself out of the water, it will panic and thrash about. It will not try to attack, but it will bite at anything in range, knock over equipment, and trash controls and fixtures. Dealing with the creature might include driving it back into the lock, or attacking it with spears or improvised weapons, as gunfire within the facility might prove more dangerous than the eel.

Land War

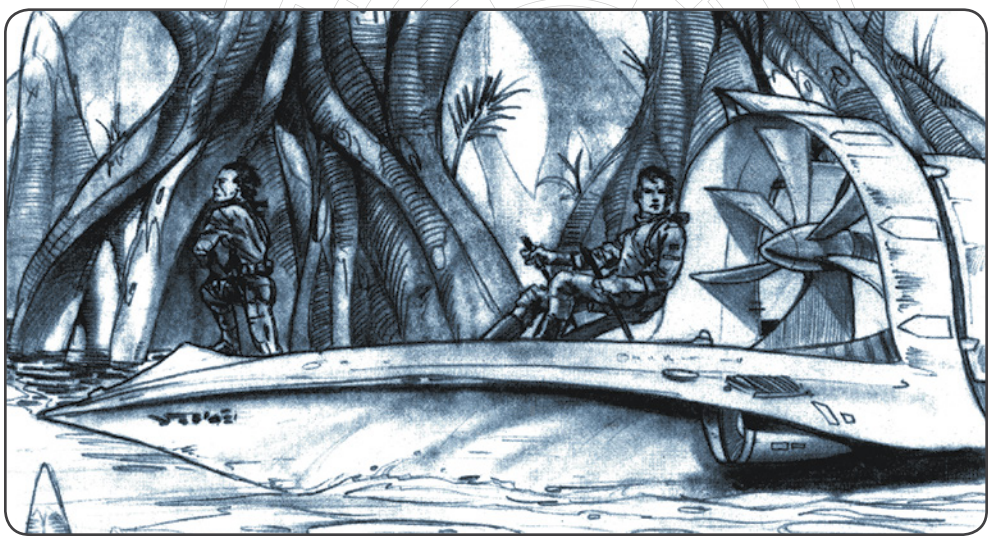
In the dark, wet jungle of some remote island the player characters have stumbled upon the half eaten carcass of a niño muerto. The ground has been torn up in some sort of struggle, and any native or frontiersmen characters might notice signs of a land lizard attack. Maybe the players even witnessed the kill, and are now watching the large amphibian consume its prey from the safety of the undergrowth. Just as those characters with experience in the outback realize what is about to happen, the Game Master should have the remainder of the dead niño's troop show up, enraged by the smell of their bloody packmate. The players suddenly find themselves caught between two of the deadliest terrestrial predators on the planet—one angered in defense of its food, and the other an encircling pack of arboreal killers defending their territory. This encounter is about as deadly as they get and a Game Master should make sure his player's characters are well armed (or expendable) if he decides to throw this one at them. Alternatively, perhaps the niños and lizard are so intent on each other that they can spare only a cursory attack or two for the characters.

Love is in the Air

Alex's ribbonsquid is a newly observed species, from six to eight meters in length. The ribbonsquid exhibits long migration patterns, and researchers are eager for samples. Natives are known to prepare a variety of medicines from the occasional ribbonsquid catch, so several Incorporates have prepared teams to investigate. Enterprising and brave dolphins may endure the indignity and risk possible harm for the opportunity to take samples and observe ribbonsquid behavior close up.

One Snowy Evening

Along the eastern edge of the Pacifica Archipelago, currents send nutrient-rich waters out into the deep ocean. Agriculture, prospecting, and research bring



many people to the area. A common problem is generally referred to as "snowfall." The species is sexually dimorphic. The female has very short arms, tucked in two flat structures on the posterior end. Unfortunately, with her tentacles retracted, the female resembles a dolphin, in shape, color, and other cues.

Characters are most likely to encounter Alex's ribbonsquid during mating season, when the animals move through continental shallows. Dolphins investigating a ribbonsquid migration are likely to be the unhappy recipients of courtship and contact with gangs of eager cephalopods. Territorial males will attack other characters.

Snowfall originates within the seas around the major landmasses. Storms kick up massive amounts of nutrients and rip biota free from shallow waters. As these nutrients and detritus travel west, large numbers of other animals and plants grow in the rich waters, causing a bloom. This current is generally driven downward—by friction, winds, and freshwater—to spill off the eastern edge of the continental shelves. Once the waters drop below the photic layer, the environment shifts and cools rapidly. This bloom becomes an opaque mess, occluding waters throughout the area, becoming turbidity currents when they hit the abyssal plain.

Closer to the surface, this debris can be harmful to cetaceans, due to parasites and infection. The blooms also cause difficulty with sonar, though this is not due to the organic material. Snowfall is accompanied by light, less salinated warm water. Thermoclines can become layered and turbulent, creating noise. Sonar and communications can be disrupted by the effect.

Snowfall is considered beautiful by some, and provides vital nutrients to a large number of benthic animals. Some have considered the use of these blooms in agriculture, drawing nutrients and organic material from the water during the snowfalls. No economic method to harvest these blooms has yet been invented.

Pheromones

A large number of Hydrospan watercraft have disappeared in the southern waters of the Zion Islands, particularly between Boa Vista and Navajo. Other than frantic calls about being attacked by "clouds," there is no clear evidence of what is causing these disappearances. Part of one craft containing a transponder has been found, the craft having evidently suffered a major impact. The biggest problem is that this region is a major traffic route. Many vessels travel westward along the southern edge of the Poseidon Antilles, moving through the gap between Boa Vista and Navajo, and then north-northeast to New Jamaica. It would cost Hydrospan a great deal to avoid the route.

Hydrospan is obviously concerned. Security personnel wonder whether the disappearances are the result of actions by rival Incorporate states, ecoterrorists, violent natives, or aborigines. Other vessels have moved through the danger zone with no problem—only Hydrospan watercraft have been targets. Security has put some observation drones in the area, but these have limited coverage. Hydrospan is unused to being targeted by such attacks and will pay handsomely for a resolution of the problem.

The culprit is a natural one. A migration and breeding season has begun for several species of fish, eduropods, sponges, and a type of airborne insect that dives for plankton in the waters near reefs. The Caribe Reef nearby is bristling with activity, with huge numbers of sponges covering the reef, eduropods gathering in great numbers, fish gorging themselves on them, and stone snakes feeding on all the others.

The problem is that a new quick-drying paint, developed by Hydrospan and currently used on their newest line of vessels, contains a chemical that resembles a trigger for eduropod mating. As a Hydrospan vessel moves near the reef, it attracts a growing number of eduropods, followed by fish and stone snakes. The water is soon teaming, the air filled with insectoids feeding on eduropods, and birds swarming to feed on the insects. An ecosystem in miniature tightens around the watercraft. This is frightening and distracting, but the danger is in the greater whites that follow these concentrations. The greater whites emerge from the depths and swallow gaping mouthfuls of the abundant organisms, and they've been gulping down the watercraft as well.

Polyplug

This encounter could be dangerous depending how it plays out, so Game Masters should be prepared. The characters are about to weigh anchor after spending a couple days in a quiet bay or moored near a sheltered reef. When the helmsman goes to start the MHD drive, warning indicators report a blockage in the vessel's drive tube. Reversing the flow does not eject the plug, and no other such maneuvering seems to clear the problem.

When someone goes over the side to investigate, he comes face-to-face with an adult polypod that has taken refuge inside the drive tube. Apparently thinking the tube was a cave or a ready spot from which to stage an ambush, the creature now feels threatened and is likely to attack. Assuming the diver survives this first encounter, he and his shipmates should have an interesting time trying to figure out how to get rid of their aquatic stowaway without damaging their boat or themselves.

Sex Glue

There are many reefs capped by pseudo-coral. They are not true corals, and are not eduropods. Although they are animals, they have unusual similarities to fungi. At a certain point of their breeding cycle, many of these species are stimulated by exposure to freshwater, generally in the form of rain.

They respond to the freshwater by releasing huge numbers of gametes and a slimy substance that pours along the reef, fertilizing other pseudo-coral. This fluid can cause trouble for nearby animals, choking fish and other large chordates. Frequently, other fish and animals are attracted when the fluid is released, waiting out of the deadly range. Plankton feed on the unused fluid, and the food chain receives a brief boost.

Characters working on or near reefs may be subjected to this unusual environmental encounter. During a rainstorm, the characters will notice the water becoming increasingly cloudy. The material will accrete to the surfaces of all submerged objects, and clog intakes. Flippers or arms will be coated, becoming gummy, and stick together. Gills will become choked. All physical actions in the water will suffer a –1 penalty per 15 minutes, with a maximum penalty of –4. Gills will become inoperable, requiring aquaforms to immediately leave the water. The water more than 200 meters from the reef will be uncontaminated by the substance. The production only lasts 1 to 2 hours, after which the fluid disperses.

Slime Showers

This unpleasant phenomenon is particularly common to subtropical regions. Under certain conditions, sargassum islands gathered in thick numbers will pollinate in sequence. Massive amounts of pollen fill the air, and soon mix with water. Slick brownish green rain soon falls, coating ship decks, coastline, and unlucky people with the slippery substance.

Stinging in the Rain

A blustery, nighttime storm has blown a group of blimps ashore where they have hung up on the surrounding terrain. Their tentacles are stuck in trees, tangled in vegetation, wedged between rocks, and draped thickly over the characters' hut, tent, or jumpcraft. When they awake, they are confronted with a sticky barricade of protoplasm and stinging cells that takes time and ingenuity to get through.

The tentacles are soft and gooey, and cutting them is akin to pushing on a rope. Even when detached from the main body, the severed bits still sting and are difficult to clear away. To add an additional element of confusion and surprise, combine this encounter with the events in "Digging in the Dirt" above, then sit back and watch the fun.

Storm Children

A rare species related to the ghoster lives in the Storm Belt on the open ocean. The organism forms large mats that float along the water and can sink to variable depths to avoid the worst storms. These organisms, known as storm children by local natives, have also evolved a unique method of feeding.

During a storm, the organism forms a cone shape, dispersing in a wide ring and forming a deep concentration of filaments. These filaments create a potential that attracts lightning. When lightning strikes the center of the storm child, biological inductance taps and rapidly stores large amounts of energy. After the strike, the colony repairs whatever damage has been done and rapidly metabolizes the energy into useable forms.

Travelers trapped in a storm at sea may blunder into a storm children colony. To those few who are familiar with the creatures, the faintly glowing rings offer a warning that lightning will strike nearby. Researchers of storm children may face great danger during storms, and the safest approach is to submerge until the danger has passed.

Sunburst Attack

Tourists and researchers near Westcape have reported some distressing news. Small groups of sunbursts have attacked children and isolated individuals, ganging up on them and dragging them into the depths. The sunbursts then batter their victims to death. The usual rumors abound, and officials in Dyfedd are concerned about the impact on tourism in the area.

It is mating season for the caneopoise, and small bands of juvenile sunbursts are in a hyperaggressive state. They are too young to attract mates, so they practice their dominance behavior on any small animals that get in their way. The solution is simply to identify the behavior and the timing, and issue proper advisories.

The Dolphibat and Barnacle Mule

One of the problems with classifying and identifying life on Poseidon is that most observers are untrained, undisciplined, and often untrustworthy. Particularly among the native community, there are a large number of animals described that most scientist suspect are pure invention. The problem is, of course, that truth is often stranger than fiction. Absurd animals have been found on Earth throughout history, the platypus being just one well-known example.

Sometimes scientists are the brunt of jokes. Two popular and probably invented life forms are the dolphibat and the barnacle mule.

The dolphibat is supposedly a fusiform animal with long batwings. Though some scientists have speculated that it could be a relative of the eel dragon, the lack of any physical or recorded evidence leads most biologists to assume it to be a native tall tale.

The barnacle mule is a large, rubber shrimp-like animal that dwells in the coastal marshes. Six legs radiate from the center, reaching out to pull up nearby underbrush. When the underbrush is stripped bare, it everts and lumbers to a new location, and then folds back up. Natives claim barnacle mules are used as pack animals. Though this sort of animal is plausible for Poseidon, there is no evidence that they exist. When pressed, natives claim that they do not use barnacle mules, but other natives in neighboring islands do.

The pursuit of cryptozoology is alive and well on Poseidon. With so many animals to identify and classify, sifting through stories and accounts becomes important. Part biology and part psychology, understanding perception and how stories evolve gives scientists important clues when using untrained but eager observers. Player characters can expect rewards from a variety of interested parties for verified animals. Sifting through stories and accounts may be a bit tedious, but the fieldwork involved can keep players very busy.

The Power of Many

The articulated rook is a relative of the night crawler found only on some of the smaller islands of Poseidon. It is diurnal and bears some resemblance to a squat castle tower. Weighing in at 10 kilograms, the articulated rook is known to scientists as a solitary scavenger and opportunistic predator in reef and island shallows ecosystems. What is unknown, however, is that its behavior shifts dramatically during the migration of other amphibious and aquatic species.

During these periods, the rook is social and hunts the shores in packs. One or two will frighten or bully their prey. Animals that are more aggressive are baited. Whether pushing the animal or being chased, the rooks lead the animal to the shore, where up to 20 more of the animals lurk in ambush. The group attacks en masse. They are often successful and quickly carve up the prey, passing pieces of the carcass to the females. The females, in turn, carry the pieces to above-water lairs and crevasses. Rooks will also attack animals in the water, but only in shallows. During migration, rooks can eat huge numbers of passing sunbursts, land lizards, and other surprisingly large animals.

When hunting humans, the lead rooks will first see if the humans are interested in chasing them. If not, they will wave their claws and nip at the humans, to frighten them toward the water. A human can try to avoid them, but must be alert and quick. The problem is that many of these islands are small, and there may be numerous hunting packs ringing the island. Cetaceans are less likely to be attacked, but may be ambushed by the entire group if their territory in the shallows is approached.

A number of explorers and researchers have vanished over the past few years. Though some remains and equipment have been discovered, the nature of the attacks is a mystery. There is a pattern to the disappearances that requires some research to understand. The location of the attacks and the timing of sunburst and other migrations might also give a hint. Discovering, and surviving, the social nature of the articulated rook may be worth some fame and money to researchers.

The Trouble with Towels

The creeping towel is an organism unique to Port-Au-Prince, with a flat body up to 50cm long and only a few centimeters thick. It forms a velvety sheet, covered with small tendrils on the underside. Crawl-

ing through shaded forest undergrowth and marshy regions, its small feet pick up moisture and decaying organic material. It has yet to be classified, though it has tentatively been placed in Laxopeda.

Inhabitants of the region have discovered several amusing uses of the towel. As its name suggests, it can be used to dry off after a swim. Its feet will also consume hair and a thin layer of epidermis, so that it functions like a shaver and exfoliation device. The animals keep themselves particularly clean, if kept in proper conditions, and exude natural antibiotics. Natives have used these animals to debride wounds and collect the antibiotic exudations for medicines. Small populations of the towels have been exported to neighboring native settlements. Towels require a great deal of care but do fairly well in captivity. All attempts to transplant them to other regions have failed, however.

In the last year, rumors of severe allergic reactions and carnivorous towels have caused a scare, accompanied by several disappearances. Scientists have theorized that annual variations may have caused a shift in behavior or morphology. GEO and Incorporate states have restricted exports of the organisms and confiscated them from private owners. Natives have shunned inquiries. The truth is that someone at Hanover Industries is interested in cultivating the organism. Several early reports from Hanover researchers indicated that portions of the creeping towel have amazing antibiotic and regenerative properties. Julia Pohl, a low-ranking Hanover executive, has intercepted these reports, and has concocted a plan to further her career. She has pulled in favors, creating an effort to secure the resource of creeping towels for further research. The stories about the dangers of these organisms are intended to discourage their trade and other potential researchers, though this method may backfire on her. Ms. Pohl plans on heading a team in Port-Au-Prince to do further research into the towels.

GenDiver will eventually learn of the scheme and seek to interfere or take the resource for themselves. Other groups may also become involved. The effect this will have on the characters depends on their affiliations. Ultimately, the reports on the towels turn out to be without merit. The towels have a robust ability to regenerate their own tissue, but this has no useful application. The antiseptic properties of towels are relatively mild, compared to what Hanover has already developed.

Tug Boat

The player characters are crew or passengers on a boat in this encounter. Maybe it is a research or commercial fishing vessel. Maybe the crew has a long anchor line, solar blanket, fishing net, or perhaps an ROV in the water. The encounter begins when a large animal, maybe a lesser white or a leviathan, gets entangled in the line or swallows the submerged equipment. The cable snaps taut, and the boat is dragged in circles as the creature tries to escape. Maybe the stern of the boat is pulled under a few times as the animal dives, water washing over the deck.

If the cables are too strong, the crew must race to cut the equipment loose or risk sinking. Perhaps the entangled animal breaches the surface and threatens the boat, or maybe it stays below, a frightening, inexorable mystery that refuses to show itself. The encounter could end with the connecting lines snapping, the creature attacking in self-defense, or with the boat being pulled under. However it goes down, the encounter should be played as a frantic emergency that requires quick thinking and fast action on the part of the characters.

Unlikely Threats

One of the most ignoble ways to lose an aircraft is to be taken down by a bird. A tradition dating to the beginning of flight, birds have always represented a deadly inconvenience to pilots. Though modern aircraft are durable, an avian traveling at sufficient speed can cause considerable damage to a windshield or, at the least, reduce visibility. More severe damage occurs to jet air intakes or turbofans.

This does not occur particularly often, but the situation is exacerbated by migration patterns. In regions with large seasonal shifts, insect populations often boom. In some places, the air can become opaque, thick with millions of small insects. The danger to pilots is in the huge numbers of birds that gather to feast on them. When these smoky shapes form, pilots are advised to steer well clear.

Aircraft are also occasionally forced to fly through migrating flocks. At the speed many aircraft travel, there is often little opportunity to detect the flock early enough to avoid it. Low-flying aircraft often travel much more slowly. This gives the aircraft more opportunity to detect possible collisions, but also increases the number of potential targets. Eel dragons and blimps are both low-flying animals.

CHAPTER 5: FIELD GUIDE

POSEIDON TAXONOMY

Haven Institute of Science and Technology
Department of Xenobiology
Dr. Antonina Dyson, PhD, presiding chair

In memoriam: Dr. Fredrick Glasses Tomas Aguillar, Sharon Cade, Maria Aguillar, David Gold, and Paul Smith

My colleagues have honored me with the opportunity to open this year's Haven Institute of Science and Technology's Journal of Poseidon Studies. I am quite proud to be a part of the efforts of my peers and our wonderful students in making this a banner year. Each day that passes adds immeasurably to the store of our knowledge.

With the public interest shown in past journals, this year brings a new design. The main journal is presented here as prepared excerpts from the 34 articles. Interested parties can read the full entries as desired. In this way, the main journal can be perused quickly, and more technically versed readers can then refer to the full 548-page journal.

I open this year's work with an excerpt from my own paper, written with the invaluable help of my students Kenneth Ho and Rutger Harris.

Excerpts from 2799: Results of the 4th Annual HIST Xenobiological Taxonomy Committee, by Dr. Antonina Dyson, PhD, with Kenneth Ho and Rutger Harris

The goal of creating a coherent taxonomic classification for Poseidon has always been hampered by several major obstacles. The first is a paucity of information about life on Poseidon. The second is an almost absolute lack of information about the paleohistory of Poseidon. On Earth, fossil finds are critical in connecting and understanding the development of classifications, and in understanding how classifications developed over Earth paleohistory. There is a lamentable absence of fossil evidence available for Poseidon.

These obstacles are somewhat understandable. Classification of life on Earth has, to a large extent, been founded on the work of large numbers of people over many centuries of sampling, examination, and exploration of Earth's ecosystems. During the time of the initial colonists, the lack of luxury and very few numbers meant that observations were limited. Even the last 40 years of expanding population and technology have made modest inroads, compared to what has typically been available on Earth.

Some obstacles are less understandable. Gathering samples, information, and, in particular, fossils are very low priorities for most exploratory groups on Poseidon. Their focus is typically on the immediate potential use of geological or biological specimens. This is a shortsighted attitude.

The most sweeping understanding of life on Poseidon will only come by researching how the ecosystems of Poseidon came about and interact, as well as the structure and development of organisms within these systems. This understanding will do more to help civilization on Poseidon than any amount of blinkered inquiry. There are other difficulties with developing a taxonomy for life on Poseidon. Common names have always been a problem. It is understandable for people to relate animals or plants to those they are familiar with, but such names are misleading. This is a relatively benign version of a more significant problem.

The problem endemic to taxonomy on Poseidon is that of similarity. The traditional attempt among biologists has been to classify organisms of Poseidon according to definitions established for life on Earth. This approach has grown mired in what now seem insurmountable difficulties. Life on Poseidon evolved in similar ways to that on Earth, due to similar conditions and forces. Ultimately, however, the nature of simple random chance must logically result in a distinct and unique path of development. Attempting to fit one categorization to another is doomed to fail, as is the pursuit of a common classification that fits both planets.

This is not to say that Earth taxonomy must be abandoned completely. Analogous structures and morphology can communicate a great deal about how life on Poseidon evolved and is grouped, based on the knowledge of how such forms evolved on Earth. Similar terms are used to denote these parallels. It is our responsibility, as scientists, to avoid being misled by them. Consider digger crabs. They

bear many striking similarities to crustaceans on Earth. It is usually assumed that they are related to other crustacean-like Poseidon animals, and all of the same class.

There are a number of species that have been identified, tentatively, as pseudo-crinoid. These animals, most notably the scarlet Kauai frond crab, show characteristics of both crinoids and crustaceans. Genetic studies compellingly support the placement of pseudo-crinoids and crustaceans in the same phylum. This is a large difference from the taxonomy of Earth, where crinoids are more closely related to humans than to crabs. The common reaction has been to argue that some part of these studies is flawed. One common argument claims that the frond crab is simply an arthropod with traits that happen to resemble crinoid traits, and that there is no crinoid-crustacea connection. The frond crab is not a crustacean, necessarily, but belongs to some group within Arthropoda that bears superficial similarities to crinoids.

This problem is mostly caused by comparative terms. The arthropods of Poseidon are fairly analogous to those of Earth, but there are consistent and characteristic differences. As with Earth biology, then, it becomes a delicate judgment of exactly where the lines and groupings should go.

Part of the mandate of the xenobiology department has been to make these determinations. There is considerable argument, of course, but great advances have been made at identifying useful and defensible groupings of Poseidon biota. There necessarily remain a great number of "island" classifications, where lack of information, fossil evidence, or related specimens cannot justify determination of groupings.

Some have argued that completely new terms should be generated to avoid confusion. Precedent and functional similarities have maintained the use of analogous terms. Many classifications, particularly in genus or species, retain *simila*. Other classifications have simply used the same terms. One development has been to append a subscript 'p' or *'e' to denote organisms from Poseidon or Earth, particularly in papers relating organisms from both planets.

Taxonomic classifications of organisms on Earth are readily accessible through CommCore and may be used as a reference.

POSEIDON MACRO-TAXONOMY

Note that most connections and statements about the history of life on Poseidon are rather theoretical, and much empirical work needs to be done. Indications of uncertainty will be restricted to relationships that are particularly speculative.

EUKARYOTES

This classification encompasses all nucleated life. As with Earth, Poseidon Eukaryotes account for nearly all macroscopic life. It is assumed that Eukaryotes evolved in a similar way on Poseidon, though there is no supporting fossil evidence. One macroscopic prokaryotic example is the tidal mud reefs. Composed of possibly several kingdoms resembling cyanobacteria, they form a visible reef structure throughout Poseidon. They likely represent a surviving vestige of ancestral bacterial mats.

KINGDOMS

Below this level, Poseidon life is divided much like that of Earth. Animals, fungi, several types of algae and plant microbes, plants, and a wide variety of protists form separate kingdoms. Earth fungi and animals are more closely related than other kingdoms, but it is not clear if this is also true on Poseidon. Among possible other kingdoms may be a group containing the Howell's leech and another containing the harvester worm. The ghoster forms yet another kingdom, with a debated relationship to fungi. A crossover kingdom covering species bearing characteristics of both plants and animals has also been proposed.

PHYLA OF THE ANIMAL KINGDOM

Porifera

Porifera (or "pore bearing") include sponges of a wide variety. They show a greater diversity on Poseidon than on Earth. A number of encrusting sponges have complex relationships with reef production beyond their analogs on Earth. Several freestanding orders use water propulsion to migrate or disperse young.

Cnidaria

On Earth, this phylum consists of sea anemones, corals, jellyfish, sea pens, and hydra. Defined as having stinging cells (nemocytes), cnidarians consist of two cell layers (epidermis and endodermis) connected

by the mesoglea, the "jelly" that serves as a glue for the vast bulk of the animal. Cnidarians are exclusively carnivorous, though the degree to which they actively hunt or passively ingest food varies.

On Poseidon, there is a well-defined phylum that resembles cnidarians to a large extent. Developmental changes are rather different, but most of the observed traits of Earth cnidarians apply to those on Poseidon. Most Earth orders have analogs on Poseidon. Blimps are the most famous example of cnidarians on Poseidon. Corals are a ubiquitous and important part of Poseidon ecology.

Eduropoda (Arthropoda)

Arthropods cover a variety of invertebrate animals with a segmented body, jointed appendages, a frequently chitinous exoskeleton molted at intervals, and a dorsal anterior brain connected to a ventral chain of ganglia. On Earth, arthropods include such notable Classes as insects, arachnids, and crustaceans.

On Poseidon, the situation is a bit more complex and less clear. Arthropoda of Poseidon share several strong characteristics with Echinodermata of Earth. In addition, Eduropods seem to be more closely related to pseudo-chordates on Poseidon than the analogous phyla of Earth.

These differences have resulted in a renaming of the phylum as Eduropoda, to discourage confusion. Eduropoda have the following characteristics:

A water vascular system, similar to Echinodermata. There are gill structures and other advanced organs in many Eduropods, but it is thought that these evolved from pseudo-tubefeet in ancient forms. This water vascular system extends throughout Eduropods, and their digestive and respiratory systems are not as specialized or complex as arthropods of Earth. This is less true of Class Insecta of Poseidon, which has more distinct respiratory and digestive systems.

The digestive system has a slight radial structure that does not strongly resemble either Arthropods or Echinodermata. Many details of this structure are still not completely understood.

Eduropoda skeletal structure is somewhat variable. Generally forming from "seeds" in a series of spiral scales, these usually grow into sheets that bind and harden or form segments. Most Eduropods form exterior chitinous scales, but the Cristatoids (pseudo-Crinoids) develop flesh over thick sheaves of scales, which share many of the same functions as an internal skeleton. Ligaments allow Eduropods to form variably rigid structures. In some, these ligaments form a major part of the rigid structure of the animal.

Eduropods are bilaterally symmetrical, with sometimes-considerable irregularity. Among the Cristatoids in particular, this symmetry is frequently missed, with limbs extending in many directions.

Eduropods have two sexes, and a frequently pronounced sexual dimorphism.

The Eduropod nervous system is rather like that of Arthropods, with ganglial structures and a brain.

Eduropoda consists of Insecta, Crustacea (including the notable Genera of Cancersimila, pseudo-crabs), and Cristatoids (pseudo-crinoids). A large number of animals have been included in this phylum, but Class divisions are still often unclear. Insects, in particular, seem to be divided into a number of distinct groups. The well-known Poseidon scorpion is part of a small group of quadrupedal insects. There is also an important group of insectoids with a pseudo-radial symmetry. The rubber shrimp has been categorized as Cristatoid.

Mollusca

Poseidon mollusca share a number of similarities with those of Earth. They are invertebrates, soft, and some have calcareous shells. On Earth, mollusks include clams (bivalvia), snails (gastropoda), and squid (cephalopods).

Analogs to these groups are also present on Poseidon, along with analogs of extinct trivalves.

Most of the characteristics are parallel. Poseidon mollusks have two sexes, but frequently produce young by budding.

Reefworms are now thought to be Mollusca and have been placed in their own class, Gracilid.

Squirts are Mollusca. Initially grouped with polypods as Poseidon "pseudo-cephalopods" (now simply cephalopods), there is some evidence that they may be more closely related to reefworms and are thus categorized as Gracilid.

Chordata

Chordates (animals with backbones) seem to have developed similarly on Poseidon, although their relationships with other phyla are quite different. Earth chordates are closely related to echinoderms and arose from a variety of worms. It is believed that Poseidon chordates evolved from proto-arthropods.

One sign of this is that chordates are all hexa-pedal in structure, a trait common to many eduropods. Jaws evolved early in the development of Poseidon chordates, much earlier than similar developments on Earth. The stone worm, one of the few representatives of an ancient phylum, is related to the roots of both Eduropods and Chordates.

Chordates on Poseidon developed as a radiation from an unknown Eduropod form. A centralized nervous system developed from the ganglial system, and the seed-scale system was fully internalized. Instead of chitin, ligaments and collagen provide most of the structural materials, with calcareous growth of bone. The vascular system has evolved into more specialized systems, and bilateral symmetry is a rigorous norm amongst most chordates.

The fish of Poseidon show a number of distinct traits that betray their Eduropod relationship. The skeleton shows a slight knobbiness, compared to Earth fish. This is caused by a seeding growth pattern of the skeleton. The surface scales, too, are chitinous in at least two observed species. The development of fishes on Poseidon is uncertain. Whether there was an age of bony fishes and parallel developments will depend on an adequate fossil record.

The development of land animals on Poseidon is a matter of considerable debate. It is unclear how much land was exposed at various periods in Poseidon's past, and thus unclear under what circumstances animals evolved onto land.

Most land chordates are amphibious to some degree, representing a wide variety of orders. Many of these forms have evolved land characteristics and shed them. The water rat, for example, shows signs of having evolved on land, having adapted for a purely aquatic life, and then evolved for a more purely land habitat. At one point some researches even placed water rats and schoolers into the same order, but recent evidence disputes this.

Chordates on Poseidon are of particular interest and have received more research than other phyla.

Notable Classes of Chordata

Piscisimilis (fish-like): This class comprises all of the known fish of Poseidon. There are a number of identified orders, including a rather young order that includes trident fish.

Caudata (tailed): Analogs of salamanders and newts. A variety of legged and legless amphibians are grouped as pseudo-salamanders, including the hell-bender. The eel dragon has tentatively been placed in this Order. Evidence suggests that Poseidon caudates have adapted a great deal more than their analogs on Earth, and have more complex structures. They are closely related to Draconodonta.

Luteupods (muddy feet): This order is unique to Poseidon. It consists of thin-toed amphibians common to mangrove forests. This group is considered more ancestral than the caudates.

Arbutida (fruit-like): Another unique order, these amphibians have adopted an almost sessile existence, functioning much like oceanic passive feeders. Their mobility is often tied to diurnal or seasonal cycles. They inhabit a wide variety of ecosystems, from wet rainforest undergrowth to the shallows of lagoons. A few forms are known to spend most of their day-to-day existence in trees, coming to water only to breed.

Draconodonta (dragontoothed): These amphibians closely resemble reptiles of Earth. It is thought that this group represents the ancestors of Poseidon mammals. The discovery of the prow-beaked fisher near the Midway Islands late last year has caused some debate, it being a reptiloid with a fused, bony jaw. Some think the fisher should be placed with pseudo-avians. Others believe that they are part of a transitional order. In any case, draconodonts are close analogs of reptiles, though closely related to their caudate roots.

Chelonia: Analogs of turtles have rarely been observed. They are primarily represented by the loggerhead, and perhaps the weedeater (p. 305), though this is the subject of some debate.

Aves: Avians represent a small but robust class. Whether there was an age of reptiles remains unclear, but avian-like species dominate the air throughout Poseidon. Most are amphibious, at least to the extent of diving for food. Warm-blooded like mammals, avians typically retain claws on their wings, and many lay their eggs in marshy or damp environments. Like amphibians, they require a wet habitat to fertilize eggs, though many species have adapted a calcareous shell that develops after fertilization. Unusually, the structure of Poseidon avian feathers is constructed of a chitin-like substance.

Mammalia: The mammal analogs of Poseidon share important characteristics that identify them as such. Hairy and warm-blooded, Poseidon mammals are divided into many diverse groups, and are a very successful development.

Orders of Mammalia

Oviforma are egg bearing and include water rats.

Bimaxilla are marsupials and, rare amongst chordates, have two functioning mandibles. The side jaws are fused with the top jaw. Most also have an atrophied or absorbed pair of limbs. This order seems more consistently land-based and is not particularly numerous. It is likely that a larger percentage of Poseidon's land area was exposed at various times during the past, and that bimaxilla represents an order that was once common, specialized for land existence. As ocean levels began to rise, bimaxilla species were unable to adapt into sufficiently competitive forms.

Trianellida are also marsupials, but otherwise very similar to oviforma. They give birth to live young that crawl into a series of small pockets. One characteristic morphology of trianellidae is the heart's peculiar three-ringed structure. Hexa boar are members of this order.

Placentae are placental mammals, giving birth to live young. The mechanism is a bit different in many placentae, and some believe the order should be subdivided. In some placental mammals, such as the sunburst, eggs are fertilized internally. The egg expands, becoming more permeable, and then forms into a membrane much like a placenta.

Geminida are an unusual form of mammal, not closely analogous to those of Earth. They share some close features with the draconodonts, including both scales and fur. The mother forms an elaborate bank of internal cells, genetically identical to herself. These are absorbed and become part of the structure of the young, allowing short gestation times and live young. The offspring, for a few months, still has many cells that are genetic clones of the mother. As the young grows rapidly, the cells are absorbed and by the first year there is no trace of the original cellular material.

Catenida

This phylum includes stone worms. These animals are characterized by fully functional lungs, warm blood, and numerous individualized segments. Some researchers believe that early forms of catenids developed from eduropods and then radiated into chordates.

Laxopoda

This is a strange group of animals found among coral reefs. There are some similarities to cnidarians and echinodermata.

A small, radial body connects many long, thin arms. The arms have a calcareous structure composed of loosely connected spines. With an open vascular structure, the arms function almost as separate animals, processing their own food and wastes. The structure of the flesh is very simple, composed of two layers like a cnidarian. The skeletal spines form as inclusions from nodules on the exterior into the connective layer. Channels resembling very primitive tubefeet often line the arms.

The arms are loose, and can become separated due to stress, predation, or possibly as part of reproduction. If the arm comes to rest in appropriate surroundings, one end will thicken and the arm will shrink, soon to be joined by new arms. Most laxopods are no more than a few centimeters long, and most observed genera form symbiotic relationships with bacteria or algae.

Arthrocepha

This phylum consists of common animals unique to Poseidon. Also known as "pseudo-corals," they caused much confusion until classified properly in 2197. Though they superficially resemble eduropods, their development is quite different. Very simple radial

organisms, they seem to be an ancient group. They have several unusual characteristics that are reminiscent of fungi, such as indistinct cell boundaries.

From a casual inspection, however, they share many of the same niches as marine eduropods. The best observed is the pseudo-coral, which builds large calcareous reef structures. Though some reefs have both coral and pseudo-coral, there are no purely arthroceph reefs. There are indications of some free-swimming orders, and several types of mite-like animals found on both sargassum islands and rainforest are plausibly linked to this phylum. These are distinct from the tidal mud reef organisms, which are a completely separate type of reef-building life.

Phyla of the Plant Kingdom

Zygnematales

Very similar to the zygnematales of Earth, these include the most prolific green algae. The name comes from their reproduction, which is sexual and involves meiosis of a zygote. Unlike zygnematales of Earth, the gametes and sometimes the adult forms of these algae are flagellate (has a whip-tail). Zygnematales includes Poseidon kelp and sargassum.

Prolifera

This order includes a wide variety of bushy sea-plants with a simple, wort-like structure and long, thin fronds, frequently with a reddish-black coloration. Some have placed prolifera in their own kingdom.

Embryophytes

This is the core group of vascularized, photosynthetic plants. The name comes from the analogous phylum on Earth. These plants form embryo, and include seed-bearing plants (flowering and conifers), wort-like plants, and fern-like groups. This group has gone through developments unique to Poseidon. Several orders are noted for carnivorous behavior and motility. Some genetic evidence suggests that the canyonlands, and the orders found there, form a major part of the development of embryophytes. Water hemp and Poseidon mangrove are two examples of this phylum.

Xanthophytes

This is a distinct group of orange or yellow plants, noted for a bulbous or smooth appearance. These plants are unrelated to the xanthophytes of Earth. Two orders of xanthophytes have been discovered, Terelida and Limuphila. The Terelida is only represented by four known species. Each is a small land plant found on a few tropical islands, collectively known as ground lemons. Limuphila is more diverse, and is found in tidal mud reefs.

Phyla of the Gemmaphyte Kingdom

This is a small but significant kingdom. It is represented by a variety of algae, some of which strongly resemble diatoms. Many species have been found in symbiotic relationships with tidal mud reef organisms. Silicified shells or skeletons are common to many orders of Gemmaphyte. Some colonial varieties of these algae seem to use prisms of silicon as a component of their photosynthesis.

Phyla of the Fungal Kingdom

This kingdom remains rather enigmatic to mycologists. Phyla have not been dependably identified. One well-known fungus, the so-called "fast fungus," shows some similarity to slime molds in reproduction and structure. Fruiting bodies have been more difficult to identify among fungi of Poseidon, compared to those of Earth. Fungi have been identified in mangrove forests and throughout Poseidon's island landmasses. The place of fungi in connecting plant species is harder to identify on Poseidon, as there are several widespread groups of colonial bacteria and protists that seem to serve as connective systems between plant species.

Taxonomic Diversity

Organisms on Poseidon are roughly divided into two evolutionarily distant groups. This is similar to the division of life on Earth into Old World and New World varieties. On both planets, geographical isolation led to different evolutionary paths. The groups of Earth do not correspond to those of Poseidon, beyond this similar circumstance of isolation.

The Prime group, also known as Type I, covers the Pacifica Archipelago. The Darwin group, also known as Type II, covers Darwin's Archipelago, the Arc of Fire, and Endeavor Islands. The Tier-Humboldt line runs along 32° east longitude. Islands to the east are Type II and those to the west are Type I. The Camber line runs roughly along 80° west longitude, and divides the Type I region to the east from Type II islands to the west.

The Southern Hope Chain forms a distinct developmental region. Its connection to the others is still murky. Some have placed it within the Prime group, but this classification has been well disputed (Yi Anderson 2195, 2199, in preparation). There are Type I and Type II transplants in this region, but the origins of many are unclear, as is the direction of transmission. Within these groups, particularly the Darwin group, there is a larger amount of regionalized taxonomy than found on Earth. The Challenger Deep, Endeavor Islands, Darwin's Archipelago, and Arc of Fire each represent distinct groups of biota.

ANIMAL BEHAVIOR

Animal Behavior, Theory and Practice
by Mort B, graduate student of Evolutionary Behavior under Dr. Theodore Glassman

Animals have always posed a difficulty for humans. We share our world with them, and in ages past, depended on them for our survival. But we rarely understand them. Learning about the factors that affect and influence animals and animal development can help in understanding why they behave as they do.

There are reasons for animal behavior, and these are generally couched in evolutionary terms. Behaviors that endanger an animal's ability to reproduce are selected against, while helpful behaviors are selected for. These two forces form the bedrock of animal behavior. The great importance of passing on genes motivates elaborate mating ritual, dominance, and altruistic behavior.

Beyond these programmed strategies, animals exhibit a flexible and seemingly capricious individuality. Animals adapted to narrow niches and environments have a more limited reaction than those developed to forage in or adapt to many environments. Adaptable animals will change in response to variable environments, forming distinct personalities.

Evolution is the silent master. Strategies balance resources. Large animals move further and are more protected than small animals, but fewer can inhabit a given region. Elaborate sexual structures come at high metabolic cost, but can exert considerable pressure toward evolving more robust or successful forms.

Ultimately a certain level of unpredictability is inevitable, as organisms respond to a vast number of stimuli that cannot easily be identified. An animal's behavior may shift due to the time of day, year, odors, or many other factors. However, there are some basic rules.

Animals protect themselves, protect their resources (territory), and protect their young. The order of importance varies between species and in response to variables. Some fish have nests where eggs are kept, and will vigorously defend these nests. Others spawn and then let the eggs fend for themselves. The shredded redfish, found in tidal temperate waters, drives out other fish from nesting areas but shows no particular inclination to attack crawling animals, even if they are clearly consuming the eggs.

More intelligent animals may sacrifice their young to save themselves, such as the verdant shrew of Martinique. There is no way to predict this prior to observation, as the delicate scales of evolution, which determine the cost of raising an animal compared to producing young, are invisible. Though it seems sensible that animals that raise a few young would be more protective, this is not always the case.

Simple animals have fairly predictive responses, based on their ability to sense and understand the environment around them. Sessile feeders will react to turbulence by withdrawing. Mobile feeders will hide or flee from large animals that behave, look, or smell like predators.

Herbivores and plankton feeders often exhibit hiding and fleeing tropes. Predators often use a variety of interesting hunting methods to improve their odds. Particularly intelligent predators will evaluate targets, engaging in hunting behavior similar to that of large predators on Earth.

Predation behavior is based on determining a proper target, then enacting the hunt. Quick hunters will often engage in a run and strike to disable the target. Among great cats, this comes in the form of a paw strike, a slash at the throat, or biting down on the throat or nose to suffocate the target. Cooperating hunters, such as niños muertos, frighten prey into tight groups and drive them toward other members. Opportunistic predators, including omnivores, tease and frighten their prey, waiting for a clear opening and only committing when a course is clear.

Danger is the inevitable result of simple statistics. Humans and cetaceans cross many ecozones. Even if 999 in 1,000 animals ignore them, that still leaves a large number of potential encounters. The number one protection is education: knowledge of how indi-

vidual animals react, and knowledge of what animals are common in the surrounding environment. Unfortunately, on Poseidon, many ecozones are still poorly understood.

Predators are necessarily rare, compared to omnivores and herbivores. Large lifeforms like humans and cetaceans are likely to be seen as a danger. Actions are likely to be interpreted, correctly or not, as threatening to the animals themselves, to their territory, or to their young. Perceived threats create reactions. Most animals flee or hide, which suits humans and cetaceans just fine. It is common to see fleeing fish or other animals withdrawing into rocky crevasses.

Many dangers are inadvertent. The squealer monkey throws rotting fruit and feces when an interloper invades its territory. The Poseidon scorpion stings only when threatened—such as when the sleeping human it has sought out for body warmth rolls over it in the night. These are perceived threats, and the only solution is for travelers to know the region, be alert, and avoid behaviors that will trigger dangerous responses.

Concealed animals pose the greatest danger. Although a cautious individual can avoid a spiny fish or needle shell, other animals hide from view. The only warning may be the attack itself. The solution is to be careful; avoid close proximity to likely hiding places and familiarize oneself with the animals common to the area one is visiting.

Small parasites are also a particular danger, whether on land or in the water. A number of insects and other animals are adapted to feed on Poseidon mammals, and a significant percentage will also target humans or cetaceans. Unfortunately, differences in biology often cause dangerous reactions.

The most dramatic danger comes from large predators, though these attacks are comparatively rare. There are only three possible responses to predation. If the predator is of similar size to the target, displays of aggression can sometimes cause the predator to back off, particularly if the predator is opportunistic. This is more likely to work if the individual has a size advantage or the advantage of numbers.

If this is not possible, the second best response is fleeing, particularly if the individual can fly and the predator cannot. This is extremely dangerous, as most predators are faster than humans and even common vehicles, and some marine predators are faster swimmers than cetaceans.

The last response, if the others are not viable, is to use deadly force. Note, however, that injuring a predator may only enrage it, and killing the predator may attract the unwelcome attention of other animals.

GAME ENCOUNTERS

Animal attacks can be divided into four types: territorialism, personal defense, parasitism, or predation.

Territorialism is common. Resources are vital to the survival of species, and many have evolved methods of protecting their territory. For sessile feeders and other animals, territory may be constrained enough so that territorialism and personal defense are essentially the same. Since territory is frequently under possible attack, most animals will not engage in deadly force. Territorial behavior usually consists of a series of displays designed to startle, confuse, frighten, or simply to inform. Territorialism can be found among a large number of animals, particularly vertebrates. Many forms of invertebrates rely on chemical warnings. Though these warnings are more difficult for humans to identify, these animals usually pose little danger.

Characters are most likely to face attacks motivated by territorialism. Territories can cover large areas and are often impossible to identify. Characters must stay alert for warning displays. Even small animals may use poison or cause wounds that can become infected if untreated. There is no way to give such animals an avenue to escape, since the animal is not interested in flight. Characters may be pursued even beyond the normal boundaries of the territory as a way of ensuring that they will not return. Groups of animals may share territories and mob the character with displays or minor attacks. Stick monkeys offer a common example of this kind of behavior.

Personal defense is a common response from animals that feel threatened by a character. An animal may feel threatened by proximity, or only if cornered or touched. Personal defense can take the form of overt attack or startling displays. The best approach in these situations is usually to give the animal an avenue of retreat, to flee or hide. The perceptions of the animal may be limited, and some will not recognize an avenue of flight. Loud noises or forceful gestures may frighten a stubborn animal sufficiently to motivate it to flight.

Personal defense encounters are rather common. In all ecosystems, many animals will interpret large

moving animals as threats. Sessile organisms will react with spines or poison, as will many animals that inhabit lairs or nests. Mobile animals are more likely to flee from approaching characters, and encounters motivated by personal defense are therefore less common. Characters engaged in personal defense encounters can often escape simply by moving away from the threatened animal. Unfortunately, if there is a large group in the area, the character may blunder into more. Organisms that rely on poison for defense often use bright coloration as a warning. Animals that engage in warning displays are the safest, assuming the character perceives and understands the display.

Parasitism is distinct from predation. The character is identified as a food source for the animal or its young. Since parasites are typically much smaller than their hosts, the parasite interacts with the host more as an environment or resource than as prey. Many parasites have evolved adaptations targeted at specific hosts. Infection of characters is frequently an error, in which the parasite mistakes the human for its chosen host, or something close enough to provide for its specialized needs. An infection may then develop in ways characteristic of the parasite's biology.

Of course, an animal may not have the ability or necessary faculties to avoid such a counterproductive strategy. These situations are rather common among Terrestrial animals on Poseidon, since the indigenous parasites are not adapted to Earth biology. Parasites are common throughout the planet, in a wide variety of ecozones. Characters traveling in regions of rich biodiversity, such as the mangrove forests and rainforests, are especially vulnerable to parasitic infection. Preventative medicine and antibiotics are the only reliable solutions, apart from fully sealed environment suits. Immunological symbiotes and antipoison modifications may help deal with the effects of parasites, but actual medical treatment is almost always indicated.

Predation is not particularly common, at least among humans and cetaceans. Predators hunt animals that are typically no more than 3–4 times their mass, and most hunt prey that are smaller than themselves. Pack-hunting predators are apparently not as common on Poseidon as they are on Earth, but this strategy can dramatically increase the maximum size of potential prey. Because most predatory species on Poseidon are significantly smaller than humans, they are rarely perceived as appropriate prey.

Predators can be divided into two groups, full-time predators and opportunistic predators. This division is rough, as full-time predators will eat the kills of others and may supplement their diets with alternative food sources. The distinction is that full-time predators are highly evolved to hunt a specific range of animals, as this behavior provides them with the bulk of their diet. Opportunistic predators, often omnivorous, will hunt a variety of animals, and are more frequently scavengers and carrion eaters.

Predation requires the expenditure of a great deal of energy, and many hunts fail. Hunting is least taxing where large groups of undifferentiated prey animals are available to the predator. A marine predator will typically favor a large school of small fish to a single large prey animal. When hunting a large school, the predator can attack many times in quick succession with less expenditure of energy. Greater whites will consume a significant portion of the organic content in a mangrove in a single feeding frenzy. Some social predators use cooperative strategies to herd prey into tight groups before attacking and consuming them.

Larger—and often more solitary—prey animals are more exhausting and chancy, and predators that depend on them typically require specific adaptations to survive. These may include unusual speed

or particularly lethal natural weapons. Many predators of large animals are adapted for pursuit. They are capable of brief bursts of amazing speed, but often lack the endurance for a prolonged chase. They often exhibit an eerie stillness punctuated by sudden flurries of motion. The great cat who crouches in the grass before suddenly pouncing is a ready example.

Opportunistic predators, as the term suggests, typically supplement their normal diet through predation when a promising opportunity presents itself. Opportunistic predators will often attack wounded animals, steal the kills of small predators, assault nests in search of eggs or young, or prey on animals who have become immobilized or incapacitated—animals trapped in mud flats or tar pits, for example. The hunting behavior of opportunistic predators is often different as well. They will frequently appear more cautious and tentative, testing the prey to determine whether it is vulnerable or dangerous. Opportunistic predators may launch quick, probing attacks, hoping to wound and weaken the prey, then withdraw to stalk and observe before darting in for another attack.

Because of their more tentative nature, opportunistic predators are typically easier for humans to frighten off. Any signal the animal will interpret as potentially dangerous can be an effective deterrent.

POSEIDON FIELD GUIDE

This ongoing survey is intended to classify and describe those native Poseidon species that have been identified as either unique resources for, or singular hazards to, the planetary colonization effort. This survey is intended as a guide for GEO field personnel and familiarity with its contents is recommended. The following information, when available or substantiated, has been included for each listed species.

Name: The species' known common names, as well as their genus and species names are given here. The scientific names are as per the taxonomic system for Poseidon, currently under development by this office.

General Description: This entry describes what is known about characteristic physical features of each species.

Behavior: This entry describes what is known about each species' characteristic behavior patterns and life cycles.

Range: This listing defines each organism's known planetary distributions.

Habitat: This entry lists the species' known habitat preferences within their global distributions.

Length: This is the average length in meters along each creature's longest axis.

Weight: This is the organism's average mass in kilograms.

Frequency: This listing indicates, in relative terms, how often the creature may be encountered in its described habitat.

Resource Value: This entry describes what is known about the species' relative value as a natural resource, describing its usefulness and desirability.

Threat Level: This entry is of particular importance and describes the relative threat posed by the listed species. We repeat that this information is tentative and must be regarded as such. Caution is always recommended.

Attacks: This describes the type, number per action, and skill level of the species' natural attacks.

Damage Rating: This entry lists the Damage Ratings used for the species' attacks. These ratings have already been adjusted for the creatures' Physique.

Poison: This listing describes the effects, onset time, and Damage Rating of a species' natural toxins.

Movement: These values represent the species' normal and maximum movement rates per action, respectively.

Attributes: This list of relevant attributes gives the average scores for the given species.

Armor: This entry describes the species' natural armor rating, if any.

AM-BUSH

(*Hashashim insipidia*) The am-bush, or assassin plant, grows most commonly around tide pools, but its range is apparently limited to Westcape and the surrounding islands. The plant grows directly on coastal rocks, just above the high-tide line. The plant's base consists of eight to 10 runners. These green, leafy extensions send rootlets into the rock beneath the plant to keep it firmly attached. Runners extend for 10 or 15 meters from the main body. The plant's seeds are housed inside a bright red central pod that is generally six centimeters in circumference with a gnarled surface texture.

Behavior: The assassin plant is unique for its complex use of the ions dissolved in seawater. Potassium, chlorine, and oxygen are absorbed from the water and the plant then uses a suite of mixed-function oxidizing enzymes to create crystals of potassium perchlorate. The crystals are deposited in thousands of tiny chambers inside the central seedpod. An elaborate counter-current exchanger then preferentially extracts copper ions from the surrounding water and concentrates them inside the seedpod chambers. The resultant exchange reaction produces copper perchlorate, a highly unstable explosive.

When the seeds within the pod reach maturity, enzymes are produced that can trigger an ignition reaction. When an animal strays too close to the mature plant, the seedpods explode with remarkable force, driving the plant's tiny needle-like seeds into the unfortunate animal's flesh. Though the exact mechanism that allows the plant to time its explosion is unknown, the mechanism is thought to assist seed dispersal and germination. Toxins in the seeds slowly kill all but the largest host animals, allowing them to be carried away from the parent plant while also providing the seeds with a ready made source of fertilizer. The assassin plant is sometimes harvested by natives. The perchlorate inside the seedpod can be used in small quantities to start cooking fires and is also used in vermin traps. Additionally, when dried, the pod makes a beautiful pendant used in native jewelry. Recently, there have been some reports of natives cultivating assassin plants for use as terror weapons or "all-natural hand grenades." These reports have been largely discounted.

Range: Westcape and surrounding islands
Habitat: Rocky shorelines
Length: 12 centimeter diameter seedpods, 10–15 meter runners
Weight: 0.5 kilograms
Frequency: Uncommon
Resource Value: Medium
Threat Level: Medium
Attacks: Seeds 6
Damage Rating: None
Poison: Neurotoxin: Onset Time 5 minutes, Duration 24 hours, Damage Rating 2
Movement: None
Armor: None

Angel Wings

(*Poena angelus*) Angel wings are small, fragile, planktonic invertebrates commonly found in Poseidon's warmer waters. These animals are ctenophore analogs, and have flat, transparent bodies and pairs of wing-like paddles that give the species limited maneuverability. When they catch the light, iridescent colors shimmer across the paddles, ostensibly giving the species its name. Angel wings typically hang vertically in the water, trailing a short, thin mass of tentacles as they drift with the current.

Behavior: Angel wings are planktivores, consuming the tiny organisms that get caught in the sticky coating covering their trailing tendrils. They are generally not a danger to humans, but bear mention in this report for a troublesome aspect of their reproductive biology.

During their year-round breeding cycles, angel wings produce small, sticky egg clusters on the distal ends of their tentacles. When these tendrils come in accidental contact with another organism, the tendril tips and their egg clusters break off, hitching a ride on the passing creature. The eggs shortly hatch and the angel wing larvae burrow into the skin of the host. There they reside for several days, growing only slightly, but collecting vital organic compounds from the host that adult angel wings are apparently unable to provide. When sufficient quantities of these compounds are collected, the tiny larvae squirm out from the host's tissues and become free-living plankton.

Angel wings represent a potentially serious threat to human hosts, but one that is easily dealt with if the infestation is caught in time. Angel wing larvae infest humans in the same way they infect indigenous animals. The compounds they seek, however,

are apparently absent from the human biochemical makeup. When not supplied with the nutrient, angel wing larvae fail to emerge, and after approximately a week they die. The necrotic parasites can subsequently cause a number of complications including fast fungus infections, gangrene, and various other toxicity syndromes.

Virtually every native on Poseidon has been infected with angel wing larvae at some point in their lives, and many have been infected more than once. Consequently, the cure is well known across the archipelago, at least in areas with a high native population. Though unpleasant, the cure is simple and completely effective. The infected individual must coat the infested region of skin, marked by an irritating rash, with a paste of freshly ground fish meat. Any species will do, as the indigenous flesh apparently provides the larvae with the mystery nutrient they seek. The fish paste poultice must be replaced every few hours, but after three or four days the larvae crawl out, the rash disappears, and the host is parasite-free.

Range: Tropical and semi-tropical waters planetwide

Habitat: Photic zone

Length: 10 to 18 centimeters

Weight: 15 to 25 grams

Frequency: Common

Resource Value: None

Threat Level: Low

Attacks: Infestation

Damage Rating: Larvae: Onset Time 12 hours, Duration 48 to 72 hours, Damage Rating 1

Movement: Drifts with current

Physique: –2

Coordination: –2

Cognition: –8

Psyche: –3

Endurance: –2

Reflexes: –5

Toughness: –6

Armor: None

Aurora Borialgae

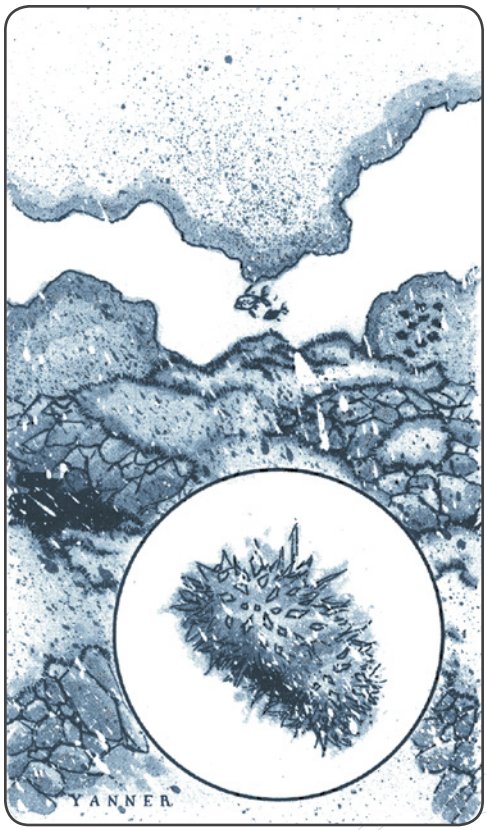
(*Autus fervens*) Aurora Borialgae is the unfortunate common name for one of the more spectacular species of reef-building organisms on Poseidon. In the Pacifica Archipelago, borialgae occurs only in the Westcape region, though biologists have reported a wider, tropical distribution.

Borialgae is actually a protist analog, and has more in common with plants than terrestrial coral polyps. It grows in only very shallow, nutrient-rich waters, and is most abundant at sites enriched by deep-ocean upwelling. The species is a colonial organism that grows in massive, monogenetic patch reefs that can stretch for dozens of kilometers. The individual organisms are small, fleshy clusters that surround themselves with crusty, interconnected, calcitic shells, extracted ion by ion from Poseidon's mineral rich waters.

The algae varies in color from dark purples, browns, and greens to gold, yellow, and pale orange. The calcium shell is pale and translucent, but trace minerals presumably washed from the Westcape mainland are incorporated into the calcium compounds, giving the reef structure itself a rusty iron hue.

The borialgae reef material is relatively soft and crumbles easily, giving the growths extremely sharp edges and creating a severe hazard for any swimmer or cetacean unfortunate enough to brush against the reef.

Behavior: Borialgae demonstrates a unique behavior that has made the species well known, even back on Earth, and has lead to a growing tourist industry during the organism's short summer reproductive season. Hundreds of natives from Westcape and thousands of tourists from Dyfedd come by catamaran, yacht, and VTOL to witness the unique show offered by the region's Skyscraper Reefs.



Every season, fully one third of the individual plants comprising each reef bioconcentrate dissolved magnesium from the surrounding seawater and store it in tiny pockets within the reef shell structure. In conjunction with the seasonal release of gamete-like spores, some unknown environmental stimulus causes an equally unknown chemical mechanism to oxidize the concentrated magnesium. The tiny flares provide a spectacular nighttime light show that races up and down the length of each reef, turning the darkened waters into a fairy world of wavering glow and shimmering color. Native and newcomer visitors alike are often moved to tears by the beautifully eerie sight.

How the individual colonies synchronize their flares, what controls which individual plants collect magnesium, when a given reef lights up, or even what the purpose of the natural illumination might be are all open to speculation. Biologists at HISTOS in Dyfedd are studying the phenomena, but are currently at a complete loss to explain it.

Range: Tropical waters planetwide
Habitat: Shallow, nutrient-rich waters
Length: Individuals up to 2 centimeters in diameter, single colonies up to 35 kilometers along longest axis
Weight: Up to 6 grams per individual
Frequency: Rare
Resource Value: Commercially important to the tourist trade in Westcape
Threat Level: Low; hazard to swimmers
Attacks: Accidental impact
Damage Rating: 2
Movement: N/A
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: None

Bad Mojo

(*Magus malum*) The mojo is a large species of predatory fish known for its exceptional speed and singular huntsmanship. The mojo is streamlined with bright, silvery skin, a well-muscled and shallow body, and a stiff lunate tail. The animal's primary jaws are long and narrow and lined with dozens of serrated teeth. The species lateral jaws are wide and sport razor sharp bony spurs along their outer edges. The mojo is one of the fastest fish species on the colony world, and in the shifting light of the open ocean mojos seem to fade in and out like ghosts as their silver hides reflect the colors around them.

Behavior: The mojo is a predator with a unique niche. The fish specializes in preying on other predators, attacking when its target is distracted by its own hunt or struggling food. Mojos hunt in pairs or trios, swimming near the surface and following schools of baitfish. When other predatory species descend on the bait, the mojos attack, streaking out of the glare of the overhead sun like surprise dive-bombers. They race past their unsuspecting targets at speeds in excess of 60 kilometers an hour. They slip past so closely that the razor-like spurs along their lateral jaws slice into their prey, causing severe muscle damage that leaves the unsuspecting fish crippled and bleeding. The mojo usually makes a second and third pass, then circles

around to tear large mouthfuls from the now helpless predator-turned-prey.

Though bad mojos seem to prefer hunting animals significantly smaller than themselves, they have been known to attack larger prey, including humans. Though these attacks are rare, they have been documented and are usually lethal. Spear fishermen, native hunters, and biologists collecting specimens are advised to be wary of these animals. Most such attacks on humanplans have come as might be expected, while they were distracted with their own struggling quarry.

Newcomers have taken to calling these fish "marshals" in place of the native name. The name is apparently an anthropomorphic comment on the species' ruthless dog-eat-dog tactics. Though reportedly the marshals themselves consider the slang an apt comparison, the Justice Commission officially discourages GEO personnel and their associates from using the name.

Range: Temperate waters of the southern hemisphere

Habitat: Pelagic surface waters

Length: 1.5 to 2.3 meters

Weight: Up to 80 kilograms

Frequency: Rare

Resource Value: Medium; the species is tasty but difficult and somewhat dangerous to catch

Threat Level: Medium; attacks on humans are rare but potentially lethal

Attacks: Slash 5, Bite 3

Damage: Slash 5, Bite 3

Movement: 10/32

Physique: 3

Coordination: 1

Cognition: 2

Psyche: 3

Endurance: 3

Reflexes: 1

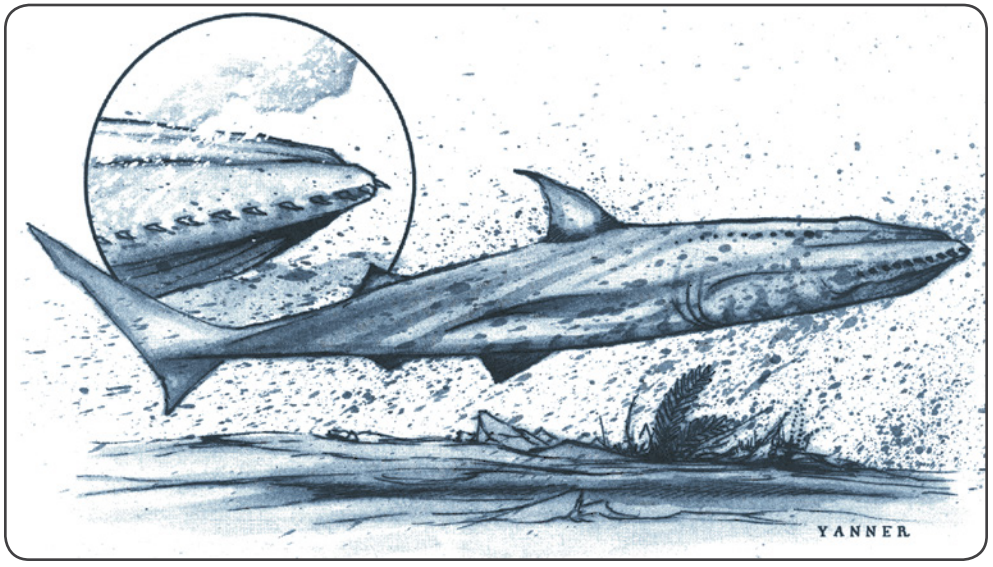
Toughness: 2

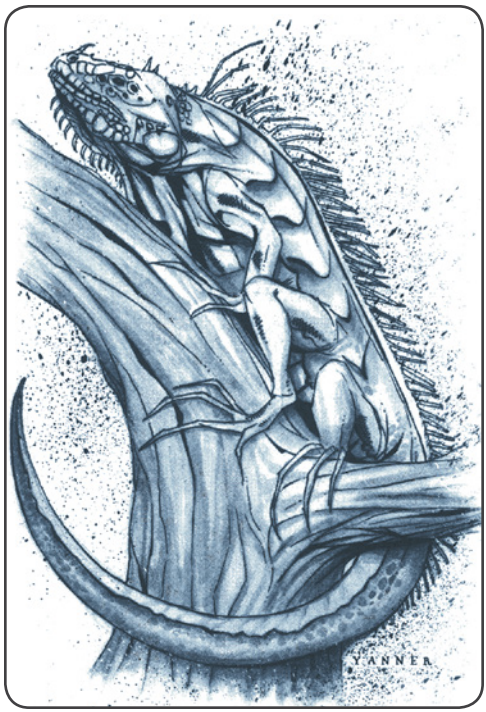
Armor: 1

Basilisk

(*Lacerta infucatus* var.) The basilisk is certainly not the fearsome creature its mythical name implies. In fact it is quite the opposite and is seemingly harmless to anything but the occasional insectoid. The basilisk is a common reptiloid found throughout the tropical and subtropical regions of the Pacifica Archipelago. It is similar in form and ecology to Terrestrial iguanas, though the various species are brightly colored and typically much larger than their Earthbound analogs. Their remarkable rainbow pigmentation is likely a form of warning coloration keying potential predators to the animal's foul tasting and mildly toxic hide.

Behavior: The basilisk is primarily a vegetarian, eating a variety of plant life including various toxic species without ill effect. It is probable that its own toxic nature is the result of metabolic incorporation of these plant poisons. Basilisks also include





insects as a nutritionally important part of their diet, and are uniquely adapted to preying on them. These animals produce saliva with a sweet, flowery fragrance, which when combined with their bright coloration, seems sufficient to dupe nectar-feeding insects into approaching close enough to be snagged from the air. Basilisks have long, flexible necks well adapted to sudden lunges, and when hunting insects they sit with heads cocked upwards, mouths agape. When foraging insects come too close, basilisks snap their necks out with a blinding lunge few insects can escape.

In all other movements, basilisks are slow and torpid. They are uniquely docile and when not feeding they typically spend their time basking in the sun. They have few predators, even in Poseidon's hungry ecology, and this is likely due to their borrowed toxicity. Basilisks are long lived and slow growing, and except for the breeding season, during which they gather in large, swarming masses, they appear to be solitary animals.

Their beautiful coloration, pleasant odor, and docile nature have made basilisks popular pets among natives and frontiersmen. In many villages and outposts it is not uncommon to see these lizards lounging on porch rails, roof beams, chair backs, or even in the laps of children. Though their innate intelligence is low, they respond contentedly to stroking and petting and so unintentionally illicit affection from humans.

Range: Tropics and subtropics throughout the Pacifica Archipelago and likely planetwide

Habitat: Primarily tree-dwellers common in jungle, coastal scrub land, and mountain forest

Length: 0.5 to 2.1 meters, including their long tail

Weight: 0.25 to 16 kilograms

Frequency: Common

Resource Value: Valued as pets in native culture, and if carefully skinned so as not to contaminate the flesh with hide-borne toxins, the meat is light and tasty

Threat Level: Minimal

Attacks: Bite 2

Damage Rating: 1

Poison: Hide toxins poisonous if ingested: Onset Time 1 hour, Duration 24 hours, Damage Rating 1

Movement: 0.1/1

Physique: 0

Coordination: 2

Cognition: –1

Psyche: 0

Endurance: 0

Reflexes: 0

Toughness: –2

Armor: None

Big Round Thing

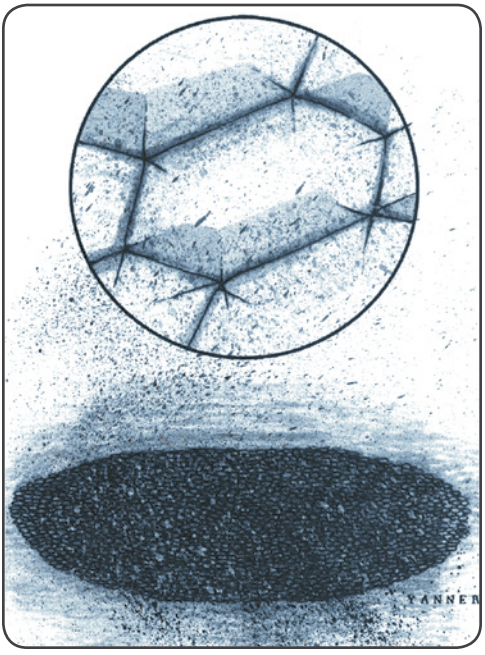
(Unclassified) BRTs, or rounders as most natives call them, are another of the seemingly endless ecological enigmas found on Poseidon. Featuring a structure and biology as unlikely as their name, these creatures are enormous, often reaching diameters in excess of 100 meters. At their thickest, however, rounders seldom exceed one meter from their dorsal to ventral surfaces. The central portion of the organism typically consists of several overlapping, staggered layers of subunits that pare down to a single ragged layer at the creature's margins.

The body of the organism is extremely tough and rubbery, and the surfaces are coated with a thick slime that apparently helps prevent encrusting growths from taking hold. The upper layers of tissue contain large patches of mottled, dark brown pigments that are light sensitive and conduct a form of photosynthesis. The spaces between these patches

are translucent, and almost transparent in places. The lower layers of tissue contain much less pigmentation and are typically pale reds and yellows. When a rounder is viewed from below, with bright sun above, the effect is impressive. The organism looks like a muted, living stained-glass window, appearing to cast countless wavering beams of subtly colored light into the depths.

BRTs appear to be some form of superorganism that is actually a collection of smaller units that some biologists argue should be classified as separate species. These subunit organisms are seldom encountered independently, however, and in captivity quickly enter a state of dormancy that invariably precedes death. This implies that the organism is not simply a colony of individuals, but an organic manifestation of the physiological interdependence of its smaller units. There are a variety of these subunit forms, though beyond subtle differences in shape and coloration, the uninitiated find them difficult to tell apart.

Most subunits are multisided polygons with rounded corners. The most abundant units are hexagonal and rarely exceed two meters in diameter. Ecologists classify the individual subunits by their shape and position within the greater structure—rim units, dorsal units, ventral units, visceral units, and so forth. Dorsal units contain the majority of the photosynthetic pigments, while the translucent ventral units support tiny feeding papillae that gather microscopic organisms and dissolved nutrients from the water. In addition to numerous structures whose functions are not currently understood, the visceral units contain grape-like collections of air bladders used to regulate buoyancy.



Behavior: Big round things are drifters, making them plank-tonic organisms despite their incredible size. During the day the creatures bask at or very near the surface, feeding on the much smaller phytoplankton. At night, the organism submerges, disappearing into the depths. Though confirmation is still forthcoming, biologists speculate that the organism sinks to the sea floor where it can absorb nutrients absent at the surface. Rounders that drift ashore or encounter storms readily break up into their individual subunits. The separate units then drift past the obstacle where most subsequently rejoin, reforming the superorganism.

Virtually nothing is known about rounder reproductive biology, as the mechanism has yet to even be identified. The creature also remains unclassified as debate continues over its phylogeny. Many advocate its inclusion in the plant-animal crossover kingdom suggested in the GEO's recently proposed Poseidon taxonomy.

BRTs themselves are of little economic value to either natives or colonials. They do, however, attract a number of valuable aquatic and avian species looking for temporary shelter or food. These transient communities are favored hunting grounds for native spear fishermen and curious biologists.

Rounders pose little threat, but when near the surface they can be navigational hazards. Though a collision with a BRT will seldom damage a boat hull, the individual subunits that often break free with the impact can clog MHD drive tubes. Note also that big round things are a favorite food for greater whites, and congregations of rounders in current eddies or along drift lines often attract these dangerous animals.

Range: Planetwide

Habitat: Surface waters, typically adrift along the margins of major currents

Length: Up to 120 meters in diameter

Weight: 90 to 110 metric tons

Frequency: Uncommon

Resource Value: Medium; valuable as hunting grounds and as a scientific curiosity

Threat Level: Low
Attacks: None
Damage Rating: N/A
Movement: Drifts with current
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: N/A

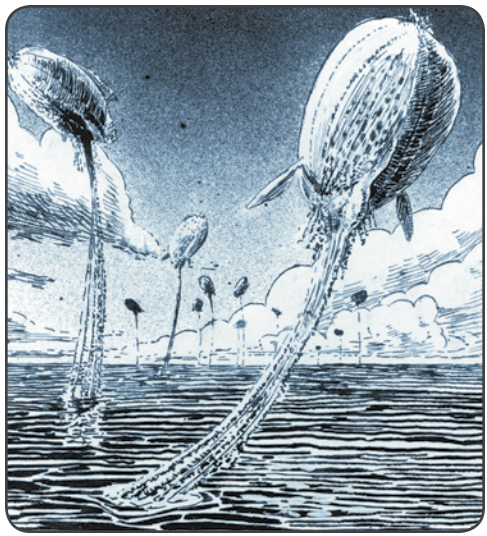
Blimp

(*Giordana fluitarus*) Their common name was inevitable as these marine animals look almost exactly like terrestrial airships. The creature, however, is actually a sort of semi-airborne analog to the terrestrial Portuguese man-of-war. The main body consists of a thin, almost transparent membrane that contains metabolic gases. The tentacles the creature drags through the water are long and thin and covered with stinging cells.

Behavior: Blimps metabolize seawater into oxygen and hydrogen. The hydrogen is released into the creature's balloon-like body. During the heat of the day, the hydrogen provides enough lift to pull the bladder into the air where it is blown along by the ocean winds. As it drifts, the creature drags its tentacles through the water behind it, stinging, digesting, and absorbing plankton and other small marine organisms. At night, in the cooler air, the pressure of the hydrogen is reduced and the creature slowly settles into the water where it floats until morning. It is believed that this semi-airborne lifestyle is an evolutionary response to predation.

Blimps are a navigational hazard to slow-moving and wind-powered vessels, and are dangerous to swimmers. Their sting is not usually lethal, but can cause sufficient pain to incapacitate and potentially drown a swimmer. Blimps are also the focus of a favorite pastime of native children. Children search, out dying blimps that have been blown ashore and gleefully poke at them with burning sticks. The resulting explosive pop is bright and entertaining, but harmless.

Range: Semi-tropical and tropical planetwide
Habitat: Open ocean
Length: Up to 40 meters
Weight: Up to 5 kilograms, including the tentacles

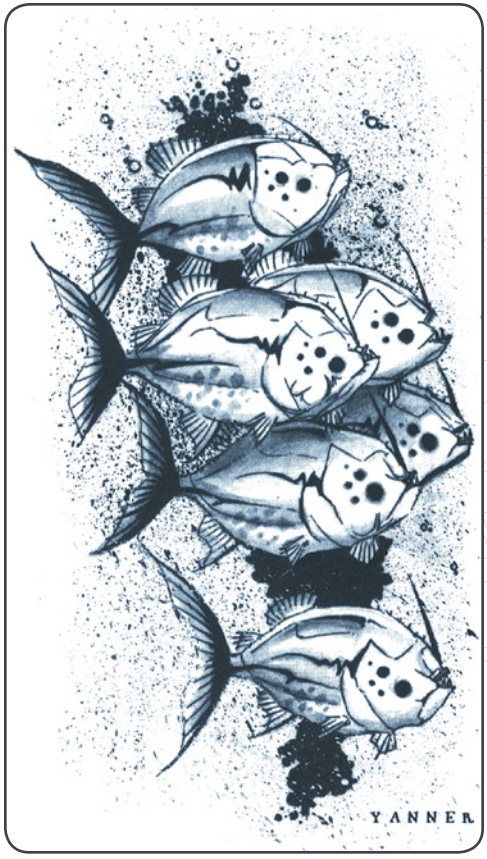


Frequency: Uncommon
Resource Value: None
Threat Level: Medium
Attacks: Sting 6
Poison: Paralytic neurotoxin; Onset time 10 minutes; Duration 24 hours; Damage Rating 3
Movement: Drifter
Physique: 0
Coordination: –10
Cognition: –8
Psyche: –10
Endurance: –5
Reflexes: –9
Toughness: –6
Armor: None

Blood Hunter

(*Venator emeritus*) Blood hunters, or hunters as they are more commonly called, are voracious fish analogs that inhabit the shallow coastal waters of Poseidon's tropics. These fish are most appropriately compared to the now-extinct piranha species of Terrestrial South America. They are dark green to black with an iridescent sheen in bright light. They are sleek bodied, fast swimmers with two rows of exceptionally sharp slicing teeth on each of their four jaws.

Behavior: Hunters swim in large, tightly packed schools of several thousand animals. They patrol coastal shallows in a constant search for prey and their particular attraction to the scent of blood is likely the reason for their common native name. They



are keen cooperative predators that kill even the largest animals. A typical school of hunters can flense a lesser white to the bone in seconds, instantly turning the surrounding water into a bloody froth of swarming fish and drifting bits of tissue.

Hunters tend to swim near the surface, and are so closely packed that from above they look like a single, larger animal. In such schools individuals constantly break the surface, churning the water and leaving a notable wake. This is often the only warning before hunters attack, and even the youngest native children watch warily for such sign.

Fortunately, blood hunters are a relatively rare species and where they do occur they seem staunchly territorial. In the rare event that one school strays into the territory of another, the defending school is quick to attack. The result is typically a bloody decimation of both schools that leaves each so depleted neither is able to hunt effectively. Strangely, a single new school typically reforms from the remnants of the originals. Biologists think these occasional territorial battles may be a natural culling in response to overpopulation, where the end result is an ecological boon of increased genetic diversity, reduced competition, and larger territory.

Note: The statistics below represent a school of blood hunters, not an individual fish.

Range: Tropical waters planetwide

Habitat: Shallow coastal waters, commonly bays, marshes, and estuaries. There are unverified reports that some tropical rivers may support smaller schools of freshwater hunters.

Length: Up to 30 centimeters

Weight: 0.35 kilograms

Frequency: Rare

Resource Value: Minimal; though edible, they are considered too dangerous to fish

Threat Level: Extreme

Attacks: Bite 4

Damage Rating: 2

Movement: 6/15

Physique: 1

Coordination: 4

Cognition: 2

Psyche: 2

Endurance: 5

Reflexes: 3

Toughness: 1

Armor: None

Bubble Array

(Unclassified) The bubble array is a bizarre aquatic creature, and one for which there is no suitable Terrestrial analog. Bubble arrays consist of a multitude of transparent spheres, clustered together to form a long trailing mass. A mature array can be almost 70 meters in length, consisting of a symmetrical assembly of spheres at the front that tapers into a long train of single interconnected bubbles at the end. The spheres range in size, with the anterior bubbles reaching almost a meter in diameter, and the tail bubbles as small as a quarter of a meter. The bubble membranes and the tissue-fluid amalgam filling them have almost the same incidence of refraction as seawater, and so the organism is virtually invisible from any distance greater than a few meters.

Behavior: Bubble arrays are essentially planktonic organisms, able to swim only with the current or in the calmest waters. Most of the anterior bubbles support clusters of long spine-like protrusions that pad-

dle in tiny circles, driving the creature forward in a slow, randomly undulating motion reminiscent of a dragon in a Chinese festival. The rotating spines can be more than half a meter long and may reflect bright light with a colorful iridescence. The shimmer from these spines is often the first evidence of the creature's presence. A bubble array swims slowly through the water collecting zooplankton and other small marine animals within the interstices of its individual bubbles. Acidic secretions within these pockets and dead end canals quickly dispatch and then slowly dissolve the prey into basic organic compounds. This nutrient rich fluid is absorbed through the surface of the inner spheres and apparently distributed from there throughout the mass of the creature.

The bubble array is likely a distant relative of the blimp, but one that has evolved a different use for the hydrogen it electrolyzes from sea-water. Unlike the blimp, which uses the hydrogen it products as a lifting gas, the array uses its hydrogen to produce hydrochloric acid. This acid is secreted into the enclosed channels of the array's body where it is used to kill and digest the array's food. The acids are also used to protect the creature itself from predation. The acids it secretes are concentrated enough to burn on contact, making the array a painful mouthful for even Poseidon's biggest predators. As benign as the bubble array may appear, care should be taken to avoid physical contact with one. The acids the creature ejects as a defensive measure will damage bioplastic equipment and readily burn exposed skin.

Range: Temperate waters planetwide
Habitat: Photic zone
Length: Up to 70 meters
Weight: 1.25 to 2 metric tons
Frequency: Uncommon
Resource Value: None
Threat Level: Low, use caution to avoid chemical burns
Attacks: Accidental contact
Damage Rating: 2
Movement: 1
Physique: –6
Coordination: –30
Cognition: –20
Psyche: 0
Endurance: –3
Reflexes: –25
Toughness: 4
Armor: None

Carniflora

(*Carniflora* species) This group of organisms is represented by several genera of plants that supplement their photosynthetic metabolism by active predation. Sizes vary, but most are rather small, preying on insects, rodents, and other small animals. There are some, however, that are very large and can threaten small livestock and even humans. Cryptically colored and adapted to blend in with the undergrowth, these plants depend on ambush tactics and powerful toxins to capture and kill their prey.

Behavior: The main body of these organisms is typically globular and buried underground. Ropy vines, often lined with thorns and poison glands, extend outward in all directions though the surrounding vegetation. Sensitive to vibration, these vines will flail about when disturbed, in remarkably effective attempts to inject unwary prey with toxin. The poisons are extremely potent and animals die quickly, only steps from the point of attack. Scattered just below the soil are networks of tiny root-like tendrils, and within moments the tendrils begin growing around and into the fallen prey. Tightly cocooned in tough, rubbery rootlets, the prey is digested over several days by powerful enzymes. The "killing fields" of carniflora plants, especially the larger ones, are often characterized by the rancid smell of decaying flesh and littered with half-digested, tendril-wrapped corpses.

Range: Tropics to subtropics
Habitat: Found most commonly in well-vegetated areas with high annual rainfall

Length: 1 to 35 meters
Weight: 1.5 to 20 kilograms
Frequency: Uncommon
Resource Value: Carniflora are used by the natives as a source of natural toxins, and they may prove to be of pharmaceutical value.
Threat Level: High
Attacks: Stab 7 (3 per round)
Poison: Lethal neurotoxin; Onset Time 10 seconds; Duration 24 hours; Damage Rating 5
Movement: None
Physique: 2
Coordination: –5
Cognition: –5
Psyche: 3
Endurance: 2
Reflexes: –5
Toughness: Vines –1, Body 3
Armor: None

Chain Beetle

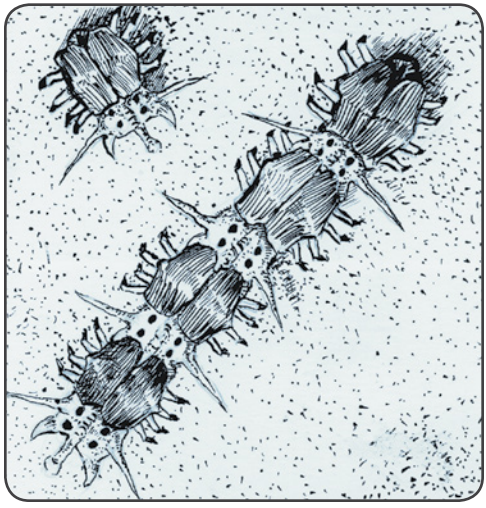
(*Dorsalis givenius*) Chain beetles are actually not insectoids, nor are they crustaceans as their amphibious behavior implies. Their phylogeny is unclear, but they appear to be some sort of large amphipoid. They vary in size, but individuals can grow rather large, and colonies can reach more than five meters in length. Their coloration is cryptic and typically matches the mud and sands in which the animals commonly bury themselves. Their bodies are flattened dorsal-ventrally and their shells are extremely thick and strong. The creatures' eight lateral limbs are used for locomotion, and several strong ventral appendages are used for collecting and processing food.

Chain beetle shells are so hard that the animal has few natural enemies. Though it protects the beetle from most natural predators, the shell also makes them a prized harvest for Poseidon's natives. When ground down and polished, the shell material makes excellent needles, awls, skinning knives, and other small, durable tools. There is even a growing market for chain beetle shell jewelry in some of the larger settlements. When polished clean, the inner layers of the shell glow with remarkable colors and patterns.

Behavior: Chain beetles have a unique ecology that makes them interesting to scientists and a threat to the unwary. Individual beetles are fairly secretive and are rarely encountered. Typically, however, chain beetles collect into coherent colonial groups, literally chaining themselves together using extremely powerful grasping hooks under the leading and trailing edges of their shells. Large colonies can contain more than 20 individuals, yet are able to behave and hunt as a single entity. Their means of communication is currently uncertain, but evidence indicates some sort of chemical messaging.

Because of their formidable shells, colonial chain beetles are almost fearless, and where they are common, they can be a threat to livestock and human settlers. Chain beetles on the prowl have been known to force their way into homes at night and attack sleepers. They seem unperturbed by noise and physical attack, and are almost impossible to deter. Unfortunately, as single individuals are killed the rest of the colony simply carries the deceased along with it and continues the attack. Flowing across the ground like a terrestrial millipede, the colony uses its sharp ventral mouth parts to nip small chunks of flesh from its prey. Typically, the colony is unable to kill larger prey in a single attack and simply latches on, continuing to chew, eating the prey alive. Certain synthetic aromatic chemicals appear to have a debilitating effect on the colony by interrupting its communications. Fire has also proven to be a useful deterrent against attacking chain beetles.

Range: Temperate and tropical regions planetwide
Habitat: Wet sand and mud flats, shoreline vegetation
Length: 25 centimeters each
Weight: 1 to 2 kilograms each
Frequency: Uncommon
Resource Value: Medium



Threat Level: High
Attacks: Pincher 5
Damage Rating: 1
Movement: 3/5
Physique: 0
Coordination: –1
Cognition: –4
Psyche: 0
Endurance: 0
Reflexes: –2
Toughness: –3
Armor: 5

CHUB

(*Victus facilis* var.) Chubs are small unlikely creatures and are compared most frequently to Terrestrial rabbits. There are many known species varying in size, coloration, and behavior, but the similarities are greater than the differences. Chubs are small creatures with no defenses and the unfortunate lot of serving as prey for even the most timid of Poseidon's carnivores. Chubs are furless, but their bare skin is soft and has tiny wrinkles that give it a velvety texture. They have six legs with large digging feet, but they are still relatively clumsy and slow animals.

Behavior: Chubs are herbivores feeding preferentially on seeds and fruits that fall to the ground, but they will consume just about any plant material available. They have limited climbing ability, and are restricted to the lower underbrush where they scrabble around foraging for food. Chubs are burrowing animals, and their simple warrens seem to be their only defense against, and the only reason they have survived in, Poseidon's unforgiving ecology.

Chubs are considered cute, at least by Poseidon standards where scales, poisons, and webbed feet are the norm. They also have the unfortunate luck of being quite flavorful, their meat having a natural buttery flavor. Even though their small colonies occur naturally only in the coastal scrub land of the Westcape region, chubs have become a favorite pet and meat source, and are common livestock in native settlements throughout the archipelago.

Range: Natural populations occur only on the islands of the Westcape region, though transplanted chubs have established viable colonies throughout the Pacifica Archipelago where they have escaped native livestock hutches.

Habitat: Dry coastal scrub forest
Length: 20 to 25 centimeters

Weight: 0.25 to 0.75 kilograms
Frequency: Common
Resource Value: High; though there is little meat on each animal, chub flesh is delicious. Their cute appearance and timid demeanor also make them popular pets among native children.

Threat Level: None
Attacks: None
Damage Rating: N/A
Movement: 2/5
Physique: –1
Coordination: –1
Cognition: 1
Psyche: –2
Endurance: –1
Reflexes: 0
Toughness: –5
Armor: None

CUP SUCKER

(*Crusta crocinus*) The cup sucker, or wound snail, is a mollusk analog that is a favorite tool of the native healer's trade. The snail is tiny, with a simple, cup-like shell. The shell is bright yellow, warning potential

predators of the animal's toxic body fluids. The snail's foot is an equally bright purple with dull, rust-colored spots. Cup suckers are found in tide pools, mud, and sands of the intertidal zone where they play the unique ecological role of mutualistic fungivores.

Behavior: Cup suckers seem to prefer a diet of fast fungus, and if the growth is readily available, they are content to consume only the fungus. They are commonly found in great numbers on decaying carrion, along the beach drift line, or anywhere else that abundant organic material supports a rich fast fungus crop.

Cup suckers are also known to attach themselves to injured animals, where they feed on the fast fungus that typically infects the injured tissues. Apparently, the wound snail's presence reduces the physiological stress on the host organism, sparing it a fast fungus infection that could possibly turn a minor injury into a life threatening condition.

The snail's service is not free. As it feeds on the fungus within the wound, the snail also draws nourishment from the host's body fluids. This drain is physiologically negligible, and has little detrimental effect on most host animals. The snail, however, uses the additional nutrients to produce a tiny cluster of eggs and attaches the cluster to a patch of the host's healthy hide. When the injury is sufficiently healed that further fungal infection is unlikely, the snail simply lets go and drifts away. The sail departs but the small egg sack remains attached to the host's skin for several days before also drifting free. The apparent ecological significance is that the cup snail's young are dispersed to new habitats.

Native healers have been using cup suckers since before the Abandonment to keep open wounds, abrasions, and burns clear of fast fungus infections. Most healers keep small colonies of the mollusks on hand to service their patients, and claim that the tiny animals have been responsible for saving thousands of lives over the years.

The colonial medical establishment has even started to accept the species as a viable tool in the battle against fast fungus infection, and has begun using the snail in abnormally resistant or extreme cases. Recent medical research at the Haven Institute of Science and Technology has suggested that there may be more to the snail's medical value than its appetite for fast fungus. Antibacterial compounds in its mucosal secretions may also help disinfect the wounds it cleans. If these preliminary findings bear out, the researchers hope to develop a line of antibiotics better suited to combating Poseidon's more drug-resistant bacteria species.

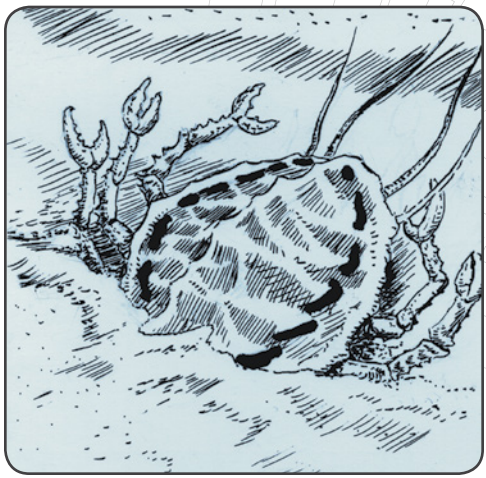
Range: Tropical waters planetwide
Habitat: Intertidal zones
Length: Up to 1.5 centimeters in diameter
Weight: 5 grams
Frequency: Very common
Resource Value: High; valued as native medical treatment for fast fungus infection
Threat Level: None
Attacks: None
Damage Rating: N/A
Movement: N/A
Physique: –2
Coordination: –15
Cognition: –5
Psyche: –5
Endurance: –3
Reflexes: –10
Toughness: –10
Armor: None

Digger Crab

(*Cancersimila fossionis*) The digger crab exhibits the extreme sexual dimorphism characteristic of many animal species on Poseidon. The males are similar to large terrestrial crabs, with a heavy carapace covering top and bottom and six spindly appendages. These appendages are uniform, with three jointed spines along their length, and small claws at the ends. Two rows of eyespots flank the crab laterally, but its primary sensory organs consist of a series of antennae along its legs. The female is as much as three times again as large as the male, and lacks the carapace common to most terrestrial arthropods. Functionally little more than an egg factory, the bloated, soft-bodied female suffers from limited mobility and underdeveloped eyespots.

Behavior: The female digger crab spends most of her time resting deep within the maze-like tunnels constructed by her male drones. The spines and claws along the males' legs are uniquely suited to burrowing in the damp sand where the creatures build their nests. The warrens can be quite extensive, and there have been reports of nests causing sinkholes that have trapped unwary beachcombers. The males spend most of their time gathering food for the queen. Its most common prey includes insect analogs, smaller crustaceans, and other invertebrates, but the female will devour most anything that becomes trapped in the shifting sands of the warren.

Diggers often give their nests added structural support by building them against solid objects, such as rocks or tree trunks. A continuing problem is their tendency to nest around the stilts supporting many native dwellings. The stilts begin to lean when they lose their support, and some houses have actually collapsed.



Diggers are favored by some natives as a source of delicious, tender meat. Crabbers locate the nests and net the drones as they make forays to the sea. The females are generally considered disgusting, inedible creatures. The males' hard carapaces are strong and usually very brightly colored. They are often used in native handicrafts, most notably as bowls, pots, and mugs.

Range: Planetwide tropics, but most abundant in the Haven Cluster

Habitat: Wet sands and intertidal zone

Length: Up to 0.4 meters

Weight: Up to 3 kilograms

Frequency: Common

Resource Value: High. The digger crab is valued as a source of food and raw material for handicrafts.

Threat Level: Minimal

Attacks: Claw 3

Damage Rating: 1

Movement: Land 1/2, Water 1/1

Physique: –1

Coordination: –7

Cognition: –3

Psyche: –3

Endurance: –2

Reflexes: –5

Toughness: –4

Armor: 5

Dune Creeper

(*Paliurus defendo*) The runners are thin, but tough, and branch out in all directions, further protecting the beach from the forces of wind and water. The runners and leaves alike are a dark green that appears almost black.

Behavior: The plant is a halophyte, able to grow in the salty conditions of the shoreline water table. As the plant absorbs salt water through its roots, active transport in the runner tissues concentrates the salts in individual, sacrificial leaves. As the salts accumulate, these storage leaves slowly die, turning a pretty gold color before falling off the vine, taking the excess salts with them. Every few meters, dune creeper runners send advantageous roots deep into the loose sand. These root systems secure the plant against storm winds and become nodes for new run-

ner outgrowths. In this way, a single individual plant can leapfrog its way across the top of the beach, covering the ground in a maze of tendrils and colonizing a whole shoreline.

Dune creeper is a common, slow-growing plant that is a highly valued resource in many native villages. The vine has deep and bushy roots that do a good job of holding sand together against erosion, helping to build beach dunes and berms. The stalk of the plant consists of long, ropy runners with small green leaves and tiny sand-colored flowers.

Dune creeper helps stabilize beach sand against erosion, and therefore helps to establish relatively rich ecological communities that would otherwise be unable to form in such an arid and salty habitat. Crustacean analogs and other invertebrates find shelter and food among the vines, eating both the plant itself, as well as each other. Other plants root in the more stable soil under the creepers outstretched vines, and benefit from the water its extensive root system holds near the surface and the natural fertilizers the other hangers-on leave behind.

Since the early years of the Abandonment, Poseidon's natives have made dune creepers a useful part of their architecture. Where creeper grows well, it can be coaxed to climb pilings, support beams, walls, and up over rooftops. On this stable substrate the vine does especially well, growing thickly. If the climbing plants are well tended, a small building can be completely encased with creeper in just a few years. The growth dramatically improves the structural integrity of small wooden buildings, often helping them to withstand even cyclonic winds. The plant helps waterproof covered structures, and keeps them cooler in the hot sun. It is also documented that creeper-covered buildings suffer less from the ravages of fast fungus as well. Where creeper has been extensively utilized in the local architecture, native dwellings often take on a wilder air, and seem more a part of their natural surroundings than artificial constructs of a human community.

Range: Subtropical regions

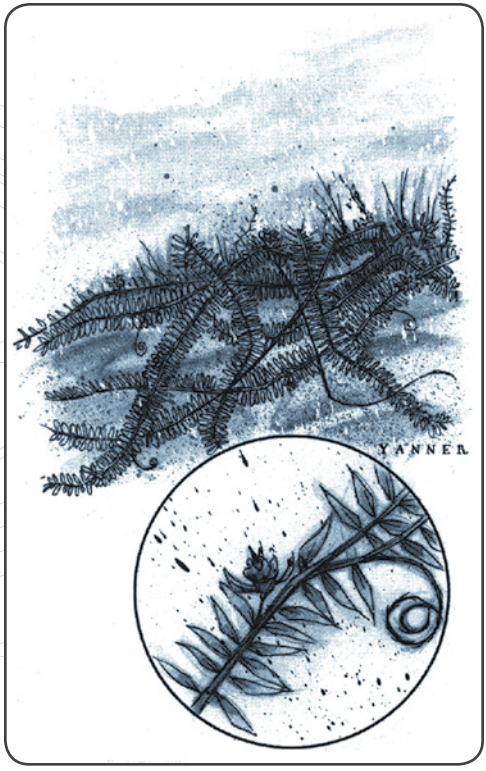
Habitat: Arid coastal dunes

Length: Individual plants can reach several hundred meters in length.

Weight: Up to 0.25 kilograms for an individual runner

Frequency: Common

Resource Value: High; native children collect edible invertebrates from the associative communities



creeper supports. The plant is cultivated to stabilize the sands around beach communities and to structurally reinforce native buildings.

Threat Level: None

Attacks: None

Physique: N/A

Coordination: N/A

Cognition: N/A

Psyche: N/A

Endurance: N/A

Reflexes: N/A

Toughness: N/A

Armor: None

ECHO/FISH

(*Piscis refero*) Echo/fish is the Interspecies name for a group of related fish species that are the preferred natural prey of dolphin natives and colonists alike. With dolphin sound-picture names like soft/swift/diver/twitch/soft and bony/rough/speeder/juice/bony, it is easier for humans to simply lump these similar species together under one name—echo/fish. Fins find the inability of humans to readily distinguish

between these species baffling, and always seem ready to offer endless discourse on the nuances of their acoustic signatures, swimming habits, and textural variations. Cetacean psychologists believe that this ongoing discourse is a subtle commentary on human physical limitations that fins find endlessly humorous.

Echo/fish range in size up to a quarter of a meter and share basic elements of shape and color. Most species are some version of silver, gray, or brown, and have what could be considered the archetypal body form for Poseidon fish. Most live in large schools and are found throughout the Pacific Archipelago and beyond.

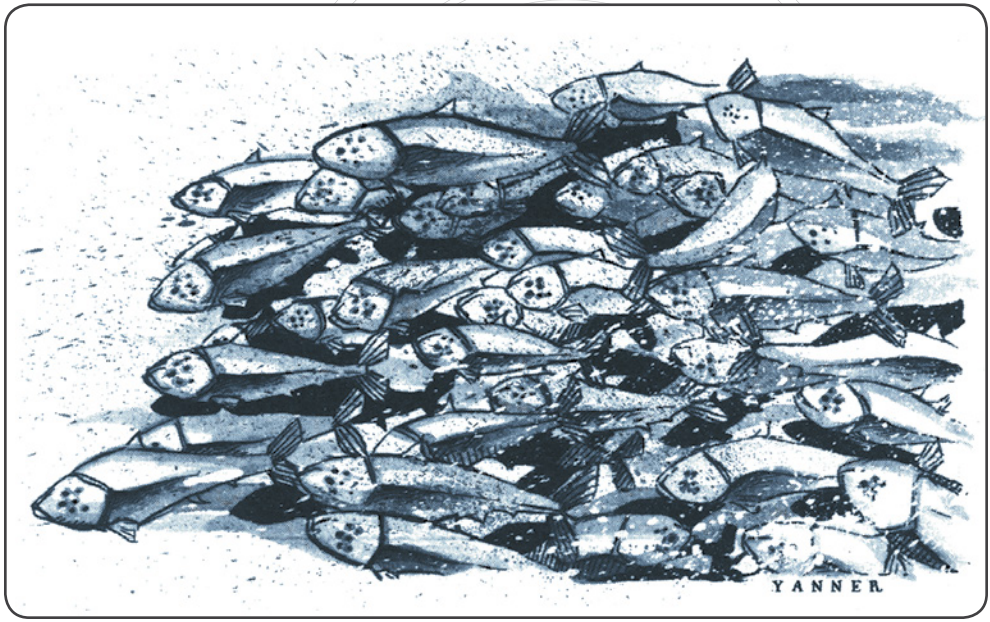
Behavior: These species form large, dense schools that range along island coastlines in predictable distributions. Echo/fish are abundant and prolific, reproducing year round and quickly replenishing any depletion of their stocks. Echo/fish are readily stunned by dolphin sonar attacks making them easier to catch. Human fishermen do not compete with fins over these stocks. Echo/fish are relatively bony and therefore more troublesome to prepare than other common species. Dolphins, on the other hand, typically swallow their prey whole and so do not seem to mind.

Fin and human spiritualists claim that such ecological hunting habits are in keeping with the underlying tenets of the Whalesong. Others claim that making ecological considerations in the utilization of natural resources is simply responsible citizenship.

Range: Temperate to tropical waters planetwide
Habitat: Continental margins and coastal shallows
Length: 10 to 25 centimeters
Weight: 0.4 to 1.8 kilograms
Frequency: Abundant
Resource Level: High; preferred food fish for dolphins
Threat Level: None
Attacks: None
Damage Rating: N/A
Movement: 3/8
Physique: 0
Coordination: 2
Cognition: 0
Psyche: –1
Endurance: 0
Reflexes: 1
Toughness: –5
Armor: None

Eel Dragon

(*Anguillasimila volatilis*) The eel dragon is neither an eel nor a reptile. It is an amphibian analog that has evolved the capability of true flight. The animal's body is eel-like in form, but that is where the resem-



blance ends. It has large, membranous wings perfect for extended soaring. The head is only an extension of the neck and the tail terminates in barbed hooks used for hunting. Coloration varies widely, and males are typically only half the size of females.

Behavior: The eel dragon is a soaring animal, spending most of its day riding ocean winds and island thermals, hunting schools of small fish. It is unclear how these animals detect their prey, but a wheeling flock of dragons is a sure sign that the waters below are teeming with fish. Eel dragons hunt by making low passes over the water and dragging their barbed tails below the surface. The sharp tail-hooks snag fish, which are quickly pulled from the water and swallowed whole.

Eel dragon behavior is not only of obvious value to native fisherman, it can also be a hazard to aircraft. For some unknown reason, perhaps as a result of their means of perception, these animals are attracted to loud noises. As a result, it is not uncommon for them to be sucked into the fan intakes of slow-moving jumpcraft and VTOLs. Eel dragons are ungainly on land, moving like snakes but hampered by their folded wings. As a result, these animals are rarely seen on the ground. At night, they roll into tight balls, wrap their wings about their coiled bodies, and drop into the water. They float quietly at the surface in large sleeping rafts.

Range: Temperate to tropical regions planetwide

Habitat: Coastal margins

Length: 0.5 to 1.2 meters for females, half that for males

Weight: 0.4 to 0.9 kilograms, half that for males

Frequency: Common

Resource Level: Low

Threat Level: Minimal, except as an aircraft navigational hazard

Attacks: Barb 6

Damage Rating: 1

Movement: 15/25, Land 1/2

Physique: 1

Coordination: 3

Cognition: 1

Psyche: 1

Endurance: 1

Reflexes: 2

Toughness: Female –2, Male –3

Armor: None

Fast Fungus

(*Vindexa* species) Fast fungus consists of symbiotic bacteria and fungus-like organisms that live interdependently, much like the algae and moss that make up terrestrial lichens. There are many different types of fast fungus, each particular to certain environmental conditions, but most share several characteristics.

Fast fungus survives by breaking down and then absorbing organic molecules from almost any dead or nonliving source. Dead organisms not otherwise recycled by the ecology are rapidly dissolved; waste products and shed tissue are quickly consumed.

In the early years of the Athena Project, the fungus quickly destroyed many bioplastics. This made survival even more difficult for the original colonists as equipment was literally eaten away. Fast fungus is still responsible for the corrosion of bioplastic structures and equipment, but chemical additives mixed into the plastic during manufacture have reduced the problem. Still, fighting fast fungus is a constant chore as hulls, walls, and equipment housings must be constantly scrubbed, sprayed, or scraped clean to prevent extreme corrosion.

Behavior: Fast fungus received its common name because of its phenomenal growth rate. A fast fungus colony and completely consume even a large carcass In just a couple days. Virulent strains can hole a wooden boat hull in just hours. Artificial chemicals and natural derivatives can be used to retard growth, but require frequent application.

Fast fungus can also be a human health hazard, as it can infect dead human tissue much like terrestrial athlete's foot. Though easily treated, these infections can become life threatening if not attended. Natives medicate themselves and protect boat hulls and other organically derived products by washing fast fungus infections with solutions derived from the toxic flesh of soft spurts. In some cases, fungal infections in large structures like wooden boats or shelters can be suppressed by introducing other strains of fast fungus, the competing strains apparently secreting chemicals that inhibit the rival's growth.

Range: Planetwide

Habitat: Aquatic and non-aquatic species are common. Only where the environment is exceptionally dry does fast fungus have trouble growing.

Length: N/A

Weight: N/A

Frequency: Common

Resource Level: None

Threat Level: Minimal to humans, high to unprotected equipment

Movement: None

Fish

(Various species) Poseidon's fishes, though physically and physiologically different from Earth species, are almost indistinguishable ecologically. In terms of behavior, habitat use, and variety there are essentially no differences. Large, fast, open-ocean predators; colorful, toxic reef-dwellers; cryptic bottom-feeders; there is an endless, Earth-like variety of fish species in Poseidon's fresh- and saltwater habitats.

As with bony fishes on Earth, it is apparent that most of Poseidon's fish species share a common ancestry, and though body-form diversity is high, most species share some common characteristics as a result. As with many animals on Poseidon, fish have two rows of multiple eyespots running head to tail along their flanks, and they appear most sensitive to ultraviolet light. The typical body form is more elongated than the average terrestrial fish, lending a distinctly eel-like motion to fish swimming. Fish gills are physiologically similar to those of Earth fish, but are couched in slits running the length of the animal's body, just below the row of eyespots. Thin, undulating muscular flaps covering the gills keep them supplied with fresh water. Fin shape and function varies greatly depending upon ecological niche, but most species have two sets of jaws-a secondary, horizontal set on the sides of the primary, vertical jaws. These lateral jaws open horizontally, closing on the sides of the vertical jaws. This gives fish mouths a characteristic four-part structure. In predatory species, these lateral jaws are typically lined with long, sharp teeth to help secure prey, and in filter-feeders, the jaws are adapted to filtering water.

Most fish are smooth skinned and covered in a protective slime layer. Coloration is highly variable running from cryptic to bright warning or breeding pigments. The fish of Poseidon share many other convergent similarities with Earth species, including their importance as a human food source. The majority of Poseidon's fish species are edible and many are considered delicious.

Behavior: The unforgiving ecology of Poseidon is characterized by harsh natural selection, and this has driven the evolution of extreme adaptations and behaviors for escape, defense, and predation. Estimates indicate that there are 15,000 to 20,000 species of fish on Earth. Studies on Poseidon indicate that these extreme evolutionary pressures have created at least three times that diversity.

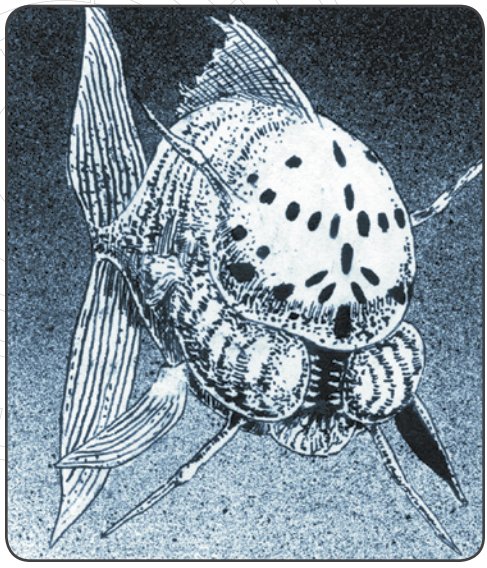
Range: Planetwide

Habitat: Oceanwide, as well as all rivers and lakes

Length: Variable by species; up to 15 meters for the largest

Weight: by species; up to 1,300 kilograms for the largest

Frequency: Variable by species



Resource Level: Next to seaweed derivatives, fish are the most important human food source on Poseidon.

Threat Level: Variable by species

Attacks: Bite 4

Damage Rating: Less than 50 kilograms 1; More than 50 kilograms 3

Movement: 1/4 to 8/20

Physique: –4 to 2

Coordination: –3 to 3

Cognition: –5 to –1

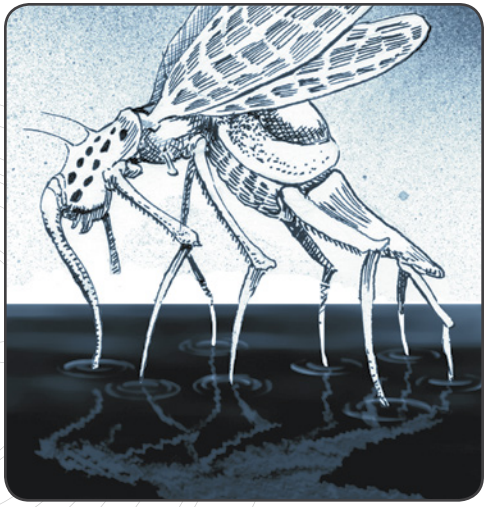
Psyche: –5 to 1

Endurance: –4 to 1

Reflexes: –4 to 1

Toughness: –7 to 5

Armor: None



FISHERMAN

(*Pascator piscataris*) This huge arthropod analog has six long, thin, jointed limbs that extend from its various body sections, each leg ending in a "foot" beyond the last joint. Each foot is covered with spiny, hair-like fibers that allow the creature to support itself on the water's surface tension. Similar fibers closer to the body are sensitive to airborne vibration, and the fisherman uses them as part of its auditory system. The fisherman's body is segmented into several narrow sections, with all but the head segment supporting a pair of legs. A long, hollow spine juts from the anterior of the fisherman's head section. On its back are a pair of membranous, ovoid sacs. These structures contain specialized glands which secrete and store a complex enzymatic toxin.

Behavior: When feeding, the fisherman searches out concentrations of zooplankton and schools of small fish swimming near the surface. It then alights on the water and extends its mouth-spine below the surface, releasing a dose of its stored toxin. Any organisms in the immediate area quickly absorb enzymes from the expanding cloud. The toxin inhibits the function of motor neurons in the affected animals and quickly paralyzes them. The incapacitated prey subsequently floats to the surface where they are consumed.

Natives throughout the Haven Cluster, especially in isolated settlements like Circumstance (p. 48), coat their hunting weapons with the fisherman's toxin. In large quantities, the substance is capable of slowing and disorienting even large prey animals. There have even been unconfirmed reports of native extremists· using the toxin on their newcomer enemies. Researchers with Lavender Organics and Biogene have also taken an interest in the fisherman. Its enzymatic toxin is the most structurally complex protein yet discovered in nature, and scientists seek to discover how the diminutive fisherman produces it, and why it is so complex.

Range: Haven Cluster

Habitat: Shallow coastal waters

Length: 0.1 to 0.15 meters

Weight: 8 to 15 grams

Frequency: Uncommon

Resource Level: Unknown

Threat Level: Minimal

Attacks: Toxin Cloud 7

Poison: Paralytic Neurotoxin: Onset Time 15 minutes, Duration 12 hours, Damage Rating 2

Movement: 1/3

Physique: –1

Coordination: 4

Cognition: –4

Psyche: –1

Endurance: –1

Reflexes: 0

Toughness: –6

Armor: None

GHOSTER

(*Retemanes* species) Ghosters are a fascinating genus of colonial organisms. Each individual consists of an ephemeral, membrane-bound filament so translucent as to be almost transparent. This gives the collective

organism an indistinct outline and a shimmering invisibility that has led to its common name. The individual filaments are bound together in interlinked strands to form vast, sheet-like master organisms.

What makes this animal such an interesting species is that, much like neurons in a terrestrial animal, these organisms can generate electrical potentials by pumping dissolved ions (sea salt) in and out of their bodies. By varying the ion content over the surface of their enormous but paper-thin bodies, these organisms can generate a formidable potential that can be discharged with dangerous effects.

Used on a continuous small scale, these electrical discharges stun and then kill small marine organisms for consumption. Larger, single discharges, however, especially from large ghosters, can be extremely dangerous. Not only have unwary divers been electrocuted, but reports are common of sub pilots driving through these virtually invisible creatures only to have electrical systems short-out.

Behavior: These animals simply drift about on the water's surface shocking plankton and other small organisms to death. These organisms become trapped among the ghoster's interconnected fibers and rapidly decay. As they degrade, they provide nutrients to the individual filament organisms that absorb them directly through their cell membranes.

Drifting ghosters continually discharge into the surrounding water as they encounter prey. These discharges provide the only reliable means of identifying and therefore avoiding ghosters in the wild. Within close proximity, 20 to 30 meters, EM scanners can sense these electrical currents, warning of the nearby creatures.

At night, if the discharge rate is high enough, the constant interplay of sparking light seems to make the creatures glow. They light up the surrounding water, and from the air the glow can be seen for several kilometers. From the deck of a boat, large ghosters seem to light up the sea from horizon to horizon.

Range: Ghosters are found in temperate latitudes only. Colder temperatures inhibit the chemistry of their electrical potential and the storms of the Belt damage their fragile bodies.

Habitat: Ghosters float at or very near the water's surface, drifting about, totally at the will of ocean currents.

Length: Ghosters are flat, wispy, irregular sheets of translucent tissue typically covering several hundred square meters of the water's surface.

Weight: 2 to 8 kilograms
Frequency: Uncommon
Resource Level: None
Threat Level: High
Attacks: Electrical Discharge (automatic)
Damage Rating: Electrical Shock 4
Movement: Drifter
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A

Toughness: This creature is almost impossible to kill. It is easily torn into smaller parts and can be shredded with a lot of effort. However the individual cells can reproduce new networks of fibers asexually. To completely destroy a specimen, poison or extreme heat is required.

Armor: None

Gladiator Crab

(*Cancersimila preliator*) The gladiator crab is a large crustacean analog whose name comes from its single-minded territoriality. The animal is believed to be a close relative of the digger crab and is the most heavily shelled and densely muscled of Poseidon's many crustacean species. Sporting comically large chila, or pinching claws, and an unusually thick carapace, the gladiator is a formidable animal that is typically eaten by only the largest and most determined predators.

Gladiator crabs have iridescent shells that shimmer with the colors of mother of pearl. Constant tunneling through the sand keeps gladiator shells clear of algae and other growths, and serves to polish them to a bright sheen. Besides its oversized fighting claws, the gladiator has four thick walking legs, each tipped with splayed protrusions that give the animal an unusually good grip in the wet sand of its burrow and the intertidal zone where it hunts.

Gladiator crabs are edible, and considered delicious. Their dangerous territoriality and thick shell make them both difficult to find and still harder to kill. As a result, they typically go unhunted in favor of their thin-shelled cousins.

Behavior: Gladiators are one of the most aggressively territorial animals known to biologists. Unlike most other species, whose combatants typically submit and retreat before serious injury occurs, gladiator

crabs invariably fight to the death. Female and male crabs alike stake out and protect individual territories, defending them against all trespassers, and most aggressively against their own kind.

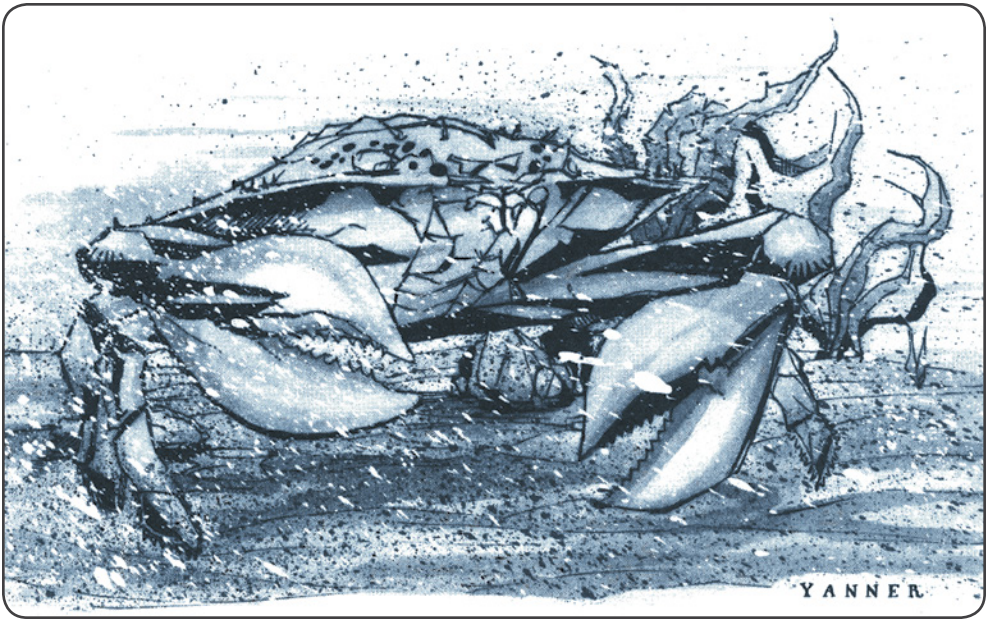
A gladiator grab that catches another of its species on its territory will attack without hesitation and fight until it has killed the invader, been incapacitated, or itself killed. Gladiator's shells are so thick that such battles can last over an hour before one combatant manages to breach the carapace of the other, or sever enough of its opponent's limbs to render it immobile.

If the victor has enough energy left after the battle, it will drag the vanquished crab back to its burrow where it consumes the remains. On the other hand, the victor itself is sometimes so spent after a fight that it dies of exhaustion, or succumbs to a predator it might otherwise have been able to fend off.

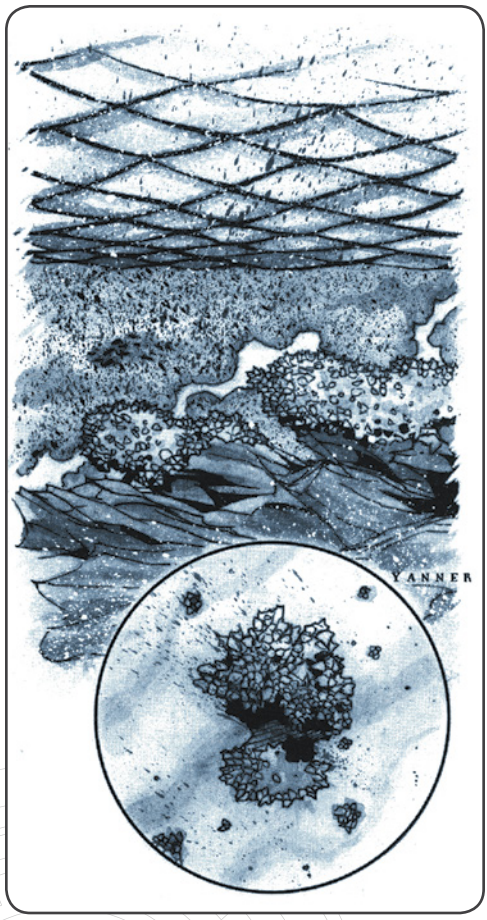
Gladiator crabs never associate peaceably with each other, even during their short breeding season. During a two-week period, female gladiators dig deep nests just above the high-tide line along the borders of their territories. After burying their eggs, they mark the area with potent pheromones that apparently only attract male gladiators. Males prowl their own territorial boundaries looking for these nests, which they dig up, fertilize, and then rebury.

Misguided native children and mean-spirited adults, both native and otherwise, often stage combats between gladiator crabs. The adults set up betting tournaments in aquatic imitation of Terrestrial cockfighting, and in the native quarters of many colonial settlements Incorporate slummers and thrill-seeking tourists are making gladiator fights big business. Some fight rings have become so lucrative that they have reportedly attracted the attention of organized crime, which in turn has attracted the attention of the GEO Justice Commission.

Range: Throughout the Pacifica Archipelago
Habitat: Sandy to semi-rocky intertidal zones
Length: Up to 0.85 meters
Weight: Up to 12 kilograms
Frequency: Uncommon
Resource Value: Valued for its flavorful meat and used in animal-fighting tournaments
Threat Level: Medium
Attacks: Pinching claws 4
Damage Rating: 4
Movement: 1/3
Physique: 0
Coordination: –5
Cognition: –2
Psyche: 1
Endurance: 0
Reflexes: –3
Toughness: –2
Armor: 5



Glass Coral



(*Crystalus perspicuus*) Glass coral is arguably the most spectacular life form on Poseidon, and without a doubt the most beautiful. Like Terrestrial reef-building coral and several of the other reef organisms on the water-world, glass coral is a colonial animal that forms vast mineral structures on the seafloor. Unlike other reef species, however, glass coral utilizes silica, extracted from Poseidon's silicon rich waters, to form its unique shell structure almost entirely out of natural glass. Glass coral is apparently a member of the same evolutionary line as borealgae, but the individual organisms are significantly smaller, and though they contain functional photosynthetic compounds, they are relatively transparent.

Behavior: What makes glass coral reefs so spectacular is the sheer beauty of their structure. The mineral skeleton the algae lays down is a natural glass that varies from translucent to entirely transparent. Trace amounts of locally abundant minerals and various organic compounds are incorporated into the lattice structure of the reef material itself, lending the finished glass a variety of swirled and exotic colors.

As beautiful as this may be, the most breathtaking sight occurs when the bright Serpentis sun hits the reef at just the right angle and the light is shattered into a million shimmering fragments—an alien rainbow of colors never seen on Earth. The flowing lens of the surrounding water interplays with the natural prisms, irregular forms, and colorful imperfections of the glass to create a stunning, almost supernatural light show. Even the highest resolution holographic equipment seems unable to capture the true nature of the display, and only firsthand experience allows for true appreciation. Scientists and artists alike are enthralled by this species, the former in speculation about the purpose of such adaptation, the latter simply in awe of the chromatic majesty.

Glass coral reefs are particularly hard structures with razor-sharp edges and dagger-like protrusions that are serious hazards to errant boat hulls and unwary swimmers. Despite the obvious threat to harvesters, the natives value glass coral for more than its inherent beauty.

Some of the organic compounds secreted into the reef structure by the algae analogs make the otherwise brittle natural glass remarkably durable. Since the earliest days of the Abandonment, natives have used glass coral fragments to make a variety of useful tools, including needles, scrapers, awls, and blades of all sizes. Well-made glass coral knives are efficient and valued possessions, and a native tradition has developed of passing on such blades as family heirlooms. Some craftsmen have become so skilled and their designs so elaborate that their knives have begun to claim thousands of scrip from collectors in Haven and among the Incorporate.

Glass coral reefs are also becoming tourist attractions in some regions. Local native villages and a few colonies are seeing increasing numbers of day trippers and weekenders coming to see the reefs, and in the Haven Cluster several guide services have begun offering trips planned around glass coral dives.

Range: Tropical waters planetwide

Habitat: Nutrient-rich waters

Length: Individuals up to a centimeter in diameter, single colonies up to 3 kilometers along longest axis

Weight: Up to 2 grams per individual

Frequency: Uncommon

Resource Value: Important source of tool and artistic materials to natives, and of increasing regional import in the tourist trade

Threat Level: Medium; extreme hazard to unwary swimmers and helmsmen

Attacks: Accidental impact

Damage Rating: 4

Movement: None

Physique: N/A

Coordination: N/A

Cognition: N/A

Psyche: N/A

Endurance: N/A

Reflexes: N/A

Toughness: N/A

Armor: None

Greater White

(*Leviathan dominatus*) Though nothing like true Earth sharks, because of their coloration, size, and ferocity, this species common name was inevitable. Enormous creatures, these predators hunt throughout the planet's oceans, always hungry, always feeding. These animals are so large that they must supplement their diets between successful hunts by filter feeding, much like terrestrial whales. With long, thick bodies more akin to that of moray eels than sharks, greater whites represent the dominant known animal threat on Poseidon. Capable of swallowing small boats and submersibles whole and tearing larger ones apart, greater whites are true and frightening monsters.

Adult greater whites are huge and most are very old. They are so large and old that they can actually support entire individual ecosystems as parasites, algae and sessile organisms attach to their rough hides. Like coral reefs, these communities attract higher level herbivores and predators, creating a complex ecology. To defend itself against these parasites, greater whites have evolved degrading hides that continually decay, sloughing off in large sheets as the creatures swim, taking the interlopers with them. This dead and dying tissue gives greater whites their characteristically ragged, stringy hide and pale white hue. This dying skin is also what gives them their notoriously disgusting smell.

Behavior: Several rows of sharp, bony ridges line their vast maws, and with the powerful muscles driving these jaws they can tear most alloys and shatter industrial plastic. What greater whites cannot tear

apart with their jaws they will ram or breach upon until the structure or vehicle is destroyed and the "edible parts" exposed. These animals are long and wide, and swim with an undulating motion that can create 10-meter bow wakes when the creatures are hunting at the surface. Often this wake is the first and last warning a surface vessel receives before an attacking greater white breaches out of the water and smashes down on the craft, crushing it and driving the wreckage below the surface.

These animals are not only uniquely sensitive to waterborne vibration, they also have an acute sensitivity to electromagnetic fields. Scientists believe that this sensitivity allows the species to navigate using Poseidon's magnetic fields. They also theorize that this sensitivity allows greater whites to track larger prey animals by the electrochemistry of their nervous systems. This may explain in part the high frequency with which this species seems to make unprovoked attacks on oceangoing vessels. Their electromagnetic emissions may trigger instinctual behavior in greater whites.

Range: Planetwide

Habitat: Photic zone when feeding on plankton, ocean-wide when hunting larger prey.

Length: 25 to 75 meters

Weight: 120 to 190 metric tons

Frequency: Rare. Predators this large could not be common, as the ecology could not support a large population. It is because of this rarity, in part, that marine travel on Poseidon is an acceptable risk.

Resource Value: Unknown

Threat Level: Extreme

Attacks: Bite 4, Breach 5

Damage Rating: Bite 24, Breach 40

Physique: 8

Coordination: –5
Cognition: –5
Psyche: 6
Endurance: 7
Reflexes: –5
Toughness: 12
Armor: 3

GRENDEL

(Unclassified) Little is known about this species—except that it is extremely dangerous. It is unclear even what its phylogeny may be and most information about it should be considered speculative. Grendels, named presumably after the deadly creature of the Beowulf story, are likely relatives of the marsh devil of the Sierra Nueva region, but a genetic comparison has yet to be made. Reports indicate that grendels grow larger and are even more aggressive than their suspected cousins, and therefore pose an even greater threat.

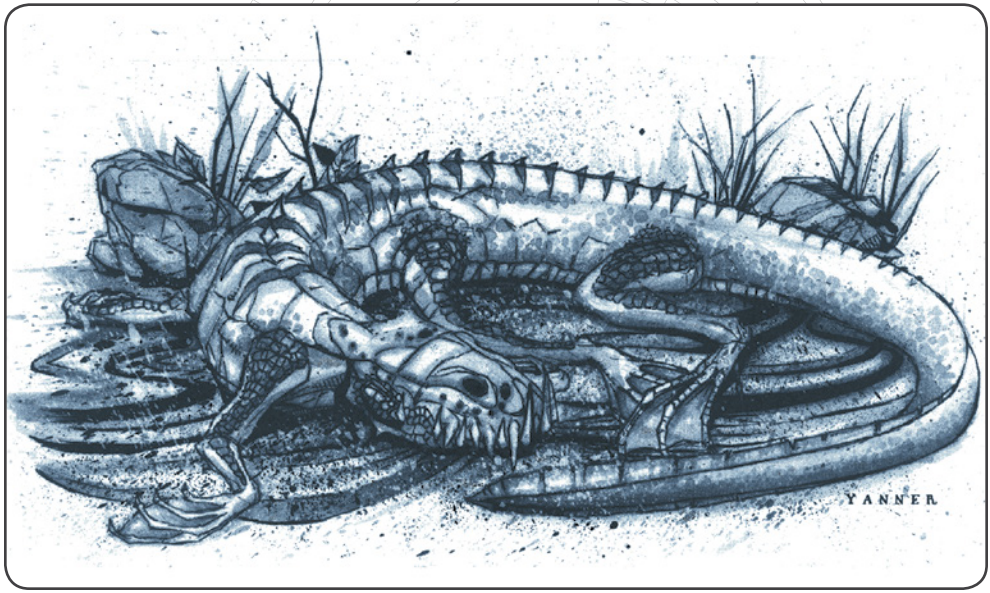
Like marsh devils, grendels are large, six legged, carnivorous amphibians. Their coloration is mottled, varying from brown to muddy green, and most bear vertical stripping akin to that of Terrestrial tigers. Their bodies are low slung and muscular, and their flat, angular heads support powerful jaws. Their teeth are actually not individual structures, but serrations extending from the bony plates of their jawbones. The structures are poorly suited to chewing, but allow adult grendels to remove up to 20 kilograms of flesh with a single snapping bite.

To date, grendels are known only from the central hills and savannas of New Jamaica, but biologists suspect their actual range may be more extensive.

Behavior: Grendels apparently spend most of their time submerged, buried in the mud of marsh and stream beds. They are active, nocturnal hunters and typically take to dry land in pursuit of food. These animals are deliberate stalkers, relying on uncanny speed rather than subtlety to catch their prey. Their appetites are formidable and grendels consume a broad range of aquatic and terrestrial prey, including members of their own species. Grendels usually eat their prey where it falls, but have been known to drag it back to favored water holes for safekeeping.

Special note should be made regarding the unusual speed of these creatures. The muscle structure and metabolism of marsh devils allows for powerful bursts of over 30 kilometers per hour over even terrain. Holo footage and preliminary studies of grendel muscle structure indicate that grendels may be capable of speeds in excess of 40 kilometers per hour.

Infant grendels hatch from large globular egg clusters as miniature versions of adults—teeth, appetites, and all. Large hatchings are frightening events, making the marshes and rivers of central New Jamaica exceptionally dangerous during the grendels' early summer breeding season.



The residents of Bright Savanna have suffered significant loss of life, livestock kills, and property damage as a result of larger hatchings, and most of the information in this field guide concerning grendels comes from reports made by the authorities there.

Range: New Jamaica, though the actual range may include all of the Zion Islands

Habitat: Freshwater rivers, marshes and riparian savanna

Length: 2 to 3 meters

Weight: 300 to 400 kilograms

Frequency: Rare

Resource Value: None

Threat Level: Extreme; there are numerous verified reports of lethal attack on humans and livestock

Attacks: Claw 7 (2 attacks), Bite 5

Damage Rating: 8,8

Movement: 12/24; though always quick, grendels can only maintain their top speed for 6 rounds

Physique: 4

Coordination: 2

Cognition: 2

Psyche: 2

Endurance: 3

Reflexes: 2

Toughness: 3

Armor: 3

Hangin' Joe

(Unclassified) Despite its rather innocuous name, this creature should be considered extremely dangerous. Described here based on only a few specimens, this organism is apparently well known to natives who frequent Poseidon mangrove islands. The animal appears to be a gastropod analog with a thick, muscular foot and a lumpy, thick-skinned visceral mass. Though arboreal mollusks are not unheard of, this creature is certainly unique, if only for its size. Hangin' Joes are massive and can weigh in excess of 200 kilograms.

Their hides are a mottled brown, but are typically covered with a thick mat of moss and epiphyte analogs. Joes have 10 to 20 long, ropy tentacles that look remarkably like hanging vines. These limbs are powerfully muscled and can reach 30 meters in length. When the animal is moving or feeding, the tentacles are typically coiled near the body. When hunting, they hang below the creature's arboreal perch. When close to the main body, the wary can sometimes detect a faint sulfur odor which can give away the creature's presence. These creatures currently remain unclassified.

Behavior: Hangin' Joes move rarely and slowly, and only from one hunting perch to another. A hunting Joe flattens itself out, wrapping around a large supporting limb. Like many creatures on Poseidon, Joes -are ambush predators. When hunting, they uncoil their long tentacles, draping them over lower branches or dangling them just below the water's surface. Any hapless animal that blunders into the drooping "vines" is instantly entangled in a flurry of coiling tentacles. Joes kill by constriction and death can be slow, especially for larger creatures. Once dead, the prey is lifted to the Joe's perch and tucked under the mass of the creature's body, where a toothy radula makes short work of hide, muscle, and bone.

Range: Tropical

Habitat: Poseidon mangrove

Length: Foot 2 to 3 meters, tentacles 30 meters

Weight: 200 to 250 kilograms

Frequency: Rare

Resource Value: None

Threat Level: High

Attacks: Grapple and Constriction 5

Damage Rating: Suffocation

Movement: None

Physique: 0

Coordination: –5

Cognition: –5

Psyche: 3

Endurance: 1

Reflexes: –5

Toughness: 3

Armor: None

Harvester Worm

(Unclassified) First observed by Atlas Materials personnel outside of Undersea Habitat-I, these aquatic tubeworm-like organisms have defied scientific classification since their discovery in 2190. Harvester worms glow with a dim, natural phosphorescence and appear as a forest of pale fiber-optic filaments swaying in the currents. Their glow varies in color across the entire spectrum, though without a determinable pattern.

Harvester worms exhibit traits that could classify them as members of both the plant and animal kingdoms. Extensive root-like systems anchor them to the seafloor, and they seem to reproduce through a form of spore. At the same time, they possess internal organs, digest food, and expel solid waste. Unable to classify them using traditional taxonomy, most botanists and zoologists suggest waiting until current debates lead to a unifying classification system for the two planets.

Behavior: Harvester worms inhabit and grow in tailings and slag heaps left from Long John mines, and so they remain relatively rare. Oddly, they have never been found prior to the initiation of mining activity. They typically appear at a site within four to six weeks after mining has begun, and are therefore not a practical means of predicting the location of Long John lodes.

Quite edible, harvester worms are often minced or used in stews. They are an acquired taste, described as tasting like a combination of apple and squid. The flavor tends to vary somewhat by location since the creatures absorb trace amounts of common local minerals, which the meat retains.

Range: Most abundant in the Pebble Rocks region

Habitat: Tailings left from undersea Long John mining operations

Length: 0.5 to 3 meters

Weight: 0.1 to 10 kilograms

Frequency: Common in volcanically active undersea regions, rare elsewhere

Resource Value: Low

Threat Level: The worm potentially threaten mining equipment and submersibles if they get sucked into intake vents and clog them, but they are otherwise considered harmless.

Attacks: None

Movement: None

Physique: 0

Coordination: –5

Cognition: –5

Psyche: –4

Endurance: –2

Reflexes: –5

Toughness: –4

Armor: None

Hatchlings

(Unclassified) Hatchlings are apparently the larval stage of some larger carnivorous amphibian. What they grow into is still the subject of debate as captured specimens have never lived long enough in captivity to reveal their adult form. Hatchlings are smallish, cryptically colored animals with short but powerful, tentacle-like climbing appendages. They are soft and ovoid in shape, with numerous eyespots. They have relatively large mouths, and stomachs that are capable of distending to several times the original size of the creature. Their mouths are lined with extremely sharp, bony ridges that very efficiently slice large mouthfuls of flesh from their prey.

Behavior: Hatchlings are frightening and lethal creatures. These animals are found in freshwater swamps and marshes where adults have apparently laid eggs. These creatures develop in their egg cases to a certain physical maturity, and then enter a sort of dormancy. They remain in this state until a sufficiently large animal wanders within a specific range. Then, in seconds, the entire clutch, usually consisting of 20 to 50 larva, burst from their egg casings and swarm over the unfortunate prey. In seconds, the

creature is completely consumed, often with several of the siblings being themselves eaten in the frenzy.

The stimulus for this hatching is uncertain, but vibration, heat emissions, or even scent may be involved. There is also little consistency between egg-laying sites, and any freshwater pool or marsh should therefore be considered potentially dangerous.

Note: The statistics below represent a swarm of Hatchlings, not an individual.

Range: Tropical and subtropical, limited to regions below the frost line

Habitat: Shallow, well-vegetated, freshwater pools, marshes and swamps

Length: 0.15 to 0.3 meters
Weight: 0.5 to 1 kilogram
Frequency: Uncommon
Resource Value: Larva—None
Adult - Unknown
Threat Level: Larva—High
Adult - Unknown
Attacks: Bite 6
Damage Rating: 4
Movement: 1/3
Physique: 0
Coordination: –5
Cognition: –5
Psyche: 4
Endurance: 0
Reflexes: –2
Toughness: –3
Armor: None

HELLBENDER

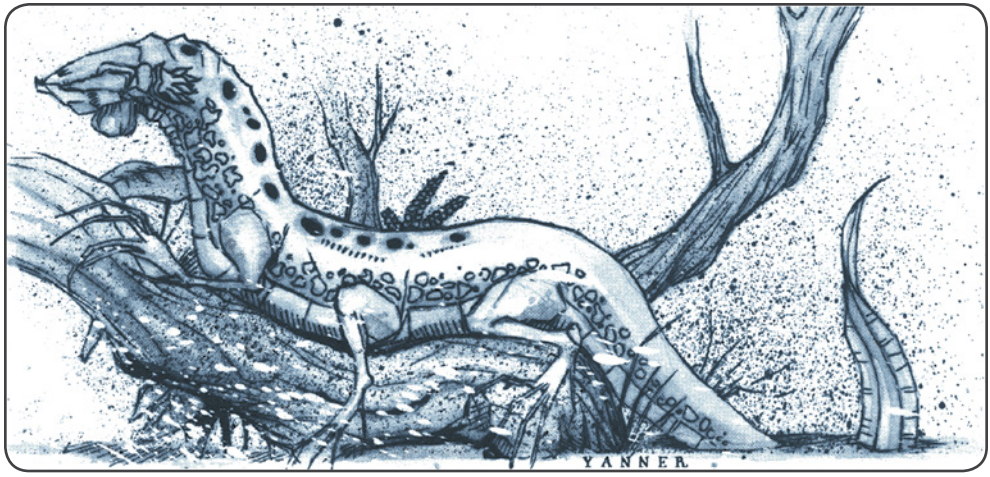
(*Os venenifer*) Hellbenders are named after the large Terrestrial salamanders they vaguely resemble. Unlike their namesake, Poseidon hellbenders are hexipeds and have a dozen ruddy-colored eyespots along the length of their marbled brown backs. The animals have feather-like external gills and rudimentary but functional lungs. Their tails are long and laterally compressed making them powerful swimmers. Their feet are long toed and tipped with small claws that also make them able climbers.

Hellbenders have large splayed heads with wide primary and narrow lateral jaws. The flesh covering their lower jaw is wrinkled and bulging, and contains not only the glands that produce their potent neurotoxin, but also their unique delivery mechanism for that venom.

Behavior: Hellbenders are found in both fresh- and salt-water environments. They prefer slow-moving rivers and salt creeks from which they can climb into overhanging vegetation and lay in ambush. Benders will cling motionless to low branches for hours until a suitable victim strays close enough to attack.

Hellbenders are a remarkable example of parallel evolution. The loose, elastic flesh of the bender's lower jaw is lined with tubular structures that can be forcibly filled with body fluids, forming a projecting tendril that can strike a target up to a meter and a half away. This hydraulic appendage is similar in shape and action to the insect-grabbing tongue of some Terrestrial reptiles and amphibians. Instead of a sticky pad, however, the bender's appendage is tipped with three small hypodermic spines. These spines inject a potent dose of venom upon contact, penetrating all but the thickest hide.

Even the largest victims usually succumb quickly to the hellbender's lethal neurotoxin, first to general paralysis and then minutes later to cardiopulmonary failure. If the prey is small, the bender typically drags it into the water and consumes it at leisure. If the victim is larger, the hellbender will often eat its fill and then retreat to the relative safety of the water to digest its meal. Some days later it will return to its ambush perch where it targets one of the scavengers its kill may have attracted, and strikes again. This sequence of killing, eating, digesting, baiting, and killing again may continue for weeks. Large piles of bones and rotting remains alongside muddy riverbanks are fair warning that a hellbender is laying in ambush.



Range: Semi-tropical regions throughout the southern hemisphere

Habitat: Riparian zones and estuary tidal creeks

Length: Up to 1.2 meters

Weight: 3 to 4.8 kilograms

Frequency: Rare

Resource Value: Low; native hunters sometimes capture hellbenders alive and milk them for their venom, which they use to tip spears and arrows

Threat Level: Medium; benders do not often attack humans, but care should still be exercised when their presence is likely

Attacks: Tendril 5

Poison: Neurotoxin: Onset Time 30 seconds, Duration 15 minutes, Damage Rating 8

Movement: 1/3

Physique: 2

Coordination: 2

Cognition: –2

Psyche: 0

Endurance: 1

Reflexes: 0

Toughness: –3

Armor: None

Hexa Boar

(*Verres sexcrus*) Like many of Poseidon's land-dwelling vertebrates, the hexa boar has six locomotive limbs. Though the multiple legs give the mammaloid an odd gait, they do provide it with excellent mobility in the swampy habitats it favors. The animal is the size of a large pig and is covered with stringy fur and a thick hide. The legs are rather long and the feet are splayed to help support the creature's considerable bulk in the soft swamp mud. A sensitive, almost prehensile upper lip hangs over its wide mouth, a short, rounded horn sticks up from its flattened head, and sharp, bony spines run along the upper length of its muscular neck.

Behavior: The hexa boar is a solitary animal that lives in both fresh- and saltwater swamps and marshes. The animal is primarily herbivorous, eating many kilograms of vegetable matter daily. Hexa boars also eat insectoids and aquatic invertebrates as well, digging them out of the muddy bottom with their short horns and substantial upper lips.

Hexa boars are rather docile and quiet animals, easily missed in the thick vegetation of a marsh. They are, however, one of the few land-dwelling animals native hunters find large enough to be worth hunt-

ing. Where abundant, they are an important part of the native diet.

In general, the hexa boar is decidedly timid. However, in self-defense the animal becomes anything but. When threatened, the creature lowers its head and splays out is limbs. Its dense, muscular body and low center of gravity give it considerable strength, and the sharp neck spines are a formidable weapon. Turning quickly to always face a threat, hexa boars have been known to savagely gore surprised and unlucky predators and unwary hunters.

Range: Found almost exclusively in the Pacifica Archipelago
Habitat: Both salt- and freshwater wetlands
Length: 1.3 to 1.6 meters
Weight: 190 to 220 kilograms
Frequency: Uncommon
Resource Value: Medium
Threat Level: Medium
Attacks: Gore 5
Damage Rating: 6
Movement: 3/10
Physique: 2
Coordination: 0
Cognition: 1
Psyche: 1
Endurance: 1
Reflexes: 0
Toughness: 3
Armor: 1

Howell's Leech

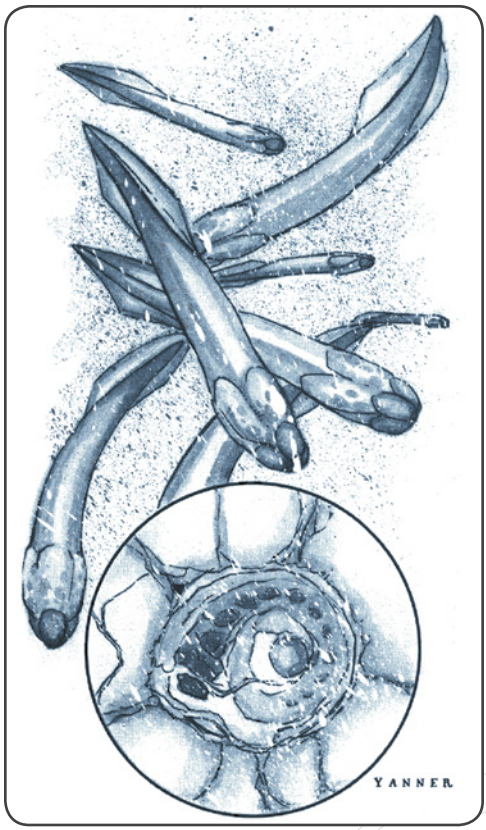
(Unclassified) This creature is as yet unclassified, as it seems to represent a previously undescribed taxonomic group. The animal, if it can be called that, lives exclusively in the fluid mud of the tidal mud-reef habitats unique to Poseidon. Their bodies are fluke-like in form, but much larger and denser. Most are almost transparent, with their internal organs visible through the surface tissues. Little else is know about their physical makeup and less still about their life cycle.

Behavior: The Howell's leech is, like so many other animals on Poseidon, a higher order predator, but one specialized to hunt in a unique way. These organisms burrow deep into fluid mud where they lay still, setting a dangerous trap for unwary prey. Special tissues in their bodies metabolize water into oxygen and hydrogen gas. These gases are secreted under the layer of mucus that covers the leech's body. As gas secretion continues, the layer of mucus begins expand, forming an enlarging bubble within the mud, with the leech lying in wait at the bottom. By the time the upper surface of the gas bubble nears the surface of the mud, the mucus has begun to dry out and harden. The result is a large spherical pit hidden under a thin layer of surface mud. The weight of the leech and the thickness of the surrounding ooze barely hold it in place below the surface. The leech simply lies dormant, waiting for some prey animal to come along that is large enough to rupture the bubble as it passes over. As the bubble collapses, the prey collapses with it and is immediately buried in the thick, choking ooze. After the prey suffocates or drowns, the leech burrows into its body, consuming it at leisure.

Range: Temperate regions only
Habitat: The leech is apparently confined to the fluid mud of the tidal mud shallows
Length: 0.5 to 1.5 meters
Weight: 10 t0 35 kilograms
Frequency: Unknown
Resource Value: Unknown
Threat Level: High
Attacks: None
Movement: 1/2
Physique: –2
Coordination: –8
Cognition: –5
Psyche: 0
Endurance: –1
Reflexes: –6
Toughness: –2
Armor: None

Jellyroll

(Unclassified) Another of Poseidon's more enigmatic species, it is not even clear whether the so-called jellyroll organism described here is the larval or adult creature. Jellyrolls are encountered in two forms. The most common is in globular egg clusters that wash ashore throughout the archipelago. The second is as individual organisms buried in the sands of the upper surf zone. Jellyrolls are small lancelet-like invertebrates that may represent the evolutionary precursor to Poseidon's ubiquitous fish species. They are tiny animals, seldom more than a centimeter or two in length. They are almost translucent, have rudimentary eyespots, and what appears to be the first evolutionary stages of the four-part mouth structure of modern Poseidon fish.



Though developmental studies seem to imply that the organism is the larval form of some larger creature, scientists have been unable to artificially initiate metamorphosis in the laboratory. Native biologists have also been thus far unable to suggest an organism that could represent the adult.

Behavior: Jellyroll egg masses drift ashore throughout the summer months. As the surf washes the clusters against the beach face, they slowly fragment as they roll up and down the sand. The clusters break apart, hatching and spreading the tiny organisms all along the beach. The animals quickly burrow into the sand where they feed on tiny benthic invertebrates. Here they spend some indeterminate period of time before an unknown environmental key triggers further development and they disappear out to sea.

Though almost tasteless, jellyrolls can be a valuable source of protein, especially in survival situations. Where they are abundant, natives collect jellies as soon as they wash ashore and boil them to denature their toxic proteins and render them edible. The resulting syrup can be eaten as is, or can serve as a nutritious base for stew. Care must be taken when collecting jellies, however, as their egg tissues contain a variety of caustic enzymes that burn to the touch and cause life-threatening allergic reactions in many humans.

Various research and development teams have recently become keenly interested in jellyrolls. Rather conclusive studies have determined that though the free-swimming jellies are subject to normal levels of predation, the egg clusters are not consumed by any known species. Most suspect that the caustic enzymes contained in jellyroll egg tissue are responsible for their immunity from predation and feel that there may be profitable biotech applications for such chemicals.

Range: Found seasonally throughout Poseidon's tropical waters

Habitat: Egg cases can be found along any shoreline, but the larva are found only in sandy surf zones

Length: Egg cluster is a globular mass 6 to 8 centimeters in diameter; larva are 1 to 2 centimeters in length

Weight: Egg clusters are 1 to 1.3 kilograms, larva are 0.75 to 1.2 grams

Frequency: Seasonally common during mid summer

Resource Value: Useful source of edible protein and potentially valuable to the biotech industry

Threat Level: Low

Attacks: None

Damage Rating: None

Poison: Enzymatic irritants that cause chemical burns and possibly allergic reactions; Onset Time Immediate; Duration Until affected area is chemically neutralized; Damage Rating 2

Movement: Negligible

Physique: –2

Coordination: 0

Cognition: –8

Psyche: –3

Endurance: –2

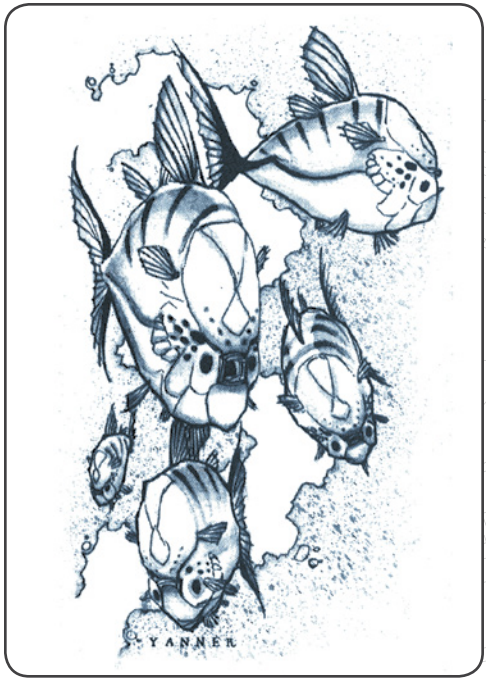
Reflexes: –4

Toughness: –8

Armor: None

Jump Jump

(*Tripudio tripudio* var.) Jump jump is the native name for a group of common, edible fishes that form large schools throughout the Pacifica Archipelago. These



animals range in size, but seldom exceed two kilograms. They are nondescript and silvery, though some have reddish or yellowish hues to their fins. They stand as examples of typical Poseidon fishes, and have little to distinguish them save their abundance, and their resulting importance to the native subsistence fishery.

Jump jump is a staple of the native diet, comprising more than 35% of the fish meat consumed in most villages. Jump jump flesh is yellowish and flaky when cooked and has a nutty flavor that is an acquired taste for most non-natives. Soaking the uncooked meat in clean salt water makes the fish more palatable to the average newcomer, but is considered a crime by native cooks.

Behavior: Jump Jump is a schooling fish that forms massive shoals that often span kilometers. This makes the species susceptible to gill nets, purse seines, weirs, and cast nets, as well as cetacean herding parties. Only the largest species seem interested in baits or lures, and even then catching them on tackle is more often for sport than sustenance.

Range: Temperate to tropical waters planetwide
Habitat: Continental margins and coastal shallows
Length: 25 to 40 centimeters
Weight: 0.4 to 2.2 kilograms
Frequency: Abundant
Resource Level: High; by weight, more jump jump is eaten in traditional native villages than any other
Threat Level: None
Attacks: None
Damage Rating: None
Movement: 4/11
Physique: 1
Coordination: 2
Cognition: –2
Psyche: –2
Endurance: 0
Reflexes: 0
Toughness: –3
Armor: None

Keel Vine

(*Vinea carpo*) Keel vine is a troublesome aquatic growth for which even native Poseidoners have failed to discover a use. Keel vine is a thick-stalked, kelp-like algae that is common in protected temperate shallows. The algae has bright orange fronds with mottled brown stalks, and grows in large anchored patches that form semi-submerged rafts at the water's surface.

Behavior: Keel vine fronds are covered with tiny barb-like growths that are quick to grab hold of a passing animal's hide or a boat's hull—sometimes even modern bioplastic. In smaller clusters the passing object easily breaks free and serves to disperse hitchhiking reproductive tissues to new habitats. In larger clusters, however, the vines can be so entangling and cumbersome as to hold a creature, or even slow moving boat, dead in the water. Breaking free is problematic and can be life threatening as there have been numerous human and cetacean drownings attributed to keel vine. Luckily the algae's bright color is a useful warning notable by even the most inexperienced newcomer.

The subtle rules that govern evolution dictate that large animals do not evolve on small landmasses, hence the distinct lack of any large, wholly terrestrial species on Poseidon's islands. This ecological rule does not hold true for marine environments, however, hence the proliferation of such fantastically huge species in Poseidon's oceans. The supportive buoyancy and the biological productivity of the ocean conspire to allow organisms to reach enormous sizes, and the ultimate example of this evolutionary extreme is the leviathan.

Range: Temperate waters planetwide
Habitat: Shallow, nutrient-rich waters
Length: Up to 20 meters in length
Weight: 5 to 8 kilograms per frond
Frequency: Common
Resource Value: None
Threat Level: Medium, but only to the unaware
Attacks: Grapple 3
Damage Rating: Potential drowning
Movement: N/A
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: N/A

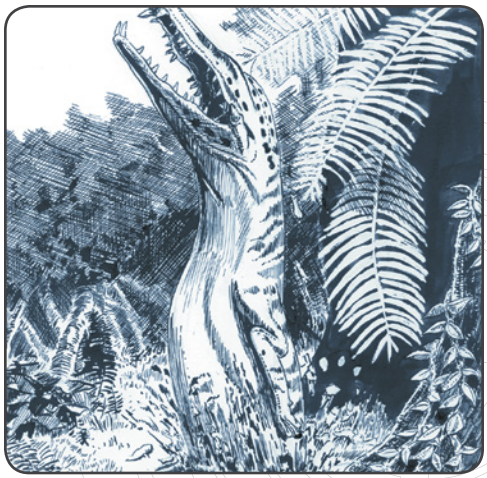
Land Lizard

(*Malalongus ricardo*) These animals are not actually lizards, or even reptiles at all. They are, like most of Poseidon's larger, land-dwelling predators, the ecological equivalent of amphibians. Land lizards have only two small, limb-like appendages that they use to drag their considerable bulk along. Their heads are narrow, and they have all but lost the lateral jaws of their fish ancestors. Their jaws are lined with long teeth evolved to give them a secure hold on prey, and coincidentally, a decidedly fierce appearance. The rest of their body is flattened and eel-like. In water, this muscular tail section propels them efficiently along. On land, it serves an entirely different purpose.

Behavior: As predators, land lizards fill a particular ecological niche. Like amphibians, they lay eggs in the water and spend much of their time there, but they hunt almost exclusively on land. Dragging their bulk through the undergrowth or swimming up rivers, these animals hunt deep in island rainforests. They can be encountered many kilometers from water, and during the rainy season their range extends even farther.

While hunting, land lizards will burrow into the ground and cover themselves with leaf litter. With their powerful tails coiled beneath their bulky heads, they will wait patiently for large prey to pass. With a blindingly fast extension of its tail, the animal launches itself out of hiding and strikes at its prey. Like a terrestrial crocodile, the lizard will then spin furiously, tearing a large chunk of flesh from the prey animal. Invariably, shock and blood loss serve to dispatch the prey, which is then quickly consumed. Sated, the lizard returns to its moist hollow and covers itself completely, remaining inactive until digestion is complete, often days later.

Range: Tropical regions only
Habitat: Wet rain forest environments only
Length: 0.5 to 4 meters
Weight: 9 to 230 kilograms
Frequency: Rare
Resource Value: Medium. Though difficult to find, their flesh is a prize food.
Threat Level: High
Attacks: Bite 7
Damage Rating: 6
Movement: Water 2/4, Land 1
Physique: 2
Coordination: 1



Cognition: 0
Psyche: 2
Endurance: 2
Reflexes: 0
Toughness: 3
Armor: None

Lesser White

(Various) The collective term "lesser white" refers to any of the much smaller relatives of the greater white, and includes Poseidon's ecological analogs to Terrestrial sharks. There are over 50 classified species, and biologists estimate there are likely hundreds more. Many are common and significant both ecologically and economically. Many are well known to the natives and carry common names like surf cutter, black back, and woe-am-I. These animals vary greatly in size, behavior, and superficial physical characteristics, but they share a basic anatomy and predatory ecological role.

Though significantly smaller than their enormous cousins, lesser whites are similar to greater whites in their eel-like body form and four part-mouth structure. They vary broadly in color, and ironically, few are even partly white. Though varied, typical coloration is cryptic, adapted to their predatory role. Most species have anterior steering fins and one or more posterior propulsion fins that are more extensions of their long bodies than actual caudal fins. Their skeletons are comprised of stiff connective tissue templates variably ossified with inorganic salts apparently extracted from the surrounding seawater. Unlike their huge relatives, most species of whites do not shed their skin, but instead are covered with ridge-like dermal scutes that are hardened with long and complex protein chains.

Behavior: Though most lesser whites are predators, some fill scavenger and herbivore niches. Whites have hundreds of sharp cutting teeth and seemingly endless appetites. Some hunt from ambush, while others stalk and attack prey from below. A number of species hunt in cooperative, pack-like schools that can be more frightening than their bigger cousins when on the attack. Whites are found in just about every marine habitat on the planet and there are at least three known freshwater species. Though superficial behaviors and physical traits vary, lesser whites represent an ecologically important collection of species and a considerable threat to humans plying Poseidon's seas.

Range: Planetwide

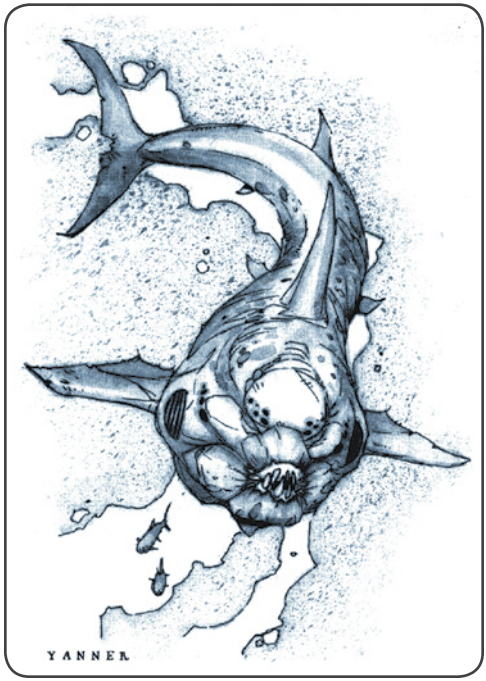
Habitat: Known from all marine habitats and several freshwater and river systems

Length: 0.5 to 24 meters (average 15 meters)

Weight: 2 kilograms to 16 metric tons (average 9 metric tons)

Frequency: Common

Resource Level: Prized and flavorful food source; many colonial restaurants have begun featuring



white meat, and commercial fisheries are currently pressed to meet demand

Threat Level: High; there are numerous verified reports of unprovoked predatory attacks on humans and cetaceans

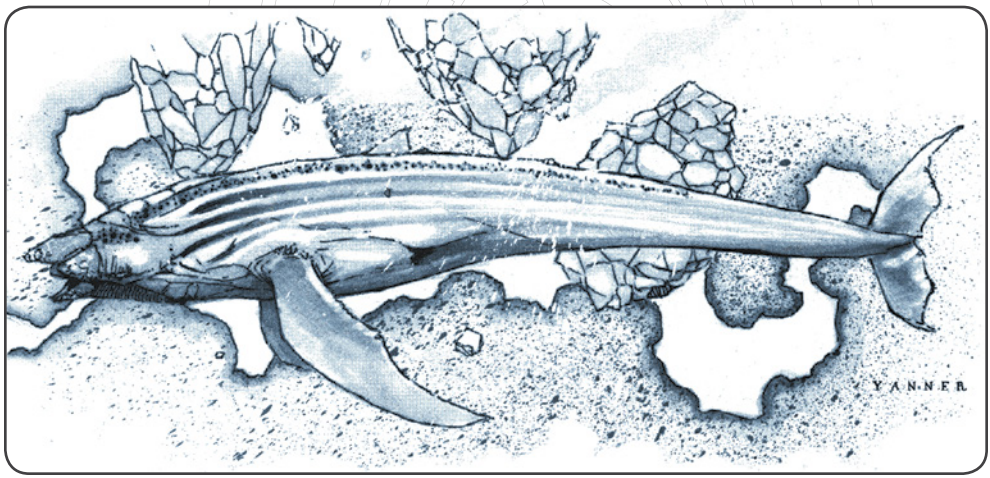
Attacks: Bite 8
Damage Rating: 8 (average species/size)
Movement: 7/18
Physique: 4
Coordination: 1
Cognition: 0
Psyche: 4
Endurance: 4
Reflexes: 0
Toughness: 7
Armor: 2

Leviathan

(*Picis ingens*) Named after the monsters of ancient maritime myth, the leviathan is the largest non-colonial organism ever discovered, actually exceeding what biologists thought were the physiological limits for a multicellular animal. Despite their size, leviathans are fish and are bigger even than their greater white cousins. Their bodies are long and covered with encrusting marine growths. They have rough hides that, unlike the degrading skins of greater whites, act as armor against invading parasites. Typical coloration is light gray with dark lateral streaks running the length of their bodies. Enormous, dark eyespots line their dorsal surface, but how well they see is a matter of debate. Leviathan heads are compressed dorsal-ventrally, appearing flattened, wide and shovel-like. Their reduced jaw structures surround gaping maws up to 10 meters across, allowing them to filter plankton from over five million liters of seawater an hour.

Behavior: Leviathans are planktivores and survive solely by filter feeding. There is simply no way that the species could support its massive body by consuming anything from a higher trophic level—there would not be enough biomass. Their dependence on abundant plankton restricts leviathans to colder temperate and polar waters where plankton populations are highest. As a result, leviathans were not discovered until after Recontact, despite their size. Ecological processes keep populations necessarily small, allowing the animal to remain a secret until the more extensive exploration of post-Recontact revealed its existence.

Leviathans swim slowly along in a never-ending quest for calories. When local plankton blooms allow, a leviathan may remain in a given area for some time, grazing in ever widening spiral patterns. When plankton populations are more disperse, the animal will travel hundreds of kilometers in a single day, eating continuously. The only time the species leaves the plankton-rich photic zone is to make periodic dives to the seafloor. They appear to do this every few days, and biologists speculate, based on collected fecal samples, that the species may actually swallow mouthfuls of mud gouged from the seafloor. Such sediments often contain thick mats of energy-rich bacteria as well as important nutrients. Since leviathan breeding behavior has never been documented, many scientists speculate that mating may also occur during such benthic excursions.



To date, all information on leviathans has been gathered though observation and remote probes. The animals are so rare and inhabit regions so far outside colonial population centers that Poseidon's ecology has recycled deceased leviathans before their corpses could be discovered. A research group at the Haven Institute of Science and Technology has a standing reward of 50,000 scrip for information that leads them to a fresh leviathan corpse. Their interest in studying these animals up close is so keen that the team has a high-speed VTOL waiting on 30-hour standby. With the plane and its cargo of custom-built medical robots, the crew can be on site and conducting a necropsy anywhere on the planet within eight hours. To prevent poachers from purposefully killing one of these rare animals simply to claim the reward, the researchers' offer stipulates that the leviathan must have died of verifiably natural causes.

Range: Temperate and polar waters planetwide

Habitat: Photic zone, with period benthic dives

Length: The largest specimen ever observed was 131 meters in length

Weight: Estimates suggest an adult weight of up to 280 metric tons

Frequency: Rare; global population estimates vary, but none exceeds 600 individuals

Resource Level: High; the species is the subject of intense scientific curiosity

Threat Level: Medium; collisions could cause severe hull damage and may elicit dangerous defensive behavior

Attacks: Breach 6

Damage Rating: 50

Movement: 4/7

Physique: 10

Coordination: –10

Cognition: 2

Psyche: 5

Endurance: 7

Reflexes: –4

Toughness: 14

Armor: 8

LOGGERHEAD

(*Parmata mzumba*) The loggerhead demonstrates the most extreme sexual dimorphism of any species on Poseidon or Earth. The female loggerhead is a large turtle-like reptile analog. A thick and massive shell covers a stout body with six heavy limbs. Most improbably, the male loggerhead is a tiny eel-like vertebrate only a few centimeters long. This dimorphism is an evolutionary reflection of their behavior and serves to fascinate Poseidon's already overwhelmed ecologists.

Behavior: Female loggerheads are slow and docile and have no natural due to the protection of their formidable shells. The males, though shy and secretive, are highly poisonous. The females spend most of their time asleep in the thick mud of freshwater marshes, and the males spend almost all their time hiding deep within the recesses of the females' shells.

When a suitable prey species strays too close, dozens of males dart out from their hiding place, bite the target, and quickly retreat. Though individually none of the bites are lethal, the multiple attacks are more than most animals can survive, and the prey quickly dies. The female then slowly begins to feed, and her crumbs and leftovers are more than enough for her attending males.

Range: Temperate zones of the southern hemisphere

Habitat: Freshwater swamps and marshes

Length: 1.3 to 1.9 meters for females, up to 0.1 meters for males

Weight: 300 to 570 kilograms for females, up to 0.04 grams for males

Frequency: Rare

Resource Level: Medium. Their meat is valued by Poseidon's natives, and their shells have many practical applications.

Threat Level: High. Many unwary humans have died of loggerhead poisoning.

Attacks: Bite 6 (male only)

Poison: Paralytic respiratory toxin: Onset Time 1 hour, Duration 36 hours, Damage Rating 3

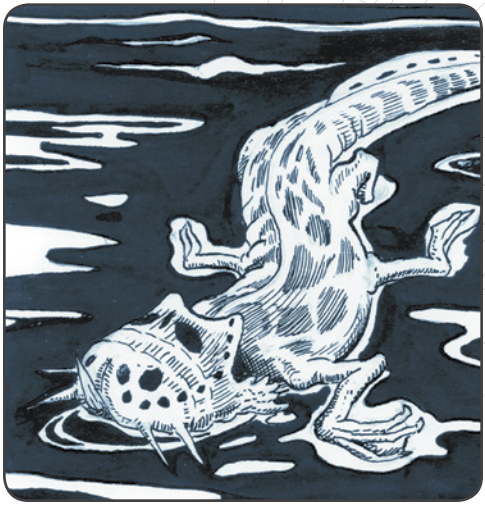
Movement: 1 (female), 3 (male)

Physique: 2, –4
Coordination: –7, –4
Cognition: –5, –10
Psyche: 0, 2
Endurance: 1, –1
Reflexes: –6, –7
Toughness: 4, –7
Armor: 2, None

Marsh Devil

(*Diabolus palus*) Not discovered by GEO biologists until 2198, this carnivorous amphibian has been known to the natives of the Sierra Nueva since the first settlement in the region was established. The marsh devil has a long, tapered body and six strong limbs ending in broad, flat feet with pronounced webbing and sharp claws. It is mottled gray to brown in coloration, and like many of Poseidon's animals, has two rows of multiple eyespots running the length of its body. It has no terrestrial analog.

Behavior: Marsh devils are functional hermaphrodites, as each specimen possesses both male and female reproductive organs. This characteristic stands in stark contrast to the often extreme sexual dimorphism of most of Poseidon's higher . marsh devil spends most of its time in the rivers and coastal marshes of its island habitat, though it sometimes leaves the water to hunt in the rainforests for short periods of time. Several prey animals contribute to the marsh devil's diet, including hexa boars and a variety of freshwater fish. These fierce predators have also been known to attack humans.



Its habitat use, fierce aggression, and genetic markers have lead some researchers to believe that the marsh devil may be the adult form of the larval animal commonly called a hatching. This assertion currently remains unverified.

Range: The islands of the Sierra Nueva Cluster
Habitat: Freshwater rivers and coastal marshes
Length: 1.5 to 2.1 meters
Weight: 250 to 350 kilograms
Frequency: Rare
Resource Level: None
Threat Level: High. There are native reports of marsh devils attacking and killing humans.
Attacks: Claw 7, Bite 5
Damage Rating: 8, 6
Movement: 12/20 Normally fast and deadly, marsh devils are able to manage truly terrifying bursts of speed for short durations. These creatures cannot sustain a top movement rate of 20m per action for more than 8 rounds.
Physique: 3
Coordination: 2
Cognition: 2
Psyche: 1
Endurance: 2
Reflexes: 2
Toughness: 3
Armor: 3

Needle Bush

(*Ricardana acus*) The main body of this plant consists of a huge, beautiful flower-like gourd that blooms year-round. The body of the plant, however, is surrounded by a tangle of thorn-covered stalks and brambles that form an almost impenetrable thicket around the gourd.

Behavior: The plant attracts insectoids of various species by offering a deep pool of sweet nectar. Many of the insects become trapped in the sticky goo and slowly die. The nectar contains enzymes that slowly digest the creatures, providing the plant with a rich source of nutrients. The thorny brambles surrounding the gourd secrete poisons, and in tandem with the brambles themselves, serve to protect the gourd from larger animals that may also be attracted by the sweet smell of the nectar.

Range: Tropics planetwide
Habitat: Moist tropical jungles only
Length: 1.1 to 1.3 meters tall
Weight: 5 kilograms

Frequency: Rare

Resource Level: High. The nectar produced by the needle bush is valued by natives as a natural component of both medicinal and recreational drugs. Harvesting the nectar requires care as the thorn poison can be lethal. This toxin is itself often collected for use in hunting and in washes used to battle fast fungus infestations.

Threat Level: Medium. The thorn poison can be lethal.

Attacks: Accidental injury

Poison: Paralytic respiratory toxin: Onset Time 30 minutes, Duration 24 hours, Damage Rating 4

Movement: None

Armor: None

Needle Shell

(*Paraconus lethalis*) An analog of the Conus cone shell of Australia's Great Barrier Reef, the needle shell is a mollusk analog native to the Skyscraper Reefs off southwest Westcape. The brightly colored hemispherical shell is spiked with dozens of points radiating in all directions.

Behavior: Each point of a needle shell can eject a barbed dart that contains a potent venom. The dart's maximum range is about 20 centimeters. A single sting is agonizing to a human and several stings can paralyze the autonomic nervous system, causing respiratory arrest and often death.

Young natives harvest needle shells and dilute their venom for use in stunning fish or dangerous predators. The harvest also serves as a display of bravery as one or two youths die each year from the stings. GEO medical kits contain an all-purpose antidote effective against needle venom, but this antidote is scarce in Westcape.

Range: Skyscraper Reefs, Westcape

Habitat: Shallow reefs

Length: 10 to 20 centimeters

Weight: 250 to 400 grams

Frequency: Uncommon

Resource Level: Medium

Threat Level: Medium. Poison can be lethal

Attacks: Sting 5 (3 per round)

Poison: Paralytic respiratory toxin: Onset Time 15 minutes, Duration 24 hours, Damage Rating 3

Movement: None

Physique: –2

Coordination: –4

Cognition: –4

Psyche: –1

Endurance: –1

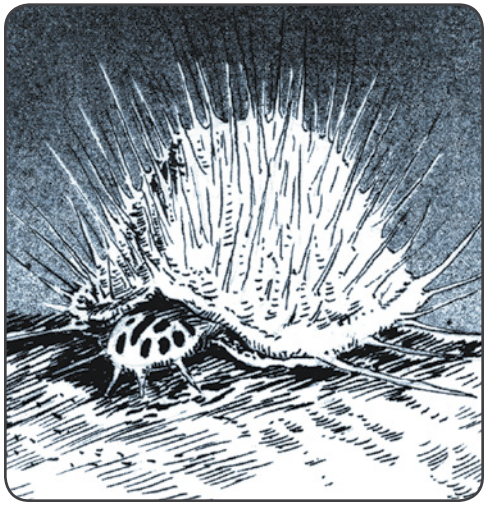
Reflexes: –4

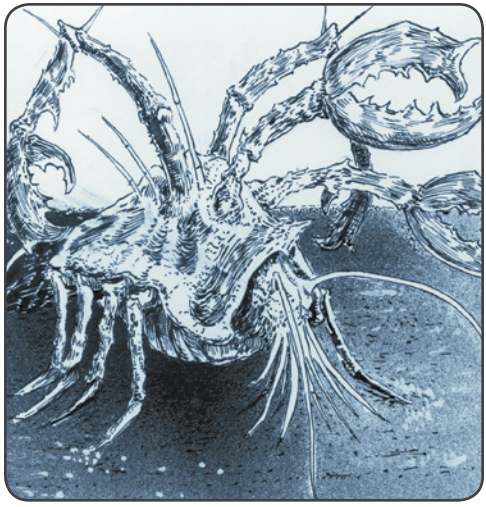
Toughness: –6

Armor: 1

Night Crawler

(*Cancersimila erskinus*) These crustaceans are huge, with heavy shells and multiple pinchers and claws. They are red to brown in color and usually covered with a variety of algae that grow attached to their shells. Their claws are extremely powerful and can crush large shellfish or pinch small animals in half. Crawlers have even been known to sever limbs of careless hunters and hapless swimmers.





Behavior: Night crawlers, as their common name implies, are nocturnal animals. They spend the day hidden in underwater caves or buried in the sand. After sunset, they crawl onto the beach looking for carrion that may have washed ashore or prey animals too slow to get away. They haunt the sand and vegetation along the beach's edge, casting about with long, chemically sensitive antenna-like feelers. Because they are rather slow, they. are typically not a threat to humans, but unwary beach campers have been killed and eaten by these animals.

Night crawlers are favored by both native hunters and Incorporate executives alike as a source of delicious, delicate meat. In many places, the local populations have already been endangered by overharvest. Commercial hunters are killing the animals in alarming numbers to supply the restaurants of Haven and other settlements.

Range: Temperate and tropical regions planetwide
Habitat: Near shore and beach zones
Length: 1.2 to 1.4 meters
Weight: 20 to 27 kilograms
Frequency: Rare
Resource Level: High
Threat Level: Medium
Attacks: Pincher 5
Damage Rating: 3
Movement: 1/3
Physique: 0
Coordination: –10
Cognition: –4
Psyche: –2
Endurance: –1
Reflexes: –7
Toughness: –1
Armor: 3

Niño Muerto

(*Parvulus mortuus*) Niños muertos, or "dead children," are a rare but extremely dangerous terrestrial predator found in Poseidon's tropical and semitropical forests. This animal seems like a morphological cross between a Terrestrial baboon and a hyena, though larger and somewhat leaner than either. There is some speculation that the species may be related to squealers, but unlike their possible cousins, niños are fierce predators that should be avoided at all costs.

Niños get their name from their haunting, ululating hunting calls which sound distressingly like crying children, and echo through the forest when a pack is on the prowl. Niños muertos are lithe but very strong and are covered in course bristling fur. Their hides are a mottled black and gray, which makes for extremely effective camouflage in the dappled sunlight and shadows of the jungle's lower canopies. Niños have narrow heads and long jaws supporting large canines and numerous carnasial teeth. Their limbs are gangly, and like squealers, they have extra joints. Their digits are tipped with talon-like claws, and though not poisonous themselves, the claws are typically covered with saprophytic bacteria that can cause deadly infections in any organism lucky enough to survive a niño's attack.

Adult niños have sticky musk glands located just under their jaws, which produce a thick, oily secretion that they groom into their fur. The oil is likely a water repellent for the animal's coat, but the musk has a uniquely strong and foul odor reminiscent of rotten meat. The odor is thought to be some sort of olfactory tag for the members of a given pack, and the odor is so strong it permeates the air around the animals' temporary roost sites. The fetid smell is often the only warning that the species has moved into a given area.

Behavior: Niños muertos are effective pack hunters and few terrestrial organisms can escape a niño attack. Children are semi-arboreal and use trees to great effect when stalking their prey. A hunting pack will move through the canopy, leaping from tree to tree calling loudly back and forth as they do. Their calls seem intended to spook their prey and send it into panicked flight. Working together to surround

and cut off the fleeing animals, attacking children leap onto prey from above, mobbing and bringing down even the largest creatures. Such attacks are vicious, bloody, and singularly lethal.

The appearance, ferocity, and eerily intelligent behavior of niños muertos have served to give the creatures a fearful reputation among Poseidon's natives. They are often the bogey man in stories meant to keep native children away from the jungle, and when niños approach inhabited areas, villagers are forced to actively hunt down the nomadic packs, driving them away, or more often eradicating them with poisoned baits, traps, and guns.

Range: Currently known only from the jungles of the Channel and Zion islands, and the mountain forests of Prime Meridian

Habitat: Multi-canopy forests

Length: 1 to 1.7 meters

Weight: 60 to 75 kilograms

Frequency: Rare

Resource Value: None

Threat Level: High; natives report numerous fatal attacks on livestock and humans

Attacks: Claw 4, Bite 4

Damage Rating: 3, 6

Movement: 6/12 on the ground, 4/9 through the trees

Physique: 2

Coordination: 3

Cognition: 1

Psyche: 2

Endurance: 2

Reflexes: 2

Toughness: 1

Armor: None

NOONIEBIRD

(*Parabuceotida vulgaris*) Though Westcape natives know these noisy creatures as chatterbirds, GEO scientists named them Nooniebirds for their gift of mimicry, reminiscent of early 22nd Century comedian Noonie Flack. Resembling hombills in form and size, nooniebirds have a hooked beak, striped casque, and rudimentary claws on their wing joints.

Behavior: Nooniebirds nest on Westcape and the surrounding islands in large colonies of 500 to 750 birds, usually in caverns or on limestone cliffs. Clinging to the rock with wing-claws and talons, they build huge communal nests of grass and clay. The nests, which hold a dozen families, are so large that a human can climb inside, and during severe storms natives have even been known to take shelter within them. Nooniebirds have a magpie-like compulsion to steal bright, glittering objects for their nests. Westcape natives often forage through the

ACCESS DENIED

Nooniebird meat is stringy and almost inedible to humans, but their foul-smelling black plumage exudes oil that makes a useful lubricant. In recent weeks, the birds have also served as a crude sort of intelligence-gathering service for the native resistance.

Nooniebirds can imitate a wide range of calls and voices, presumably to scare predators. Though not notably intelligent, the species can parrot an entire spoken sentence after hearing it only once. Nest communities often repeat overheard phrases for days, and though the content is often of little value as intelligence, the species' strange behavior has been known to provide the natives with empirical information about Hanover troop movements.

nests looking for gems, shells, stolen tools, and similar paraphernalia.

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Range: Westcape and environs
Habitat: Coastal margins, mountains
Length: 0.5 meters
Weight: 2 to 3 kilograms
Frequency: Common
Resource Value: Medium
Threat Level: Minimal
Attacks: Beak 3
Damage Rating: 1
Movement: Air 15/25, Land 1/2
Physique: 0
Coordination: 1
Cognition: 1
Psyche: 0
Endurance: 0
Reflexes: 1
Toughness: –4
Armor: None

PHARIUM

(*Pharium solitas* var.) Pharium is a low, ground-hugging growth with numerous small round leaves and simple, wind-pollinated flowers. The stems are thin and ropy with small curling runners that end in tough, nut-like seedpods. The pods rest on or dangle just above the ground and each contains several dozen small black seeds.

Behavior: Wild pharium is a fickle plant and grows well only under bright, warm, and dry conditions. The original species is supposed to have come from the plains of Prime Meridian but colonial records are unclear on this point. The various strains now in cultivation grow under a variety of conditions and have been bred in part to suit local environments across the archipelago.

Though pharium is a contraband substance in most colonial settlements, it is nonetheless an important component of Poseidon's economy. Natives have been using the plant as a recreational drug since the early years of the Abandonment. Despite occasional cases of psychological addition, the use of native pharium has always been considered harmless and has become an accepted part of native culture and spiritualism. Since Recontact, however, the breeding of more potent strains has created pharium derivatives that provide dangerous highs and debilitating physiological addiction.

If chewed or smoked, the leaves of native pharium provide the user with a soft, almost imperceptible buzz that takes the harshness out of physical sensations and replaces it with a warm sense of well being that lasts an hour or two. Alternatively, the seeds can be ground into a course powder and smoked over a flame or mixed with conventional tobacco. The effect of the seeds is similar to that of the leaves, but with two or three times the potency and duration. A native pharium high is easy to hide and has little effect on a person's physical abilities. Mental abilities are marginally depressed, but recovery is quick and there is no discernible crash.

Strain-derived pharium, or derivative as it is called on the canals of Poseidon's urban centers, is a different story. The various subspecies from which D is harvested have been bred for potency and effect,

and several are full-modification jobs straight out of high-end genetics labs. Most derivative has effects similar to but more powerful than those of native pharium. Most are temporarily debilitating, causing profound lethargy and semiconscious states lasting several hours. Users claim the intense sensations they experience are mentally expansive and physically pleasurable, and that post-high crashes are defined by nausea, headaches, and temporary sensory nerve dysfunction.

Some D variants are more potent still, and sometimes cause delusions and paranoia that in turn can lead to psychotic episodes and violent behavior. It is the recent proliferation of such strains, and the rash of violence they have caused, that has motivated the Justice Commission's crackdown on pharium dens operating within GEO jurisdiction. This recent effort has brought law enforcement agents into conflict with organized crime, especially in the larger cities. The pharium trade is big business and groups like the Gorchoff syndicate are not willing to give up their operations without a fight.

Range: Currently found throughout the Pacifica Archipelago

Habitat: Varies by strain

Length: Up to 0.4 meters high

Weight: 0.15 kilograms per plant

Frequency: Uncommon

Resource Value: High; valued by traditional natives as a recreational drug; bred and sold as a cash crop by organized crime

Threat Level: Low

Attacks: None

Poison: Some derived strains only, neurotransmitter inhibitor: Onset time 30 seconds, Duration 4–5 hours, Damage Rating 2

Movement: None

Physique: N/A

Coordination: N/A

Cognition: N/A

Psyche: N/A

Endurance: N/A

Reflexes: N/A

Toughness: N/A

Armor: N/A

POLYPOD

(*Multimumbrum magnus*) Polypods, as the common name implies, are multi-tentacled creatures similar in body form to Earth octopi, only much larger. Produced through a sort of budding, even juvenile polypods are large, and adults-especially the females-can be enormous. Polypods have varying numbers of limbs, most often from four to twelve, and distinct sexual dimorphism, males being much smaller than females.

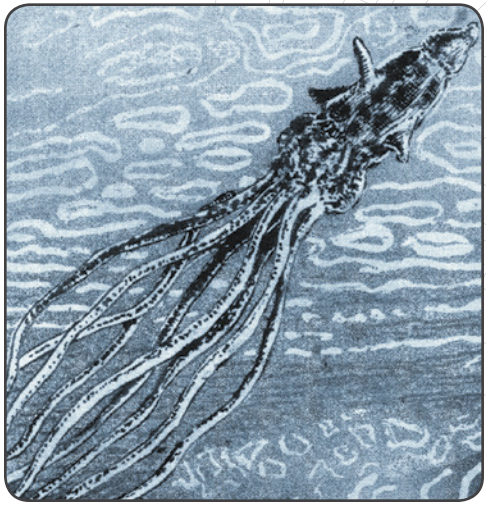
Polypod reproductive ecology is the organism's most notable feature. The male, when sexually mature, seeks out a female, and if the female does not kill it outright, the male bites onto the female, wrapping its tentacles around her head region. Over time, the two actually grow together, becoming a single animal, the male remaining only as a largish lump on the female's side. The female incorporates a variable amount of genetic material from the male and begins to grow a bud-like structure that will

eventually split into a separate offspring. This budding can continue for several years until the female accepts another male and begins producing a new, slightly different genetic line. Some very old polypod females have been documented as having more than 20 residual male lumps.

Research biologists have been able to identify specific genetic strains of polypods, tracing them back to less than 10 primary types. These strains, when plotted on regional maps, appear to prefer specific habitats while vying for overall ecological dominance planetwide.

Behavior: Polypods are stealthy ambush predators that only move about under cover of darkness. The animal appears to have very few hard body parts and is therefore able to squeeze itself into cracks and holes that would seem impassable to such large creatures. From such hiding places polypods wait, using acute senses of touch and smell to find and attack unwary prey that strays too close to their secret lairs.

All polypods are territorial, especially against members of different strains. Reports of territorial battles between large females are frightening accounts. Typically, a pod will have several favorite lairs, moving between them every couple of days as the local prey species become aware of its presence. One favorite tactic of hunting polypods is to spread their limbs out along the underside of a sargassum raft and wait for vibrations in the mat above to indicate possible prey. Plunging their tentacles upward through the seaweed mat, these creatures can make very effective surprise attacks.



Many elder natives claim they can "smell" polypod lairs, and most active lairs do collect a slimy secretion from the creature's skin. This substance supports a phosphorescent bacteria that can sometimes give away the pod's presence to the wary observer.

Range: Temperate and tropical regions only

Habitat: Rock bottoms and submerged cliff walls, sargassum rafts, and the edges of thick kelp forests. Pods are usually found in the photic zone, but reports of very old and very large deep sea species exist.

Length: Males are usually less than 10 meters from tentacle tip to tentacle tip, while females typically reach 30 meters across. There are, however, frequent reports of specimens over 70 meters from tip to tip.

Weight: 100 to 1,700 kilograms, depending on sex and age

Frequency: Common

Resource Value: Medium. Smaller ones are taken by natives as a food source.

Threat Level: Male—Minimal
Female - Extreme

Attacks: (Female) Grapple 4, Smash 6

Damage Rating: 9, 14

Movement: 3/5

Physique: 4

Coordination: –2

Cognition: 1

Psyche: 2

Endurance: 3

Reflexes: 0

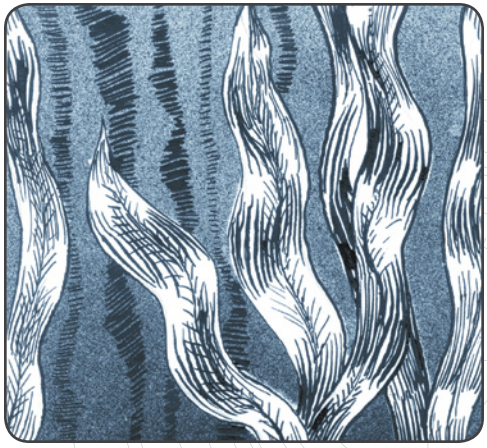
Toughness: 6

Armor: 1

Poseidon Kelp

(*Gramen* species) Analogous to terrestrial kelp, Poseidon kelp is a thick, leafy vine that can grow to lengths of more than 100 meters. Dozens of species have thus far been classified. All use buoyant, metabolized gasses stored in the long stalk to keep the blades afloat in the sunlight. Several poisonous varieties have been discovered, as well one carnivorous variety—strangler kelp. Other varieties have a high nutritional value, and are harvested by natives and newcomers alike.

Behavior: Poseidon kelp originates in a tough bulb firmly rooted to the ocean floor. Millions of fronds often grow in close proximity to one other, forming a dense submerged forest. Larger kelp forests, dozens of kilometers in surface area, form biomes as rich and diverse as any on Poseidon. All manner of marine



species thrive among the dense fronds, from fish and crustaceans who live in symbiosis with the algae, to predators who find the forests rich hunting grounds.

Strangler kelp is a particular hazard of kelp forests. This variety grows dozens of long fronds from the base pod, whose leaf structures are very sensitive to touch and vibration. If anything bigger than a small fish swims through the fronds, it quickly reacts, shifting metabolized gasses to the stalk at the point of contact. The fronds constrict and become rigid. Feeding tendrils similar to those found on carniflora then go to work, digesting the prey.

Range: Temperate seas except for notable concentrations in New Hawaii

Habitat: Warm, shallow coastal waters

Length: Individual vines can reach 250 meters

Weight: Variable

Frequency: Common

Resource Value: High. Some varieties can be harvested for textiles, most are nutritious. Some are toxic if ingested: Onset Time 30 minutes to 1 hour, Duration 24 to 72 hours, Damage Rating 1 to 3

Threat Level: Low for normal, High for Strangler

Attacks: None, Constriction 6

Damage Rating: None, 5

Movement: None

Physique: 0

Coordination: –4

Cognition: –4

Psyche: –1

Endurance: N/A

Reflexes: –4

Toughness: 1

Armor: 1

Poseidon Mangrove

(*Arbormarina insula*) The only thing Poseidon mangrove has in common with terrestrial mangrove is that it grows in saltwater. This tree analog is an ecological wonder, and makes terrestrial redwoods look small. Mangrove grow to incredible heights, and send out lateral branches that intertwine with the trunks and lateral branches of surrounding trees as proof against Poseidon's powerful storms. The trunks are thick and massive, and the canopies consist of full palm-like fronds.

Behavior: Poseidon mangrove grows directly from the seafloor, usually getting an initial foothold around a small island or sand bar. Over time, the massive prop roots send out advantageous shoots and more trees grow up around the first pioneers. A mature stand may cover hundreds of square kilometers and look like an island of vegetation sprouting from the surface of the ocean. The interlaced branches and prop roots create unique habitats, both above and below the water's surface. These habitats support an ecology and a collection of species found nowhere else on Poseidon. The intertwined branches create a multilevel canopy of game trails and arboreal meadows, lending further diversity to the groves.

The mangrove islands are rich hunting grounds for both Poseidon's predators and the native colonists. They also serve as excellent protection against the storms that ravage the tropics. As a result, many native hunting camps, and even a few small villages, are nestled in the protective branches of these marine forests.

Range: Tropic and subtropics planetwide
Habitat: Shallow oceans
Length: Up to 70 meters
Weight: N/A
Frequency: Uncommon
Resource Value: High. Not only are these forests valuable as sheltered hunting grounds, they also provide high quality wood fiber for boat hulls and other native construction.
Threat Level: None
Movement: None

Poseidon Potato

(*Victualia amplus*) The Poseidon potato, or popo as it is more commonly called, is one of the most economically important plants on the colony world. Though not much like a potato at all, in fact not even a tuber, the popo is so called because of its ubiquitous role in native cooking.

Colonial records report the use of the plant as a food staple several years before the Abandonment, and describe numerous methods of preparation from even those earliest years. After the Abandonment, the popo became a vital agricultural crop, especially in regions were the native ecology made growing introduced Terrestrial plants difficult. The Poseidon potato has become such a prevalent food in native culture that it is even featured in the growing body of native folklore. Stories claim that the Storm Widow herself is responsible for discovering the plant, and several of the more popular popo recipes are attributed to her kitchen. Records indicate that popo was actually first discovered in the Zion Islands, but quickly spread to other centers of human habitation. The plant can now be found growing wild on almost every island of the Pacifica Archipelago that has experienced even the most temporary habitation. This wide distribution is a testament to the intrinsic importance, and inherent hardiness, of the species.

Popo plants are low, thick-stalked growths with a vine-like form similar to Terrestrial squashes. The stems are rust colored with thick, pulpy leaves. The leaves are shiny and dark green with darker purple around their edges, and the fruits grow in clusters of three suspended just above the ground. The fruits are covered with a thin, skin-like rind that is the same dark purple as the leaf edges, but swirled with rusty streaks.

The meat of the fruit is salmon colored and firm near the surface, turning softer and pulpier toward the center. Each layer has a distinct flavor, and dozens of uses in native cooking. There are three hard seeds at the fruit's core, and even these have culinary applications.

Behavior: Both the plant's leaves and the rind contain chemicals that readily induce vomiting in almost all of Poseidon's herbivorous species, but seem completely harmless to humans and their introduced livestock. It is obviously these compounds that help the plant survive Poseidon's hungry ecology in such a variety of environments. The few animals that do consume the fruits use sharp teeth, beaks, or claws to first expose the meat and then carefully eat only the inner layers. These species are inadvertently responsible for distributing the plants small seeds to new habitats.

Popo fruits provide four distinct food products, which in turn are used in literally dozens of popular recipes. The rind is used to make a variety of native snacks, and though it provides little nutritional value, it is never wasted. The firmer, outer layer is the greater part of the fruit and is most similar in texture and culinary versatility to Terrestrial beets or squash. The inner layer is soft and pulpy. It is easily separated from the rest of the fruit and can be used like Terrestrial tomatoes. The seeds are dried, ground into a coarse powder, and used as a spice. The flavor is elusive but light and pleasant, and has become a hallmark of native cooking.

The entire plant can be eaten raw or cooked, but raw it has a rather bitter flavor that most find unpleasant. The cooked flavors of both fruit layers are similar but the inner layer is significantly stronger than the outer. It is difficult to describe the flavor of popo, as there are no apt Terrestrial comparisons. Most simply consider the taste another of the unique aspects of Poseidon, one a person can only experience firsthand.

Range: Throughout the Pacifica Archipelago, though that distribution is an artifact of the human colonization effort
Habitat: Suitable growth habitats seem limited by only a minimum soil moisture content
Length: 8 to 10 centimeters in diameter
Weight: 0.2 to 0.3 kilograms
Frequency: Abundant
Resource Value: High; the popo is a staple of native cooking, and many colonial historians believe it may have been responsible for the survival of many satellite communities during the hardest years of the Abandonment. Economists compare the Poseidon

potato to Asian rice crops as an indicator of their food market value.

Threat Level: None
Damage Rating: None
Movement: None
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: N/A

Poseidon Sargassum

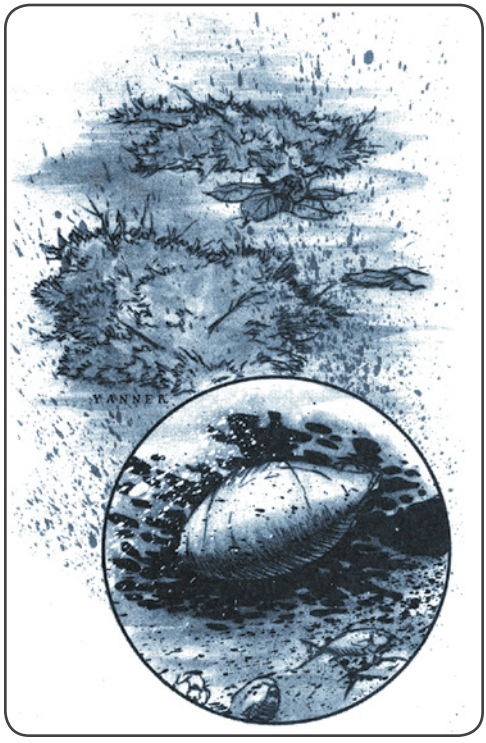
(*Thalassinus* species) Thalassinus is a genus encompassing a variety of floating marine algae collectively called Poseidon sargassum. The different species show variation in coloration, frond and bladder size, as well chlorophyll chemistry, but the differences are subtle and generally only relevant to biologists and foraging natives. The algae analogs range in color from green to red to brown, with large patches of each species growing intermingled with others. All species develop gas bladders ranging in size from 3 to 15 centimeters, which fill with the oxygen produced by the organism's photosynthetic metabolism. The fronds are generally small, and overlap each other, dangling, entwining, floating, and climbing towards the sun.

Behavior: Most species extend small tendrils that cling to surrounding vegetation, drawing the floating masses together into vast living rafts called sargassum islands. The tendrils play a continuous game of king-of-the-hill that draws new sprouts and fronds up onto adjoining plants as each vies for maximum exposure to the sun. The constant battle is misleading, however, as each plant is decidedly dependent on its apparent competitors for the collective ecological good of the raft. Together the interlocked plants resist waves and storm winds, capture nutrients, and attract animals that further fertilize the growths. The interconnected masses provide ready growth substrates and sources of spores for sexual reproduction. Their collective bulk also means that grazing animals are not as likely to devour the entirety of any one plant, offering the individual growths the same protection fish gain from schooling.

Aside from the various hunting and foraging benefits Poseidon's natives garner from sargassum rafts, the algae species themselves are a valuable resource. Though most species are edible, many offer trace nutrients that are hard to come by in other indigenous foods. Where wild sargassum is not abundant, many villages have large net-bound pens in which they cultivate the algae. Most sargassum species are used in native cooking but some are particularly suited to feeding livestock such as weedeaters, pigs, and goats. A few species of sargassum have medicinal uses, primarily as topical antibiotics. High concentrations of iodine and various bioaccumulated salts offer readily available treatments for minor fast fungus and bacterial infections as well as afflictions ranging from diaper rash to upset stomach.

It has recently been discovered that these plant-like species share closer genetic similarities with analogous Terrestrial species than any other organisms on Poseidon. This discovery has sparked heated scientific debate, and many research labs are hoping the species might provide the information needed to explain the mysterious genetic commonality of Earth and the colony world.

Range: Tropical and subtropical waters planetwide
Habitat: Surface waters



Length: 10 centimeters to 12 meters
Weight: 20 grams up to 6 kilograms
Frequency: Common
Resource Value: High; the various species are important native food crops and valuable sources of medicine. The rafts they form are also important hunting grounds. Recent genetic discoveries have given the species new scientific value as well.
Threat Level: None
Attacks: None
Damage Rating: None
Movement: Drifts with the current
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: None

Poseidon Scorpion

(*Mordax ruber*) This insectoid is a small and dangerous animal. It has four long, jointed limbs, a small head, and an extremely sharp and potent abdominal stinger. Fortunately, the majority of its body is bright red and so it stands out against most backgrounds.

Behavior: This creature is secretive and timid, but can be very dangerous as its poison is one of the most lethal natural toxins on Poseidon. Unfortunately, they are apparently attracted by body heat and are therefore mostly a threat to unwary sleepers. They do not often attack humans intentionally, but inadvertent contact will usually elicit a sting.

Range: Temperate region of the northern hemisphere
Habitat: Dry forest, scrub land and desert
Length: 0.007 to 0.1 meters
Weight: 0.03 to 0.05 kilograms
Frequency: Unknown
Resource Value: None
Threat Level: Extreme
Attacks: Sting 7
Poison: Lethal toxin, unknown class: Onset Time 10 seconds, Duration 24 hours, Damage Rating 9
Movement: 1
Physique: –2
Coordination: –2
Cognition: –5
Psyche: 0

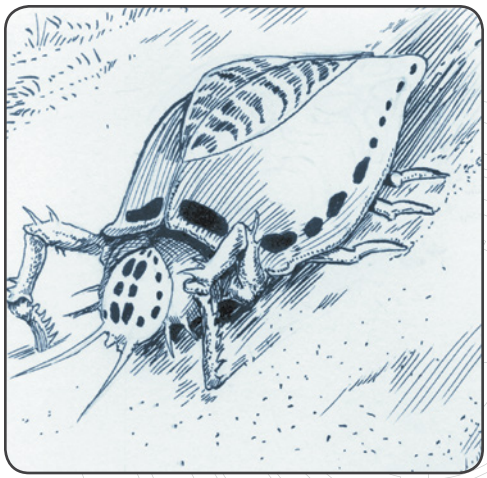
Endurance: –1
Reflexes: –3
Toughness: –7
Armor: None

Poseidon Trilobyte

(*Colacarius wernerii*) Large, slow-moving arthropods, Poseidon trilobytes, or roaches, live in tide pools, mud flats, kelp forests, and ocean shallows. They are apparently highly toxic to known species if consumed, and their shells are brightly colored to warn off predators. They also have glands along their dorsal surfaces that produce a sticky, bioluminescent secretion that plays an important role in reproduction.

Behavior: Primarily a scavenger, the Poseidon trilobyte feeds on carrion and decaying plant matter. They use their large, formidable-looking forelegs in mating displays, and to fasten themselves to large carcasses while feeding. Docile creatures, except during their brief mating season when the males become very aggressive, trilobytes are a common sight around settlements in New Hawaii.

Trilobytes are extremely poisonous, but other factors make them an important resource animal. Natives use the pigments from their bioluminescent glands as decoration. Many native and newcomer communities also use pens of semi-domesticated trilobytes as a convenient means of organic waste disposal. Trilobytes picked up the nickname, roach, from the behavior of hatchlings in human habitation. When the hatchlings erupt every spring, there is no controlling the scurrying, ravenous arthropods. Coastal settlements in the New Hawaiian chain are



often assaulted by these hungry creatures for several weeks each spring.

Range: New Hawaii

Habitat: Tidal pools, beaches, shallow seas, and kelp forests

Length: 1 to 2.3 meters

Weight: 4 to 6.7 kilograms

Frequency: Common

Resource Value: High: Adults serve as waste disposers, are harvested for pigment

Threat Level: Low

Attacks: Claw 4

Damage Rating: 4

Movement: 1/3

Physique: 0

Coordination: –8

Cognition: –8

Psyche: 0

Endurance: 0

Reflexes: –8

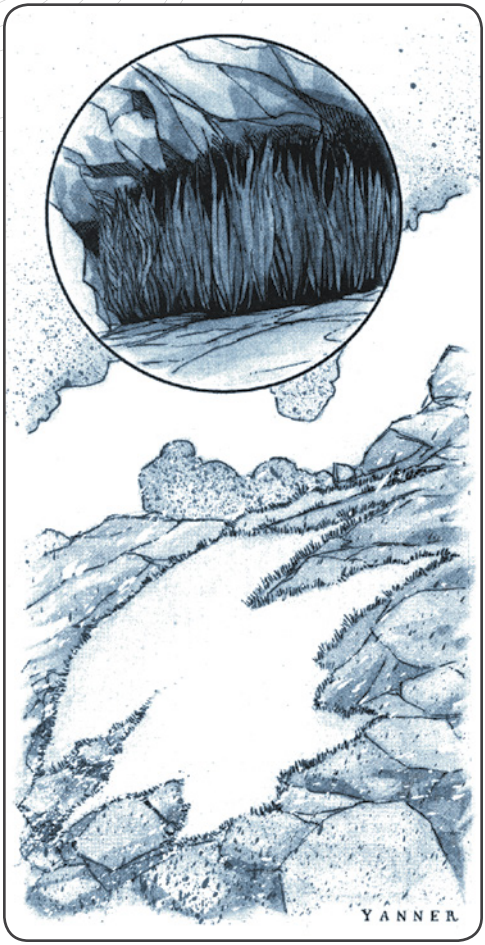
Toughness: –2

Armor: 2

Pump Weed

(Unclassified) Pump weed is a useless, nuisance organism that is a constant frustration to marine technicians, mechanics, aquaculturalists, and boat captains alike. The organism has two growth forms. One is a low, velvety, moss-like encrusting form that coats submerged rocks and other solid substrates such as boat hulls, water intakes, and pipe works. The second is a thick, mat-like form that supports densely packed, stringy fronds up to 20 centimeters in length. The encrusting base of the life form contains yellowish photosynthetic pigments that give it a golden hue, but the fronds lack any pigments and are almost transparent.

Behavior: When growing in the open, under direct sunlight, pump weed takes on its low, encrusting form, spreading quickly over the surrounding substrate. When growing in shadow, however, such as in rock crevasses, on the underside of boat hulls, or inside outflow pipes or pump intakes, the organism takes on the thicker, frond-bearing form. The fronds are feeding appendages, filtering the water passing through them for microorganisms and organic detritus. These are apparently absorbed and metabolized for energy in the absence of sufficient sunlight. Pump weed grows quickly and can clog intakes, impede outflows, and foul hulls in only a matter of days.



Though anyone depending on marine equipment for their livelihood finds pump weed an annoying and often costly vermin, the organism intrigues scientists. The growth is an anomaly, not fitting into any traditional classifications, and defying even the newest Poseidon-based taxonomies.

Range: Tropical waters throughout the Pacifica Archipelago

Habitat: Well-oxygenated waters just below the low tide mark

Length: 1.5 to 2 centimeters in encrusting form, up to 20 centimeters in frond-bearing form

Weight: 4 to 6 grams per square centimeter

Frequency: Common

Resource Value: None

Threat Level: Minimal; the organism is an annoying and time-consuming nuisance to marine industry

Attacks: None

Damage Rating: None

Movement: None

Physique: N/A

Coordination: N/A

Cognition: N/A

Psyche: N/A

Endurance: N/A

Reflexes: N/A

Toughness: N/A

Armor: None

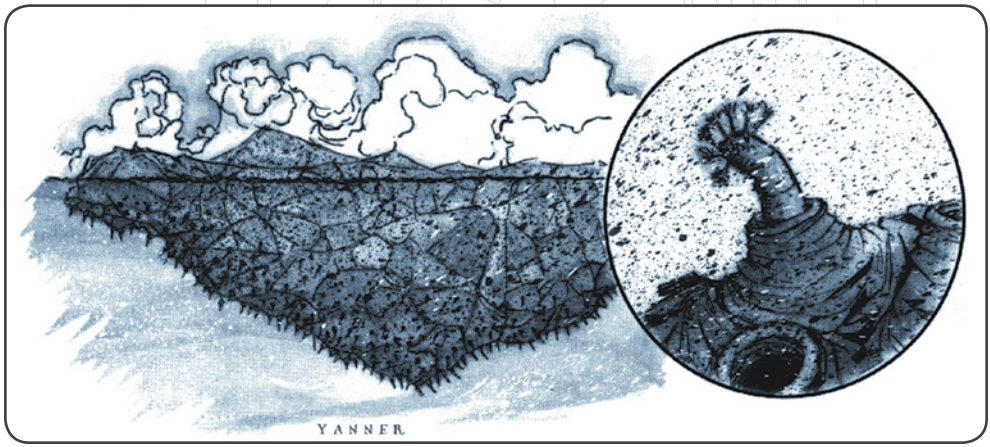
Reefer Colony

(*Insula victus*) Reefers are unique colonial, worm-like organisms that build one of the most unlikely structures in nature. The animals are large for reef-building organisms, with individual worms growing to a meter in length. The anterior end of each worm is bifurcated into a number of tiny barbed tendrils with which the organism combs the water for planktonic prey. The body of each worm is ringed with hairy ridges that hold it securely within its tube-like shell. The skin and meat of the worm is a dark orange color derived from the shell pigments of the tiny organisms it consumes.

Like other reef builders, these animals secrete interconnected shells that together form the larger structure of the reef. Reefer shell is comprised of an insoluble organic polymer analogous to a natural form of bioplastic, and it is typically muddy yellow in color. Though ultimately not as durable as bioplastic, the material is tough and semi-rigid. As the worms secrete the polymer, then-waste gases are trapped within the structure of the material, lending the reef shell slight positive buoyancy. This buoyancy is a key aspect of the animal's ecology.

Behavior: Reefer colonies grow quickly, continuously adding new individuals to the reef through both sexual and asexual reproduction. When the colony reaches a genetically determined size limit, the worms begin secreting catabolic enzymes that degrade the base layers of the reef. The polymer slowly melts away, and after several weeks, the body of the reef breaks free from its foundation. The positive buoyancy of the reef material lifts the colony to the surface where it subsequently drifts along at the whim of the current.

The weight distribution within the reef causes the whole structure to roll over as it rises, so that the worms, which once covered the upper surface of the reef, now protrude from the underside of the floating mass. The buoyancy of a reefer colony is so slight



that it floats along like an organic iceberg with only about 10% of its mass above the surface of the water.

Mature reefer colonies can be several hectares in surface area, forming veritable floating islands when they reach the surface. Encrusting marine growths, sea birds, and other transient species quickly colonize the exposed parts of such reefs. Larger reefer islands often support terrestrial vegetation that grows from seeds washed or blown onto the structure. The dangling worms continue to feed as these floating islands drift aimlessly for months, often supporting remarkably complex secondary ecologies. Eventually, stresses caused by wave action work to break the reef into smaller and smaller fragments. These fragments eventually become waterlogged and sink to the seafloor where they establish new reefer colonies, beginning the life cycle anew.

A reefer colony is an obvious navigational hazard for ships and other watercraft and should be given a wide berth, as much of its structure remains submerged. Native fishermen and frontiersmen have been known to use reefer islands as temporary camps and refuges, and more than a few castaways have been saved by dragging themselves aboard passing colonies.

Range: Temperate and tropical waters worldwide
Habitat: Colonies originate at the lowest reaches of the photic zone
Length: Up to 150 meters in diameter
Weight: Up to 25 metric tons
Frequency: Uncommon
Resource Value: Medium; natives and frontiersmen use them as convenient way stations and they have saved the lives of numerous castaways
Threat Level: None
Attacks: None
Damage Rating: None
Movement: Drifts with current
Physique: N/A
Coordination: N/A
Cognition: N/A
Psyche: N/A
Endurance: N/A
Reflexes: N/A
Toughness: N/A
Armor: None

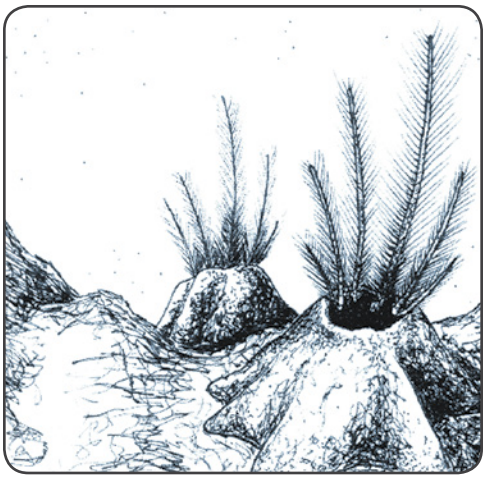
Reefworm

(*Corallium species*) Though not related to terrestrial worms, this invertebrate is similar in physical structure and appearance. It has a long, rounded body and may grow as long as 10 centimeters. As its name suggests, the reefworm lives inside coral reef formations and has been found throughout the Northwest Territories.

Behavior: Reefworms are predominantly found in the well-lit portions of local reef systems. Their chief source of food is the various species of algae that grow on the reefs' surfaces. Twice each year, reefworms emerge from within their hiding places to propagate the species. The reefworm is considered a delicacy by the natives of the Sierra Nueva who come out in force during this brief mating season for celebratory harvests. The natives are not the only ones who find the reefworms to be tasty morsels-the breeding creatures are also a favored prey species for the blimps that are common in the skies of the Sierra Nueva.

Unfortunately for the blimps, reefworms are similar to Poseidon's ghosters in that they can generate and discharge small electrical potentials. By themselves, these discharges are far too tiny to be a danger to the blimps. However, if an unfortunate blimp entangles too many reefworms at once, the combined discharge can be sufficient to ignite the blimp's metabolic hydrogen, causing it to explode. The result is that the natives' Reefworm Festival is often accompanied by a sporadic fireworks display.

Range: The Northwest Territories
Habitat: Coral reefs and atolls
Length: 4 to 10 centimeters
Weight: 3 to 6 grams



Frequency: Rare

Resource Value: Medium. The natives of the region consider reefworms a delicacy.

Threat Level: None. The reefworm's electrical discharge is too slight to notice, let alone harm a human.

Movement: 0.5

Rubber Shrimp

(Unclassified) Rubber shrimp are not really shrimp-like at all, getting their name only from the fact that they have a taste and texture similar to that of terrestrial shrimp meat. In fact, rubber shrimp are not actually even crustacean analogs, and have yet to be officially classified.

Rubber shrimp have a high meat-to-body-mass ratio making them a preferred catch for native hunters. A single large rubber shrimp can feed several families, and given their rather low threat level, they are commonly collected by pry bar-wielding children. The delicate meat has also made rubber shrimp a favorite dish in a growing number of Poseidon restaurants. This increasing demand has even created lucrative fisheries in some regions, driving local population declines around urban centers like Haven and Second Try.

Behavior: Physically, rubber shrimp are most like huge versions of terrestrial barnacles, with thick, cone-shaped protective shells. The animal is apparently mobile, but typically spends the majority of its life firmly attached to the same rocky outcrop. Rubber shrimp shells are steep-sided cones with a circular opening in the peak. This opening can be sealed by a pair of muscle-powered valves that when closed make the shell essentially impenetrable. When open, they allow the creature to extrude a number of bristled swimmerets with which it collects plankton and captures small, hapless prey.

There are a number of different species of rubber shrimp, and though most inhabit the shallows, a few dwell in the'; intertidal zone. During low tide these species simply seal themselves inside their shells and wait for the water to return. Such species are typically the ones that suffer most from the attentions of hungry native children.

Range: Planetwide

Habitat: Shallows and intertidal zones

Length: 0.3 to 1.2 meters

Weight: 2 to 21 kilograms

Frequency: Common

Resource Value: Important native food staple and growing commercial resource

Threat Level: Minimal. Incautious collectors have been known to lose fingers and even hands when they were caught in the closing valves of a startled rubber shrimp's shell. The valve edges are particularly sharp and the muscles very strong.

Movement: None

Rumble Bee

(*Terabolla murmurus*) This insectoid is an enigmatic creature. Reminiscent of a hybrid between a terrestrial mosquito and a wasp, it is huge for a flying insect. Its flight is slow and appears improbable, and is so loud that it can be heard through the forest more than 40 meters away. Variable iridescent coloration and bright wings give the creature a stunning appear-

ance, and a trio of long and sharp anterior stingers give it definite look of menace.

Behavior: Though the creature's formidable stingers would imply otherwise, the animal does not appear to be a threat. In fact, it seems quite docile. There is not a single reported case of a rumble bee stinging a human, and native children commonly keep them as pets. The function or target of their stingers therefore remains unknown.

Range: Tropics, primarily in the archipelagos of the southern hemisphere

Habitat: Dry forest and grasslands

Length: 0.25 to 0.3 meters

Weight: 0.18 to 0.2 kilograms

Frequency: Rare

Resource Value: High. Native healers found that the egg masses of the rumble bee can be used to make an effective topical antibiotic. Some villages keep small rumble bee farms so as to have a constant supply of this valuable material.

Threat Level: Unknown, but apparently none

Attacks: Unknown (probably a stinger)

Damage Rating: Unknown

Poison: Paralytic neurotoxin: Onset Time 30 minutes, Duration 24 hours, Damage Rating 2

Movement: 8/15

Physique: 0

Coordination: –5

Cognition: –5

Psyche: 0

Endurance: 0

Reflexes: –5

Toughness: –5

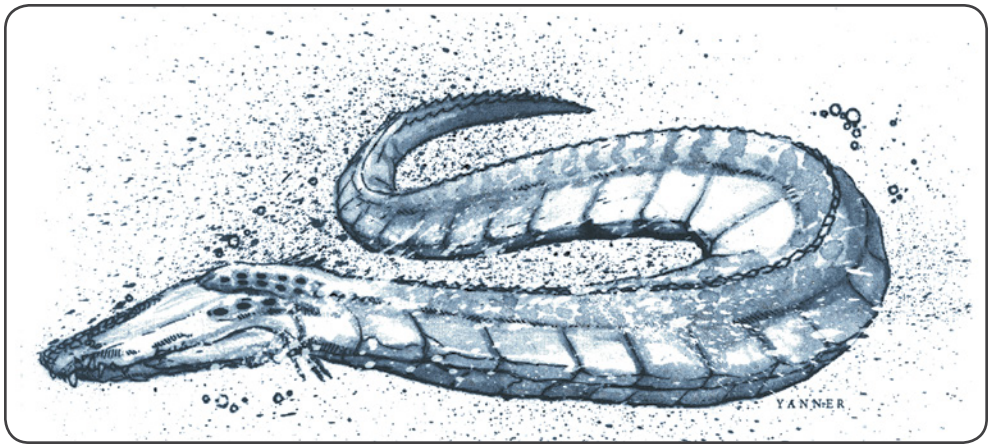
Armor: None

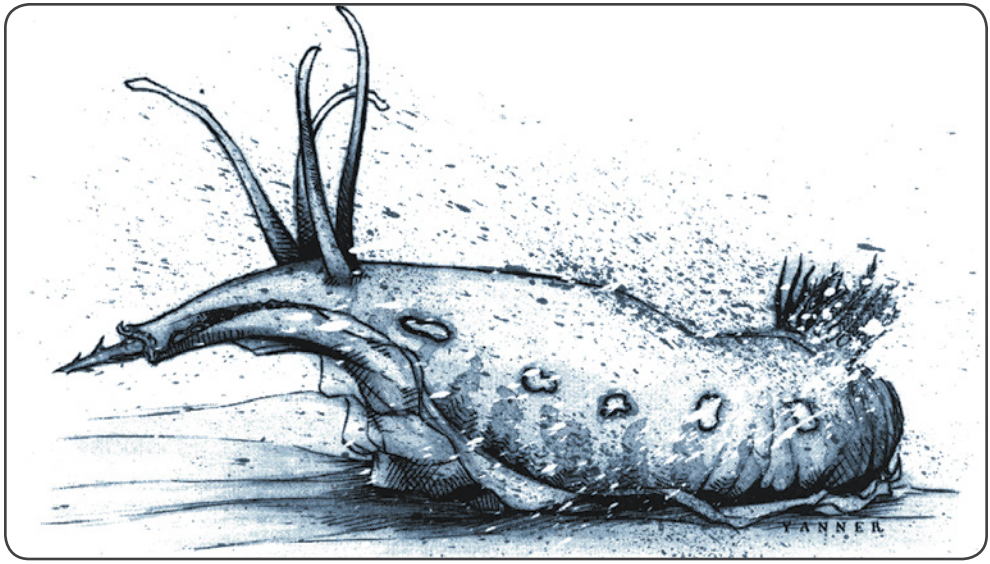
Saltwater Pseudo-eel

(*Malalongus periculosus*) The pseudo-eel is a close relative of the land lizard, actually sharing the same genus. The salty, as local hunters call it, is found exclusively in saltwater, however, and lacks even the rudimentary forelimbs of its cousin. Like the land lizard, salties are actually amphibians, but unlike their relatives, the species is restricted to an entirely aquatic life.

Salties are typically much larger than land lizards, reaching seven or eight meters in length. They have a similar eel-like body form with long, laterally compressed tails. Their primary jaws are elongated and lined with over a hundred sharp, conical teeth. Their lateral jaws are not quite as vestigial as those of land lizards and feature serrated bony ridges that help grip struggling prey. Salties are bicolored, with dark blue-gray hides dorsally and pale gray underbellies. Black vertical stripes lend the species particularly effective camouflage when hunting through the vegetation of the shallows and the shadows of deep water.

Behavior: Pseudo-eels are voracious predators, and kilo-for-kilo one of the most formidable animals on Poseidon. They are fearless and aggressive, and native hunters claim they are also frighteningly cunning. Salties hunt throughout a variety of habitats, from shallow coastal swamps and marshes to sargassum rafts and mangrove stands. They are equally effective as ambush predators or high-speed attackers. They slip slowly through vegetation or lie in wait in the muddy bottom. They have been known to rush up with the surf to pull unwary animals from the shore, and there are several documented cases of salties pursuing divers into the locks of underwater habitats.





Salties are typically solitary animals, though they will periodically group together and hunt larger prey in loose packs of eight to ten animals. Biologists suspect that these packs may represent kin or breeding groups, but are unable to differentiate genders in the field and so have yet to verify the theory. Individual salties are extremely dangerous, but these breeding packs are monstrous aggregations that are formidable enough to threaten even greater whites. All possible diligence should be exercised to avoid encountering such packs.

Range: Tropical and subtropical waters worldwide
Habitat: Prey-rich waters to 100 meters in depth
Length: 5 to 8 meters
Weight: 350 to 475 kilograms
Frequency: Uncommon
Resource Value: Low; the species is edible but too challenging to hunt safely
Threat Level: High
Attacks: Bite 8
Damage Rating: 9
Movement: 4/10
Physique: 3
Coordination: 3
Cognition: 1
Psyche: 2
Endurance: 2
Reflexes: 2
Toughness: 4
Armor: 2

Sand Archer

(*Peloris telum*) The sand archer is a fairly common mollusk analog that lives in the sands and mud of the intertidal zone. The animal is mustard colored and shell-less with a long, tapered body. The animal can be large for a mollusk, exceeding six kilograms after only a few years of growth. The creature has four long eyestalks that support sensitive photoreceptors, and a tube-shaped mouth tipped with a hard, hollow, spine-like radula. The spine is barbed along its length and can be as large as two centimeters in diameter.

Behavior: The sand archer lies in ambush just below the surface of the substrate in which it is buried, its eye-stalks protruding just above the sand. When a likely animal strays within a few centimeters, the archer attacks. Seawater, drawn from the outside, is forced into the mouth tube by rings of powerful muscle. The spine and mouth tube are hydraulically ejected from the animal's head and into its prey. This harpoon is strong and sharp enough to penetrate the hides of most small sea creatures, and is often enough to kill smaller animals outright.

After spearing its prey, the sand archer quickly draws its body deeper into the mud, pulling its meal after it. If the prey is small enough, it is typically pulled beneath the sand. If it is larger, and still struggling, the archer pulls it tight against the seafloor and allows it to struggle to death. If the prey proves too large or strong the archer's mouth spine may be torn

free. If this happens, the mollusk regrows a new radula harpoon in just a few days. The sand archer feeds by sucking body fluids from its prey, drawing them through its hollow spine and mouth tube.

Sand archers generally attack only manageable small targets, but they will harpoon larger creatures in self-defense. If a larger organism attacks a sand archer, or a hapless human steps on one, the mollusk will fire its harpoon in an attempt to fend off the assault. A sand archer spine is ejected with sufficient force to drive the harpoon deep into a human foot, causing tremendous pain and opening the body to a number of potential infections. To avoid sand archer attacks, natives are taught from childhood to shuffle their feet instead of stepping from foot-to-foot when wading in a likely archer habitat. Shuffling steps prevent a person from stepping directly on top of a buried sand archer thereby eliciting the defensive harpoon discharge.

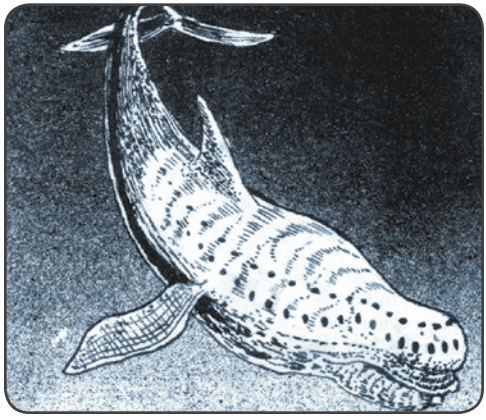
Range: Throughout the Pacifica Archipelago
Habitat: Sandy or muddy intertidal zones
Length: Up to 65 centimeters
Weight: Up to 10 kilograms
Frequency: Common
Resource Value: Low; the meat is edible but rather flavorless.
Threat Level: Medium; frequently harpoon unwary beachcombers
Attacks: Harpoon 6
Damage Rating: 1
Movement: 1
Physique: 0
Coordination: –4
Cognition: –4
Psyche: 0
Endurance: 0
Reflexes: –4
Toughness: –3
Armor: None

SCHOOLER

(*Adfabilia tsutakawa*) Schoolers are large pelagic animals that at a distance can be confused with large fish. Up close, their body form is stockier and more compressed, so that they swim with a motion more similar to terrestrial cetaceans than Poseidon's fish. Schoolers come in a range of bright, iridescent colors, and are sleek, powerful swimmers. They have very small mouths and rows of eyespots like many of Poseidon's denizens.

Behavior: Schoolers are notoriously curious and are often found near human settlements or activity. These animals supposedly earned their common name because of their habit of maintaining small, stable, coordinated pods. They behave with a distinct intelligence and curiosity, and some biologists feel schoolers may be analogous to pre-genlift dolphins in terms of their mental capabilities and interest in humans. Capturing these animals is difficult, because though curious, they are also decidedly wary, fleeing quickly when approached. Those that have been captured have either been killed or have died soon after capture. It is perhaps relevant to note that native fishermen apparently do not harvest these animals, even though they are large and would make valuable catches. Their intelligence makes them difficult enough to capture that they are not worth the effort.

Range: Planetwide
Habitat: Apparently unrestricted
Length: 1 to 2 meters
Weight: 45 to 95 kilograms
Frequency: Uncommon
Resource Value: None
Threat Level: Minimal
Attacks: None
Damage Rating: None
Movement: 6/14
Physique: 2
Coordination: 0
Cognition: 4
Psyche: 0
Endurance: 1
Reflexes: 2
Toughness: 1
Armor: 1



Sea Ghoul

(*Vow inferi*) This avian analog's name is apparently a play on their seagull-like abundance and their scavenger ecology. In keeping with their name, ghouls are ugly creatures, with mottled gray and white skin. They have long wings supporting flight membranes that are so thin they are almost transparent. The bird's body is lean and provides so little buoyancy that when floating in the water the animal's snake-like head and neck are all that show above the surface. Their small jaws match their small heads, but are tipped with pairs of bony plates somewhere between beaks and conventional cutting teeth.

Behavior: Ghouls have a number of both dorsal and ventral eyespots, but seem to rely most on their sense of smell to find the carrion they eat. Ghouls forage in small flocks of up to twenty birds, which gather into larger groups if abundant or particularly big carcasses are available. When such feeding congregations occur the grunting calls of the squabbling animals can be deafening, and it seems that individuals spend as much time fighting over the food as eating it. Native Poseidoners have learned to avoid these large feeding groups. They typically indicate the presence of a substantial amount of carrion, implying that either a large predator is nearby, or at the very least, that scavengers more dangerous than the ghouls may soon arrive.

Ghouls are abundant throughout the Pacifica Archipelago. They are edible but have a gamy, unpleasant flavor that keeps them relatively safe from native hunters. Ghouls are regularly eaten in survival situations, but care should be taken even then. Though their meat is edible, their liver organ analogs are rich in various chemicals that are highly toxic to humans. These chemicals are thought to help the species metabolize poisonous bacterial wastes that accumulate in the rotting food they consume. The GEO has lost a number of soldiers and field biologists to ghoul liver poisoning, prompting the inclusion of this otherwise harmless species in this report. Sea ghouls are not otherwise a threat to humans, and have never been documented attacking anything larger than the occasional herring.

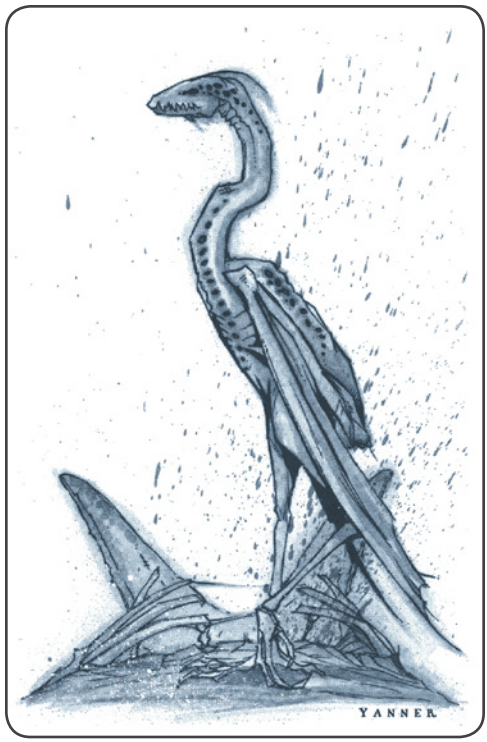
Range: Planetwide

Habitat: Most coastal habitats on Poseidon support at least one subspecies of sea ghoul

Length: 20 to 50 centimeters

Weight: 1.5 to 2.2 kilograms

Frequency: Abundant



Resource Value: Minimal; the species is edible but barely palatable. Natives consider large flocks reliable sign that larger, more dangerous animals might be nearby.

Threat Level: Minimal; the animal's liver is highly toxic

Attacks: Ingested toxin

Poison: Respiratory suppressant: Onset time 15 minutes, Duration 1 hour, Damage Rating 6

Movement: Land 1/3, air 5/14

Physique: 2

Coordination: 0

Cognition: –2

Psyche: –2

Endurance: 0

Reflexes: –1

Toughness: –3

Armor: None

Seaweaver

(Unclassified) Little is known about seaweavers because as far as official records indicate, they have never been observed. The creature is known only from the organic net it apparently secretes and uses

to catch prey. Analogous to a spider's web, these nets are far larger and consist of tough, sticky, semi-transparent threads. Nets have been found in various patterns, free-floating, or strung or coral heads. Recently created nets are often found with entangled prey, objects, small fish, crustaceans, and the like. Older ones are usually badly tattered and decayed, drifting about harmlessly.

Behavior: It is likely that seaweavers are nocturnal. This would help explain why they have yet to be observed, and it would also improve the effectiveness of their traps. Even though their nets are translucent, darkness would make them virtually impossible to detect. The species apparently lays out their nets, stretched between handy objects, much like terrestrial spiders. They feed on almost anything that becomes entangled in the complex, sticky fibers, and the bigger nets are capable of catching rather large prey. There are unsubstantiated reports of unwary swimmers becoming entangled and drowning.

Range: Planetwide

Habitat: Reef and rocky areas where they can string their nets

Length: Unknown

Weight: Unknown

Frequency: Uncommon

Resource Value: High. The webs of seaweavers are prized finds among the natives. Boiling them down results in a thick and very effective natural glue that works well in sealing watercraft, repairing sails, and similar tasks. If the strands are carefully cut apart and dried, they make rather strong and flexible cord. Supposedly, there is also a way to ferment the webs into a potent beverage the natives call water sake. Reportedly, several chemicals in this drink make the brew a mild hallucinogen.

Threat Level: Unknown

Attacks: Unknown

Damage Rating: Unknown

Movement: Unknown

Physique: Unknown

Coordination: Unknown

Cognition: Unknown

Psyche: Unknown

Endurance: Unknown

Reflexes: Unknown

Toughness: Unknown

Armor: Unknown

Singer-In-The-Dark

(Unclassified) GEO biologists have always considered stories about the so-called singer-in-the-dark just tales told to frighten native children—that is until now. Native folklore is full of references to some unknown creature called the singer-in-the-dark, or the night singer. Many old timers swear they have heard the creature's haunting calls or knew someone who was lost to a singer. Until a recent report from a GEO field expedition, these tales were considered exaggerated hearsay or simple fantasy.

The only feature consistently attributed to singers-in-the-dark is a mournful, strangely beautiful song. The descriptions in the native stories vary, but the call is supposed to be low and musical and heard only on night-darkened beaches. Uniformly, however, the tales claim that anyone venturing into the dark to investigate the sound is never seen again.

A current GEO field expedition, collecting data for this very report, recently submitted an emergency addendum to this document. While camping on the beach of a small island in the New Hawaii chain, the team heard a strange musical call apparently originating from somewhere down the surf line. Several party members went to investigate and a short time later the calls ceased. When the investigators subsequently failed to return the rest of the group went looking for them, but found no trace. Several days of searching was no more fruitful, and this office has been forced to acknowledge that the missing biologists are likely dead.

The only evidence of the encounter is a sensory recording made by an implant-equipped team member. The recording (interlinked file #5816) is of an eerie, strangely compelling sound with complex subsonic harmonics. Researchers at HIST are already trying to determine the purpose of the complex sound, and suspect it may be a sort of natural siren's call used to attract or confuse potential prey.

Based on this recent evidence, this office has no choice but to give new credence to the native lore regarding singers-in-the-dark, and to advise all field personnel and frontiersmen exploring nighttime shorelines to consider any unusual animal calls as warning that a lethal predator may be lurking in ambush.

Range: Based on the wide distribution of native stories featuring singers-in-the-dark, the species may be found throughout the Pacifica Archipelago

Habitat: Nocturnally along empty shorelines

Length: Unknown
Weight: Unknown
Frequency: Apparently very rare
Resource Value: Unknown
Threat Level: Extreme
Attacks: Unknown
Damage Rating: Unknown
Movement: Unknown
Attributes: Unknown
Armor: Unknown

Snow Weasel

(*Niveus hexipedis*) Little is known about this south polar species. Several naturally freeze-dried corpses have been studied, but there have been only a few documented sightings of living specimens. The creature's anatomy does reveal some information about its ecology, however. The animal is a mammaloid, with thick white fur and thicker blubber. It is a long bodied hexiped, with splayed feet and completely webbed toes. The animal's thick, otter-like tail is well suited to swimming and its muscles contain abundant myoglobin analogs indicating the creature can hold its breath for some time.

The snow weasel's head is large, and its teeth are those of an opportunist. The animal's eyespots run the length of its body, and though most are covered by long fur, they appear completely functional. The large olfactory lobes of the animal's brain indicate its sense of smell is of primary importance. Tiny mineral-rich, gel-filled pockets in the animal's tympanic apertures also imply that the species is sensitive to magnetic fields, perhaps allowing it to navigate over the featureless ice fields of its range. This may be key to the animal's survival, allowing it to reliably travel from thermal oasis to thermal oasis.

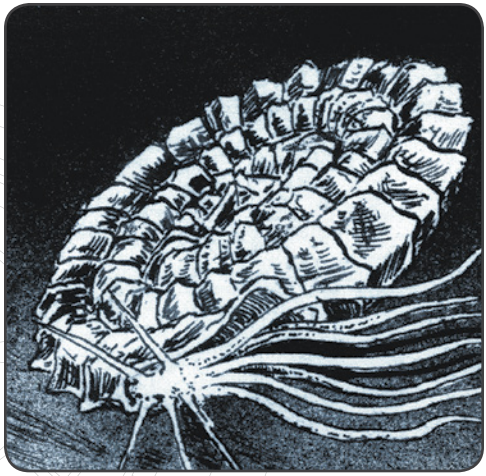
Behavior: Though biologists speculate about the snow weasel's ecology, little is known for sure. The animal's dentition implies it is an omnivore, taking advantage of whatever food it encounters. The animal is likely a scavenger at times, but its well-muscled body, long canines, and sharp claws indicate it is also an able predator, likely hunting fish, birds, and the various small land animals that make their homes in and around thermal oases.

The animal is a known camp vermin, but a potentially dangerous one considering its size and predatory features. Several GEO and Incorporate research operations on the islands and ice flows of the south polar region have apparently been raided by hungry snow weasels, as indicated by tracks, spore, and a pair of sightings. Though no attacks against humans have been reported or even seem likely, it is relevant to include these animals in this report as a potential threat to personnel working within the creature's range.

Range: South polar region
Habitat: Polar oases and open ice packs
Length: 1.4 to 2.3 meters
Weight: 35 to 45 kilograms
Frequency: Rare
Resource Value: Unknown
Threat Level: Medium; the animal is likely an able predator
Attacks: Claw 4, Bite 5
Damage Rating: Claw 3, Bite 6

Movement: 3/10
Physique: 2
Coordination: 1
Cognition: 1
Psyche: 2
Endurance: 2
Reflexes: 1
Toughness: 0
Armor: 1

SPURTS



(*Cometedae* species) Both hard and soft spurts are extremely common in Poseidon's oceans. These organisms are abundant, making up an indeterminate number of genera with ocean-wide distributions. Spurts get their common name from their mode of locomotion. Water is drawn in one end of their tube-like bodies and ejected out the other, generating a remarkable amount of thrust. Most spurts are streamlined and capable of unmatched acceleration. They are unable to maintain high speed over any great distance. Spurts are highly phototropic and vary greatly in size, the smallest being only a few centimeters in length, while there are unverified reports of soft spurts over 20 meters long.

Spurts fall into two physical classifications-soft and hard. Hard spurts are more like aggressive, flattened, chambered nautili. Hard spurts are usually predatory but are seldom a threat to larger animals due to their characteristically small size. Hard spurts are well protected by a sleek hut formidable shell into which they can withdraw when attacked. The shell is difficult enough to open that predators usually eat them whole. Most hard spurts are safe to eat and uniquely palatable, so they are a mainstay of the traditional native diet.

Soft spurt species, on the other hand, are larger, shell-less and feed mostly on plankton strained from the water with sticky tendrils along their tentacles. Their flesh, however, is usually very poisonous, this toxicity serving as their primary defense. These animals are brightly colored to warn of their poisonous status and few predators even try to eat them. They are so toxic that many native hunting and fishing poisons are derived from soft spurt flesh, and even glancing contact with some can be fatal.

Behavior: Hard spurts spend most of their time aggressively maintaining hunting territories against other spurts. When not defending these hunting grounds, most hard spurts lay in ambush, waiting for anything smaller than themselves to swim nearby. Their venom is a mild neural toxin and is only a threat to human-size animals when the spurt is particularly large. There are, however, undocumented reports of unwary swimmers and inexperienced native children falling prey to large hard spurts.

Soft spurts are docile, languid creatures, drifting slowly about collecting plankton. They are a threat to larger animals only when they are blundered into. Either in defending themselves or by accident, larger spurts are toxic enough to kill animals two or three times the size of a human.

Range: Planetwide; both hard and soft spurts are found throughout Poseidon's oceans.

Habitat: Though some hard spurts dwell in the deep ocean, most are found in shallow water where prey is most abundant. As plankton feeders, the soft species spend most of their time in sunlit surface waters collecting food. (Hard, Soft)

Length: 0.05 to 1.5 meters, 0.1 to 10 meters
Weight: 0.1 to 45 kilograms, 0.05 to 215 kilograms
Frequency: Common
Resource Value: High. Spurts are valuable food sources, and their toxins can be used to make various native pharmaceuticals.
Threat Level: Minimal, Extreme
Attacks: Bite 5, Sting 7
Poison: Mild/lethal neurotoxin: Onset Time 30 minutes/15 seconds, Duration 12 hours/72 hours Damage Rating 2/8
Movement: 3/8, 1/3
Physique: 1, –2
Coordination: 4, –4

Cognition: 0, –4
Psyche: 2, 0
Endurance: 1, –1
Reflexes: 2, –4
Toughness: 0, 1
Armor: 1, None

Squalers (Stick Monkeys)

(*Simiasimila ululatus*) Reminiscent of terrestrial prosimians, these mammaloids are small tree-dwellers. They have greenish, bare skin and thick, short, furry manes. A long prehensile tail, multi-jointed, bony limbs, and opposable digits help make them excellent climbers. Fleshy, wrinkled cheeks and multiple eyespots give them a decidedly ugly face.

Behavior: Stick monkeys are annoying camp vermin, always getting into supplies and caches and damaging equipment. They travel in loud, jittery packs and are quick to pelt interlopers with rotten fruit and their own feces. These creatures are obnoxious and taste awful when eaten. They are not usually dangerous, but their alarm squeals have been known to attract curious predators. Additionally, they have a notably toxic defensive bite, and so are to be avoided.

Range: Tropics, planetwide
Habitat: Dense forest and jungle
Length: 0.4 to 0.8 meters
Weight: 4.8 to 5.5 kilograms

Frequency: Common
Resource Value: None
Threat Level: Minimal
Attacks: Bite 4
Damage Rating: 1
Poison: Usually non-lethal, induces extreme nausea: Onset Time 15 minutes, Duration 12 hours. Damage Rating 1
Movement: 4/8
Physique: 0
Coordination: 4
Cognition: 2
Psyche: –2
Endurance: –1
Reflexes: 3
Toughness: –4
Armor: None

Stone Snake

(Unclassified) These creatures are not snakes or even reptile analogs, but their elongated bodies and tough hides undoubtedly led to their name. Still unclassified, stone snakes are one of the largest and most dangerous predators on Poseidon, and there are many well-documented cases of attacks on humans. They are fast swimmers, using an eel-like motion to maneuver through the saltwater shallows they inhabit.

Stone snakes are evolutionary anomalies. They are warm blooded, but their external anatomy is most reminiscent of annelid, or segmented, worms. They are composed of multiple segments that increase in number as the creature ages. They tend to dark gray in coloration and their hides are thick, rough, and hard. The stone snake has rings of eyespots around each body section, each of which physiologically seems almost an independent organism. The creature breaths using primitive, separate lungs in each body segment, the air passing through two blowhole-like structures on the dorsal surface of each segment. The stone snake's jaws can be a meter long and are comprised of the same four-part structure found in Poseidon's fish species. -like teeth line the inner surfaces of all four mandibles.

Behavior: The stone snake lies on the bottom of shallow coastal waters, preferring muddy bottoms. It is a solitary hunter, and its speed allows it to capture most prey easily. After impaling its prey with its long teeth, the stone snake drags it to the bottom and holds it there until it stops struggling. Few creatures can defend themselves against an adult

stone snake, but they seem to have a built-in population control. During mating, violent muscular contractions sometimes cause stone snakes to constrict around their partners' bodies, crushing and often killing their mates.

Stone snakes can remain submerged for several hours if resting and over 90 minutes if active. A breathing stone snake is characterized by a long series of rapid spouts and hollow pops caused when the blowholes of each segment in tum break the surface as the animal breaches. The sound can be heard for over a kilometer and should serve to alert anyone in the area that a stone snake is hunting nearby-it may be the last warning before a sudden and deadly ambush from below.

Range: Zion Islands
Habitat: Coastal shallows
Length: Up to 6 meters
Weight: Up to 55 kilograms
Frequency: Uncommon
Resource Value: None
Threat Level: Extreme
Attacks: Bite 7, Grapple 4
Damage Rating: 8, 4
Movement: 6/14
Physique: 3
Coordination: 0
Cognition: 2
Psyche: 0
Endurance: 1
Reflexes: 1
Toughness: 2
Armor: 1

String Worm

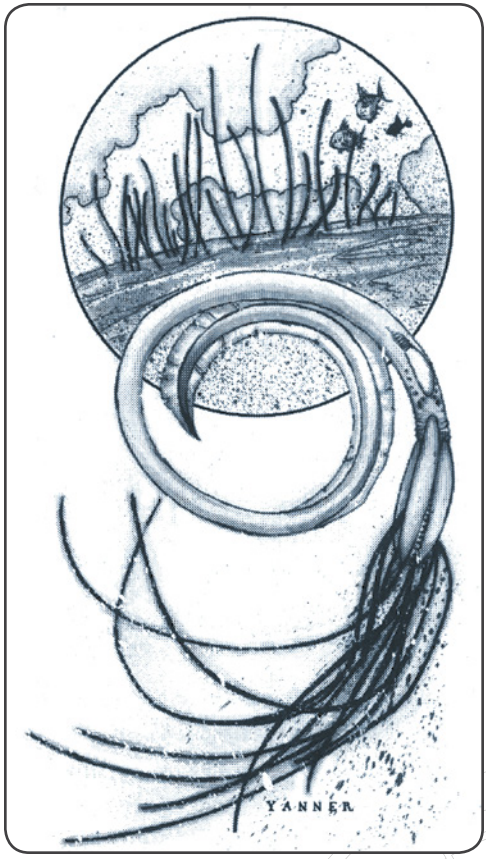
(*Funiculus veneficus*) The string worm is a rare and dangerous animal that has only recently been classified. Though long known to Poseidon's natives, the string worm is, luckily, seldom encountered because of the nature of its intractable habitat. String worms live in the tidal mud reef ecosystems of the planet's temperate regions. They are secretive and appear to be long lived. The creature is actually a fish analog that has undergone some dramatic evolutionary changes that make it almost unrecognizable as a member of that group.

String worms reach up to three meters in length and up to 20 centimeters in diameter. Though they have rudimentary, fin-like structures as part of their skeleton, these are vestigial and buried within the organism's muscle tissues, lending the creature a notably worm-like appearance. String worms are uniformly pasty white in color, and have rudimentary, almost function-less eyespots. Their skin is smooth and loose, and covered with glands that secrete a thick coating of mucus. The string worm's mouth is lined with small but very sharp cutting teeth, and its jaws are wide for the animal's size. The creature's lips support ten to twelve tentacle-like palps that can be as long as two meters. Though motile, these palps are poorly muscled, and are not used to capture prey but instead are used to poison it.

Behavior: String worms live buried in the thick flowing ooze of Poseidon's tidal mud reefs. They spend the vast majority of their time at rest and will often not move for days. When they do finally stir, it is usually only to feed, or to reluctantly move to more productive hunting grounds.

String worms lay coiled in the mud with their head upturned toward the surface. They worm their lip palps through the mud, stretching them outward from their mouths like the spokes of a wheel. The fish listlessly wriggles the tips of the palps where they stick out of the mud, and they appear like the ends of small tasty invertebrates. Unsuspecting predators hunting though the mud are easily duped and readily pounce on the apparent prey.

The palps are easily torn or bitten off so they can be just as easily swallowed. The palps are a Trojan meal, however, containing highly concentrated neurotoxins potent enough to kill even the largest local fauna. The toxin kills in seconds, and the string worm simply swims through the surrounding ooze to collect its prey.



Even if a potential meal is not fooled by the worm's poisoned bait, it can still fall prey to the animal's toxin. String worms are keenly sensitive to vibration, and will typically react if any organism wanders within a meter or two of their outstretched palps. Muscular contraction can be used to flush the lethal toxin into the surrounding mud and water, where it can still overcome some species by passing through their skin or gills.

Unfortunately, humans are susceptible to the waterborne toxin, and if exploring tidal reefs, should consider a sudden numbness in any exposed skin as a sign of string worm poisoning. They should immediately move to dryer ground as complete paralysis may shortly follow, and the worm will soon be looking for its prey.

Range: Temperate regions supporting mud reef ecosystems

Habitat: The wetter, more fluid channels of the mud reef ecozone

Length: Up to 3 meters in length

Weight: Up to 120 kilograms

Frequency: Rare

Resource Value: Native healers have discovered that the string worm's neurotoxin, in extremely small doses, serves as an effective local anesthetic. In the days of the Abandonment, this made the species a prized catch for hunters, and it remains such for the more isolated, and isolationist, native groups.

Threat Level: High

Attacks: Ingested or diffused toxin

Poison: Paralytic neurotoxin; Onset Time 20 seconds; Duration 5 hours; Damage Rating 4

Movement: 3/5

Physique: 2

Coordination: 1

Cognition: 1

Psyche: 0

Endurance: 1

Reflexes: 1

Toughness: 2

Armor: None

SUNBURST

(*Caneopoise benagus*) The caneopoise is essentially the marine ecological equivalent of the buffalo that once ranged the central and western plains of North America in the millions. These animals are mammaloids, and in body form resemble a cross between terrestrial walruses and dolphins. They are large and slow swimming and valued by commercial hunters for their hides. Their skin is soft and smooth, with a brilliant silver sheen. When tanned, the hides are beautiful, retaining their natural appearance. Sunburst hides are one of the few animal products that fetch a high enough price beyond the Serpentis System to make exportation profitable. To feed a growing market, commercial hunters have already reduced populations is some areas, a telling accomplishment, considering how vast the herds actually were. and native groups are calling for a moratorium on commercial sunburst hunting, but to date, only the most endangered populations have received legal protection.

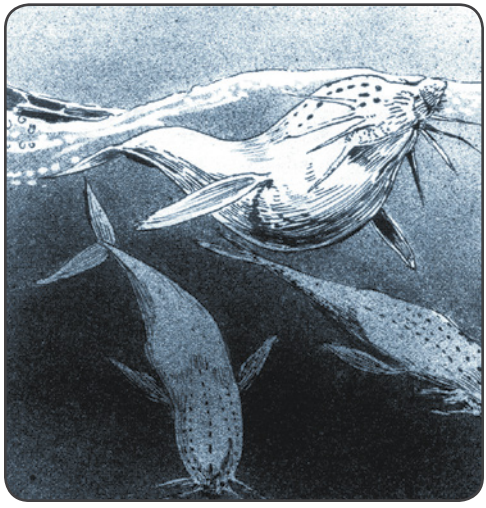
Behavior: Sunbursts are plankton feeders and gather in astoundingly large herds as they continuously migrate through the oceans, feeding as they go. Some of the larger herds are many kilometers long and consist of millions of individuals. These animals use a form of echolocation to communicate, and in

such numbers they make so much noise that cetaceans claim their singing is a constant part of the background "music" of Poseidon's oceans.

Caneopoise also have an interesting symbiotic relationship with an otherwise nondescript sea bird. These birds collect in flocks whose numbers rival those of the sunburst herds, following the caneopoise migrations wherever they go. During the mid-afternoon, the sunbursts typically drift aimlessly, basking in the sun. The birds descend on the sleeping animals and hungrily clean them of surface parasites. This short rest and meal is apparently all the avian species requires as they have only been observed attending sunburst migrations.

Few sights on Poseidon are as singularly impressive as that of a sunburst herd a million strong, swimming fast, flashing in the sun, with their avian escort in attendance.

Range: Planetwide
Habitat: Photic zone
Length: 2 to 3 meters
Weight: 450 to 780 kilograms
Frequency: Common
Resource Value: High. Not only is the species commercially valuable as part of the terrestrial fashion trade, but they are also a staple of the native Poseidoner's diet.
Threat Level: Minimal
Movement: 3/8
Physique: 2
Coordination: –1
Cognition: 0
Psyche: 0
Endurance: 1
Reflexes: 0
Toughness: 4
Armor: None



Sweet Noodles

(*Dulcis dulcis*) Sweet noodles' pale white stalks consist of small fleshy capsules stacked one on top of another, and reach lengths of up to two meters. Single organisms consist of clusters of eight to 10 stalks and for some as yet unknown ecological reason seldom grow in proximity to one another. The root-like holdfasts that secure the organisms in the mud are shallow and easily dislodged, and the long fronds are flexible, drifting lazily back and forth in the current.

Behavior: Sweet noodles are slow-growing marine algae that thrive only in nutrient-rich sediments at the dim limits of the photic zone. Sweet noodles are photo-synthetic and manage to acquire sufficient nutrients from the sediments in which they grow, despite their lack of true, functional root systems. The organism is widely distributed, but grows sparsely, with individuals seldom found close together. The mechanism of this allopatry is unclear, and biologists are curious both about how it works, and why the organism demonstrates the behavior in the first place.

Sweet noodles are included in this report for only one reason—they taste good. In fact, they are arguably the best tasting, most popular indigenous food species on the colony world. Poseidon's biochemistry is distinctly lacking in compounds that humans find sweet. The sugars common in the planet's plants can be nutritious, but they are not very flavorful, and refining them does not help. One of the few exceptions to this apparent rule is the sweet noodle. The organism has a fleshy texture and citrus flavor most akin to Terrestrial lychee nuts, and is a favorite treat among natives, old and young alike.

The algae is naturally rare and so difficult to find growing wild, and its allopatric behavior and eccentric habitat make it difficult to cultivate. Oddly, the flavor quickly fades after the organism is harvested, and so it is usually picked just before it is eaten. Consequently, though there is a growing interest in the dish in the finer eateries of the larger settlements, the market is mostly unsupported.

What little sweet noodle a village successfully cultivates is saved for special occasions, picked fresh and served still chilled from the depths. Native chil-

dren love sweet noodles, and it has become a tradition across the archipelago to serve the algae in place of birthday cake.

Range: Distribution includes but may not be limited to the Pacifica Archipelago

Habitat: Nutrient-rich sediments within the lower photic zone

Length: Up to 2 meters

Weight: 2.2 to 4.5 kilograms

Frequency: Rare

Resource Value: High; the algae is a valued native treat, and just about the only indigenous sweet on Poseidon

Threat Level: None

Attacks: None

Damage Rating: N/A

Movement: N/A

Attributes: N/A

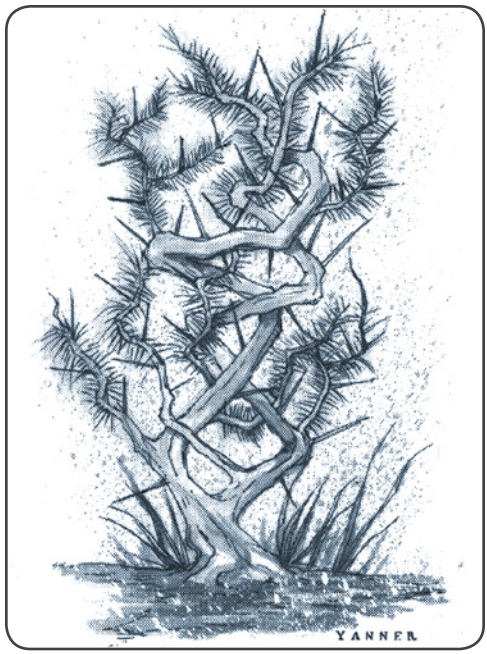
Armor: None

THORNROW

(*Vepres vepres*) Thornrow is a hardy, fast-growing shrub that bristles with long, formidable thorns. The stem of the plant is dark red, and the stringy, compound leaves are yellowish green. The stems and branches grow in densely packed tangles, protecting the leaves and small flowers from hungry herbivores. The plant grows in large patches that become impenetrable thickets for all but the smallest animals.

Behavior: Thornrow grows best in the arid coastal regions of Westcape, though some farmers have tried establishing the plant on New Jamaica and Prime Meridian. The shrub requires bright sunlight and its roots are susceptible to fast fungus infection when growing in excessively damp soil. The species' extensive root system evolved for dry, sandy substrates and grows deep to tap desert water tables. In fact, Westcape ranchers find the plant a reliable means of locating productive well sites. When growing wild, the plant can make terrain impassible, and it is virtually impossible to clear without using fire or low-grade explosives.

Despite its troublesome natural form, thornrow has become a valuable sort of living construction material useful in making livestock fences and barriers. If properly pruned the plant can be coaxed to form corrals and hedgerows that are proof against any indigenous life larger than a chub. Collecting and then replanting the shrub is difficult work and a thornrow fence takes several years to grow to functional size, but in Westcape at least, the result is worth the effort. The fence is durable, self-repairing, and a uniquely effective deterrent to predators. In Perdition, some thornrow fences have been in use for more than 65 years.



Reports have filtered out of Westcape claiming that the local native resistance is using thornrow thickets to its tactical advantage. By cutting well-camouflaged tunnels into the hearts of these tangled bushes, many wild thornrow groves have supposedly been turned into secret weapon caches and hideouts.

Range: Westcape region of the Pacifica Archipelago

Habitat: Arid sandy soils

Length: Up to 4 meters tall and in thickets over 50 meters in diameter

Weight: Up to 80 kilograms per plant

Frequency: Common

Resource Value: Native ranchers have long been using the plant as a natural form of fencing to protect livestock from indigenous predators

Threat Level: Low

Attacks: Accidental impact

Damage Rating: 1

Movement: N/A

Attributes: N/A

Armor: None

Trident Fish

(*Salmonidus poseidonus*) The trident fish has been called the tuna of Poseidon. Swimming in massive schools, the animal is very common and almost entirely edible. The skeleton is relatively simple, giving the species a high meat-to-body-mass ratio, and making the fish absurdly easy to clean. The meat of the trident fish is blood red when raw, yellow and flaky when cooked, and though its flavor is unique, most people find it delicious. Twenty to 40 kilograms of meat can be obtained from a typical adult fish.

Adult tridents have a unique body symmetry derived from their strange juvenile development (see below). Most have highly reflective silver skin with vertical bars ranging from midnight blue to aquamarine. Trident fish are currently believed to be one of the fastest fish in Poseidon's oceans.

Behavior: The trident undergoes a significant morphological transformation upon reaching sexual maturity. The juvenile form is a benthic animal and triangular in cross section. Juveniles typically swim point-or "keel"-downwards, and their broad, flat backs are covered with multiple eyespots that face upwards to guard against attack. When the juveniles are ready to mate, two males and a female will enter what is referred to as a "breeding trio," swimming with their keels touching along a common central axis. The fish then grasp each other with small hooks on the rays of their ventral fins. Within two weeks the three separate organisms undergo a remarkable, mutual transformation, literally merging together into what is believed to be a single organism. The ventral tissues of each fish invade those of its partners until the three have grown together inextricably.

Exchange of gametes occurs through a currently unexplained mechanism, and the newly formed hermaphroditic adult bears live young. Most trident fish breed twice annually throughout their 10 to 15-year life spans. The mutable and interactive physiology of the species remains a topic of avid study for ichthyologists. Though juvenile trident fish are bottom dwellers, adults often congregate in vast schools, ceaselessly patrolling the rich surface waters as they hunt large zooplankton and small fish. The triple sets of outward-facing eyespots -make the trident fish extremely difficult to approach. Fishing methods have long been limited to drift netting, purse seining, and surface spearing.

Range: Planetwide

Habitat: Mid-depth benthic zones (juveniles), surface waters (adults)

Length: 2 to 3 meters

Weight: 25 to 50 kilograms

Frequency: Common

Resource Value: High. Trident fish are an extremely important and efficient food source in the native economy.

Threat Level: Minimal

Attacks: Bite 4

Damage Rating: 2

Movement: 8/20

Physique: 0

Coordination: –5

Cognition: 3

Psyche: 0

Endurance: 0

Reflexes: –1

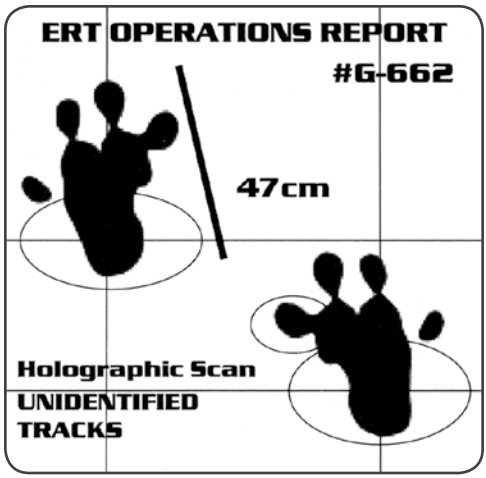
Toughness: 0

Armor: None

Walkabout

(Unclassified) Though very little is known about this species, the Office of Biological Survey is providing this data as a partial entry to Report #POS-l03. This is a precautionary measure in response to a recent incident in which the members of an Atlas prospecting team were lost.

The only physical evidence of this creature's existence comes from several tracks and numerous blood samples documented and recovered by ERT personnel operating out of al-Mamlakah. Based on track



shape and arrangement, the species appears to be bipedal, or mostly so. Based on track size, depth, and degree of soil compression, the species is estimated to mass between 150 and 200 kilograms. DNA tests of the blood samples indicate that the species is in fact indigenous to Poseidon, though not closely related to any species in survey data banks.

Recent inquiries made of native guides and at inland villages indicate that this species may have been encountered before. If it is, in fact, the same animal, locals appear to have known about it for some time, referring to the creatures as walkabouts. Accounts describe rare encounters with brutish, pale beings. They seem shy and elusive, always keeping to the jungle and only ever seen at a distance. Until these claims can be documented this office considers such information .

The verifiable data available for this report is circumstantial, and is based on the ERT's investigation of the encounter site. Responding to a panicked distress call from an Atlas prospecting team operating in Lost Valley, the ERT found a ransacked encampment and the bodies of several savaged field workers. Equipment and vehicles were smashed and scattered about and only eight of the 12 site personnel have since been accounted for. It appears that the prospectors did attempt to defend themselves and that one or more of the attacking animals was shot. This is believed to be the source of the non-human blood samples recovered at the site.

Further information may be forthcoming as the ERT doctor has verified that at least one of the Atlas workers was equipped with a sensory recorder, and that it may contain recordings of his last experience. Atlas officials are claiming the recorder was irreparably damaged in the incident and that any recordings it may have contained were lost.

Range: Unknown beyond Prime Meridian

Habitat: Mountain forests and lowland margins

Length: Unknown

Weight: 150 to 200 kilograms as estimated by footprint compression

Frequency: Unknown, but apparently rare

Resource Value: Unknown

Threat Level: Should be considered high until further study

Attacks: Unknown

Damage Rating: Unknown

Movement: Unknown

Physique: Unknown

Coordination: Unknown

Cognition: Unknown

Psyche: Unknown

Endurance: Unknown

Reflexes: Unknown

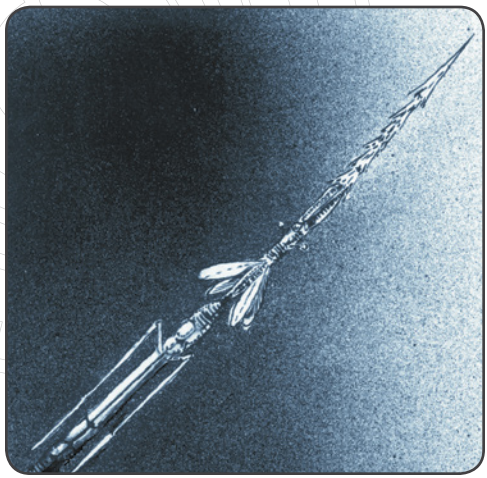
Toughness: Unknown

Armor: Unknown

Water Dart

(*Mitchella telumus*) The water dart is a rather insidious marine insectoid. It is thin and rod-like with a hard, barbed spine at its anterior end, and a flexible swimming tail at its posterior end. The creature is semi-translucent and difficult to see underwater.

Behavior: When this creature reaches sexual maturity it becomes parasitic. Targeting some



large marine creature, preferably a mammaloid, the female water dart rams its anterior spine into the flesh of the victim. If not immediately removed, the creature will slowly burrow under the skin and bury itself in the host's muscle tissue. There it will absorb nutrients from the host's body and eventually lay its eggs. Even if the target host manages to pull out or dislodge the dart before it digs in, the creature's spiny barb will usually break off and remain imbedded. This spine houses the creature's egg sack, and if the spine is not subsequently removed, the eggs will hatch. The larvae will follow the host's circulatory system and collect in its body cavities. There they will feed on the host's tissue and grow, eventually and painfully killing the host. When they have consumed what remains, the young darts disperse to begin the cycle again.

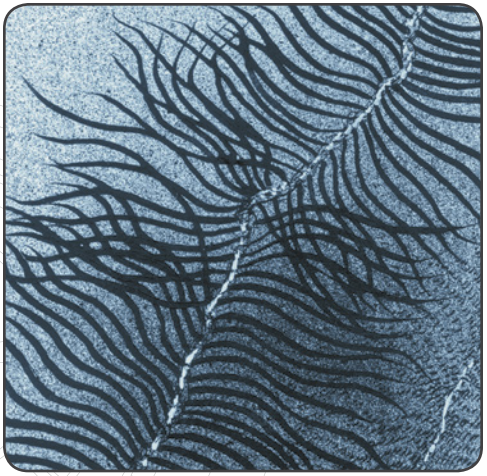
Range: Temperate oceans planetwide
Habitat: Photic zone
Length: 0.1 to 0.12 meters
Weight: 0.01 to 0.02 kilograms
Frequency: Unknown
Resource Value: None
Threat Level: High
Attacks: Implantation 5
Damage Rating: 1
Movement: 2/4
Physique: –2
Coordination: –10
Cognition: –8
Psyche: 0
Endurance: –1
Reflexes: –9
Toughness: –7
Armor: None

Water Hemp

(*Vitisia sukarnas*) Water hemp is a thin, fibrous vine that grows in a variety of forms and habitats. Usually purplish in color, the plant has small leaves and during the breeding season is covered with tiny white flowers.

Behavior: The plant originates in a knotty bush that is firmly rooted into the substrate. From that bush, the individual vines grow outward, spreading over and covering the surrounding terrain. Auxiliary roots grow from some of these vines, the plant leapfrogging outward, expanding its coverage.

Range: There are a variety of both temperate and tropical species.



Habitat: This plant thrives in as variety of habitats, but requires abundant water.

Length: Individual vines can reach more than 50 meters.

Weight: Variable

Frequency: Common

Resource Value: High. This plant is prized by Poseidon's natives as a source of natural fibers. When harvested and processed, it can be used to make everything from clothing and blankets to boat sails and rope. Though a bit courser than cotton cloth, the material woven from water hemp is both versatile and durable. Several commercial water hemp farms have been established in some of the more settled regions of Poseidon, supplying a great deal of raw fiber and cloth to the local markets.

Threat Level: None
Attacks: None
Armor: None

Water Rat

(*Rodentis gregalis*) Like most other terrestrial animals on Poseidon, this mammaloid has six legs. The legs are thin and muscular, and end in small webbed feet with three clawed toes. The water rat's body is long, sleek, and hairless, culminating in a leathery tail. Its head is hairless as well, with four small auditory cavities at the base of thin flaps of muscle and skin at the base of the skull. The water rat's small mouth is filled with sharp spade-like teeth for piercing, scraping, and tearing.

Behavior: The water rat is a gregarious animal, with extended families occupying the same locale

for generations. They commonly reside in dens they dig in overhanging banks and shorelines. Water rats are extremely mobile, able to climb, run, and swim equally well. They have no means of breathing underwater, but can remain submerged for up to 30 minutes.

Water rats are able builders, and they use various natural materials to enhance their dens as they continually expand their warrens. They are omnivorous, feeding on plant life, insects, and any small vertebrates they can catch. The larger female lays large, leathery eggs, usually four to six per cycle, in a small nesting chamber within the den. She then continues to hunt each day, while the male guards the nest.

Water rats have proven to be excellent barometers. Some natives keep them as pets because they become visibly anxious with the approach of a storm. The creatures also eat fast fungus, making them allies in the constant battle against the rot. Unfortunately, they have also been known to gnaw at woodwork, and more than one unwitting traveler has left his boat unattended for a few days, only to return and find it no longer seaworthy. The water rat can be eaten, but the meat is very tough and tastes muddy.

Range: Zion Islands

Habitat: Rivers, streams, lagoons, Poseidon mangrove, and wetlands

Length: Up to 1.2 meters, including tail

Weight: Up to 16 kilograms

Frequency: Common

Resource Value: Minimal

Threat Level: Minimal

Attacks: Bite 3

Damage Rating: 1

Movement: Land 2/5, Water 3/6

Physique: 0

Coordination: 1

Cognition: 2

Psyche: 0

Endurance: 0

Reflexes: 1

Toughness: –2

Armor: None

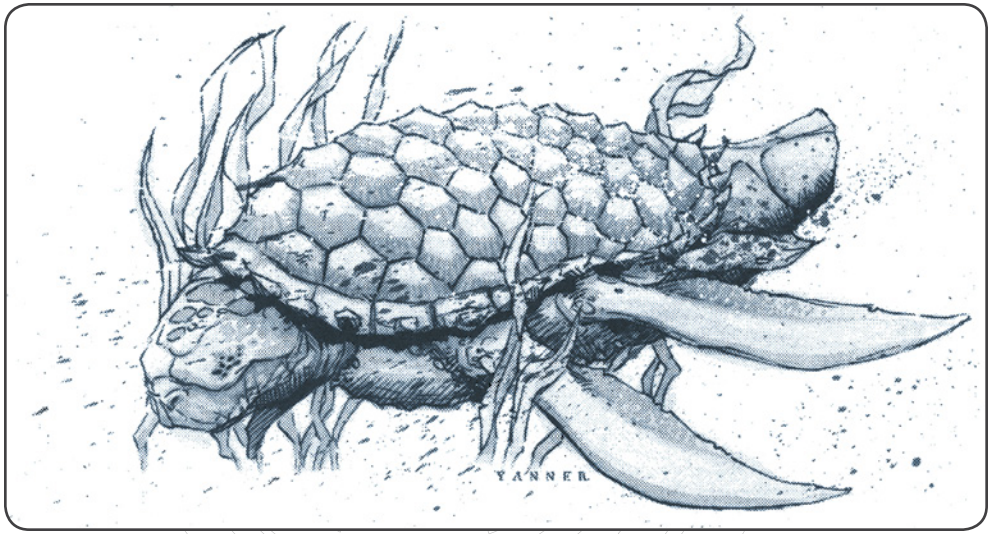
Weedeater

(*Aqua bovis*) A weedeater is a large, lethargic mammaloid that is best described as a cross between a Terrestrial manatee and a sea turtle. They are robust creatures with thick layers of insulating blubber under a tough, lumpy, brown hide. Their vital regions are covered with hard bony plates and spiny ridges that are proof against smaller predators, and their dense skeletons feature unique, pointed, subdermal protrusions that make them painful mouthfuls for larger predators. The weedeaters ancestors were hexipeds but their fore and mid-limbs have evolved into stiff, paddle-like fins, and their hind limbs have become small, stumpy vestiges.

Behavior: Weedeaters are slow swimmers that paddle along the water's surface moving from kelp bed to kelp bed. They eat continuously, presumably because the marine plants on which they graze are so low in calories and nutrients. The animals are docile and lack any means of attack, surviving in Poseidon's hungry ecology only because of their armored hides and sharp bones.

Weedeaters live in small herds of four to eight animals and only form larger groups during the calving season. In early summer, weedeaters converge on certain remote islands. These nursery islands are perennial rookeries, and have apparently been serving as such for thousands of years. Soon after dragging their considerable bulks ashore, the females give birth and lay about for several months nursing their hungry pups. The young's dermal plates do not harden until the third month and so the calves are particularly vulnerable during this time.

At the end of the nursery season, just prior to the colony breaking into smaller herds and returning to the feeding grounds, there is a mating frenzy with males and females from different herds interbreeding in a week long free-for-all. Gestation lasts until the



next season when the animals return to their ancestral rookeries and the cycle begins again.

Weedeaters are an important native food stock in New Hawaii, where the large kelp forests support wild populations. In other parts of the archipelago, where kelp is not abundant enough to support the species, villages often raise domesticated weedeaters, rearing them on diets of kelp, sargassum, terrestrial vegetation, and compost. The flesh is dark red and flavorful, coming closest to beef of any of Poseidon's indigenous meats.

Special note to Justice Commission personnel—native insurgents in the Sierra Nueva Cluster have apparently been utilizing the unusually dense, sharp-pointed bones of this species as symbolic and effective hand-to-hand weapons. The mid-limb femur of the animal is perfectly shaped to serve as a sort of war hatchet or tomahawk. It has reputedly become a badge of honor among these war-like groups to kill a "Despoiler" using one of these skeletal hammers. As a consequence of this information, the Marshal Service has issued standing orders that anyone found in possession of such a weapon should be immediately arrested on charges if terrorism.

Range: Temperate and tropical regions supporting forests of Poseidon kelp
Habitat: Kelp forests
Length: 2.5 to 3 meters
Weight: Up to 420 kilograms
Frequency: Common
Resource Value: High
Threat Level: None
Attacks: None
Damage Rating: None
Movement: 1/2
Physique: 2
Coordination: –2
Cognition: –2
Psyche: –2
Endurance: 0
Reflexes: –2
Toughness: 2
Armor: 7

WRAPAROUND

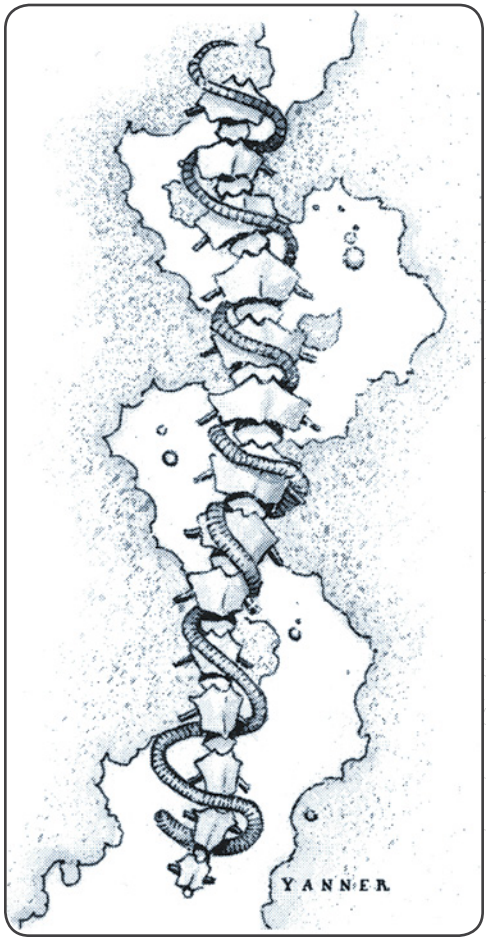
(*Ambulo infitialis*) The wraparound is a nasty parasite that is occasionally found in various species of Poseidon fish. Unlike many of the parasites adapted to fish hosts, however, this one can cross species and infect warmblooded animals, including humans.

Wraparounds are nematode worm analogs, pale green in color with long, tapered, bodies. The surface of each worm supports three evenly spaced, body-length rows of tiny hair-like bristles that allow it to securely grip its host's tissues. There is no apparent mouth, though the anterior end of unimplanted worms has a deeply recessed indention lined with more of the bristle hairs. This aperture is misleading, however, as it dead ends and serves no purpose in the acquisition of nutrients.

Behavior: The vector for wraparounds has not been conclusively identified, but it is assumed that

the parasite is passed from one host to another via the ingestion of tissues infected with egg or larval-stage worms.

As the parasite grows in length, it coils repeatedly around its host's spinal column, drawing nutrients from the animal's body fluid by osmosis. When it reaches sexual maturity the worm embeds its posterior end into its anterior aperture, and the two ends of the coil quickly grow together, fusing the creature into a seamless helix. The worm then asexually produces thousands of tiny eggs that fill its own body structure, eventually killing it. Enzymes released at its death cause long protein chains in the worm's tissue structure to contract. Complete contraction can take several days, but as it occurs, the pressure the coil applies to the host's spinal column first causes severe pain, then nerve dysfunction, and eventually paralysis. It does not take long for Poseidon's hungry ecology to recycle an infected host that has reached the paralytic stage, presumably passing on the dead worm's eggs to any number of predators or scavengers.



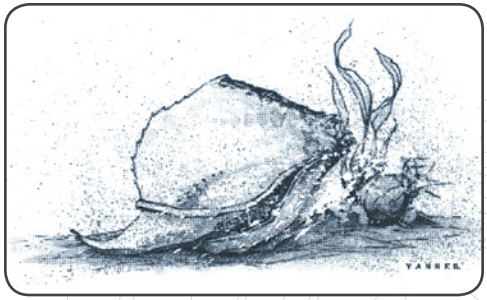
Wraparound infection in humans was much more common in the days of the Abandonment, but it still occasionally occurs today. Before the worm reaches sexual maturity, most anti-parasite drug treatments will kill the animal. After the worm has coiled, however, killing it will initiate contraction. At this point, only skilled surgery will prevent paralysis. Colonial records from the time of the Abandonment verify that wraparound paralysis, if left untreated for more than a few days, runs an increasing risk of becoming permanent.

Range: Temperate waters planetwide
Habitat: Parasitic infestation of pelagic fishes
Length: 35 to 40 centimeters
Weight: 22 to 27 grams
Frequency: Rare
Resource Value: None
Threat Level: Low
Attacks: None
Damage Rating: None
Movement: None
Physique: –2
Coordination: –4
Cognition: –8
Psyche: 0
Endurance: –1
Reflexes: –6
Toughness: –9
Armor: None

Xenosilicabenthoid

(*Peloris vergrandis*) Xenosilicabenthoids, or X-clams, are innocuous benthic invertebrates that, except for a single biochemical anomaly, are otherwise unremarkable. These small animals are best described as a cross between a gastropod and a bivalve. The organism has a two-part spherical shell hinged at the dorsal edge. Its body consists of a visceral mass and a snail-like muscular foot, the entirety of which can be sealed within the ball-shaped shell. The shell is whitish and the animal's body is brown with irregular black spots.

Behavior: X-clams live in some of the deepest parts of Poseidon's oceans where they drag themselves slowly through the mud, feeding on the vast bacterial mats that grow between the sediment layers. The animal's ecology is simple and uninteresting,



and the species would not have been included in this report if not for one biochemical oddity.

Range: To date only known from the deeper reaches of the Pacifica Archipelago

Habitat: Bacteria-rich, deep-ocean sediments

Length: 2 to 3 centimeters

Weight: 3.5 to 6.5 grams

Frequency: Rare

Resource Value: Unknown; the species may represent a key to more efficient xenosilicate prospecting or even synthetic manufacture

Threat Level: None

Attacks: None

Damage Rating: None

Movement: Negligible

Physique: 0

Coordination: –4

Cognition: –8

Psyche: 0

Endurance: 0

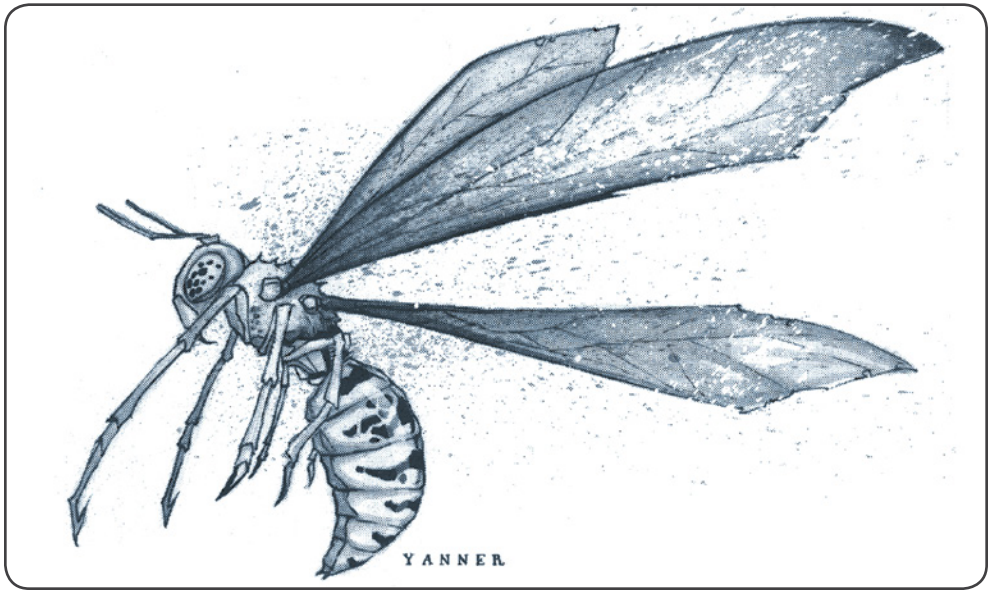
Reflexes: –6

Toughness: –10

Armor: 1

ZIPPER

(*Venerium corroboro*) Zippers are small wasp-like insect analogs. They are dull colored, long winged and rather unremarkable in appearance. They have a pair of long stingers on their forelimbs, and use these to inject potent venom. Zippers are found across the Zion Islands, as well as in the southern reaches of the Northwest Territories. A graduate student at HISTOS recently discovered that the shell of the invertebrate contains trace amounts of xenosilicate. At first the finding was suspect, but further study has verified that the species' shell invariably contains minute but measurable levels of Long John. This information has set off a frantic race in the mining sector to determine the relationship between the animal and the ore. Some suspect that the distribution of the clam may be indicative of productive Long John fields. Others are convinced that the animal may provide the key to manufacturing synthetic xenosilicate lattices. Regardless, all agree the animal represents a curious and potentially valuable biochemical mystery.



Behavior: The insects live in wooded areas, in colonies of less than one hundred individuals. They chew hive-like structures into the rotting wood of dead or dying trees, and raise their larvae on the bodies of other insectoids they chase down and envenom. Zippers are fast and agile fliers and their prey is hard pressed to escape.

Zippers are not typically a threat to humans, but they will attack if their hive is disturbed. Their stings are uniquely painful, but it is the effect of their toxin on human physiology that is truly remarkable. A single sting is sufficient to trigger a powerful endorphin rush in most humans. The venom from several stings acts like the designer drugs used by military personnel, giving the target a rush of energy and strength beyond their normal levels. Eight to ten stings, on the other hand, are typically sufficient to cause convulsions, cardiac arrest, and death.

The natives of these regions have been using zipper venom as a recreational drug since just after the Abandonment. Until recently, such utilization was considered an odd custom but innocent enough. Over the past year, the insect has become a popular draw at some nightclubs in Kingston, where the "natural high" of its sting is used to enhance the sensations of partying customers. Acute allergic reactions are suspected of causing a number of deaths, however, and even Kingston's notoriously lax law enforcement authorities are beginning to take notice of the problem.

Alternatively, reports have reached the GEO Office of Colonial Affairs that claim the Sierra Nueva insurgents have begun manufacturing effective combat drugs from the insect's venom. These reports remain mostly speculative, but suggest that extracts from the venom offer users the same benefits, and risks, as drugs such as reflex serum. Law enforcement and military personnel operating in the Sierra Nueva region are advised to keep this possibility in mind.

Range: Apparently restricted to the Zion Islands and the Northwest Territories

Habitat: Mature woodlands

Length: 2.5 centimeters

Weight: 1.5 grams

Frequency: Uncommon

Resource Value: Valued as a source of recreational drugs and possibly utilized in the manufacture of native combat drugs

Threat Level: Low

Attacks: Sting 2

Damage Rating: None

Poison: Neurotransmitter analog: Onset time 10 seconds, Duration 15 minutes per sting, Damage Rating 2 for up to five stings, 8 for more than five stings

Movement: Land 1/2, Air 4/12

Physique: 0

Coordination: 2

Cognition: –2

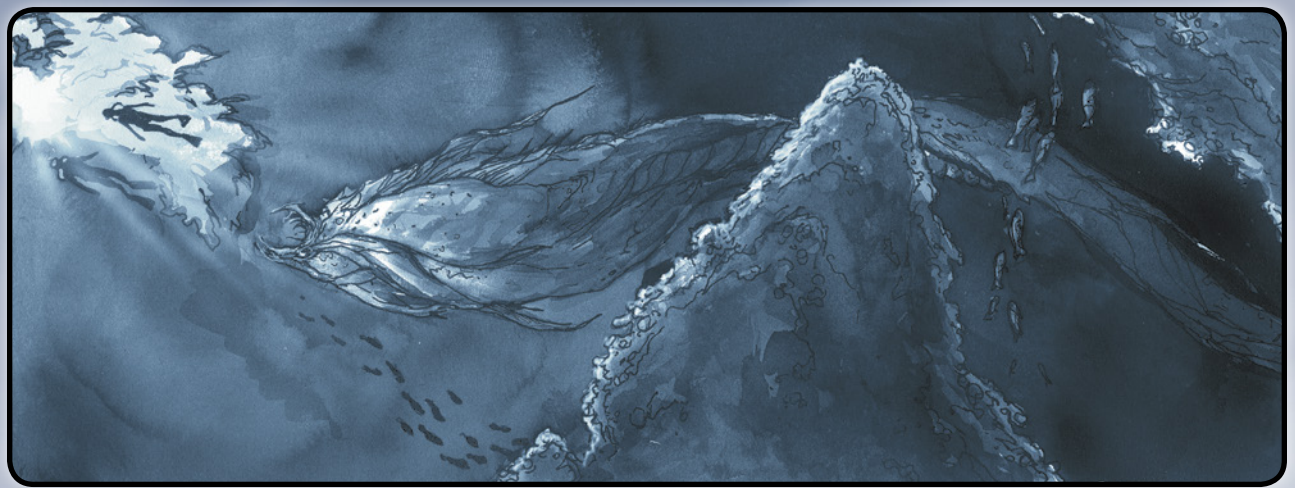
Psyche: –2

Endurance: –1

Reflexes: 0

Toughness: –10

Armor: None



CHAPTER 6: ALIEN LEGACY

THE ABORIGINES

Begin recording…

"The date is July 8, 2197, and the time is… 17:46. The following is a recorded transcript of a preliminary necropsy of a deceased organism, presumed to be a member of Poseidon's sentient species. Lacking an accepted taxonomic classification, the specimen will be referred to during this study as… an aborigine.

"It appears that the aborigine is mostly intact, and organic decay, though apparent, has yet to significantly damage tissues.

"The specimen is approximately… 273 centimeters in length and… 205 centimeters across the widest span of its fins. The subject weighs approximately 112.3 kilograms.

"There are numerous… ah… six, seven, eight… ten robust tentacles that extend from the posterior region of the specimen's ventral surface. These seem to vary in both diameter and length. Ah… three of the larger ones seem to have been lost, however… torn off, perhaps, or severed… perhaps as part of the injury that appears to have killed the specimen.

"This aborigine appears to be an adult…however, that is purely speculation based only on relative size and what little is known about the species. Gender is, at this point, indeterminate…perhaps internal observations will indicate sex. It is possible that like many of this planet's indigenous species, the aborigines have more than two genders. Again, this is speculative and perhaps unlikely, as this sexual multi-morphism tends to be restricted to Poseidon's smaller species.

"A few patchy regions on the epidermis indicate that the specimen was probably brightly colored. At the time of this record, however, most of the color has faded dramatically. Such post-mortem color change is characteristic of chromatophoric organisms. It is therefore indicated that aborigines are able to alter their apparent color.

"The overall morphology of the specimen is reminiscent of that of various manta species from Earth. The organism is bilaterally symmetrical with dorsal-ventral compression. A streamlined cranial and cervical region flares into flat, muscular wings and a shallow body. The epidermis appears smooth to the eye and is… soft to the touch. It seems, however, to be covered with a pattern of shallow convolutions. They run… longitudinally along the specimen's body. Their anatomical function is… ah… unknown.

"The cranium is small and characterized by deeper folds and ridges running along its surface. Many of the folds appear to be fin-like…perhaps these surfaces are used for subtle control while swimming. There are two rows of circular organs running the length of the animal's dorsal surface, starting at the crown of the head. Each organ appears to be subdivided and is therefore reminiscent of the compound eyes of Earth insects. There are eight per row, and they vary in diameter from approximately… 10 to… 20 centimeters. Given their size and morphology, recent speculation that these organs are photoreceptors may be inaccurate.

"External indication of other sensory receptors, such as auditory or olfactory, is lacking. Considering the sophisticated development of such organ systems in other species on Poseidon, however, it is highly unlikely that these are not also well developed in aborigines.

"The mouth is… is… the specimen… lacks any… obvious structure designed for ingestion. Perhaps it is hidden within the cranial folds and will be revealed during subsequent dissection. Without being able to classify the dentition, conclusions regarding associated dietary habits are impossible to make.

"As previously indicated, the ventral region supports numerous tentacle-like appendages. Their texture is… such as to indicate an anatomy of dense muscle and connective tissue. Several are subdivided distally into smaller tentacles… others end in hardened… notably sharp… claw-like structures.

"Though large… and no doubt powerful, anecdotal evidence that the larger of these limbs are used for locomotion on dry land is… highly improbable. Cursory exam indicates that the internal skeleton, if it exists at all, is too flexible and underdeveloped to support the body without the buoyancy of water. Such deficiency would preclude any amphibious behavior by the species.

"Cause of death appears to be traumatic injury. There is a large gash in the mid-dorsal region consistent with impact from a boat propeller… or perhaps a large tool such as an axe or… a machete. As pre-

viously noted, several tentacles have also been damaged or severed. Additionally, there are three small punctures in the right lateral region, consistent with… bullet entry wounds.

"Definitive conclusions concerning cause of death for this specimen, as well as anatomical, physiological, and behavioral aspects of aborigines in general, will only be possible through detailed dissection, histological exams, and biochemical analysis.

End recording…

Poseidon's indigenous aborigines represent one of the key plot elements and sources of mystery in BLUE PLANET. Their history, biology, and motivations are intimately related to the planet and the game's future storyline. To this end, the following information is vital both to a complete understanding of the game premise and to the ability of Game Masters to effectively include aborigines in their adventures.

Additionally, if players wish to maintain the elements of mystery and discovery in their BLUE PLANET experiences, **they are strongly advised not to read this particular section**, even if they have found the temptation of the rest of the *Game Master's Guide* too much to resist.

CREATOR LEGACY

Poseidon's aborigines are not the product of a long and adaptive evolutionary history. They are instead the technological legacy of an ancient and enigmatic civilization, a civilization that was traveling between stars when the Earth was young. Known to the aborigines as the Creators, their origin is shrouded in the depths of time and space, but their heritage survives on countless planets throughout countless systems.

Driven by an imperative to spread life throughout the galaxy, the Creators passed from system to system through holes they constructed in the very ether of space. Wherever and whenever they went, they transformed barren planets into primordial ecosystems, seeded oceans with genetic material, altered existing evolutionary pathways, and nurtured sparks of sentience. Empowered by an organic technology capable of manipulating the very building blocks of the universe, the Creators were able to harness the laws of nature to realize their collective will. This nanotechnology allowed them not only to seed life, but to design and construct it as well.

In their distant past, the Creators outgrew the confines and limitations of their own physical existence and began to build new bodies for themselves. They built organic, sentient, living machines in which they could explore the worlds they seeded, in which they could effect change in ecologies, and which they could leave behind as a living heritage and as loyal servants.

On Poseidon, as on many planets before and many since, the Creators left behind a species of artificial life as caretakers for the waterworld. Designing the aborigines into the planet's transformed ecology, the Creators have left them with a cultural imperative to maintain the planet's ecological balance, a balance that human colonization has begun to upset.

ABORIGINAL CULTURE

Though they appear technologically primitive, concluding that aborigines are unsophisticated is irrelevant and removed from context. The aborigines were genetically engineered to serve the Creators as sentient avatars in the terraforming of Poseidon. Subsequently, their physical form and culture were never subject to evolutionary pressures and the whims of natural selection. The species has been unchanged in physical form and cultural motivation for an eon. They are not primitive; they are instead perfectly adapted to their destiny.

To say that the aborigines have a culture—as humans define the term—is inappropriate. They do live by a set of societal rules, and they do have a heritage of experience that they pass to subsequent generations. However, most of these cultural directives are instinctual and coded behavioral aspects of their genetic makeup. As a culture, the aborigines are concerned with only one thing—the preservation of Poseidon's ecology.

Below the surface, the ocean is a stable environment. Temperature, salinity, dissolved gas content, even currents vary little in a given region. In such a stable environment, and because of a metabolism that obtains its requirements from the surrounding water, the aborigines need few artifacts, dwellings, or possessions. What synthetic materials, tools, and weapons the aborigines do require are supplied by the Creator nanotechnology they maintain in hidden caches around the planet.

Aboriginal settlements as such would be pointless, and aborigines move from region to region as

their tasks require. They do have favorite locations for basking or retreating from prying human eyes, but even these places are seasonal or temporary. If the aborigines can be said to have settlements of any kind, these would be the interconnected caves surrounding the few remaining Creator caches. Such cave systems are rarely identifiable as settlements as humans might understand them.

As a species, the aborigines may seem relatively reserved, alien and solitary. They are, however, so very different from humans that it is inaccurate to make such comparisons. These creatures are driven by their genetic imperatives and so appear controlled and without free will. As a species they share a racial community of the mind that is incomprehensible to humans. They have no need to be gregarious or competitive and therefore appear strangely uniform in their behavior.

Technology

The technology of the Creators is an organic one in which many machines, or components of machines, are actually biological constructs that could be classified as living systems. Though only a few possess sentience, many possess some level of encoded intelligence that supports their function.

At the core of the Creators' technological achievements is an organic nanotechnology, a command of molecular machines that can assemble and disassemble virtually anything, molecule by molecule, lattice by lattice, atom by atom. It is the awesome potential of such a technology that transformed the Creators into the galactic ancestors they have become, by providing them the means to build worlds and open holes in space.

The aborigines on Poseidon have access to caches of nanites and their associated support technology. The Creators left them with assemblers and disassemblers and the natural ability to control them. Microscopic systems, especially biological ones, are directed by the laws of physics, behaving according to the circumstances of their chemical environment. By giving the aborigines a complete and subtle control over the manufacture of organic molecules, the Creator race provided them with the perfect mechanism to control the activities of their nanite technology.

Though limitless control over such a powerful technology might have tempted humans into a disastrous future of overwhelming plenty, cultural decadence, and social decay, the aborigines have maintained their original pact with the Creators. The aborigines' empathic interrelationships create a sort of collective consciousness that has kept them diligent and focused. To date, the aborigines have used their access to nanotechnology only in keeping the wishes of the Creators. This may change as colonization continues and humans become a still greater threat to Poseidon's ecology.

The Long John

Ironically, the same xenosilicates that have motivated the modern colonial effort on Poseidon are actually integral components of the Creators' nanotechnology. In their various forms, the xenosilicates serve as structural templates for nanites, guiding their building activities.

The terraforming technology of the Creators depends heavily on these templates to catalyze chemical reactions and to maintain ecological cycles. The grade of xenosilicates that humans call Long John consists primarily of templates for the regulation of biochemical reactions and genetic sequencing. Though the Creator terraforming project has long since reached its self-sustaining climax stage, the aborigines are becoming anxious about the xenosilicate harvest and are concerned about the effect its removal may have on the continued ecological balance on Poseidon.

Anatomy and Physiology

Aborigines are perfectly adapted to their aquatic world, and show tremendous specializations for marine environments. Though aborigines show significant variation in size, coloration, and minor elements of body structure, they all share a basic anatomy and physiology.

Morphology and Locomotion

The cervical region flares into a wide and flattened body dominated by two thick and muscular wing-like fins. Though aborigines often appear languid and fluid as they swim, their strong fins make them remarkably fast and agile. The wing muscles are also used to generate the organism's potent electrical potential.

Aborigine tentacles are actually manipulative, distal extensions of a hydrostatic skeletal system. Throughout their bodies, aborigines possess a complex network of muscle-bound ducts that can intake and expel seawater through large ports in their skin. The organism has subtle control over these muscles and uses opposing contractions to create and maintain significant hydrostatic pressures within the system. This allows the species a tremendous level of control over its body shape and gives it extraordinary strength and flexibility.

Aborigines are not restricted to an entirely aquatic existence, but are actually amphibious, able to function quite effectively out of the water for short periods of time. By maintaining high pressures within their hydrostatic skeletons, the system provides them with enough support to move about without the support of water, with the largest of the tentacles serving as multiple legs.

Though aborigines on dry land tend to stay low to the ground and lay flat when not moving, they nevertheless remain quick and agile. Their tentacles and hydrostatic flexibility make them able climbers and allow them to move with ease through tight or confined spaces.

Nervous System

The nervous and circulatory systems of the species are completely integrated and consist of a network of fine tubules running throughout the body. The system is connected to pores in the organism's skin that open directly to the surrounding seawater. The seawater acts as a blood analog, and its organic content and electrolytes are essential to the species' physiology. The tubules are interconnected with multiple muscular organs that pump the water throughout the system.

Additionally, this open circulation makes the aborigines essentially immune to changes in pressure, and therefore the species is able to navigate even the deepest waters with impunity. The aborigine's considerable ability to manipulate its own biochemistry affords it a tremendous thermal tolerance as well.

Multiple vestibules or pockets within the circulatory system contain high concentrations of intricately arranged organic molecules. These organic threads serve as a mutable medium for the human equivalent of memory storage and cognitive processing. These nervous sacs vary in size and are dispersed throughout the animal's body. Though each has a primary function, such as physical coordination or memory, they are capable of shared neural responsibilities in the case of acute demands or serious injury.

Throughout the species' body there are other open pockets in the circulatory system encased in glandular tissue. These organ sacs carry out functions similar to specific organs found in terrestrial animals. The pockets are redundant in function, giving the species a robust, hardy physiology that is difficult to compromise. In addition, these versatile glands are key to the aborigine's ability to create and manipulate the vast array of organic chemicals with which they communicate and control their nanites.

Senses

Like the arrays of complex eyespots found on most of Poseidon's animals, the aborigines have two rows of multiple organs running down both their dorsal and ventral surfaces. These organs are differentially sensitive to various electromagnetic radiation, and even the anterior sets are able to clearly focus visible light.

Numerous small, circular patches of membrane, spaced evenly across the species' body, pass vibrations to special nerve sacs beneath them. These structures provide the organism with an extremely acute and directionally accurate sense of hearing.

Metabolism

Aborigines do not actually ingest nutrients by consuming other lifeforms as do other animals. In fact they do not even have mouths. Most of the surface tissues covering these creatures contain pigment molecules, similar to chlorophyll, that are used to convert sunlight into energy-rich compounds. This

process meets the majority of the aborigines' metabolic needs, and it is during their requisite basking naps that most chance human-aborigine encounters take place. Additional nutrients are absorbed directly from the seawater through tissues lining their internal vascular system.

Electrochemical Abilities

Aborigines are able to generate powerful electrical fields as a metabolic side effect of muscle activity, much like some terrestrial fishes. They also have the ability to sense fluctuation in their own fields as well as the presence and form of the fields generated by other objects. The field and the species' sensitivity to it makes an excellent navigational aid in dark or murky waters. Defensively, the electrical discharge is formidable as it can be released in a powerful, stunning jolt.

Subtle manipulation of their fields also allows aborigines to communicate with each other. By altering their fields in characteristic ways, aborigines can communicate general concepts and intent to each other, but they cannot exchange detailed information. Detailed communication is accomplished through the use of organic chemicals manufactured by the glandular tissues within the organism's circulatory system. In effect, aborigines "taste" the thoughts and ideas of their fellows using the hypersensitive chemical receptors covering the folds on their heads. It is an intimate and subtle means of communication that gives aborigines a complete and empathic comprehension of each other's thoughts.

These glandular tissues process and release a stunning array of complex organic molecules. The chemicals are used to communicate with, heal, poison, and even influence the mental activity of other organisms. The majority of these chemicals act as analogs for any number of genetic patterns, enzymes, or hormonal structures. As a result there is hardly a species on Poseidon that is not at least partly subject to chemical control and manipulation by aborigines. It is the great dependence of humans on cognitive thought that makes them uniquely vulnerable to these psychoactive chemicals.

Simply put, mental processes in the human brain are determined by patterns of neural activity. Neural activity is simply the movement of electrical impulses along interconnected nerve cells, as controlled by the chemical environment of the cells. Therefore, if the chemical environment of the human brain can be controlled, so can its neural activity and subsequent mental processes. The aborigines, with their exceptional control over chemical synthesis, are therefore able to completely manipulate the thoughts, feelings, and behavior of other animal species. They are actually able to exercise a form of chemical empathy powerful enough to manipulate human thought and behavior.

Reproduction

Because aborigines are a manufactured species, they do not require sexual dimorphism to promote evolutionary adaptability. Aborigines are essentially a collection of interdependent castes, distinguished by division of labor, much like some species of terrestrial insects. Reproduction is a technical process in which members of the breeder caste literally construct new individuals as needed, basing their form on preexisting design parameters, but customizing them as required.

Using xenosilicate reproductive templates stored in breeding crèches, new aborigines are assembled molecule by molecule over a period of only a few days. The nanite builders that construct them draw the raw materials the breeders require from the organic and inorganic components of the surrounding seawater. Once the new aborigine is complete, its neural sacs are filled with copies of the breeders' molecular memories and within hours it gains the collective knowledge, experience, and abilities of all of the aborigines that have come before.

ABORIGINE CASTES

Though all aborigines share basic characteristics of anatomy and physiology, there is notable variation in size, coloration, and minor aspects of morphology between individuals. These variations define certain aboriginal groups or castes, and as with some terrestrial insects, they represent natural divisions of labor.

Breeders

Breeders are the most rare form of aborigine, as there are currently fewer than a hundred scattered about the planet. These creatures reside almost exclusively in isolated island clusters, where the water is shallow, warm, and nutrient rich. Their sole purpose is

to construct new aborigines either to replace those lost to accidents or to fulfill specialized tasks. Until Recontact, breeders were seldom active, as Creator technology makes aborigines essentially immortal, and fatal accidents are rare. Only with the increase in violent confrontations with humans, and the growing need for specialist forms to deal with this threat, have the breeders become fully active.

Breeder morphology is almost as unique as that of some specialists. They are three or four times the size of the largest members of the protector caste, with long, corpulent bodies. They have reduced fins and are sluggish swimmers as a result. They have longer but fewer tentacles, which they use primarily to drag themselves about the nursery crèche and secure themselves against the current.

Breeders' bulbous bodies contain up to six large, hollow pockets lined with specialized glandular and nerve tissues. These tissues serve as the interface with the assembler nanites that build the new aborigines. The nascent creatures grow within these pockets, the raw materials for their construction coming from stores the breeder has collected within its own body.

Attacks: Shock 8, Claw or Grapple 4
Damage Rating: Electrical Shock 8
Movement: Land 1, Water 3
Physique: 6
Coordination: –3
Cognition: 5
Psyche: 4
Endurance: 7
Reflexes: 1
Toughness: 5
Armor: None

Technicians

Technicians are the smallest of the aborigines but are currently the most abundant. They are agile swimmers with small but dextrous tentacles and hypersensitive electrochemical senses. They are responsible for the maintenance of the Creators' ongoing terraforming effort, as well as their few remaining caches and facilities. Technicians are the caste most often encountered by humans, as they roam about the oceans searching out malfunctions, attending to maintenance or construction projects, and addressing rare terraforming concerns.

Technician morphology facilitates their ability to crawl about within the confines of a cache or the workings of a large machine, and their numerous small, bifurcated tentacles surpass human hands in dexterity. Technicians have more robust control over nanotechnology than the other castes, using the tiny machines in almost everything they do. Typically technicians carry their own attendant swarms of nanites, which, when inactive, cling invisibly to the surfaces of their bodies. This allows them access to the versatile power of nanotech whenever needed.

Attacks: Shock 8, Claw or Grapple 6
Damage Rating: Electrical Shock 5
Movement: Land 3, Water 12
Physique: 4
Coordination: 3
Cognition: 6
Psyche : 4
Endurance: 6
Reflexes: 4
Toughness: 2
Armor: None

Specialists

There are sometimes rare tasks for which none of the primary castes are well suited, especially now that the aborigines have to deal with human encroachment. When such tasks arise, new, specialized individuals are usually constructed. Breeders are able to grow new aborigines in an endless array of sizes and morphologies, with equally diverse features and

capabilities. They are able to create specialist forms for any unique or enigmatic purpose.

Typically grown in small numbers, these creatures form a loose caste of their own, even though their bodies, and their ultimate tasks, vary greatly. Examples of specialists include assistants for breeders and technicians, forms to survey terrestrial environments, and even observers sent to spy on human activities.

Herders

Another caste commonly encountered by humans are the herders. They are no longer numerous, but because they are typically found in the company of large animal herds, they frequently cross paths with human fisherman and hunting cetaceans. Now that the Creators' terraforming effort has reached an essentially self-sustaining stage, herders are less active than they once were. Herders are responsible for gross management of organism populations. They monitor and manipulate population dynamics, migration patterns, interspecies ecology, and disease vectors. In the past they established mangrove forests, kelp beds, and even coral reef systems, but now are beginning to respond in force to human impacts.

Herders are larger than technicians as well as most specialists, but smaller than both protectors and breeders. They are the fastest swimmers and are more streamlined than the other castes, with larger wings and shorter tentacles. They also secrete a wider variety of the pheromones and similar compounds used specifically in the control and genetic manipulation of Poseidon's myriad species.

Attacks: Shock 8, Claw or Grapple 6
Damage Rating: Electrical Shock 5
Movement: Land 5, Water 15
Physique: 4
Coordination: 1
Cognition: 5
Psyche: 5
Endurance: 6
Reflexes: 3
Toughness: 3
Armor: None

Protectors

Protectors have always been few in number and have spent most of the terraforming protecting technicians and breeders from errant predators. With the growing human threat however, the role of the protector caste is becoming more important, and the collective aboriginal consciousness is considering increasing the population.

Protectors are the second largest form of aborigines, but unlike the massive breeders, they are thickly muscled, lightning quick, and extremely strong. They are powerful swimmers, and have massive tentacles, many of which are tipped with sharp talons and spikes. Protectors are able to produce numerous noxious agents with a variety of deterrent and toxic effects, and their ability to generate defensive electrical discharges is formidable—and potentially lethal to humans.

Attacks: Shock 8, Claw or Grapple 7
Damage Rating: Electrical Shock 7
Poison: Various lethal and non-lethal toxins: Onset Time 10 seconds, Duration 72 hours, Damage Rating 8
Movement: Land 3, Water 12
Physique: 6
Coordination: 2
Cognition: 4
Psyche: 4
Endurance: 7
Reflexes: 3
Toughness: 5
Armor: None

Aborigines and the Human Invasion

Originally, when the first colonists arrived, they were so few in number and so benign in behavior that aborigines simply incorporated them into Poseidon's living system. Later, after Recontact, when humans began to settle the planet in force and industry began to take hold, that changed.

Humanity now poses a real threat to the integrity of Poseidon's ecology, and the aborigines are beginning to respond more often—and more effectively—in their efforts to protect the planet. Perhaps inevitably, the aborigines have discovered allies among those native extremists opposed to the reopening of Poseidon.

Acting to protect their world, the aborigines have used their chemoempathic abilities to first make contact with isolated groups of humans and subsequently build effective alliances with them. The aborigines are secretive and reluctant to form any

unnecessary bonds. However, to build these alliances, the aborigines have created significant and powerful relationships with some native groups. In some cases, their intimate chemical influence has so profoundly affected the collective sentiments of some groups as to make them appear radical and hostile extremists.

In other cases, empathic control has turned the populations of whole villages into defensive, reclusive paranoids bent fully to aboriginal will. The aborigines are not prone to the wasteful use of resources and should not be considered needlessly aggressive. Their imperatives, however, can make their actions appear ruthless, and they are brutal when need arises. In such cases of mass coercion, complete control was required to prevent the spread of information about aboriginal activities or Creator artifacts and hidden caches.

It is clear that the aborigines have recognized that the human invasion of Poseidon is no longer something they can mitigate or contain. They have realized that unless they take action, they may fail to uphold the Creators' imperative. They have therefore begun to make plans for a more aggressive resistance. There is currently only one thing preventing them from using their command of the Creators' nanotechnology to literally erase the touch of humanity from the surface of Poseidon. They are confused and frightened that humans could be so destructive, since it is clear that humans themselves were once touched by the Creators.

CREATOR CACHES

Though the Creators' terraforming efforts on Poseidon have long since reached the climax stage, signs of their one-time presence can still be found in the depths of the planet's oceans. Though the aborigines have disassembled the majority of the Creators' original facilities, a few operational compounds and caches still exist scattered about the waterworld.

Most of these function as simple storage depots, caches where ancient machines, devices, and raw materials are stored against some future need. Others are factories where pools of inactive nanites sit, waiting patiently for instructions that may never come. Still others contain semi-sentient drones, living machines constructed for one enigmatic purpose or another, lying dormant, awaiting further duty.

The majority of the lost caches are on the deep-ocean floor, hidden in artificial cave systems or at the bottoms of narrow trenches, well protected from the weather or rampaging predators. Luckily for the aborigines, this also means that most are safe from curious humans as well. There are some, however, like the Creator shipyards in the Drakensberg Mountains, that are on dry land. Though most are underground, a few remain covered only by desert dunes or thick jungle and await accidental discovery.

Most creator caches are large cave systems excavated from the bedrock by hordes of nanite disassemblers. Most sites are small and warren-like, often with no apparent logic to their layout. Others are vast, open caverns with massive passages and intricate buttresses holding up impossibly high roofs. Others consist of hundreds of identical cells or small rooms, and some are simply huge, deep and empty pits whose origins are obviously unnatural.

A few caches are true structures instead of artificial caverns. Most of these were constructed by controlling the growth of Poseidon's coral-like animals. These creatures where manipulated to create towers, spires, domes, bubbles, and huge, amorphous halls. The structures were also often melded together into bizarre collages of form whose natural-seeming appearance is, nonetheless, unnaturally eerie.

The entrances to most cache structures are typically small, serpentine tunnels with hidden openings, baffled against the currents. Some are large enough to pass oversize machines and large equipment. Still others have actual doors, valves, or hatches of one design or another that seal the chambers inside against the elements and sometimes even water.

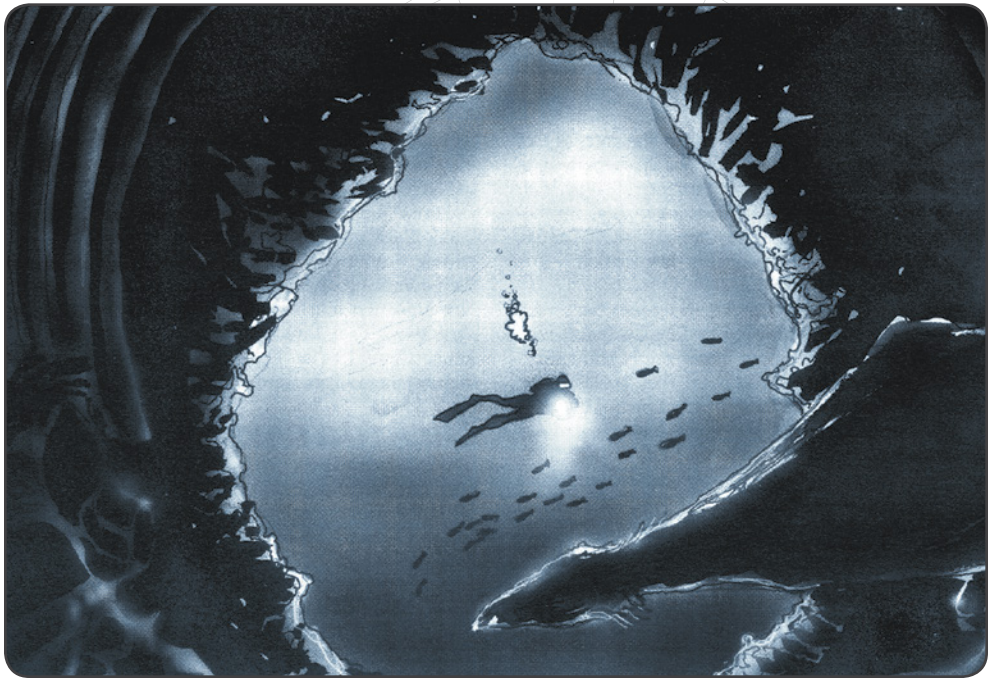
Most of the Creators' submerged facilities were water filled, or at least they are now. A rare few, however, were apparently air filled, and remain so today. Airlocks of structural nanites keep the interiors airtight, even after so long. These facilities were important for the construction and storage of equipment or biotic machines intended for terrestrial or orbital environments.

The most common form of hatch in a Creator facility is a thick assemblage of structural nanites, microscopic, ambulatory scaffolds that link together to form air- and waterproof barriers a meter or more thick. Millions of the tiny robots are programmed to fill in any open space, linking up to seal the passage. When an object or creature presses up against the hatch, the nanites appear to flow around the intruding object as they unlink, sealing against the passing form. Such passage is almost without sensation and remains essentially watertight as the nanites ooze back into place as the object moves. Such doors can be electrochemically locked by coding the nanites to unlink only when given the appropriate electrical or chemical key. Such doors are also so malleable in color and texture they can be indistinguishable from the surrounding structure.

Artificial lighting is uncommon in Creator facilities, equipped as the aborigines are with alternative senses. Some caches, however, do possess lighting systems. The primary systems are large banks of chemical-filled pods that often line ceilings, walls, and floors with equal frequency. The pods contain compounds that luminescence when exposed to the specific enzymes, and give of a soft greenish light similar to the glow of some terrestrial insects and plankton.

The nanites programmed to initiate the reactions within the pods can be programmed to activate at the detection of various stimuli, such as electrical signals or nearby motion. Additionally, because of their organic nature, lighting pods require more frequent maintenance than most Creator facility systems. As a result, they are often nonfunctional in caches that are infrequently visited by the aborigine technicians.

Throughout most flooded underwater Creator caches, there are currents of varying strength flow-



ing along the passageways. These currents are typically a design feature of the facility and used as a form of transport system within the structure. Not only do they facilitate the movement of the aborigines themselves, but they also carry much of the dissolved raw materials the nanites utilize. The nanite swarms themselves use the flowing water as transport about the facilities as well. These currents are usually propagated by harnessing the natural currents outside the facility. When this is not practical, they are generated by organic pump systems that draw water through the cache.

POWER SOURCES

Though the Creators were masters of the highest technologies, they were still bound by the laws of physics. Even their awesome machines and biomechanical devices needed power to function, and they needed lots of it. The Creators were practical, however, and efficiently tapped a variety of local power sources to operate their facilities.

Terrestrial and shallow-water facilities were typically solar powered, equipped with efficient collection arrays. Geothermal taps sunk into the hot rock of the planet's lower mantle often powered deep-water installations. Still others were run by small and efficient fusion reactors. Some low-power needs were met by bio-reactors, organic batteries that generated energy via metabolic processes. A few caches were also run on power broadcast from orbital reactors and solar collectors or by other, more exotic energy sources.

CREATOR FACILITIES

When the Creators first began terraforming Poseidon, their facilities were everywhere, and their structures were as varied as their locations and functions. As the terraforming effort became more self-sustaining, many such structures, machines, and facilities became obsolete and were disassembled. Now, only a tiny fraction of the Creator's original infrastructure remains and is scattered about the planet. Of this, only a few sites are frequently used or maintained by the aborigines.

MACHINE FARM

These facilities are typically large, open caverns strategically located in mineral beds rich in key raw materials. The caverns are formed and expanded as nanite disassemblers break down the surrounding rock, feeding it into reservoirs from which assemblers take what they need. The end result is that such cave factories are irregular and fluid in their contours, with countless side passages that wind along important mineral veins and then taper to abrupt ends. Hardened pools of various raw materials dot the floors, some appearing to have trickled in various directions as nanite delivery drones stopped in mid-transit as they were carrying materials to various assembly sites.

In some farms, seemingly scattered at random, there are half finished machines, devices, and other partially assembled equipment growing from the floors, walls, and even the cavern ceilings. These products appear to have simply formed from the living rock as the nanite assemblers stacked atom on atom. Most are only just taking form, or are only half built, but a few devices seem almost complete—or even operational. The nature of the abandoned construction hints at a technology and an antiquity that are frightening.

STORAGE CACHE

These sites are the most structurally variable, often designed to hold specific equipment or just individual devices. Storage caches are found planet wide, on dry land and in the deep ocean. Most are simple structures meant to keep out the elements and troublesome flora or fauna. Others are large hangar-like places big enough to house starships. Some are unused and empty, while others contain only bits and pieces and ancient scrap. Many remain active, used frequently by the aborigines, and some are filled with an array of devices, put away against future need. With the human invasion, activity at such stashes has increased as a result of the growing need for the stores they contain.

TEMPLATE LIBRARY

Xenosilicates are an integral part of Creator technology, serving as templates and frameworks for controlling nanite assemblers. Almost every machine or

biomechanical device made by the Creators contains its own structural blueprints in the form of xenosilicate lattices. Like DNA controls the metabolism of living cells by regulating protein production, these lattices are templates that control nanites during the growth and function of the device in which they are contained. A few small caches scattered about the planet serve as libraries where xenosilicate templates of countless Creator devices are archived. Such caches are relatively small and contain rank upon rank of resin-like storage pods in which individual template lattices are housed. Such facilities are often associated with machine farms, but a few are inexplicably isolated. Though the raw Long John ore that comprises a library's inventory is worth several fortunes, the information housed in even a few of the templates would be priceless.

Hibernation Dormitory

As the Creator's terraforming efforts on Poseidon became self-sustaining, they no longer needed their vast army of biomechanical drones. Most were disassembled, but many were placed in large hibernation facilities, were organic baths and swarms of nanites would maintain them indefinitely against future need. These dormitories contain thousands of drones ranging from tiny, non-sentient remotes to early and prototype aborigine designs. These facilities vary in size but are structurally similar. They typically consist of a submerged maze of tube-like tunnels, bored through the living bedrock and lined with cells of various sizes. Each cell is filled with a fluid support medium and attendant nanites, and is sealed from the water outside by a thin, translucent hatch grown from the surrounding rock. These caches are dark and still places, and the endless rows of cells, with their ancient, dormant occupants lends them an eerie aspect.

Research Sites

In their attempt to better understand humanity, the aborigines have begun to study human culture and technology. To facilitate this, and to hide their activities from detection, the aborigines have built a number of specialized research facilities around the planet. Most commonly these sites are built to hide the collections of human artifacts—whole vessels, large pieces of equipment, or even entire structures the aborigines have recovered. The facilities house the specimens, as well as the technologies the aborigines use to study them, protecting them from the elements and curious humans.

Such facilities vary widely in structure and size, depending upon the subject of study. Some are large and hangar-like, while others are only small caves. Regardless, nanites of all types are in abundance, and often a variety of attendant biodrones have been reanimated to assist in the research. Though most of these facilities are underwater, they are airtight to better protect the human technology contained therein, and therefore access is often problematic.

Since a primary function of such sites is to hide the aborigines' activities from prying eyes, most research caches are also well camouflaged. If they are underground, the entrances are well hidden, and if they have been built above ground, they are typically covered with layers of nanite-built stone or artificially induced marine growths.

Creator Technology

Most of the facilities, machines, and equipment the Creators' once built on Poseidon have long since been disassembled and returned to the elements from which they were made. What remains are those few places and things that were either forgotten or that the aborigines still find useful. In their daily efforts, the aborigines need few tools. Most of their tasks are accomplished through their sophisticated chemical manipulation or the creative use of small nanite swarms. There are, however, some devices and equipment that were relatively common and that remain in use or lie waiting in some undiscovered cache.

Nanites

At the heart of Creator technology are the **nanites**. These tiny machines are capable of autonomously assembling any structure from raw elemental materials. Creator nanites come in a endless array of forms, each designed for a simple, specific task. They are variously powered by thermal, solar, or chemical energy, and operate in swarms programmed chemically or by xenosilicate templates. They provide a limitless industrial base that has the power and versatility to build anything from slime molds to starships, the inanimate to the living. It is the power of nanotechnology that gave the Creators the stars, and

will allow the aborigines to end the human colonial effort should they decide it is necessary in maintaining the Creators' directives.

Assemblers/Disassemblers

The simplest nanites are assemblers and disassemblers. These machines are not much larger than the molecules they manipulate and are the basis for all nanite function. Assemblers and disassemblers respectively catalyze molecular bonding and unbonding, allowing them to build anything from anything. Disassemblers can deconstruct any object or other source matter to pirate raw materials, separating and isolating the different elements and molecules as they do so. Assemblers can then re-form these elements into any new structure dictated by their programming. Assuming a sufficient supply of the appropriate elements, assemblers can build any object, of any size and degree of complexity, including actual living organisms.

Nanite Swarm

Most nanites function in large integrated swarms consisting of millions of individual machines. Some are assemblers, some are disassemblers, while others serve as programmers, molecular scaffolding, or transport. Still others are modular and serve a variety of functions as they are momentarily included in temporary structures or short-term tasks.

Swarms are typically found in creator caches, most commonly machine farms and template libraries. Such swarms vary in size, lying dormant, forming small pools, floating clusters, or invisible dustings scattered about the facility. Smaller swarms often attend the technician and breeder aborigine castes, clinging tightly to the animal's surface when inactive. These swarms are diverse in composition and serve a variety of functions in the execution of each caste's tasks.

Nanite Rod

A rod is a compacted swarm of nanites that have temporarily interlocked their individual structures to form a solid object. Though typically such assemblages form slim cylinders or batons, rods can vary in shape and size. Rods allow large concentrations of nanites to be conveniently transported through a variety of media. They also allow for quick programming and rapid local deployment.

Biomechanical Drone

In their time on Poseidon, the Creators used a vast array of biomechanical drones to carry out their plans. Many of these were simple organic automatons that executed tedious or exacting tasks. Others were nothing more than shells into which the Creators could place themselves to more efficiently participate in the terraforming effort. Others were semi-sentient machines and could carry out complex instructions, acting with a high degree of autonomy. A rare few, like the aborigines, were truly sentient and could be considered a species unto themselves.

Despite the variety in design and function, Creator drones typically share a number of structural and functional similarities. Most designs are living organisms, and though certain models have mechanical or electronic components, they depend on a robust physiology for power, control, and action. The sensory array of most drones is broad and acute, allowing them to perceive radiation, vibrations, and chemicals of all types. Most are ambulatory and are able to walk, run, or swim, and in some cases even fly. They are quick and agile, and their strength is disproportionate to their size when compared to natural animals. Most are capable of manipulating objects with grippers, tentacles, spikes, feelers, and an array of arm and hand-like appendages. Many forms are also able to control the function of the nanite swarms that assist them in their assigned tasks.

Drones typically maintain their metabolism through some combination of photosynthesis, chemosynthesis, and ingestion. Those forms that have high metabolic demands consume a nutritive compound constructed by specialist nanites from whatever local organic raw materials may be available. This compound efficiently provides all the energy and nutrients needed by most designs, and pools or troughs of the substance are common in active cache sites.

There were once almost as many forms of drones as there were tasks for them to do, and though most have long since been disassembled, the libraries contain templates for each and every one, and the aborigines could reconstruct any of them should the need arise.

Memory Ring

These information storage devices are still commonly used by aborigines and are a key element in the maintenance and transfer of their shared memories. The active aborigine population is not large, and it

is common for individual groups to go for long periods without direct interaction. A consequence of this is that passing memories from one group to another becomes problematic. To help mitigate this, and keep their shared memories up to date, the aborigines depend on memory rings.

Rings are uniform in design and function. They are black and metallic with an oily sheen to their appearance. They are approximately 20 centimeters in diameter, with a four-centimeter cross section. The aborigines' electrical fields power the rings, and each one contains a small swarm of specialized nanites. Though rings can broadcast some of their stored information visually or by sound, they are most useful when they store and output their data chemically.

Aborigines sharing memories directly do so via complex chemical threads that they exchange and are able to read as their own memories. The nanite swarm dedicated to a memory ring can capture, store, and indefinitely maintain the memory threads produced by an aborigine. Subsequently, when another aborigine accesses the ring, they can recover and copy the stored memory threads, gaining any information, insights, or experiences stored therein.

Repair Bath

Repair baths are most common in certain Creator facilities, particularly in the breeder crèches, the template libraries, and the hibernation dormitories. Such devices typically consist of large tubs or small chambers that contain thick nutrient soup, attendant swarms of assemblers, and ready supplies of raw materials. Baths can be used to build complete drones from only their constituent components, or they can be used to repair or modify existing drones.

Though mostly inactive now, baths were once in constant use, producing biomechnical devices of all kinds. Now, the aborigines use them to repair themselves, modify their individual capabilities, and build new drones. They are also becoming increasingly important in experiments and projects featuring new drone designs intended to study and deal with the human invasion.

Raw Materials Depot

Most common in machine farms, materials depots can be found in any Creator cache. A depot is simply a collection of raw elements harvested from surrounding sources such as seawater or mineral veins. Disassemblers harvest the elements and transporters gather them into concentrated masses of pure atoms or molecules. The solids form puddles, pools, and amorphous piles, frozen in place, awaiting future use. Liquids and liquefied gases are stored in pods and chambers of varying size, typically under high pressure, sealed tight behind diamond lattice hatches.

In places where harvest activity is still going on, or was interrupted, the depots often have a riverine appearance, as armies of transport nanites form streams and trickles of raw elements that appear to ooze out of the surrounding matrix. The small trickles flow into meandering creeks that in turn flow into small deltas that then pour into the depot's main storage ponds.

Smart Tool

Smart tools are another device still commonly used by the aborigines. Smart tools are collections of complex, preprogrammed structural nanites. These nanites function by rearranging and then interlocking their individual structures to form a limitless array of useful tool shapes. Transformation is quick and fluid and is accomplished with specific electrical or chemical signals from the user. The variety of active shapes is endless, and new forms can be easily programmed into each tool with simple chemical instructions. Typical forms include blades, pry bars, lines, nets, clamps, hooks, spears, wrenches, hammers, and other simple hand tools.

Terraforming Reactor

Ecological reactors were a dominant feature of the Creators' terraforming effort on Poseidon and were once found everywhere on the planet. Each reactor was a sort of self-contained, self-monitoring, self-regulating factory that used its programming and vast swarms of nanites to establish and alter local ecology. Reactors were used to modify hydrologic, geologic, and nutrient cycles, to create or improve soils, and to scrub the atmosphere of some gasses while adding others. Reactors regulated plant and animal populations and intervened to stabilize young, fluctuating ecosystems. The current form of Poseidon's biosphere is the direct legacy of these reactors, and some still serve as ecological buffers even today.

Most reactors consisted of huge nanite swarms, a programming core, and an interlinked network of xenosilicate templates, regulators, and instructional nodes. Each reactor network was often spread over

hundreds—and in some cases thousands—of square kilometers, and served as an integration and control system for the billions of nanites assigned to it. As the planet's ecosystem evolved, the direct intervention of the reactors became less common and many were disassembled. Those built in the lower crust or deep underwater were often ignored, and it is the remnants of these reactors that supply the xenosilicate driving the human Long John rush.

Xenosilicate Template

Xenosilicates are the ubiquitous storage and control media for Creator technology. Data of all kinds can be stored in their structure, and nanites of all types depend on xenosilicate templates to carry out their tasks. Nanites are typically not large enough to carry onboard programming or instructions. To function, nanites must receive constant instruction. Xenosilicate templates provide this instruction in the form of a chemical code, analogous to the DNA in living cells. As DNA controls the function of cells, xenosilicates regulate the function of nanite swarms.

Templates are most common in template libraries and machine farms, but can be found in any Creator cache. They vary in size and shape, but most are small, amorphous, and pebble-like. Templates are also a key component of the Creators' terraforming reactors and make up much of the Long John harvested by human miners. Templates serve to guide construction, function, and maintenance of all Creator technology, and are now being used to store nanite construction plans for captured human technology.

Aborigines of the Pacifica Archipelago

Nowhere on Poseidon has the ecological impact of human colonization been as great as in the Pacifica Archipelago, and the aborigines there have borne the brunt of the assault. Their primal imperative to maintain the Creators' work has forced them to take action in response to this threat. Though the aborigines ultimately live with a unified consciousness, the local populations are responsible for carrying out the specific parts of the greater plan. As a result, the nature of the response to the human invasion of the archipelago varies dramatically by region.

Haven Cluster

Krakens

When the Creators entrusted Poseidon to the care of the aborigines, they left nanites and support technology secreted in caches at several locations around the planet. One such cache is located in the canyonlands known as the Wall, hidden deep within the tumbledowns. Here, local aborigines have used the cache to create their own answer to humanity's super soldiers.

The aborigines designed their soldiers with the sole genetic purpose of meeting humans in hostile situations, in human environments, and on human terms. Accordingly, the aborigines used the human genome as a basic template and then added their own specific touches. The resulting organism is an amphibious biped whose size, strength, and speed complement its predatory instincts. The creature is well over two meters in height, with powerful limbs and a lizard-like head. Its hands are huge and taloned, but can readily make use of human technology. A powerful iguana-like tail makes it a strong swimmer, its skin is phototropic, and its body gives off little heat. It also has the sensory awareness and organ redundancy of its aborigine creators, making it very hard to surprise and even harder to kill.

These creatures are not truly sentient and are most accurately thought of as sophisticated, biomechanical drones. They can execute complex instructions, and aboriginal tenders can control them chemoempathically in real time. Beyond this, however, the animals function on little more than raw, preprogrammed instinct.

Three prototype soldier drones were recently unleashed to discourage Long John mining within the Wall. Kraken, the GenDiver mining facility located there, suffered a three-month reign of terror during which the organic killing machines accounted for the loss of more than 40 workers. After the attacks, GenDiver pulled out of Kraken and turned the facility over to an independent mining collective.

The prototypes have proven even more effective predators than the aborigines anticipated. Something has gone terribly awry with one of the original trio and it has failed to return to the Creator cache. This rogue drone remains secretive and hidden from its aborigine masters and continues to plague the independent miners who have taken over the Kraken facility. To date the creatures have been deployed only in this single action. In the future, however, the aborigines may be forced to release their sea monsters on other, more strategic—and more populated—targets.

Soldier Drone

Length: 2.0 to 2.5 meters
Weight: 200 to 250 kilograms
Attacks: Claw (2 per round) 7, Grapple 8
Damage Rating: 7, 8
Movement: Land 8/16, Water 5
Physique: 4
Coordination: 2
Cognition: 1
Psyche: 4
Endurance: 5
Reflexes: 1
Toughness: 3
Armor: 2

Keepsake

Within the last year, a small fishing village appeared on the shores of a coral atoll known as Fable Island. The village, Keepsake, was not built by natives, independent colonists, an Incorporate state, or even the GEO. Aborigines founded Keepsake.

In order to study human behavior, the aborigines used Creator nanotechnology to design physiologically perfect synthetic copies of *Homo sapiens*. More than 50 "golems," programmed to live as humans, built and now maintain the village of Keepsake. Implanted neural pathways give the golems memories of pasts they never experienced and relationships with people they never knew. None of the golems has any suspicion that they are part of an experiment and not truly human.

To all appearances, Keepsake is like any of the countless small native fishing villages on islands throughout the archipelago. Waves lap against a series of simple wooden docks. Wooden spits hang suspended over a central fire pit. Modest thatched dwellings are strewn in a semicircle around the fire. A small wooden pen is home to a few iguanas and pot-bellied pigs. Carts and barrows rest propped against storage sheds. Closer inspection reveals that things are not quite as they seem. No boats moor at the slips along the docks. No beaten paths lead from the docks to the village. The central fire pit shows no sign of use, no trace of ash or coals. The homes are well constructed and built in the multilevel architectural style common to native villages, but no windows or open porches admit the ocean breezes. Adults tend to chores around the village, but no children play among the dwellings or on the beaches, and no elders rest in the shade sharing stories.

A new arrival's first impression of the people of Keepsake would likely be that they are much like any other native community in the archipelago. After further experience with the villagers, however, subtle clues may reveal that something is not quite right. While they appear to be robust, near-perfect physical specimens, the villagers lack the racial diversity common to many native settlements. They also seem uncertain about their social roles. Sexual relations often occur by impulse, without regard for traditional cultural values. There are no political leaders, though some of the golems are learning to dominate others through strength and fear. Moreover, no property relations exist, as villagers take and use whatever they want, whenever they want.

As one becomes better acquainted with individual villagers, he may notice disturbing gaps and inconsistencies in their memories. While the people of Keepsake know any number of facts about their pasts, their memories lack intimate details and meaningful experiences, and they are unable to draw emotional associations to them. In extreme cases, memories may even be incoherent, seemingly thrown together from the experiences of several people. There may also be revealing physical signs of the villagers' unnatural origin—a lack of calluses, birthmarks, moles, and freckles, or the near-uniformity of their navels, nipples, and ears. If confronted with evidence that they are any different

from normal humans, most of the villagers will deny the claim with compelling arguments that include memories and relationships they are certain they have had since birth. It is possible, given enough evidence, that a villager may be convinced—and that could lead anywhere. While one golem might grow despondent and suicidal, another might become enraged and homicidal. Learning they are not who, or even what, they believed themselves to be and that their past and personality has effectively been engineered would assuredly draw unpredictable and extreme reactions.

The aborigines working on the Keepsake project have several goals for the village. They intend to collect any knowledge they can by observing the villagers' behavior in a controlled environment. The aborigines hope to learn a lot more about human actions and motivations, which differ so radically from their own collective consciousness. They also intend to use the golems as subjects to investigate human neural structure and chemistry, in hopes of improving their ability to both manipulate and communicate with the species. Finally, if the experiment is successful, the aborigines may be able to introduce the golems to other human settlements, using them as representatives where peaceful contact with humans is possible, and covert agents where it is not.

Unfortunately, the aborigines have discovered that it is much more difficult to engineer human minds than it is to design human bodies. The aborigines did their best to replicate memories and personalities by implanting copies of neural pathways recovered from humans who had been compromised over the years since the Athena Project. The resulting minds, however, are terribly incomplete and fragmented, and many of the golems are effectively insane. Their mental health is rapidly deteriorating, and the aborigines fear that they will prove nonviable in the long run. Aborigine technicians have begun considering ways to use nanites to record the physiological structure and biochemistry of human brains, and these efforts may lead to the development of more stable golems.

New Hawaii

Genepool

Something is happening to the natives of a few scattered settlements in New Hawaii. More babies are being born different. For most, the differences are subtle: newborns are taking longer to talk, and some never speak at all. In the last five years, however, there have been even stranger births—hairless infants with a second set of gill slits under their arms, or rows of eyespots down their backs. About one child in four exhibits strange behavior, and one in ten shows physical abnormalities.

Native reactions to the births have varied from community to community. Some of the more isolated natives have welcomed the changes in their young, believing that Poseidon itself is changing them, stripping away the last vestiges of their earthly origin. In other villages, the strange children are regarded with fear and suspicion. Some have gone so far as to euthanize any such infants at birth. Most children born different have been hidden from outsiders, and only one incident of this abnormal behavior has been reported to the GEO. Many natives wonder what the children of these children will be like, looking to the future with either joyous anticipation or deepening dread.

A group of aborigines who act as the stewards of a New Hawaii Creator cache are the architects of this strange new breed of native. When the Athena colonists first arrived on Poseidon in 2086, the aborigines began to consider the impact the new arrivals would have on the planet in their charge, and what steps to take regarding the strange bipeds. It was decided that since these new animals appeared intent on remaining, they should be integrated into Poseidon's ecology. Examination of several specimens living and dead led to a thorough understanding of human genetics and physiology. These analyses presented an interesting possibility. While other aboriginal groups around the planet began to actively resist human encroachment on Poseidon, the aborigines of New Hawaii took a complementary, long-term approach. They began to consider how humans might be adapted to a more harmonious and integrated existence on the waterworld.

It was decided that an isolated population of humans would serve as the subject of an experiment in directed evolution, which began in 2132. New Hawaii's distance from the center of human population and its proximity to a large Creator biotech cache under the vast reefs north of Kauai made it an ideal staging ground. The wishes of the Athena colonists were never a factor in the decision. Gradual alterations of the humans' gene pool would be much easier and require less intensive uses of Creator bio-

MISSING

***Major Mahoney**: What, then, Lieutenant?*

***Lt. Hawkins**: Sir, we dismounted about five kilometers from the village. Cpl. Pirelli took point with Sgt. Edwards 200 meters behind as slack. We proceeded on infrared through the forest to the edge of the settlement. When Cpl. Pirelli reported reaching a clear viewpoint of the ville, I halted the squad and sent Pvt. Rashid ahead to establish an OP. After an extended period of observation, we advanced on the village with the point team consisting of the recon corporal.*

***Major Mahoney**: We understand, lieutenant. A standard deployment. Please continue.*

***Lt. Hawkins**: Yes sir. Well, we performed a cursory search of the village. It appeared to be a rather standard native settlement, sir. Nearly every building had sustained structural damage due mostly to small arms fire, but we did see some evidence of explosives having been used.*

***Major Mahoney**: What about the population, Lieutenant?*

***Lt. Hawkins**: Sir, it appeared as if they had all been killed. We counted 58 natives dead. They were apparently hit with no warning. There was no particular area of the village where there were more bodies than other places, suggesting that they were hit from more than one direction. We found some bodies in the streets, but many were still inside their homes, some were even still in bed, sir. Few were armed, which was odd.*

***Major Mahoney**: How is that, Lieutenant?*

***Lt. Hawkins**: Sir, we also found 24 heavily armed and armored bodies in paramilitary uniforms. The bodies bore wounds from many different kinds of attack, and for some we could find no obvious cause of death. I believe these were the individuals who attacked the village.*

***Major Mahoney**: Did you find anything else of note, Lieutenant Hawkins?*

***Lt. Hawkins**: We saw no bodies of children as we were making our sweep through the settlement. However, as we began our retreat from the site, Lance Corporal Sanchez reported movement in the bay to the west of the village. I ordered her to fall back to where she could observe the beach from cover, and brought the squad up to support her.*

***Major Mahoney**: And what did you observe, Lieutenant?*

***Lt. Hawkins**: Sir, it was the children.*

***Major Mahoney**: The children, Lieutenant?*

***Lt. Hawkins**: Yes sir. All the village's children swimming in towards the beach. I ordered Cpl. Sanchez to fall back. The corporal indicated that the children were accompanied by three large amphibious animals, sir. I advanced and observed the children and the creatures dragging the bodies of the colonists to the beach and into the water. They then stacked the uniformed bodies in the center of the village and set fire to them.*

***Major Mahoney**: What then, Lieutenant?*

***Lt. Hawkins**: Sir at that point, the children and the animals retreated into the water.*

***Major Mahoney**: The children swam off?*

***Lt. Hawkins**: I assume so, sir. They walked into the water and just quietly sank below the surface. I did not see them actually swim off. I then decided that there was nothing left in the village to protect or recover. I called for extraction, and we retreated without further incident.*

technology. The program would take generations to complete and even longer to implement on a planetary scale, but for the aborigines, time had never been a concern. The enclave of aborigines in New Hawaii used various xenosilicate templates to program suites of bio-reactive nanites. They subsequently targeted a few small outlying villages with infestations of these artificial mutagens. The nanites infected the reproductive cells of mature adults, subtly altering the genetic material they passed on to their children.

By the third generation of the experiment, the first significant results began to appear. Many of the

native children born in targeted villages since 2170 are first-stage hybrids: their physiology and genetic makeup are still human, but their brain chemistry varies from the norm. These children are completely receptive to the chemoempathic communication of the aborigines, and can receive messages without any of the confusion or fear that plagued early attempts at contact. This "aboriginal state of mind" results in strange behavior among the hybrids—most seldom speak, and all show an eerie unanimity of thought and action.

The destruction of a native village on Ina in 2186 by a team of GenDiver mercenaries provided the new humans' first major test. Warned by their mysterious mentors, the children avoided the massacre and helped the aborigines destroy the invaders. The aborigines then took direct custody of the hybrids, raising them and eventually transplanting them to the jungles of Kauai. The hybrids are there to this day, living in seclusion as the Forest People and fiercely protecting the jungle their silent masters have entrusted to them.

The arrival of millions of humans on Poseidon has caused the aborigines to reevaluate their experiment. The possibility of protracted conflict with the newcomers has forced the aborigines to consider different applications of the hybrid humans, and has created a need for advanced forms much sooner than expected. First-stage hybrids are already being employed as spies by the alien rays, infiltrating newcomer cities and bringing back detailed intelligence. The rate of mutation among the New Hawaiian natives and the number of targeted communities have also been increased. More hybrid children are being born every year, and the first second-generation hybrids have begun to emerge.

Several different hybrid forms are being produced in the hopes of creating a diverse population of hybrids who can work seamlessly with the aborigines. The most advanced stage-two hybrids are actually able to send chemoempathic messages to each other and to the aborigines, releasing communicative chemicals from modified lymph nodes through the gill slits under their arms. Other stage-two hybrids are partially photosynthetic, with chromatophoric skin. The aborigines estimate that within four years, 20% of the native infants being born in New Hawaii's more remote villages will be stage-one hybrids, and that the first stage-three hybrids will be born within the next six years.

The Forest People

A secret lurks in the jungles of Kauai. Unseen by any satellite, hidden from aerial survey, and so far unnoticed by any visitors, an extraordinary group of natives calls these dense jungles home. These shadowy tribesmen are a tangle of mysteries and seeming contradictions, and offer perhaps the most extreme example of human adaptation to life on Poseidon. Here is a group of aquaforms who dwell exclusively on land, surviving at a completely pre-industrial level of sophistication. In many ways the most native of the natives, these elusive hunters call themselves the Forest People.

Like all of Poseidon's natives, the Forest People are genetically modified human aquaforms. Sixty-three in number, the Forest People are organized at the tribal level and live as nomadic hunter-gatherers in a lifestyle reminiscent of the Amazon tribes on Earth who survived into the 20th Century. Kauai's hidden forest dwellers consist solely of systemic osmoforms—most have never seen a pure strain human until recently, although the eldest of the group have always told stories of these strange outsiders. One of the most remarkable aspects of the Forest People, however, is the relative youth of the tribe. Most of the natives are in their late teens, and the oldest member is only 23. The first children of the Forest People's second generation are just being born.

The Forest People live in perfect harmony with their jungle environment. Their diet consists primarily of fruits and tubers gathered from the jungle, supplemented with game and fowl brought home by hunters. The abundant jungles provide more than enough food for the tribe to survive, and life for the Forest People is easy. Their dependence on the jungle has led to an intimate familiarity with it—even the youngest children can survive quite ably, and the "elders" are veritable encyclopedias of pharmacological, botanical, and zoological information. The tribe is careful not to over-exploit their food sources. To ensure that the jungle's ecology is kept in its proper balance, the Forest People lead a semi-nomadic life, migrating between a handful of camps spread out all over the island. Never living in one camp for longer than three months, the Forest People's impact on their environment is minimized. These migrations also allow them to move into local caves to ride out the worst stretches of the annual storm season.

Technologically, the Forest People are the least advanced human group on Poseidon, possessing no

traces at all of high technology. All of their clothing and implements are constructed out of local materials: wood, bone, vine, and sinew. Clothing is minimal, and camps consist of a circle of thatch-roofed shelters. Fire use, gourds for storage, and chipped stone implements represent the cutting edge of Forest People technology. Hunters use spears, blowguns, and sharp bone knives as weapons. They coat many of their weapons with poisons—carniflora and scorpion venom are most commonly used. The Forest People place a high priority on artistic expression—their tools and artifacts are well crafted and often exhibit extensive decoration.

There is little, if any, gender division of labor among the Forest People—as many women as men serve as hunters, and the entire community, in typical native fashion, handles the responsibilities for childcare. The Forest People favor colorful body paint, and the hunters use a particularly effective collage of black and emerald green for camouflage. Any type of decoration involving self-mutilation—tattooing, piercing, or scarification—is forbidden. Other taboos include the eating of certain types of animal flesh, building uncovered fires, and shedding a tribemate's blood. The strongest taboos include incest, murder, and a strict prohibition against swimming in the ocean.

All of the Forest People share a strange unanimity of thought and action: verbal communication is rarely needed, and the members of a hunting group can coordinate complex efforts in complete silence. Disagreements are rare, but a body of eight senior tribesmen, the Oldest, is the final adjudicator of all disputes and acts as the tribe's governing body. Decisions that affect the entire tribe are discussed in open council, with the Oldest directing the proceedings.

The Forest People have two dominant psychological traits—a deep respect for their ecosystem and an almost fanatical xenophobia. The jungle is more than just the Forest People's home; it is their livelihood and their responsibility. The hunting parties also serve as scouts and monitors of the wildlife around them, counting the populations of certain species and monitoring the rhythms of life around them. Outsiders, with their electronics and plastic, are invaders and are to be avoided at all costs. The Oldest tell frightening tales of the Outside and the wicked men who live there. The Forest People watch all strangers who enter their domain from a distance. If the Outsiders do the jungle no harm, they are allowed to leave without ever knowing they were watched. Outsiders who seek to despoil the jungles are dealt with, quickly and finally. Many parties of would-be poachers or smugglers have vanished in the forest, their bodies never found.

The Forest Peoples' yearly calendar pivots around two annual festivals. The first is the Remembering, a week of fasting and mourning in honor of the dead. The festival falls, coincidentally, during the time the Calamity is commemorated in the rest of New Hawaii, although the Forest People are unfamiliar with that term. The second festival, the Journey, falls at the end of storm season, and culminates in a migration to a sheltered bay on the east shore of Kauai. After a week of feasts and celebrations, the taboo restricting contact with the ocean is lifted, and the entire tribe plunges into the bay. There the Forest People are invariably met by a large group of aborigines, who commune at length with the natives, then send them back into the jungle. The Forest People call the aborigines the Silent Ones and venerate them with an almost religious fervor as teachers, saviors, and guardians. Annual contact with the Silent

Ones at the end of the Journey is one of the foundations of the Forest People's culture. The Oldest look to the Silent Ones for guidance, and return from the Journey with a new set of directives and goals for the coming year.

The Forest People have elaborate tales of their origins, which they are now passing on to their children. People originally came from the stars, from Earth, a place of death and corruption. Back in the before time, the ancestors of the Forest People came into the World to escape the evil and ugliness of Earth. For a while they lived in happiness. But other evil men came from Earth and destroyed the Forest People's ancestors when the Oldest were still children. Fifteen members of the tribe are old enough to remember the troubles, but will not talk about the incident in any detail. The Forest People were saved thanks to the intervention of the Silent Ones, who took the orphans beneath the sea and cared for them, teaching them to love Poseidon and protect its natural bounties. Eventually, the Silent Ones brought the children to the forests of Kauai and charged them with the safekeeping of the island. The orphans gladly accepted their sacred mission, and the Forest People were born.

In recent years, the Outsiders have taken a direct interest in Kauai, much to the Forest People's dismay. The tribe watched the arrival of Biogene at Coronado Station with alarm, and has grown more concerned as survey teams from the station have pushed deeper into their territory. When one of the teams clear-cut a section of jungle, a hunting party reacted, killing all four scientists. The Oldest are now concerned that the Outsiders will hunt the tribe down in retaliation and are counseling caution. The recent opening of a new resort complex at Avalon has led to another influx of Outsiders, as hunters, hikers, and campers look for adventure in the jungles at the southern end of the island. New troubles are likely when the Forest People migrate back to the south end of Kauai.

There have been other recent changes as well. The first children are being born to the Forest People, and two of the most recent arrivals are different. These new infants are born with emerald green, chromatophoric skin and additional gill slits under their arms. The Forest People have been awaiting these births—the Silent Ones told them to expect changes in their children, and have foretold that these children hold the key to the tribe's future. The first meeting between these special children and the Silent Ones will be a momentous one indeed.

Forest People Tribesman

Species: Genetic Redesign—Aquaform
Goal: Survival
Motivation: Duty
Attitude: Disciplined
Role: Survivalist (Everyday)
Primary Attributes: Physique 2, Coordination 1, Cognition 0, Psyche 0
Derived Attributes: Endurance 2, Reflexes 0, Toughness 1
Aptitudes: (Superior) Combat; (Strong) Athletics, Survival
Primary Skills: Aquatics 6, Armed Melee 4, Crafting (Carving) 4, Ecoscience 4, Geoscience 4, Life Science 4, Navigation 4, Small Arms 5, Stealth 4, Tracking 6, Unarmed Melee 3
Equipment: Body paint, gourd full of water, loincloth, bone knife, chert scraper/adz, and either three spears, blowgun with four darts, or a bow and six arrows

Northwest Territories

Unnatural Instincts

When the original Athena Project colonists made planet fall on Poseidon, the aborigines were understandably curious, but were extremely cautious about making contact with the aliens. It is in the aborigines' nature to observe—and sometimes manipulate—from a distance, rather than enter into anything resembling communication. However, the aborigines realized that it would be much more difficult and potentially dangerous to interfere with sentient beings, as the human colonists undoubtedly were. They needed to create a controlled environment in which the aliens could be observed.

During the early years of the colonization effort, Bataku's security patrol was assigned throughout the Haven Cluster. While accompanying a research team in the Styx, Bataku encountered a pod of three aborigine emissaries. Using their chemoempathic abilities, the aborigines rewired Bataku's brain with a migratory instinct similar to that of the salmon on which Bataku's ancestors had once feasted on Earth. Bataku would have no memory of the encounter, but he would feel a relentless compulsion to leave the human colony for a more isolated region to the northwest—the Sierra Nueva Cluster.

The aborigines realized that they needed a much larger sample of the alien population. To this end,

they contacted Sage, the dolphin biochemist, and this encounter was a much more direct and intelligent one. They learned to communicate effectively with the cetacean and expressed their desire to learn more about the visitors who had arrived on their world. Sage agreed to help Bataku organize a small group of colonists to follow the orca on his migration to the Sierra Nueva. He would also endeavor to create a unique culture that would be receptive to an ongoing relationship with the aborigines.

By the time Bataku's people founded the Baffin Island settlement in 2098, they were in almost constant contact with the aborigines. The aborigines also continued to covertly observe and even intervene in the development of the small colony, primarily through their representatives—Sage and his successors. Much of this interference was beneficial. For example, the aborigines surreptitiously provided the colonists with food during the early, difficult years, and even engineered "natural" medicines that native healers could find and use with almost no technological resources. Indeed, it is likely that the Baffin Island natives would have perished within a decade without the aborigines' assistance.

In 2199, this unique relationship with the aborigines is manifested in many ways among the natives of the Sierra Nueva. They are among the healthiest and long-lived of the colonists on Poseidon, whether native or newcomer. They have learned so much from their aboriginal hosts, their knowledge of and familiarity with their homeland is almost unparalleled. Most of this understanding is thoroughly practical—they can predict weather patterns with uncanny accuracy, they know more about productive uses of local flora and fauna than the biotech companies are likely to learn with years of intensive research, and they understand the behavior and role of the countless species, both predator and prey, that share their oceans.

The aborigines have also become valuable allies in the natives' fight against GenDiver. They regularly participate—directly and indirectly—in the natives' attacks, and have even recently begun using their nanotechnology to provide the natives with supplies of weapons, ammunition, and other equipment vital to the war effort. Though to date the aborigines have used their tiny machines to provide only basic military supplies, it is simply a matter of time before the natives convince them to put the nanites to more drastic uses.

This support has begun to alter the balance of power between the natives and GenDiver, effectively neutralizing the Incorporate giant's tremendous economic and technological advantage. It is making the natives less dependent on their other, sometimes unreliable allies, including GEO Internal Security and Earth-based terrorist organizations such as Zero Nation.

Alien Prophet

The real Prophet died in 2163, the victim of a marine predator on one of his many excursions into the Sierra Nueva wilderness. He was replaced by an aborigine, an identical physical copy engineered by Creator biotechnology. None of the natives—not even Bataku—are aware of this, and Prophet has continued his role as spiritual adviser to his people. He is also, of course, a very effective liaison between the natives and the aborigines—far more effective than the real Prophet could ever have been.

While the aboriginal Prophet was designed to be indistinguishable from a real cetacean, there are some physiological clues to his true nature. The most dramatic is the fact that he does not age. Prophet's cellular structure has suffered no deterioration since he emerged from the Creator crèche 36 years ago. In addition, the thick tissues around the artificial cetacean's rostrum are lined with the glands that allow aborigines to secrete the specialized chemicals used for communication and the cognitive manipulation of other species.

The dolphin's psychology is somewhat anomalous as well, as engineering a mind is much more difficult for the aborigines than building a body. Prophet, as an aborigine, and like all real cetaceans, is deeply attuned to his world. This keen relationship is only expressed, however, through the characteristic cetacean mysticism when it is important to maintain appearances. The aborigines' own worldview, while difficult to define in human terms, tends far more toward pragmatism than mysticism. Prophet also lacks the playfulness, impulsiveness, and sexual traits common to most dolphins, and among the natives of the Sierra Nueva, he is considered uncommonly serious for his kind.

As a result of Prophet's origins, he also has a great deal of knowledge that is not adequately represented by his skills. He possesses all of the knowledge of Poseidon accumulated by the aborigines down through the millennia. Prophet's Intellect can

be considered 6 for the physical and life sciences generally, and 8 for the natural history and sciences of Poseidon specifically. In other words, Prophet knows more about the waterworld than human scientists can ever be expected to learn.

Prime Meridian

As they traveled from system to system, the Creators harvested the raw materials they needed to supply their journeys. Even with their brilliant engineering skills and nanite repair systems, these consummate technicians needed to manufacture new equipment and expand their fleets.

Most often, whole moons or entire asteroid fields were mined for the mineral resources needed to support their industry. Swarms of nanite drones collected the necessary elements from the natural minerals, molecule by molecule, and delivered them to the assemblers where they were incorporated into growing structures. When the new vessels or equipment were complete, the Creators moved on. Sometimes, as they set about their terraforming efforts, the Creators extracted the materials they required from the very planets they were engineering. They assembled heavy machines and components for their enormous vessels from elements in the planet's crust. Here the structures literally grew from the surrounding rock as the nanites collected raw materials and formed them into exotic alloys and elaborate structures.

As the drones gathered the raw materials, vast caverns formed and were then used as assembly hangars for the growing devices and ship components. Later, when the finished structures were extracted from these subterranean cradles, the Creators left behind large pits that inevitably filled with water, forming pearl-like chains of mountain lakes. A careful look at any of the numerous survey photos of Prime Meridian taken over the years will reveal such telltale lakes dotting the jungle valleys of the Drakensberg Mountains.

These mines and assembly plants form an interconnected labyrinth of Creator technology and knowledge, quietly awaiting discovery. Most of the production caverns are now water-filled craters, though a few remain sealed and hidden from view. Within these underground hangars, half-finished projects, swarms of nanite workers, and countless other Creator secrets lie waiting.

A typical cavern is a strange place, lacking the harsh features common in natural caves. Everything is organic in appearance, rounded and smooth, as if molten rock had covered everything and then quickly cooled. As the microscopic drones sought the elements the Creators needed, they left a complex maze of curving tunnels and shafts that once followed the natural mineral veins. From these passages flowed raw materials, carried by rivers of nanites. Mostly carbon, but also copper, gold, platinum, and other key elements, these flows are now frozen in time, seeming to have simply oozed from the surrounding rock into the hangar caverns. The collected elements literally flow into whatever strange device or component was under construction. Enigmatic, seamless structures still stand, partially assembled, apparently growing out of the frozen pools of raw elements.

Within some caves, vast numbers of inactive nanites cling to almost every surface, a virtually undetectable layer of dust, patiently awaiting chemical instructions or the application of xenosilicate templates. In places, there are large, solidified pools of pure elements and clusters of odd shapes that appear more like melted rock than growing components. The caves are mines, factories, and warehouses all in one, and though silent for millennia, the caverns seem simply to be waiting for the return of the Creators.

As remote and hidden as these factories may be, they have not been entirely abandoned. When the Creators labored here, they constructed specialized bodies for themselves, molecule by molecule. An array of forms was designed, each for a specific task. Some were giants, used for heavy, brutish jobs. Others were tiny, used to scamper about, attending to tasks within and around the growing structures. Unlike their marine cousins, however, these creatures were given only the most rudimentary cognitive abilities, and little free will beyond the programmed instructions of the Creators. As a result, when the Creators left Poseidon, they did not allow these workers to evolve a culture of their own. Instead, the Creators left them in deep hibernation, hidden within the caverns against some future need.

Even the power of the Creators is not absolute, and centuries ago severe earthquakes damaged the Creators' warrens. Some of these creatures were freed from sleep and subsequently left to an unintended fate. These few animals survived and multiplied, growing to inhabit the Creators' mountain caverns.

The liberated species is one of the medium-size heavy work designs and it is physically formida-

ble. The animal's body is huge, with a massive skeleton and a tough and scaly hide. Most individuals are a mottled, chalky white, with enormous muscles powering long, splayed limbs. The head is squat, neckless, and covered with an array of eyespots and small, chemically sensitive feelers. The creature is bipedal with wide feet and opposable toes. The species' upper limbs consist of four pairs of large tentacles spaced along its lateral surfaces. These limbs are divided distally into numerous smaller tentacles, which, working in combination with the primary limbs, have tremendous grasping and lifting power.

Physiologically the animal is simple and efficient, incorporating many of the same basic anatomical features that were engineered into their more intelligent marine counterparts. A major exception, however, is that these animals depend on ingestion for the chemical energy they require to live. They obtain nutrients from stores collected in special feeding troughs deep within the caverns. Here, nanite assemblers, even after centuries of dormancy, were stimulated into activity with the awakening of their dependents and fill the nutrient reservoirs as they are depleted.

The creature is semi-sentient and driven largely by its Creator-programmed imperatives. As basic as its original instincts were, however, the species has undergone significant cultural evolution in the centuries since gaining its freedom. The animal is cooperative and cautious, spending most of its time following a cultural manifestation of its original programming. In as much as they are able to, the creatures have come to think of themselves as the caretakers and protectors of the caverns. Since there are no construction projects to which they must attend, the population haunts the empty caverns, patrolling them against Poseidon's curious or predatory species.

Smith-Clavel's expedition unfortunately discovered an entrance to one of these caverns. The encounter surprised the inhabitants of the caves and the entire expedition was wiped out in a moment of panicked violence. The cave dwellers have since increased their vigilance and have activated a limited array of nanites to seal up many of the cavern system entrances. Though they have had few other encounters with colonists, these secretive guardians grow fearful as they realize that humans pose a unique threat. However cautious and well hidden the species remains, it is only a matter of time before an ambitious graduate student, an overeager Incorporate prospector, or an encroaching rancher stumbles across their secret.

WESTCAPE

A Lavender Organics subsurface research station has been operating off the southern coast of Westcape, deep in the Pacifica Trench. The Deep End Bathymetric Station is a unique, fully mobile deep-exploration installation—a cross between a seafloor station and a multi-deck submarine. Well equipped and computer-integrated, the saucer-like 22-person station travels the abyss on slow, silent MHD motors. Its four research submersibles—*Arville*, *Crispina*, *Norvin II*, and *Lover Boy*—regularly search the trench's depths as part of an ongoing biological survey. The mini-subs' onboard expert systems mimic their namesakes' personalities that are based on the stars of the hit CommCore series "Love That Dolphin."

LavOrg built Deep End three years ago as part of a long-term project to study Poseidon's aborigines. The Deep End facility complements related efforts underway near Caernafon. To date, the station has explored several hundred kilometers of the trench's length, collecting sparse but compelling data on the enigmatic beings. While the Deep End team has made a handful of aborigine sightings and even captured some low-quality holographic footage of the creatures, these encounters pale before their most recent and startling discovery.

At a depth of more than nine kilometers, sonar data identified a large, ovoid object rising from the sediments on the bottom of the trench. Sensor readings revealed that the object—which the Deep End team has dubbed Leviathan—measured approximately 300 meters along its longest axis and was at least partially hollow. Its external shell, measuring only a few meters, was extremely thin for the object's size and apparent mass. Ring Larouche, Deep End's chief engineer, argued that the shell was impossibly thin, insisting that Leviathan should collapse under its own weight. Other team members quickly pointed out that whoever made Leviathan—for it was clearly an artificial construct—must have been a better engineer than Larouche.

Three days ago, the research team launched a mission to investigate Leviathan. Deep End descended to a depth of 3,000 meters, and four crew members—including Larouche—left the station in the mini-sub Lover Boy. A fiber optics comm-line running from Deep End to the sub allowed the team to stay in radio

contact with the station. The team members on Deep End tracked Lover Boy to a depth of more than 7,000 meters, at which point communications were lost. Diagnostic data indicated that the com-line had been severed. The Deep End team continued to track the mini-sub by sonar as it descended past 9,000 meters. Eventually, the mini-sub passed beneath Leviathan's sonar shadow, and the station was unable to monitor its further progress.

Larouche and the other team members left Lover Boy in hard suits to explore the object. They discovered that Leviathan's surface was crystalline in appearance and texture, and further analysis revealed that the structure was a pure, dense, carbon lattice—almost certainly solid diamond. The team continued their exploration, discovering a series of large, irregularly spaced blisters on the structure's surface. As they investigated the nearest, the team was stunned when the blister began to melt away, its surface pulling away from the touch of their hard-suited hands. They soon found themselves within a shallow pocket, which in turn opened into the interior of the structure. As they entered Leviathan, helmet lights illuminating the dark, the shell silently closed again behind them.

The interior of the object was a maze of twisting, water-filled tunnels and honeycombed chambers. The chambers were of different sizes and shapes and housed a variety of indefinable, organic-looking crystal structures. Crystalline globes, bulbs, threads, coils, and other, more amorphous structures occupied rooms in the alien warren.

A warning alarm from their sonar units galvanized the team, but the confused echoes left them unprepared for the attack. Aborigines—massive protectors—glided out of the darkness from all directions, and it was soon over. The team was captured, rendered into deep comas, and carried off into the depths of Leviathan.

When three hours passed with no sign of Lover Boy, the Deep End crew feared the worst. Many members volunteered to take one of the other subs out to search for their comrades, but Sarah O'Leary, the facility captain, ordered the Deep End to surface. She wanted to request orders from her supervisors on Dyfedd before risking more lives in the trench. The Deep End surfaced at 2648, and using a tight beam transmitter, hailed a LavOrg communications satellite. Unfortunately they had not come to the surface alone.

Deep End's emergency transmission was badly garbled, and what did make it through seemed like nonsense. The transmission ended abruptly and all efforts to recontact the station failed. Search and rescue teams were immediately dispatched from Dyfedd, and found Deep End floating at the surface, adrift in the current. Continued efforts to raise the crew by radio failed. When the rescue teams subsequently boarded the station, they found nothing. No one, not a single person or even body remained. There were no signs of an evacuation or a struggle—nothing. The crew had simply vanished.

Since the arrival of humans on Poseidon, the aborigines have been compelled to respond to the increasing threat that the human colonization represents. This effort has often distracted them from other, more ancient duties. The aborigines were left behind on Poseidon to serve as caretakers for the planet and curators for the creators' terraforming infrastructure. Leviathan is a central component in that infrastructure.

Articulation of the Creators' intentions in human terms is difficult at best, and to understand their technology requires knowledge of the most advanced bioengineering as well as the soul of an artist. Leviathan is, in its most basic function, a library. The structure is an ancient, active archive of everything the

Creators left the aborigines, and all the aborigines have done and learned since their masters departed.

This library, however, is not just a store of information. It is a collection of structural, chemical, and procedural templates archived in the form of xenosilicates. These templates serve as the instructions, plans, and blueprints for the maintenance of the Creators' terraforming of Poseidon. The aborigines use the templates to guide their nanite armies in the formation of new species, the seeding of ecological cycles, the maintenance of chemical balances, and the construction of Creator machines. The aborigines have also begun to store information and templates for what they have learned about humanity, and this is where they have also stored the crew of Deep End.

After compromising the nervous systems of the station's crew, the aborigines forced them each into a deep coma. Then, with their consummate chemical control, they constructed xenosilicate templates for each of the crew members, storing structural plans of the crew's DNA, somatic variations, and unique neural pathways in perfect detail. The crew members themselves were later set adrift in the deep, their bodies left to hungry scavengers. However, at any time and for any reason, the aborigines can access the new templates and construct from nothing but raw organic material, living, breathing replicas, identical in every way to the missing crew.

The existence of Leviathan and the few other widely scattered facilities like it is one of the aborigines' most closely guarded secrets. They do not understand humans well enough to risk discovery of the libraries, acting decisively when the Deep End crew began to investigate. The aborigines are now aware of the search and rescue teams swarming around the derelict research vessel floating above, and they will stop at nothing to ensure that Leviathan remains a secret.

Zion Islands

In 2118, the orbit of the Athena Project's colony ship, the *UNSS Cousteau* decayed completely, resulting in its fiery plunge into the ocean east of the Serendipity Atolls. A small boy from Farnsworth, a native settlement on Apache Island, discovered the remains of the *Cousteau's* main communications dish buried in a muddy lagoon on a tiny, local islet. If they were to discover the location of the dish and other bits of superstructure strewn about the region, GEO specialists might be able to extrapolate the location of the *Cousteau's* final resting place.

Shortly after it crashed, aborigines in the region discovered the wreckage resting on the seafloor at a depth of more than 3,000 meters. Until Recontact and the subsequent influx of newcomers to Poseidon, the aborigines showed little interest in the ship. In recent years, though, as the threat posed by human encroachment became more imminent, the aborigines returned to the site in search of clues to the nature of their visitors.

Deep within the ship's sediment-coated hull, the aborigines discovered the *Cousteau's* main computer core. The computer, state-of-the-art for its time, used the DNA memory storage common in maincomps today. The frigid depths served to preserve the fragile organic structures, and with their natural ability to manipulate chemical compounds, the aborigines were able to access the stored code. While they recognized that the cores' DNA was structured into coded patterns, they were initially unable to decipher them or understand the significance of the data they represented.

The aborigines used their nanite assemblers to cover the wreckage in a shell of limestone to protect and hide the ship while they attempted to decipher its mysteries. Billions of nanites were released at the site, programmed to extract calcium, carbon, and oxygen from the surrounding waters, assembling these into an ever-larger calcareous structure.

BOTTOMS UP

Urrrp. God, I hate this crap. Ahh, what the hell, sun's gotta be under the yard-arm somewheres in the world, eh? Okay, so why am I gettin' blind drunk in the middle of the morning? I'll tell ya why, and I don't want to hear any crap outta ya' if I do, so keep yer mouth shut.

Knuckles McNaughten, Reed Berkeley, and Freda Washington and me'd been working this piddly little line o' Long John way the hell out by… by… that one spot… where went that one time… yeah, anyway… Anyway, we'd been working this vein for, I dunno, two weeks. 'Bout got the hold half full with ore. 'Freda thought some of it could'a been refined down to the good stuff, but she's always sayin' that. 'Cept she never said it to Knuckles. They sort'a had this thing goin' ya know, and she was always straighter' with him, with the truth ya know?

So we'd picked up enough of the stuff to pay for our food n' fuel, maybe a new set of cutters or somethin' like that. So I says to Knuckles, I says that I think it's time we headed back. Reed, he starts in on that crap about how we can't quit workin' this line, since he's got a wife and kid on Earth and all. You knew Reed, dint' cha?

Anyways, Knuckles had some kinda water rash for a while, wants to get topside and dry it out, and I'm sicka' showering outta a drinkin' glass. Freda was tired of all of us anyway, so we're all for goin' topside, but Reed starts bitchin'. So Freda says fine, she'll go check out this one high prob site we'd scanned a couple days before.

While we're just waitin' around Reed and Knuckles get into it. I mean real bad.

Just as Reed is ready to start swinging, Freda comes on the comm and says that she's found a node that's nearly pure. That's pure Long John ya understan', and four or five times as big as she is.

We head fer our suits, and start clampin' in all excited. This could'a 'been the big one ya know? We're halfway to the site, pushin' them little sleds to the max when she starts hollerin' about all these big ray things all around. She starts gettin' real scared, I could hear it in her voice. She starts in screamin' and yells somethin' about them not bein' animals. She's screamin' and yellin' fer us to help her and all we can do is run the sleds as fast as they'll go.

Within a few days, the nanites had constructed an organic hangar more than a kilometer long and 300 meters wide. When the project was completed, the *Cousteau* lay cocooned in a massive, artificial formation that looked like an extinct and submerged natural reef.

At hidden points around the reef's surface, small caves in the coral lead to a convoluted maze of smooth, twisting tunnels that pass into a single massive chamber. Phosphorescent organisms growing on the chamber's walls softly illuminate the quiet hulk of the *Cousteau*. Aborigines swarm in and around the wrecked vessel, and organic tendrils run from the ship into several organic nodes embedded within the surrounding walls. These nodes are intricate collections of organic threads that serve a function similar to the aborigines' own neural sacs, but on a far greater scale. The nodes in effect comprise an organic form of artificial cognition—an organic, artificial intelligence.

With the combined use of this living machine, linguistic and experiential templates derived from encounters with humans, and captured examples of modern human data-storage devices, the aborigines have recently learned to read the information stored in the *Cousteau's* aging core.

Dozens of the aborigine technicians cluster around the walls of the chamber like bats sleeping in a cavern. Organic filaments interconnect their neural sacs, allowing them to interface with the computer node. Electrochemical signals, much like neural impulses, flow between these aborigines and the nodes as they work.

The *Cousteau's* computer contained within its massive storage cores the sum total of human history and knowledge, and the technicians have worked to analyze all of it. Much of this data was technical. They have learned about human medicine, engineering, and basic sciences. They have augmented their knowledge of human anatomy, physiology,

All of a sudden the screamin' sorta chokes off, silent like. I was breathin' hard by now, but I could hear Knuckles over the comm, sort of groanin'. I ain't embarrassed to tell ya, I was real scared right then.

We sledded on through that dark and cold just as fast as them machines could go. When we finally got there, we found her sled and her helmet, but that was it, no Freda. We looked fer a while, but even Knuckles knew that she was an instant goner once that seal broke. Hell, the thing was cracked and the seals all sprung. Freda was gone.

And as if that weren't enough, Reed starts in like nothin' had happened. He's all kinda' 'she knew the risks' and 'I'm sorry an all, but he wanted us to stay and start cuttin' on that big node. Hell, he should'a known better, but that just pushed Knuckles right over the edge. He grabbed his cutter off his sled and went after Reed.

It took Reed a second or two to realize what was happenin', but by then it was too late. The cutter punched through Reed's suit like it was made a' paper and that was it, but Knuckles didn't slop, he just kept cuttin' and cuttin'. I got even more scared then, and started backin' away towards my sled. Reed's floods had gone out, but I could still see the blood and all in Knuckles helmet lights, driftin' there like red smoke or somethin'.

Then this shadow passes just at the edge of his lights, and Knuckles stops cuttin'. I ain't gonna swear to it, but I know it was one of them aborigine things people is always whisperin' about. Well, Knuckles stops and just stands there for awhile swayin' a little.

Then slowly, he reaches up, and pops his seals. Fifteen hundred meters down, and my best friend decides to take a bath. Ten years on the bottom of the world, the best suit man I know, and he just pops out…

Well I ain't real brave, and I ain't stupid either. I was on my sled and back to the sub as fast as I could go. I blew every emergency tank on that rig and was at the surface before I stopped panting.

So, that's why I'm getting blind, drunk in the middle of the morning. Because my best friends are dead and I don't want to know what killed 'em, and I definitely don't want to go back down there.

We ain't wanted down there. Something don't want us down there. They… don't want us down there. And ya know what, that's just fine with me.

and genetics—adding to what they had already gained from their actual encounters. More importantly, however, the aborigines recognized that the stored cultural and historical records were much more revealing of human nature.

They learned of slavery, religious crusades, and war. They learned of Adolf Hitler and the National Socialists, of Auschwitz and Dachau. They found news reports and UN studies recounting the Earth's environmental degradation, from greenhouse warming to the extinction of entire species. They studied Hiroshima and Nagasaki, and the legacy of the Cold War and nuclear proliferation that followed.

The aborigines also watched as humanity first set foot on the Moon, as they dismantled their missiles, and as they struggled to restore and protect Earth's ecological balance. They learned of humanity's love of beauty from images of Botticelli's Birth of Venus, and of its yearning for the divine in Michaelangelo's Creation of Adam. They studied Darwin's Origin of Species, Newton's Principia Mathematica, and Einstein's Theories of Relativity. They accessed news archives and reviewed personal interviews with Dr. Marcos Gottfried, and learned of his determined efforts to gift cetaceans with true sentience. They recognized the thirst for knowledge and passion for exploration that motivated humanity's first voyage to Poseidon.

The increased understanding of human nature and motivations has given the aborigines a new perspective on the newcomers to their world. The Athena Project colonists' cultural transformation during the Abandonment had indicated that humans could become viable components of Poseidon's ecology, and this was confirmed by the aborigines' exploration of the *Cousteau's* memory cores. However, what they learned also justified their fears that humans pose a terrible threat to the survival of the Creators' legacy.

Despite the wealth of knowledge preserved in the sunken ship, it all predates the Blight and its after-

math. The aborigines still know very little about the GEO, the Incorporate states, or the subconscious fears driving the newcomers' lust for Long John and its promise of immortality. The aborigines must now expand and deepen their understanding of humans by integrating new encounters and experiences with what they have learned from studying the *Cousteau*.

CREATURES OF MYTH AND LEGEND

There is no common consensus on what the aborigines are or what they want. The GEO views them as a dangerous unknown in the colonization of Poseidon. The Incorporate view them as either threats or research opportunities. Newcomers know of them only through fictionalized depictions in movies and games. Even among natives, there are many differing views on the true nature of the aborigines.

ILLUMINATED ORIGINS?

One persistent theory that has circulated on CommCore for the past 12 years is that the aborigines are not at all native to Poseidon, but instead engineered organisms introduced to Poseidon as part of the Athena Project's "hidden agenda." Conspiracy theorists in both systems have suggested that either UN or corporate interests (or even both) placed a number of specially designed biological automatons aboard the *Cousteau* to be smuggled

to Poseidon. Whoever could accomplish such a technological feat would have a highly efficient network of robotic spies in place in the oceans before any other factions ever managed a foothold on Poseidon—all the better to guide the development of the colony world. According to followers of this theory, all encounters between humanity and the aborigines have been calculated actions on the part of the aborigines' true human masters, whoever they might be…

IT FEEDS ON YOUR FEAR

In 2189, a then-unknown Bavarian actress named Asuka Schneider participated in her first production, a shlocky little virtual reality game called *Eyes of the Deep: It Feeds On Your Fear!!!* In this game, sinister aborigines stalk and terrorize a group of college girls vacationing at an island resort on Poseidon. No joke.

The exploitative and sensational horror game takes massive liberties in both its locations (filmed on a small Mediterranean island) and its depiction of aborigines. For instance, the aborigines are supposedly "psychic vampires" who survive on strong human emotions such as fear and anger. These monsters can ultimately be dispatched by extreme cold, as demonstrated in the game's laughable climactic sequence, where the player must guide a scantily-clad Asuka Schneider, armed only with a fire extinguisher, into mortal combat with the Aborigine Queen.

Eyes of the Deep would have sunk into obscurity had it not been for Schneider's explosive success as a pop idol several years later. Instead, her fans sought out the game as a crucial record of her early career. Millions upon millions of people had their impressions permanently shaped by the game, which soon spawned a highly successful series of imitations and sequels and has gradually become a permanent part of modern pop culture.

Popular myths originating from the game:

- Aborigines need to absorb emanations of fear and anger in order to survive.
- They can fly for short distances without visible means of propulsion, turn invisible at will, and shrink to the size of a small rat.
- They can be harmed by extreme cold (well, this one is actually true divorced from the context of the game).
- The largest aborigine is the Queen—kill her and the rest will die.
- It Feeds On Your Fear. Whatever You Do, Don't Scream! (actual ad copy)

Every year, more and more new arrivals to the colony world come armed with these ridiculous notions based solely on playing the game or its various sequels. Local educators and naturalists are both perplexed and frustrated by the staying power of the myths generated by *Eyes of the Deep*.

WIDOW'S HARBINGERS

The aborigines figure prominently in many native cultures. The ecoterrorist group known as the Children of the Widow has proclaimed the aborigines to be semi-divine messengers of Poseidon's will, often referring to them in their propaganda songs as "Widow's Harbingers." They claim, not unreasonably, that the appearance of aborigines anywhere on Poseidon

is soon followed by some event of great retribution against the Despoilers.

Legend has it that Jeanette Maya, the group's leader, encountered a group of aborigines during her days as a traveling musician, and they "inspired" her to found her band, Poseidon's Price, and become a fierce opponent of colonization. However, she has not claimed to have been in contact with them since that time.

The irony is that with the exception of Jeanette Maya, very few members of the Children of the Widow have had direct contact with any of the aborigines, and the leadership cell is not being actively manipulated by the aborigines. Yet.

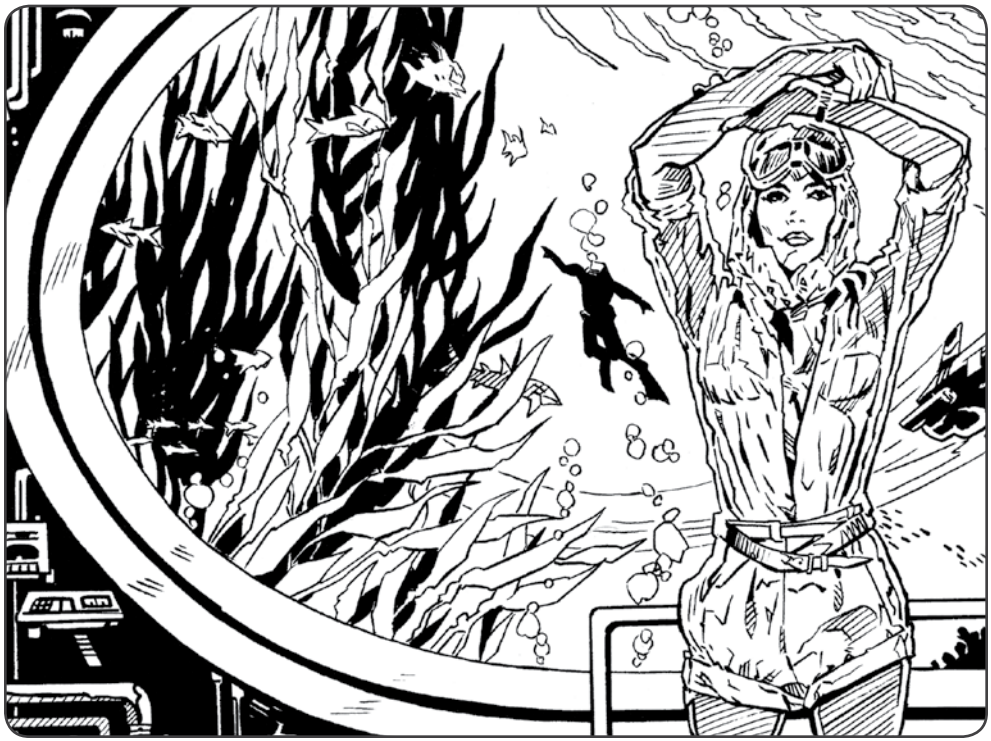
Aborigine Graveyard

The stories of the second-generation native explorer, Raj the Wanderer, are known to even the youngest native children. Every village storyteller knows of the Wanderer's epic voyages, which took him across the Pacifica Archipelago, from New Hawaii to the farthest reaches of Westcape and back. And they always speak in hushed tones of Raj's discovery of the legendary Aborigine Graveyard.

During the Second Voyage of the Wanderer (circa 2143), somewhere off the coast of Westcape, Raj's catamaran *Walkabout* ran into a savage midnight storm, possibly a Force 2 or 3 hurricane. Even in the face of the tempest, the master navigator managed to bring his vessel and crew through intact. As a new day broke, Raj found himself lost and unsure of his surroundings for the first time in his life.

The *Walkabout* had somehow ended up in the mouth of one of the many fjords that dot the coast of Westcape. On both sides of the vessel, the rocky cliffs seemed to be emitting what Raj described as a "hot misty vapor" that made visual identification of surrounding landmarks impossible. Upon further exploration into the fjord, the Wanderer turned up a stunningly bizarre find. On a sheltered rocky shelf some 300 meters in width and 50 meters in depth, there lay countless hundreds of weather-worn animal remains in orderly rows. Raj later recalled the physiology of the carcasses in great detail. Modern researchers at HIST have confirmed that they must have been aborigines.

Despite having access to detailed oral accounts of Raj's subsequent voyage home from Westcape to

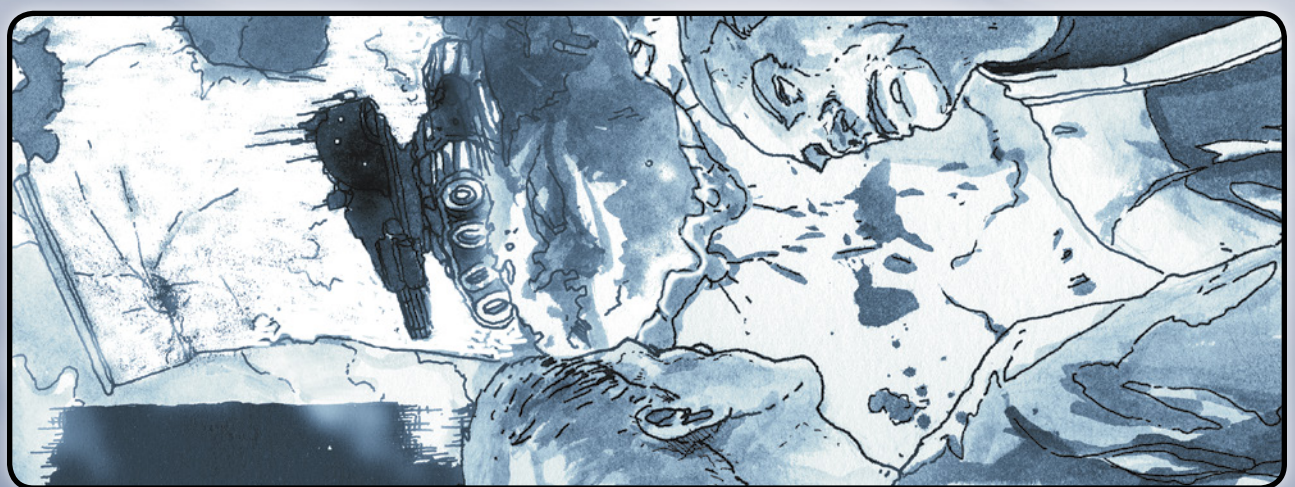


Atlantis, modern scientists have utterly failed to find the fjord he spoke of. Satellite imaging has not come across the mist-producing cliffs, nor have any surface surveys of the fjords turned up anything to date. Most academics have now given up the search, dismissing the Aborigine Graveyard as a hoax perpetuated by native storytellers. But the legend still endures, and believers still wonder. What was this mist Raj spoke of? Were the carcasses really aborigines, and if so, what were they doing there? And when will the Graveyard be discovered once more?

Other colonial myths and superstitions surrounding the aborigines include:

- Seeing them is a sign that you have a great destiny (popular among native activists).
- If you see them during a double full moon, someone you love is about to die.
- The GEO has contacted and made a pact with them, which explains why the Incorporate have suffered a disproportionate number of hostile encounters with the entities.
- They have been seen crawling on land.
- They can read minds.
- If you kill an aborigine, you must be cast out from your community, lest you bring their vengeance upon everyone around you.
- Eating aborigine flesh (taboo in almost all native cultures) brings immortality—if the aborigines don't hunt you down and kill you for it. This belief is held by some Incorporate execs.
- They need Long John as a food source—why else would miners encounter them so many kilometers down, near deposits of the ore?

CHAPTER 7: WORLD OF HURT



The face of Earth in 2199 is the tragic legacy of the 30-year global famine that has come to be known as the Blight. The rise of the GEO to world dominance, the emergence of the Incorporate states, the depopulation of much of the globe, once-great cities standing empty and abandoned, widespread social chaos and warfare—these characteristics of late 22nd Century Earth can all be traced to the Blight Years and their aftermath. The Blight was directly or indirectly responsible for the deaths of more than five billion human beings and the devastation of whole cultures and ecosystems. Historians and scientists still debate just how close human civilization came to utter collapse and even total extinction.

The Blight is the key to understanding Earth in 2199. The outbreak was without a doubt the most significant global transformation in human history, overshadowing World War II, and even the fall of the Roman Empire. In 2090, human civilization had reached the stars and colonized an alien world. The nations of Earth seemed to be slowly learning to live and work together in peace, as the global village continued to render political and ethnic boundaries obsolete and inefficient. Advances in genetic engineering, abundant and inexpensive energy sources, and computer technology promised to usher in a Golden Age to rival the dreams of 20th Century utopian futurists. Humanity had reached a level of technological development, scientific understanding, and social awareness at which it might finally have been possible for civilization to coexist within the global ecology.

In some sense, it was humanity's technology and scientific understanding that almost proved to be its undoing. Such was the power of this understanding that a handful of men, motivated by profit, were able to create and unleash a technology so deadly that it eventually threatened the extinction of the species. More than 100 years after this singular act, the Earth is still reeling from the radical changes the Blight left in its wake. The Global Ecology Organization, the Incorporate states, the Free Zones that dominate much of Earth's landscape—all owe their existence to the Blight and its aftermath.

THE GEO

Since its inception in 2093, the Global Ecology Organization has grown from an understaffed and under funded United Nations agency to a monolithic world government that dominates the political landscape of both Earth and Poseidon. Eighty years after the defeat of the Blight, public opinion on the GEO and its governance is decidedly mixed. Some, often the older generations whose memory of the Blight is still fresh, view it as the benevolent and heroic protector of human civilization. Others perceive it as a vast tyranny that impedes the development and growth of that same civilization. Challenged on every front, the GEO will nevertheless play a determining role in the future course of human events. The GEO is a tripartite government with executive, legislative, and judicial branches.

Executive Council

The Executive Council is the primary decision-making body of the GEO. It is headed by the Commissioner General and attended by the Deputy Commissioner General and the nine High Commissioners. The authority of the GEO's executive branch is far more centralized than is characteristic of traditional republics. Decisions and policies are voted upon by all members of the Council, with a simple majority deciding.

Commissioner General

The highest office of the GEO and the head of the Executive Council, the Commissioner General is arguably the most powerful individual in the Solar System. Heinrich Stein controls the entire GEO hierarchy and wields significant power over Independent heads of state. Critics of the GEO often charge that the Executive Council is little more than a "rubber stamp" for decisions that Stein makes unilaterally. In practice, the Commissioner General is most often directly involved in only major operations of the government. The routine operations of government are always delegated to the High Commissioners.

The Commissioner General is selected by a simple majority in the General Assembly. In past years, the nominee has usually been the current Deputy Commissioner General, but this is a tradition rather than a constitutional requirement. The Commissioner General serves five-year terms without term limits.

Born in Bremen, Germany, in 2136, Stein grew up in a region of Lower Saxony that had long been dominated by the Hanover Industries city-state. He

escaped the often-harsh living conditions and limited opportunities of his home and landed in Frankfurt when he was 17 years old. This old city, and the prestigious university there, was firmly under the control of the GEO and offered Stein the perfect environment in which to begin pursuing his interest in politics. In 2165, the same year Earth recontacted the Poseidon colony, Stein received his doctorate in economics and social theory from the University of Frankfurt. He immediately took a position with the High Commissioner for Natural Resources, and quickly made a name for himself as an outspoken opponent of the Incorporate and a staunch defender of aggressive ecological restoration. Stein became the High Commissioner for Natural Resources in 2176 and the Deputy Commissioner General in 2185. Elected as Commissioner General in 2192, Stein is in the midst of his second term as the leader of Earth's world government. Stein has been receiving longevity therapy for almost 15 years, and his vigorous health and political fortitude make it unlikely that he will leave office in the near future.

Deputy Commissioner General

The Deputy Commissioner's most important role is to assume the office of Commissioner General should his ability to govern be interrupted or compromised. Christine Marchadour serves in this office and is Commissioner Stein's closest political ally. In the first years of the GEO's existence, the Deputy Commissioner became a kind of "troubleshooting" office, and Marchadour often serves as the Commissioner General's official liaison with the High Commissioners. Marchadour was born in 2155 in Paris, a city that suffered terribly during the Blight Years. Christine is the daughter of orphans as both her mother and father were the only members of their families to survive the Blight. Christine received a Master's degree from Cambridge in 2176, and accepted a position as one of Heinrich Stein's administrative aides at the HCNR upon graduation. The two have been inseparable, politically and personally, ever since, and it is the conventional wisdom of pundit and politico alike that she is Stein's heir apparent, should he ever decide to step down.

High Commissions

Each High Commissioner is a member of the Executive Council. They wield a great deal of authority in their personal domains and have a fair degree of autonomy in the day-to-day operations of their offices. Each High Commissioner is charged with appointing the civil servants and functionaries who staff their departments. In practice, there is very little turnover when a new High Commissioner is appointed, and lifelong bureaucrats usually fill these low- to mid-level positions. New High Commissioners are nominated by the Commissioner General and approved by the General Assembly. Nominated High Commissioners are usually chosen from the membership of the General Assembly, and these appointments are often the result of deals struck between would-be Commissioner Generals and influential legislators. The GEO Charter, however, does not require that the Commissioner General select appointees from the General Assembly, and several of the most qualified High Commissioners have emerged from the middle level bureaucracy of their Commissions, or have even come from the private sector and the surviving political institutions of member states.

Human Resources

The HCHR took over the responsibilities of several former UN humanitarian and relief agencies when the UN was transformed into the GEO, including the UN Educational, Scientific, and Cultural Orga-

nization (UNESCO), the UN Children's Fund (UNICEF), the International Labor Organization (ILO), and the UN High Commissioner for Refugees (UNHCR). The current High Commissioner, Mounga Nifofa, is responsible for coordinating human relief in the event of disaster or war, for improving the labor conditions in all member states and promoting social justice, and has primary responsibility for coordinating educational and cultural exchange programs throughout Earth and the Colonies.

Mounga Nifofa was born in 2147 to a prosperous Kikuyu enclave near the MacLeod Enforcement city-state in Mombassa, Kenya. Nifofa took his education at Georgetown University in Washington, DC, on an academic scholarship provided by the office he now runs. Before receiving the nomination to HCHR in 2192, Nifofa served more than 10 years as Kenya's representative in the General Assembly. Nifofa's primary objective during his time at Human Resources has been to alleviate the suffering and deprivation of the millions living in abject poverty in Africa, Asia, Southern Europe, and Central America. Perceived as a political moderate, Nifofa is respected as a true humanitarian even among the Incorporate, and is revered as a saint among many African peoples.

Natural Resources

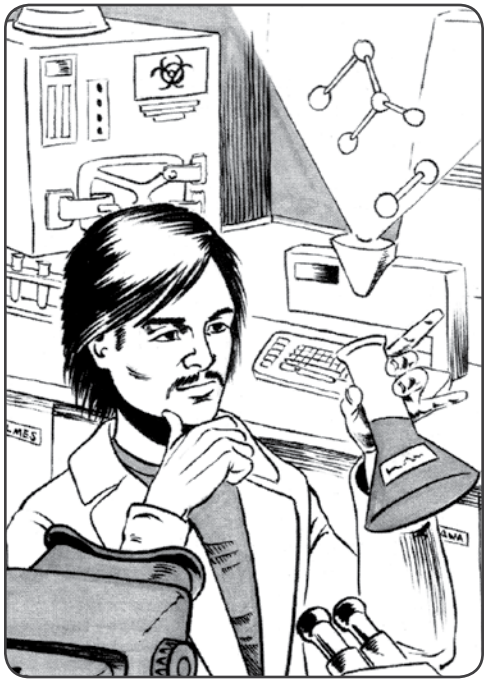
After the formation of the GEO, the HCNR absorbed several former UN agencies, including the Food and Agricultural Organization (FAO) and the International Fund for Agricultural Development (IFAD). It also adopted many of the specific duties and functions of the original UN Global Ecology Organization (UNGEO). Finally, because it was expected to coordinate early efforts to contain the Blight, the HCNR also annexed the World Health Organization. There has been some discussion in recent years of transferring these duties and obligations to Human Resources, but so far no action has been taken. Tar Marek, the current HCNR, is directly responsible for the GEO's environmental policies and regulations, and enjoys a powerful voice within the government's hierarchy.

Marek was born in Budapest, Hungary, in 2141, a city torn by the violence spilling up from the Balkans throughout the Blight and its aftermath. Prior to his nomination to the HCNR, Marek served more than 25 years in the General Assembly, and developed a reputation for eloquence, charisma, and radical environmentalism. Marek is also a strong advocate of an increased military presence in Earth's Free Zones, and has publicly called the social chaos, violence, and despotism of these regions "an even greater threat to peace and ecological harmony on Earth than that posed by the so-called Incorporate states." Marek is sometimes referred to as Commissioner Stein's "pet extremist" behind closed doors, but he remains a powerful, respected, and even feared political force within the GEO.

Science and Technology

This office absorbed many of the UN's scientific and technical agencies, such as the International Atomic Energy Agency (IAEA), the International Civil Aviation Organization (ICAO), the International Maritime Organization (IMO), and the World Meteorological Organization (WMO). The current HCST, Alexa Nikolaev, is responsible for coordinating global research and development efforts, and often serves as a liaison between GEO and Incorporate research centers. In addition, Nikolaev works with Human Resources in support of scientific and technical education programs throughout Earth and the Colonies.

The HCST also administers the World Space Agency. The successor of the United Nations Space Agency, it is the WSA's mission to manage and direct



the GEO's space program. The WSA's responsibilities include maintenance of the GEO's orbital infrastructure, including the skyhook and countless satellites and space stations in both Earth and Poseidon orbit. The WSA has a permanent presence on both *WH–1* and *WH–2*, and is responsible for coordinating the GEO's wormhole research. Finally, the WSA continues its traditional duties, from the development of spacecraft design and engineering to the scientific study of both the Sol and Serpentis star systems.

Nikolaev was born in 2161 in one of the countless Free Zone enclaves that dot the former Russian Federation. With no formal schooling, Nikolaev won an engineer's position in a Hanover computer research lab at the age of 17. By 2190, she was widely considered one of the world's leading experts on neural-interfacing microcomputers and the burgeoning field of intelligence amplification. A recent unauthorized biography has suggested that Nikolaev holds the equivalent of a doctoral degree in seven different fields, including computer science, mathematics, particle physics, microbiology, and art history.

To date, Nikolaev's most visible and controversial project has been the development of the Global Science and Technology Network (G-STAN) in cooperation with the HCC. This CommCore-based resource puts much of the accumulated scientific and technical knowledge of human civilization at the fingertips of researchers anywhere on Earth, through a state-of-the-art expert-interactive interface. Some critics complain that G-STAN is draining billions from the GEO's already limited budget, and that the funds should be used for research, not expensive programs intended to make research easier. One noted astrophysicist, however, has argued publicly, "G-STAN will do more for the advancement of science and technology than any development since the invention of written language." The vast majority of the scientific community seems to agree.

Communications

The HCC assumed many of the duties and responsibilities of UN agencies such as the Universal Postal Union (UPU) and the International Telecommunications Union (ITU). The current HCC, Jose Navarro, is directly responsible for all of the GEO's public communications facilities, including CommCore, the GEO satellite infrastructure of both Earth and Poseidon, and the drone fleet that allows rapid communication between the Solar System and Serpentis. In addition to these responsibilities, the HCC cooperates with Science and Technology to support the development of new computer and telecommunications technologies.

Navarro was born in Santiago, Chile, in 2152 and received degrees in business and electrical engineering from the California Institute of Technology in 2175. Rejecting lucrative offers from several Incorporate states and private corporations, Navarro spent 10 years in government service in Chile, then emigrated from his homeland and accepted a position with the HCC in 2185. Navarro was immediately transferred to Poseidon to assist in the development of the GEO's communications infrastructure there, and became the Deputy Commissioner on Poseidon in 2188. Though he had no prior political ties to the Commissioner General, Navarro was rewarded for his enormous strides in bootstrapping the frontier colony into the 22nd Century when Stein offered him the HCC upon his election in 2192.

CommCore

CommCore is the television, newspaper, telephone, town hall, shopping mall, movie theater, video arcade, singles bar, business office, and public library of 2199. A person without computer access to CommCore is either an extreme eccentric or living on the most underdeveloped fringes of human civilization.

The cost of CommCore access depends on location and the services used, but it averages around 100cs per month. Basic access includes unlimited communications privileges anywhere on the user's world, access to public library data, and thousands of entertainment and education options, including holovision, interactive games, discussion groups, and interactive correspondence courses. Services such as off-world communications and premium entertainment involve additional fees. A user's CommCore fees are typically deducted automatically from his designated banking account each month.

In reality, CommCore is a conglomeration of several different networks, including those serving Earth, Luna, Mars, the Belt Colonies, and Poseidon. Despite time delays ranging from 1.5 seconds from Earth to the Moon to 20 minutes from Earth to Mars, CommCore essentially functions as a single entity within the Solar System. A person on Luna can use his bodycomp to listen to a live concert in New York, and a person in the Belt can view a regatta on Mars' Argyire Sea.

Of course, the networks in the Serpentis System are a great deal more isolated. Data transmitted from Earth requires over four days to reach the CommCore relay at *WH–1*. Once received, they must be routed to a message drone, which is then sent through the wormhole to the relay at *WH–2*. The data is then transmitted to receiving stations in Poseidon orbit and integrated with the local CommCore data flow. As a result, data originating on the Earth network takes anywhere from one to two weeks to reach the Poseidon network, and vice versa.

Communication

In 2199, only interplanetary distances are a limitation on communications. Because bodycomps are so pervasive, a person is rarely out of touch unless he chooses to be. Indeed, computers are smart and friendly enough that people are often able to conduct their business without even communicating directly. For example, an employee working in his home in Haven could tell his computer, "When my boss calls, send him today's progress report." Not only will the computer do so, it will create some charts and graphs for the report, because it has been programmed to impress this particular employer with such things. If the employer needs additional information, the computer will also be able to pull data from any files to which the employer has been given access. More than likely, the employer will simply have given his own computer a standing order to contact the employee's computer each day to retrieve the progress reports.

Technology has also eliminated many of the limitations of electronic communications. Interpersonal contact is almost always accompanied by full holographic visuals, except in those instances where privacy is a concern. More dramatically, neural interface technology allows people to communicate across vast distances as if they were meeting face to face. Such encounters come complete with body language, facial expressions, gestures, touch, and even scent. Technology has also allowed communication to become more intimate than is possible with direct or virtual contact. Implant computers essentially allow a kind of electronic telepathy. These computers are capable of responding to a user's thoughts and transmitting data at the speed of light to another implant computer. With the addition of sensory recorders, almost all aspects of personal experience can be instantaneously communicated with another. For example, a soldier can record everything he sees and hears on a battlefield and transmit the information in real time to the other members of his unit, or to his command headquarters hundreds of kilometers away.

In the Solar System it is a very rare and notable event for someone to be out of touch with this vast communication network. Other than infrequent natural disasters, the most common cause of disrupted communication is going into an area where outgoing communication is regulated or even jammed. This regulation or jamming is done in and around most high-security governmental and corporate buildings, and around areas controlled by organized crime.

In the Serpentis System, service is somewhat less reliable. Communication in the Belt suffers occasional interruptions, but is usually almost as reliable as communications in the Solar System. However, on Poseidon, storms and hostile sea life frequently cut off the numerous underwater settlements. Even on the somewhat less hostile surface of Poseidon, severe storms, fast fungus, secure GEO or corporate stations, and criminal activity are infrequent but not uncommon causes of communication disruption.

Sending a message anywhere in the Solar System or the Serpentis System costs 1cs every 10 minutes or 0.2cs per page of text. Sending a message to the Serpentis System from the Solar System costs the same amount if it is sent onboard a cargo or passenger ship, but the message will take six months or more to arrive. For faster service, it is possible to beam a message from anywhere in the Solar System to *WH–1*. The message is then sent through the wormhole in a message pod and beamed to Poseidon from *WH–2*. Sent in this fashion, messages take at most two weeks to arrive, however, they cost 100cs per minute or 25cs per page of text. The cost is much higher due to both the expense of maintaining *WH–1* and *WH–2* and the difficulty of doing tight beamed transmissions over a distance of several light-days.

Entertainment

Many people watch holovids on their home terminal, or go to holo-theaters, live theaters, or even old, revival movie-houses for entertainment. Others read novels or get into long, heated arguments on the various CommCore newsgroups. However, some of the forms of entertainment available in 2199 would be totally unfamiliar to a person living in the 20th Century.

The introduction of trodes and neural jacks has allowed the dream of virtual reality to become fully realized. Through such interfaces, it is now possible to directly experience an electronic reality with all five senses. Using trodes, people can see, hear, feel, smell, and respond to a created world. Players can become part of a secret agent team, the Knights of the Round Table, or even explorers on Poseidon. With neural jacks, even more elaborate games are possible. Through neural interface, players can even experience the memories and emotions of their characters.

VR games are very popular, and addiction has become a problem on Earth and Luna. VR also has uses far beyond simple entertainment. Beginning pilots are usually trained using VR simulators, and in most modern jet aircraft, VR has replaced the traditional pilot's canopy. Medical students use VR to perform their first operations, and school children use VR programs on CommCore to interact with people and places scattered across time and space.

Information

CommCore is the ultimate library. Every book and magazine which survived into the early 21st Century is available on CommCore. Under the revised copyright laws of 2078, all works that are over 10 years old are available free of charge. More recent works are available for a small usage fee which decreases over time. A popular new novel might cost 10cs when it is first released and in three years it would only cost 3cs. Novels, technical manuals, movies, and textbooks are all available on CommCore. Almost any type of data anyone might need can be accessed through a few simple commands, or if the user has a neural jack, with a single thought.

One of the biggest surprises that many colonists experience when coming to the Serpentis System is that some information is simply unavailable. Information that is not known cannot be accessed using CommCore, and there are a great deal of unanswered questions on Poseidon and in the rest of the system. It is a frequent occurrence for a new visitor to point the camera of their bodycomp at a large sea creature only to receive the response, "This life form is not listed in any database."

Native, and even a few recent colonial settlements, exist for which there are no records; creatures exist that have been described by no biologist. Mysteries abound on Poseidon and the answers must be discovered rather than referenced through a computer.

The Virtual World

The various interface technologies have made it possible to easily access large amounts of information that is imperceptible to others. These technologies are regularly used for everything from covertly reading a person's personnel file as he approaches, to holding totally private conversations or having a built in speech prompter. There have also been major social implications to this technology, which are being explored on the cities of Earth, Luna, and the Belt, as well as in the city of Haven, on Poseidon.

Almost everyone carries a bodycomp. Many people use trodes, and more than 3% of the population have neural jacks. All of these individuals have the option of interacting in new and unusual ways that rely on access to such devices. Some people set their bodycomps to broadcast signals so that everyone who looks at them while using a trode or jack-based comp will perceive additional information about them. Some have virtual icons floating above their heads through which viewers can receive a brief biography or other information. Others use such electronic broadcasts to project a different appearance or style of dress. To ordinary observers, a woman walking down the street may appear to be a typical executive carrying a briefcase, but to those who perceive her through the software filter of a virtual interface, she may look like a tall, green hermaphrodite carrying a sword.

In Haven, as well as in many cities in the Solar System, a subculture has evolved in which these virtual personas are used to enhance the lives of its members. The current slang for using a virtual sensory persona is "wearing a Face." As of 2199, there are two Face clubs in Haven where members of this subculture go to relax and interact. Faces and personal icons may be accessed by anyone using a trode or jack-based computer, or more obviously, by using the holographic display on an ordinary unit.

Hacking

Hacking is the unauthorized access of a computer system or network. It is done for a variety of purposes, ranging from stealing money or trade secrets from rival corporations to finding the location of an illegal, secret base maintained by an organized crime family. Computer hacking is not uncommon

in 2199, but it is also not nearly as easy and glamorous as it was portrayed in books and movies of the late 20th Century. Computer security is very, very good. To gain access to a secure system, the hacker must first have access to a maincomp of his own for creating and running complex code-breaking programs. This maincomp can be at a remote location, and the hacker may use a bodycomp linked through CommCore to access it, but this increases the risk of detection and tracing.

In addition to the maincomp, unless the computer security is woefully inadequate the user must either have access to at least some of the passwords used in the system, or have direct physical access to the desired computers. Either of these allows a skilled and lucky hacker to gain access to a secure system.

Physical access to the computers is useful because almost all computer security is designed so that there are many more protections against outside intrusion than against users who have access to the internal terminals. Additionally, the most common and effective computer security involves completely disconnecting the computers from external networks. Such computers can only be hacked by someone who can actually gain physical access to them.

Hacking consists of as much raiding trash cans, looking over people's shoulders, and dressing up as repair crews as it does creating and running sophisticated code-breaking programs on expensive portable computers. Hacking is often more of a physical challenge than it is a complex mental battle of mind and machine. This mixture of physical spying and skilled computer use allows Game Masters to make hacking an adventure that can involve the entire party, rather than simply an activity where the hacker works with computers and the rest of the players sit and watch. In this way, a successful hacking venture will involve teamwork and cooperation, rather than solo effort.

Internal Security

Commissioner Atsumu Nakano controls the GEO's considerable intelligence operations and assets throughout Earth and the Colonies. In addition to overseeing the intelligence offices in the GEO's many member states, the HCIS is also, nominally, a liaison with the intelligence services of Independent governments, including the Incorporated city-states. In practice, of course, the relationship between HCIS and the intelligence services of the Independent states is more often adversarial than cooperative.

Nakano was born in 2138 in the Nippon Industrial State, an Incorporate city-state in the Kuril Islands. Upon graduating from the company university with degrees in political science and economics, Nakano was assigned to the Security Division in 2160. Public accounts are sketchy and largely unsubstantiated, but it is believed that Nakano became a GEO intelligence source no more than five years later, perhaps after visiting the Petropavlovsk Gulag maintained by the NIS in Kamchatka. In 2183, Nakano defected to Geneva and accepted an official position in the HCIS. He spent five years at the Incorporate desk and was appointed Director of Operations in 2188. As the HCIS, Nakano has continued his tradition of hostility toward the Incorporate states, and many within the government fear that his legendary and illegal Black Crusade further threatens the GEO's legitimacy and public support.

State and Internal Affairs

The HCSIA is effectively the diplomatic corps of the GEO. Of course, the second part of the High Commissioner's title is unquestionably an effort to emphasize the GEO's position that there are no true international relations on Earth, only GEO internal relations. Regardless, the HCSIA is responsible for arbitrating all disputes between member states, or between member states and the GEO. Karl Roscher, the current High Commissioner, is also responsible for maintaining relations with the Earth colonies that have remained fully autonomous from the GEO, such as Luna, Mars Colony, and the Belt Colonies.

Roscher was born in Berlin, Germany, in 2146 and, like Christine Marchadour, is one of the Commissioner General's oldest political allies. After graduating from the University of Berlin in 2167, Roscher began climbing the political ladder in the local German government. A staunch environmentalist and lifelong member of the Green Party, Roscher first met Heinrich Stein in 2172 at a Berlin symposium devoted to the issue of post-Blight ecological restoration. Roscher was elected the Governor of Germany in 2176, the same year Stein became the High Commissioner for Natural Resources, and the two were a powerful political duo at the state and federal level until Roscher was appointed the HCSIA upon Stein's election. Today, Roscher's political influence in the Executive Council and throughout Earth and the Colonies is second only to that of the Commissioner General himself.

Armed Forces

The HCAF is the commander of all GEO military forces throughout Earth and the Colonies. The branches of the GEO Armed Forces include the Peacekeeping Force, the Aerospace Command, and the Naval Command. The Marine Corps is officially attached to the Peacekeeping Force, though it often works closely with the other service branches as well.

Yuanlin Shao, the current HCAF, served more than 50 years in the Marine Corps Heavy Cavalry, popularly known as the Shock Troops, attaining the rank of Lieutenant General for the GEO flag. His nomination to the office by Commissioner General Stein was the source of some controversy, as several other officers with higher rank and seniority were qualified for the position. Many observers see his nomination as a reflection of the Shock Troops' increasingly important role in the GEO's military presence on both Earth and Poseidon. Shao also served in several conflicts with rogue Incorporate states during his distinguished career, and as a native of Taiwan, is believed to have the "correct" attitude toward China, still one of the GEO's principal Independent rivals.

Justice

The High Commissioner for Justice is responsible for enforcing GEO resolutions and statutes, and it had no real counterpart in the United Nations. In addition to the High Commissioner's routine investigative and administrative duties, the office is also responsible for nominating the Magistrates who serve a dual role as federal court justices and regional overseers of federal law enforcement operations. The GEO Marshal Service is a division of the Justice Commission, and each Magistrate is the administrative supervisor of a cadre of Marshals responsible for federal law enforcement in the Magistrate's jurisdiction. The Marshal Service was created in 2095 as a world police organization capable of enforcing UNGEO efforts to combat the Blight, and it absorbed much of the personnel and resources of the International Criminal Police Organization (Interpol) at that time.

Born in 2137 in Bristol, England, Sterling Cope has led one of the most colorful careers of anyone in government service. Cope served as a beat cop in London from 2156 to 2161, then spent three years obtaining a degree in criminology from the London School of Economics. In 2164, Cope became a homicide detective with the Criminal Investigation Department of the London Metropolitan Police. After serving with Scotland Yard for eight years, at the age of 35, Cope was accepted as a cadet in the GEO Marshal Academy in Geneva. Cope served as a Marshal in the Paris Office for 12 years, then returned to England to study law at Oxford. After obtaining his degree, Cope was appointed Magistrate to the 12th Court of Appeals in London in 2186, a position he held until he was appointed High Commissioner for Justice in 2192. An eloquent champion of law, order, and justice, Cope is often something of a thorn in the Commissioner General's side. Still a tough, honest street cop at heart, Commissioner Cope's belief in the GEO Charter is stronger than his allegiance to Stein and the Executive Council. His unwavering conviction that the GEO itself must be held to the Charter's principles is often a political liability.

Trade and Industry

The HCTI assumed the responsibilities of several UN economic and trade agencies, such as the World Bank and its affiliated organizations, the International Monetary Fund (IMF), the Industrial Development Organization (IDO), and the UN Conference on Trade and Development (UNCTAD). It is the monumental task of the HCTI to develop and coordinate unified industrial development, monetary, and trade

policies for the GEO member states. Mohan Singh, the current High Commissioner, also struggles to maintain working relationships with the Incorporate states and private corporations that command so much of the world's economic resources.

Singh is an Indian expatriate born in Calcutta in 2141. Fleeing the poverty and hopelessness of a homeland devastated by war for much of his childhood, Singh secured a scholarship to Oxford in 2157. After graduating with degrees in economics and public policy in 2162, Singh returned to India and entered service in the state government of West Bengal, where he served as a legislator until being elected Governor of West Bengal in 2175. In 2179, Singh was appointed as the Indian representative in the General Assembly, and soon became the leader of the powerful Asian Coalition. Stein's nominations of Mohan Singh and Yuanlin Shao were perceived as a very strong indicator of an administration that would take a hardline position towards the two most dangerous corners of the Asian Triangle—China and the United Islamic Republic.

General Assembly

The General Assembly is composed of one representative for each member state, including Independents, and each representative is given a single vote. The General Assembly is presided over by the Deputy Commissioner General, who is seconded by the Assembly Speaker in the event of his absence.

Unlike traditional constitutional republics, the General Assembly of the GEO has little actual legislative power. In effect, the General Assembly can only pass or reject the laws drafted by the Executive Council. It requires a two-thirds majority for the General Assembly to defeat a bill introduced by the Executive Council. The General Assembly can pass resolutions, however, which are essentially formal recommendations to the Executive Council to pursue a specific course of action. All resolutions require a simple majority to pass, and they have no binding authority on the Executive Council.

In addition to these duties, the General Assembly is responsible for confirming the Commissioner General's nominations of all High Commissioners and for selecting the Commissioner General himself. In recent years, several member states with democratic traditions have begun holding popular electronic elections through CommCore and encouraging their representatives to let this vote determine their selection. The terms of their special arrangements with the GEO even allow Independents, such as the US and China, to require their representatives to vote a certain way, whether based on popular elections or the directive of the national government. Several representatives of full member states have become vocal advocates of a resolution that would recommend

an amendment to the GEO Charter making the outcome of elections legally binding on their representatives. The Executive Council is known to oppose such a resolution.

World Court

The World Court superseded the UN International Court of Justice, which had earlier taken the place of the original World Court founded by the League of Nations. The World Court is the judiciary branch of the GEO, and has jurisdiction over disputes between member states and over the legislative activity of the GEO itself. The World Court, headquartered in the Hague, Netherlands, is also the final court of appeals for judicial decisions handed down by GEO Magistrates.

The World Court is composed of 11 Justices and is presided over by a High Justice. A candidate for the World Court is nominated by the Commissioner General and approved by the General Assembly. No more than one Justice from any member state can sit on the World Court at any given time. Senior GEO Magistrates are primary candidates for positions on the World Court.

THE INCORPORATED CITY-STATES

Like the GEO, the Incorporate states have a mixed reputation among the people of Earth and the Colonies. Often portrayed in the media as ruthless and even inhuman titans, especially on Poseidon, the Incorporated city-states are in fact complex political and economic hybrids. Their structure and organization combines elements of modern nation-states, ancient city-states, multinational corporations, and commercial cooperatives. When developing plot lines centering on the Incorporate, it is important to bear in mind that the Incorporate states, in themselves, do not do anything. Like all other human institutions, they are comprised of individual human beings, and these people are the ones that set policy, make decisions, and take action on behalf of the organization. While there are good and bad people, sound and unsound policies, and just and unjust actions, these traits can be applied to the institutions themselves only indirectly.

Anasi Systems

Location: Beirut, Lebanon
Focus: biomods, pharmaceuticals, health care
Assets: 719 billion scrip

Originally a French company, Anasi became the hero of 21st Century medicine with its development of a counter virus designed to attack the AIDS pathogen. The company built on the success of this monumental achievement and became a world leader in the medical applications of genetic engineering technologies. Anasi survived the onset of the Blight and the collapse of its parent country to establish a city-state in war-torn Beirut early in the 22nd Century. In 2117, Anasi became the first Incorporate city-state to defend its sovereign territory from foreign aggression when it preempted a UIR attack on Beirut by destroying Damascus, Syria, with a 10-megaton nuclear warhead. For the GEO, nuclear proliferation among the new Incorporate states was a nightmare scenario, but Anasi was quick to point out that it retained the right to defend itself against attacks by other states, and that the UIR's mobilization had been in clear violation of GEO laws against aggressive warfare. In fact, the GEO's Executive Council was even more concerned about the UIR than it was about the Incorporate states, and the leadership was not displeased that UIR expansionism had been curbed without the expenditure of precious GEO resources. Regardless, Anasi's action reinforced a global perception that Incorporated city-states had become political and military, as well as economic, powers.

Anasi has benefited enormously from the discovery of Long John and the opening of new frontiers in biotechnology. It has developed countless new procedures and biomodifications, and holds the patent to one of the leading longevity therapies on the market. Anasi has also diversified into primary health care, opening medical centers and clinics in several major Earth cities, in Earth Orbit, and on Poseidon.

Anasi made headlines throughout Earth and the Colonies when it purchased Cyprus from the GEO in 2188. The island had been almost completely depopulated during the Blight, and Anasi was successful in convincing the government that it would revitalize this jewel of the Mediterranean. A year later, Anasi announced that it was beginning construction on Xanadu, a massive, high-tech arcology capable of supporting as many as 50 million people.

The sprawling arcology will be surrounded by a carefully designed "wilderness park" and is intended

as a permanent retirement community for the ultra-rich. Among many other amenities, Xanadu will offer its residents state-of-the-art medical care, regular longevity therapy, cutting-edge virtual reality suites, a transhuman modification "subscription service" (regularly updated as the technology develops), and safe, secure hibernation chambers for those times when a resident chooses to sit out a few decades. Ten years later, Xanadu is nearing completion and has already been reserved to capacity. Some media critics have dubbed it "the most overpriced nursing home in history," while others hail it as a visionary glimpse at how the vast majority of human beings will live in the near future. Regardless, even before its opening, Xanadu is a resounding success, and Anasi is drawing up a proposal for a seafloor variant of the complex on Poseidon.

Atlas Materials

Location: Marrakech, Morocco
Focus: manufacturing, engineering, aerospace
Assets: 767 billion scrip

Atlas is one of the few Incorporate powers to have established a city-state within the borders of its country of origin. Taking its name from the mountain range cutting through North Africa, Atlas is a giant in the fields of low-and zero-gravity engineering and manufacturing. Many of Earth's orbital habitats bear the Atlas Materials globe, as do many of the transport spacecraft that regularly make the run between Earth and Poseidon.

Atlas was in an excellent position to survive the Blight Years. It controlled many of the mines in the New Africa that remained productive and profitable during the crisis, and it maintained lucrative relationships with Luna, Mars Colony, and the Belt, all of which were largely unaffected by the Blight. When the Blight was finally defeated, Atlas profited tremendously from humanity's aggressive return to space and renewed contact and trade with the colonies of the Solar System.

Atlas, of course, was also one of the first Incorporate states on Poseidon. It was responsible for the discovery of Long John and its potential biochemical applications, was the first to establish full-scale mining operations on the waterworld, and the first to begin transporting the minerals to Earth. Though it quickly lost this monopoly, Atlas nevertheless benefited from the exploitative rush for xenosilicates by providing deep-sea facilities, orbital stations, deep-space transports, and technical know-how to rival Incorporate states and private corporations.

Despite its active participation in the economic exploitation of Poseidon, Atlas has a long and well-documented tradition of ecological responsibility. Atlas invests a sizable fraction of its annual income on research into environmentally friendly products and technologies. It is also a major contributor to research efforts at the Haven Institute of Science and Technology studying the environmental impact of the Long John industry. As a result, it is one of the few Incorporate states with which the GEO can be said to maintain cordial relations. This long-standing policy is hardly a financial liability for Atlas—it has participated in the vast majority of the GEO's large-scale construction contracts, including *Prosperity Station* in Poseidon orbit.

Biogene

Location: El Dorado, Colombia
Focus: genetic engineering, pharmaceuticals, geriatrics, biomods
Assets: 875 billion scrip

Biogene was the first corporation to establish an autonomous city-state on Earth, and in 2199, El Dorado is home to more than 15 million people. Biogene made its fortune during the 21st Century explosion in biotechnology, and was responsible for designing the first true genie. The biotech giant was also directly involved in many of the ongoing projects during the Blight Years to develop a counter to the Fischer Virus. Despite the role it played in defeating the Blight, Biogene is often publicly perceived as an Incorporate icon, representing all that is both good and bad about the Incorporate states. Certainly, Biogene has been among the most politically aggressive Incorporate states, and for this reason alone, it has a long tradition of confrontation with the GEO.

Since the late 20th Century, the ownership and management of Biogene has remained in the grip of the Ballard family. Desmond Ballard was the CEO and largest stockholder of the corporation when the Blight plunged the global economy into chaos. Ballard used his gold reserves and other hard assets to carefully hoard Biogene's stock as the price continued to plummet, and took advantage of several opportunities to stabilize his company's position during an era of economic and political collapse.

First, Biogene was the chief beneficiary of the death of Fischer Foods. The company acquired the

lion's share of its rival's valuable assets, including laboratory facilities, outstanding contracts, and intellectual property for pennies on the dollar at public auction. It also hired many of the best scientists and engineers who were displaced when their employer collapsed into bankruptcy.

Second, Biogene won lucrative contracts from several governments, including the UN, to develop technologies that would help Earth to survive the Blight. These projects included everything from alternative agricultural production technologies, to storage and cloning techniques for extinct species, to the development of counter viruses designed to attack and kill the one unleashed by Fischer Foods in Southeast Asia.

Finally, of course, Ballard was largely responsible for winning his company's political independence. The UN's recognition of Biogene as a sovereign government gave the company the political ammunition it needed to guarantee itself a future of unheralded economic freedom and influence. Suddenly, there were few limits on the company's policies and activities that it did not set for itself. Within its private domain in El Dorado, Biogene could establish its own labor laws, conduct tax-free operations, ignore the often-restrictive drug and environmental legislation of other governments, and continue to grow and diversify without fear of antitrust action. The new Incorporate city-state gained the power to efficiently tax its citizens by simply deducting a percentage of their earnings each month. And it added security personnel and intelligence assets to its standing army of attorneys and lobbyists. Most importantly, because the Ballard family held almost all of the company's stock, it could pursue whatever long-term policies it chose without having to answer to public shareholders.

In 2199, there are 38 Ballards active in the management and operations of Biogene, all of them transhumans, all of them recipients of regular longevity therapy. The Executive Director, Herschel Ballard, is the chief of state and CEO of Biogene, as well as the patriarch of the Ballard family. Herschel and his immediate family live in a palatial mansion, built by Desmond in 2086, on the family estate in El Dorado. With the assets of Biogene nearing the one trillion mark, Herschel is thought to be the single wealthiest person on Earth. The ostentation of the Ballards has become legendary, and would likely result in widespread public outcry but for the family's equally publicized philanthropic traditions. Herschel maintains a stable of 1,000 Lippizaner stallions engineered to genetic perfection. All of the horses are the beneficiaries of custom designed longevity treatments, and have joined their master in immortality. Sea Dreams, a marine park in El Dorado, is home to Desmond, a sperm whale cloned from stored DNA. It is thought that Desmond is the only great whale in existence. The Ballards have also poured billions into private secondary schools and universities around the world, and are major contributors to several charities ranging from environmental groups to child welfare organizations.

In the wake of yet another period of explosive growth in biotechnology, Biogene has established itself as one of the dominant economic forces on Earth, trailing only the GEO itself and a handful of Independent nation-states in resources and financial influence. It has become something of a mini-empire, with offices, clinics, laboratories, and banks extending across all of Earth's settled continents, in all of its major cities. Indeed, though it does not command the economic power of nations such as the United States or China, it has become vital enough to the economic health of both nations to force economic treaties granting it significant concessions in everything from tax and tariff laws to drug regulations. Biogene's large, prosperous orbital station, limited presence on Luna and in the Belt, and colonial holdings on Poseidon make the Incorporate state a powerful force throughout Earth and the Colonies.

DUNDALK SHIPBUILDING

Location: Belfast, Ireland
Focus: shipbuilding, manufacturing, aerospace
Assets: 697 billion scrip

Dundalk was, for many years, a foundering Irish shipyard turning out three or four ocean-going cargo ships a year. In 2018, based on the ideas of a particularly imaginative engineer, Dundalk submitted a design for a two-man orbital construction pod to NASA. The Dundalk design won out over many established competitors, as it proved to be the safest and most efficient of those submitted. From that point on, Dundalk's share of the spacecraft and orbital construction market grew at a consistent and considerable rate.

In 2080, the company's future was secured when the UN awarded it the primary contract for the *UNSS Cousteau*, the massive colony ship that would trans-

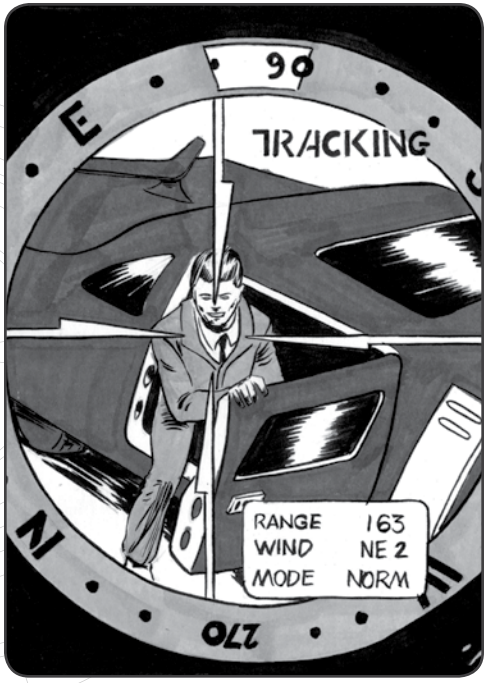
port the Athena Project colonists to Poseidon. The influx of capital, research, and technology gained during the project allowed Dundalk to expand its operations throughout the Solar System.

In 2100, the GEO ended British rule of Northern Ireland by granting Protectorate status to a unified Irish state. Belfast remained torn by social unrest and violence, and Dundalk established a city-state there in 2103 at the request of the new Irish Free State in Dublin. The successful company had long been known for pride in its ethnic and national heritage. It has enjoyed a close relationship with the Irish government and all member nations of the UN.

Since Recontact, Dundalk's operations have continued to expand. Dundalk is second only to Atlas in the orbital and spacecraft construction industry, and has become the largest provider of transport between the Solar System and Serpentis. Dundalk has also been active on and below Poseidon's surface, providing the colonization effort with everything from large freighters and transports to deep-sea stations and mining facilities.

The current President of the Dundalk city-state is Annette Kilkenney. The daughter of a long line of chauvinistic Irish industrialists, Kilkenney was largely excluded from Dundalk's boardrooms until she was almost 50 years old. Her father was the last President of the Incorporate state and, counter to the conventional wisdom, willed her his controlling block of shares upon his death.

Annette is a shrewd businesswoman and charismatic political leader. Through her efforts, Dundalk maintains excellent relations with the Irish Free State, the GEO, all member nations of the UN, and several other Incorporate states, including Atlas, Dundalk's chief competitor.



GenDiver

Location: Guadalupe, Mexico
Focus: genetic engineering, environmental engineering, security
Assets: 765 billion scrip

GenDiver was originally founded in San Diego in the early 21st Century. In 2198, in the midst of a worsening economy and growing social unrest, the company obtained permission from the Mexican government to establish a city-state on Guadalupe, an island off the coast of Baja California. Like Biogene, GenDiver was built during the last century's explosive growth in the biotechnology industry. The company was a pioneer in the field of genetic surgery, but did not really make a name for itself until it received the UN contract in 2080 for the genetic alteration of the Athena Project colonists. GenDiver modified more than 5,000 candidates over the course of five years, and grossed more per annum during this period than its pre-contract net worth.

During the Blight Years, of course, the market for human biomodification largely collapsed, and GenDiver was forced to diversify into new fields. Like Biogene, it actively pursued Blight-related government contracts, though it generally devoted these funds to research projects expected to lead to marketable products once the Blight was over. GenDiver played little part in the defeat of the Blight, and its public image is one of the worst of the Incorporate states.

Perhaps because of the constant comparisons with its larger rival, Biogene, GenDiver has acquired something of an institutionalized inferiority complex. It is often aggressive and confrontational in its operations, and has often used its political status for economic gain. The Security Division combines the roles of law enforcement, intelligence service, and national defense in one agency, and GenDiver has been accused of numerous violations of both the Ica-

rus Accords and GEO statutes, from industrial espionage and sabotage to the assassination of political and financial rivals.

Ira Goldblatt is the President of GenDiver and is thought to share the more aggressive and irritating tendencies of his pet chihuahua, Estelle. Goldblatt is a direct descendant of one of the company's founding partners, and his family's power and wealth is exceeded only by the Ballards of Biogene. Unlike the Ballards, however, Goldblatt appears to have no interest in cultivating a positive image for himself or his empire, either in the public sphere or among his fellow world leaders.

Hanover Industries

Location: Hanover, Germany
Focus: banking, manufacturing, consumer goods, health care
Assets: 789 billion scrip

The history of Hanover Industries is unique among the Incorporate states. It was first created in 2095 at a summit meeting in Bremen, Germany, attended by several of the leading industrialists in central Europe. These men and women, recognizing that their corporations were far too small and financially unstable to survive on their own, agreed on a cooperative strategy that would ensure their survival. In 2096, after several months of legal and financial preparation, they pressured the German government into relaxing a broad range of commercial regulations, including anti-trust laws, and reorganized as a single entity. At this time, the Hanover Conglomerate, as it was called, represented the vast majority of Germany's remaining economic and industrial might.

In 2101, the huge corporation again approached the government and requested territorial sovereignty over the city bearing its name, along with much of the surrounding countryside. Because the conglomerate was responsible for what little economic prosperity Germany retained, the government was forced to accede to the request. There was, however, one major condition: Hanover would be granted a 100-year lease on the territory. When the lease expired, control would revert to the German government.

The move was immediately contested by the GEO, as the Executive Council argued that Hanover did not meet the necessary criteria for a corporation to be granted political autonomy. Specifically, the GEO leadership claimed that the German state government had not failed to meet its obligations, nor would it in the foreseeable future. The Chairman of Hanover, Karl Hartmann, argued that the German government had, in fact, failed to meet its economic obligations to the German people, and that in those difficult times, economic stability was the foundation of social and political order.

While the GEO finally recognized Hanover, its political status remains the most tenuous and controversial of all the Incorporated city-states. Control of the city will revert to Germany, which is now a full member-state of the GEO, in less than two years. The Hanover government has launched a major push to relocate its political and economic infrastructure to its colonial territories on Poseidon. If it moves its capital to Poseidon, Hanover would presumably retain its status as an independent state.

As its origins would suggest, Hanover is one of the most diversified of the Incorporate states. Its many operations include banking, biotechnology, manufacturing, mining, consumer goods, health care, electronics, media, defense, and agribusiness. The political organization of the Incorporate state is almost feudal. Unlike most of its kind, the ownership of Hanover is extremely decentralized. Its many semi-autonomous divisions are largely controlled by the descendants of the original signatories of the Hanover Summit. So, for example, Otto Hartmann controls the largest block of shares and serves as Chairman, as did his father, while Rudolf Diedrich is the President of Hanover Autoworks and Joseph Krupp, a direct descendant of the famous family of industrialists, is President of Hanover Manufacturing. Each of the divisional Presidents sits on the Executive Board and is answerable, in principle, to the Chairman. There are thought to be nearly 20 different Presidents in the Hanover hierarchy.

Hydrospan

Location: Perth, Australia
Focus: manufacturing, construction, biotechnology, marine engineering, cetacean technology
Assets: 619 billion scrip

Hydrospan is undoubtedly unique among the Incorporate states. Founded in 2068 by a group of dolphin engineers, it was the first cetacean-owned and operated corporation on Earth. The company quickly became a leader in the field of marine engineering, including the development of technologies designed for Earth's cetacean population. Hydro-

span held the patents on the first sonar trodes and CICADAs, and these designs produced many spin-off technologies that were effective in human applications as well.

Hydrospan was also one of the secondary contractors to benefit from the Athena Project in the late 21st Century. The company consulted on the design and engineering of many of the *Cousteau's* modular components, provided the colonists with advanced hydrofoils, submersibles, and underwater equipment, and designed and built much of the technology developed for the cetacean colonists.

In 2107, the failing government of Australia started looking for Incorporate support. Originally headquartered in an offshore complex near Melbourne, Hydrospan joined Lavender Organics in establishing a city-state on the Australian continent. The Hydrospan city-state at Perth is an isolated island of civilization in the largely ungoverned Free Zone that sprawls across much of Western Australia. The Fremantle EcoDomes, a cetacean habitat constructed on and below the ocean surface, are home to the largest concentration of dolphins on Earth.

During the Blight, Hydrospan cultivated a close relationship with the GEO, winning government contracts for projects ranging from aquaculture to the development of technologies designed to protect coastal fish populations. The research accumulated during these projects allowed Hydrospan to diversify into biotechnology, producing state-of-the-art aquaform and cetacean biomods that were significantly more advanced than those being developed in the labs of Biogene and GenDiver.

The political organization of the Hydrospan city-state is, like its origins, wholly unique. First, ownership of Hydrospan is held collectively by all of its citizens. Shares are determined by seniority and merit, and there is no inheritance. When a citizen dies or leaves Hydrospan, his shares are purchased by the collective and redistributed. The settlement for a citizen with a long and distinguished career at Hydrospan can amount to several million scrip, though it is rare that anyone decides to leave. Hydrospan's net income, that which is not reinvested or allocated to public projects, is distributed to the citizenry according to share. The government and business hierarchies are also strictly meritocratic. Whether they are in government or corporate service, the only way for citizens to be promoted is to produce results. As a result, Hydrospan's political and business leadership is perhaps the most effective of any of the Incorporate states.

Hydrospan has, of course, benefited tremendously from the reopening of the Poseidon frontier. It remains a leader in the field of marine habitats and the manufacture of small watercraft, and the discovery of Long John has opened up completely new possibilities in the field of genetic aquaforming. Hydrospan also continues to develop technologies for the expanding cetacean population of Poseidon, a small market, but one that it has practically cornered.

Hydrospan is also, unsurprisingly, one of those Incorporate states for which ecological responsibility is a primary concern. In many cases, this approach has resulted in the development of manufacturing processes that are more efficient than those used by Hydrospan's primary competitors, and like Atlas Materials, it has prospered from the goodwill of the GEO. On Poseidon, Hydrospan is the only Incorporate state that enjoys an amicable relationship with the majority of the native population. Hydrospan has cultivated this relationship carefully, providing technological and financial aid to outlying settlements, sponsoring the immigration of Earth-born cetaceans to native settlements on the waterworld, and advocating native rights and interests in the General Assembly.

Lavender Organics

Location: Adelaide, Australia
Focus: biomods, genetic engineering, cosmetics, pharmaceuticals, computers
Assets: 637 billion scrip

Originally founded in Cardiff, Wales, Lavender Organics established offices worldwide during the biotechnology boom of the 21st Century. The company's first major contribution to the consumer market was a transform virus designed to produce increased skeletal-muscular strength in humans. The virus' limited life span ensured the need for continuing therapy and established a long-term market for the product. Lavender Organics was successful in acquiring numerous government contracts for this and other products, and also became a major player in the sports entertainment industry.

Despite these accomplishments, Lavender Organics was never a fixture on the leading edge of genetic research and development. The company secured its future by excelling in two major areas: relatively inexpensive consumer biomods and the organic computer

industry. Lavender has long been a leader in DNA-based storage technology, neural interface, and intelligence amplification. The dependence of human civilization on these central technologies is likely all that allowed the company to survive the Blight.

In 2107, Lavender closed its headquarters in Wales and established a city-state on the southern coast of Australia at the request of the collapsing government in Canberra. The company had a long tradition in Oceania, with offices, research facilities, and manufacturing operations throughout Australia, New Zealand, and Malaysia. The Lavender city-state in Adelaide was warmly received, and people flocked to the haven of security and opportunity from across the continent.

In 2199, Lavender Organics continues to develop and market the products that made it so successful. The Incorporate state maintains body-sculpting parlors and biomod clinics in more than 50 major cities throughout Earth, as well as on several stations in Earth orbit and even in Ibrium City. Its computer bioware continues to be some of the best of its kind. Lavender is also continuing research into true artificial intelligence, and is reported to be exploring new approaches modeled on the unique characteristics and processes of cetacean intelligence.

MacLeod Enforcement

Location: Mombasa, Kenya
Focus: security systems, private security, military consultation
Assets: 598 billion scrip

Founded as a relatively small security consultancy in Edinburg, Scotland, MacLeod was involved in all aspects of an industry that continued to grow in importance throughout the 21st Century. The company designed and installed security systems, contracted out well-trained and professional security personnel, provided anti-terrorist training for corporate executives, and even offered military consultation to several governments in Africa, Asia, and the Middle East. Indeed, though it was never indicted, the company was suspected of financing several mercenary outfits in some of the world's bloodiest hotspots.

It is likely that MacLeod benefited more than any other commercial enterprise from the outbreak of the Blight. While it was quite successful, the company was little more than a minnow in the corporate pond of the 21st Century. All that changed when the Fischer Virus began dismantling the world's political, economic, and social stability.

MacLeod had a long-standing relationship with Biogene Corporation, having provided the company with anti-terrorist training, political analyses of Third World markets, and security consultation for years. When Biogene established its city-state in 2094, it suddenly found itself saddled with national security concerns with which it was entirely unfamiliar. The fledgling Incorporate state, after failing to acquire MacLeod, essentially contracted the company to temporarily serve as its Defense Department during this transitional period. MacLeod was responsible for organizing, training, and equipping a small, highly competent military force and for establishing its doctrine and strategic objectives.

This massive, well-publicized contract solidified MacLeod's reputation as the premier security consultancy on Earth. The public recognition and legitimacy not to mention the capital acquired in the deal allowed the company to establish its own city-state in Mombasa when the government of Kenya fell to civil war and social chaos. MacLeod benefited from abundant human resources that could be quickly and effectively trained in military and security procedures, as well as an unending stream of lucrative contracts with Incorporate states and Free Zone enclaves for whom security had become a paramount issue. MacLeod's new found political autonomy also freed it of the legal restrictions by which it had previously been bound, allowing it to deal freely in military weapons and legitimize its mercenary forces.

In 2199, MacLeod Enforcement represents one of the most powerful and sophisticated military forces on Earth. While its personnel pool is still relatively small, its hardware is state of the art, its financial resources are immense, and its political connections throughout Earth and the Colonies are formidable. MacLeod maintains standing contracts with several Incorporate states and Independent nations, including Biogene and the United Islamic Republic. In the popular media, it is generally assumed to be the GEO's Public Enemy Number One, and it has been accused of everything from training and equipping terrorist organizations to murdering GenDiver executives on Poseidon.

Many observers believe that MacLeod's Incorporate connections, and the fact that it has almost certainly stockpiled weapons of mass destruction, are

all that has kept the GEO from an outright declaration of war. At present, the Justice Commission continues its investigations of MacLeod in the hopes of prosecuting the Incorporate state for violations of those few remaining laws by which it is compelled to abide. Thus far, these efforts have been unsuccessful, and there are rumors that the GEO may turn the matter over to Internal Security for prosecution by more subtle, and less legal, means.

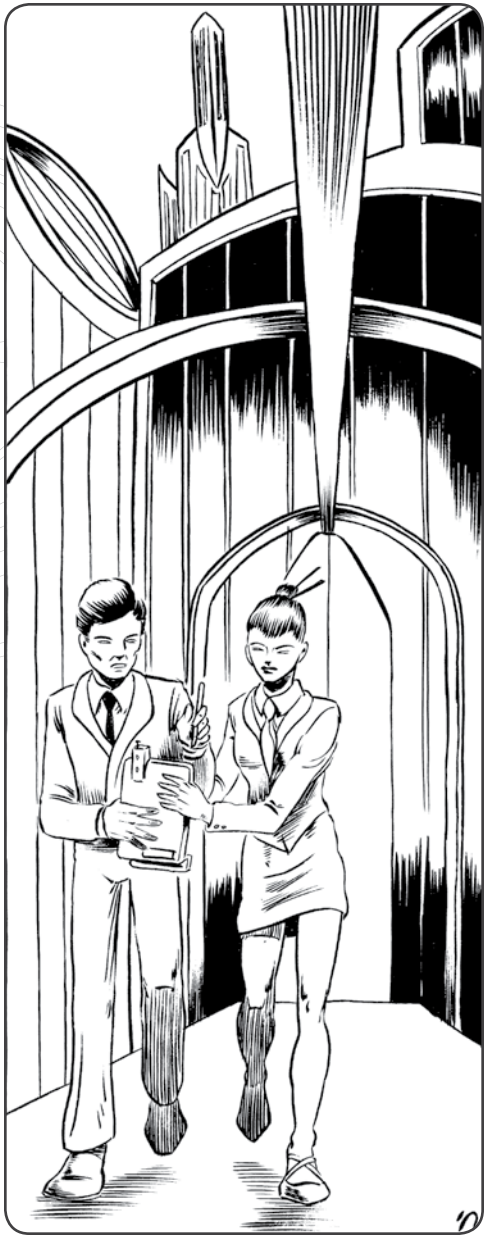
Nippon Industrial State

Location: Kuril Islands
Focus: banking, manufacturing, heavy industry, consumer goods
Assets: 742 billion scrip

Similar in its origins to Hanover, the Nippon Industrial State evolved from the powerful zaibatsu of 21st Century Japan. The Kuril Islands remained contested by Japan and Russia throughout the 2100s, and their sparse population was devastated during the early years of the Blight. It is estimated that less than 1,000 people were living on the islands when the NIS established its city-state on Iturup in 2102. The move was supported by the Japanese and Russian governments, both of which received significant aid packages from the NIS.

The Executive Director of the NIS is Tamotsu Nakazato, a man who prides himself on the social and cultural traditions of his Japanese homeland. The Nakazato family holds the vast majority of NIS stock, though small blocks are sometimes gifted to other families in return for long and distinguished service. Among the traditional values resurrected by the NIS are state Shinto, a rather xenophobic attitude towards foreigners, and aggressive militarism. Along with Anasi Systems, the NIS is the only Incorporate state that has been involved in overt warfare. In 2109, NIS forces annexed much of southern Kamchatka, meeting little resistance from a small, poorly supplied Russian garrison. The immediate establishment of a huge work camp in Petropavlovsk belied the claim of the NIS government that the action was intended to relieve the suffering of the Russian and Koryak population.

In 2199, the NIS, like Hanover, is diversified across all major sectors of the Earth economy. The state remains one of the GEO's fiercest rivals, as it continues to circumvent global statute in its quest to expand its operations and territories. The NIS would likely have been targeted by GEO economic sanctions or military action, but for two factors. First, the NIS is a powerful and influential opponent of China, an Independent nation that is an even greater concern to the GEO than the NIS. Second, the NIS plays a crucial role in the economic health and stability of the Pacific Rim, and it masterfully wields the political leverage it gains from that role. Nevertheless,



its position remains a tenuous one. As Asia, and the entire world, continues to recover from the Blight, it will become less and less likely that the GEO will suffer the Nippon Industrial State's excesses. The NIS had been aggressively expanding its operations and holdings on Poseidon, perhaps to offer a more decentralized target should its conflict with the GEO reach a boiling point.

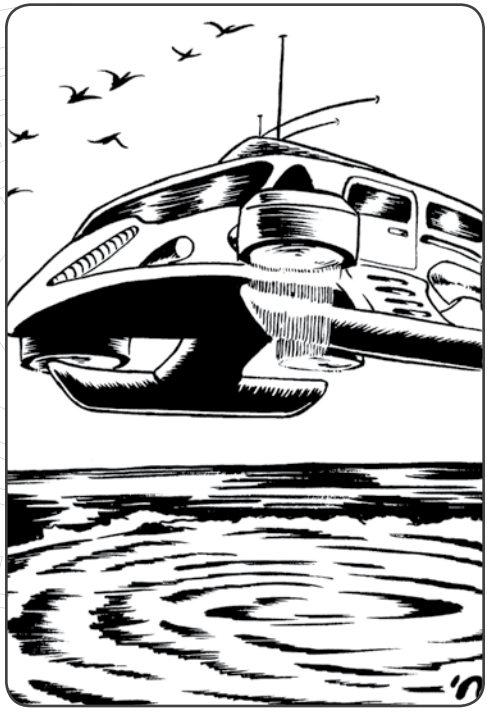
FREE ZONES

During the course of the Blight Years, countless national governments collapsed under the pressure of famine, social chaos, violence, and economic ruin. In some cases, the GEO or the Incorporate stepped in to effectively rule these regions. Others have reverted to political and social traditions predating their emergence as modern nation-states. For example, peoples throughout sub-Saharan Africa have reverted to tribalism, ignoring the imperial political boundaries that have long separated them. Still other regions have remained in effective anarchy, some for more than 100 years. The regions of Earth that remain without formal government have come to be known as Free Zones.

Free Zones can be found on all of Earth's populated continents. Most Free Zones are radically depopulated and are characterized by stunning poverty and violence. In these regions, scattered families struggle to survive on subsistence agriculture, scraping their livelihood from ruined farmland that has yet to recover from the ravages of the Fischer Virus. Bandit gangs roam the wasted landscape taking what they want from the weak, and self-styled warlords live like feudal kings in strongholds, prospering by the sweat and blood of those cowed by threats of violence.

In some cases, these violent Free Zones have presented enough of a threat to regional stability that the GEO has been motivated to intervene. The last such incident was in 2196, when coordinated GEO and US forces launched an airstrike against a stronghold in Idaho. The attack came after GEO Internal Security learned that the local warlord had been attempting to acquire nuclear weapons from Free Zones in the former France and Russia. For the most part, however, the GEO has been forced to limit its attention and activity to Earth's more densely populated regions. Its limited resources dictate that it continue its struggle to hold a few prized pieces of the world together, ignoring for the time being those that have already fallen apart.

However, the Free Zones do not paint such an exclusively tragic picture of hopelessness and violence. The technology available in the late 21st Century made it possible for countless small communities to survive and protect themselves from the Blight with no external assistance from national governments or the GEO. With small fusion reactors, wind- and solar-power equipment, sophisticated computers and automated machinery, and advanced hydroponics technology, many Free Zone enclaves have maintained a remarkable degree of prosperity throughout the Blight and its aftermath. In recent years, these traditionally insular high-tech settlements and communes have begun trading with each other and with both national and Incorporate governments. It is thought that technological development in some enclaves, particularly in such fields as computers, electronics, hydroponics, and small-scale manufacturing, has actually advanced beyond that common in the rest of the world by several years.



EARTH IN 2199

Slowly emerging from the "dark age" of the Blight Years, Earth's course into the 23rd Century has yet to be charted. There is a great deal of controversy about the nature and sources of the GEO's continued political authority and legitimacy. The United Nations, reestablished in 2156 against GEO mandate, grows in influence as the divided national and Incorporate governments of Earth chafe under the strictures of an agency they feel has outlasted its usefulness. However, until such a time as the UN "reestablishes worldwide presence in the face of a defeated Fischer Virus," and a two-thirds majority of the original UN member nations vote to dissolve the GEO, the reins of power shall remain where they rest. Striving to create and maintain an ever-tenuous peace, the GEO sits in the hurricane eye around which the world storms.

With the colonization of two star systems once again gaining momentum, Earth remains the cradle of human civilization. The tragic experience of the Blight Years is indelibly marked in its social and political makeup, in the minds and souls of its citizens, and in its very soil. The GEO, the Incorporate states, and the Free Zones all share one trait in common—they all emerged from the horror and chaos of the Blight, and they all face an uncertain future in the post-Blight world. It remains to be seen how future historians will characterize the Blight and its impact on human civilization. Was it one last lesson that will serve to prepare humanity for the promised Golden Age? Or was it merely the prelude to an era of renewed conflict and human folly? The 23rd Century will be a time of unprecedented possibilities, and this question will be answered, not by institutions and governments, but by real men and women who have the will and courage to build a future for themselves.

LUNA

Your first landing on Luna is an experience in contrasts. As you approach Ibrium City, you see enough bleak, yellow-gray desolation to last a lifetime. Our beat-up old Earth starts looking pretty green when compared with the alternatives. When you land, the dome closes overhead, and the landing platform sinks down into an Eden-like garden. The barren plastic landing deck now sits in the midst of grass, trees, ferns, squirrels, birds, deer, and foxes. It looks like some kind of VR sensorium they turned on just for you.

And that's only the beginning. Ibrium is a covered crater, a hole blasted out of the Moon millions of years back, and they've made it bloom. You can take a boat down a river that runs across the crater. Hell, I even know someone with a stream running through her apartment, complete with fish. The whole place looks like some crazed photo-calendar of the best spots on Earth before we screwed most of it up.

The Lunars are an odd lot too. They're very open, friendly, and always willing to lend a helping hand to friends and strangers alike; but they all have secrets. I think it's the nature of this place. Back from the central crater, Ibrium is an enormous maze of tunnels, passages and rooms. Without the maps on your bodycomp, I think even the locals would get lost. Well, with all those twisty tunnels I think keeping secrets just becomes natural.

I'm not talking about dark secrets or nasty secrets, just secrets. Things like "Why do I always wear two gold ribbons pinned to my jacket?" No one says what secrets they are keeping, but get to know most of these people and you will find out that they all keep something secret. It's somewhere between a game and a ritual with most of them. You're not supposed to ask, but finding out the answer, especially if you don't spread it around, earns you respect. This kind of secrecy also explains a bit about Lunar politics, but we don't need to go into that too much. There are lots of lies in the Earth media about the Moon, but I for one have no idea what's true.

—Excerpt from *An Underground Guide to the Solar System*, Janice Yager, 2191

HISTORY

The first permanent Moon base was established in 2028 and the Moon has been inhabited for the last 171 years. The first colony, Ibrium City, was established in 2050. The current population of Luna is 12 million people, spread primarily between five major settlements: Ibrium City (five million), Clavius Landing (three million), Tycho City (two million), Coper-

nicus (one million) and Gagarin City (one million) on the far side. The Moon is no longer a frontier world. It is settled, civilized, and commonly known as the jewel of the Solar System.

Physical Layout, Lunar Cities

Everyone on the Moon lives in cities. The lunar environment is so harsh that survival in small settlements is almost impossible. These cities are all domed craters with extensive networks of tunnels built into the sides. All of them are very green and lush. Modern lunar architecture has abandoned the distinction between natural and artificial in an effort to mask the stark vacuum waiting outside the domes. A typical lunar city is full of trees, grass, ferns, vines, and flowers, as well as a large number of birds, squirrels, and other small animals. In addition to alleviating the starkness of the lunar environment, this profusion of life acts to purify the air and water, even if the vast resources of lunar technology temporarily failed. Because of the low gravity, plants can more easily survive pedestrian traffic, so most lunar cities have meadows instead of paths and walkways. Long distance and cargo transport is accomplished by an extensive network of maglev trains that crisscross the lunar surface and connect the various sections of a single city together.

Many Lunars embrace the natural diversity around them by having the urban wilderness extend inside their own homes. Grass, trees, and even the occasional bird can frequently be found in these dwellings. Lunar homes are not separate houses, they are most often suites of rooms carved from the lunar rock of the crater walls. Lunars are well aware that they are dependent on their totally artificial ecosystem and take great pains to insure its continued health. In the aftermath of the ecological collapse caused by the Blight, most Lunars now see their world as a lifeboat where plants and animals endangered by conditions on Earth can survive. Several species of grains and grasses exist on Earth only because samples from Luna were reintroduced to Earth after the Blight was contained. The lunar zoos and botanical gardens are famous throughout the Solar System.

The large airy domes of the larger cities are also famous for the opportunities for recreation they provide. Luna is the only place where humans can easily fly unassisted by mechanical aids. Nearly every visitor will try their hand at strapping on a pair of low-g wings. Lunar gravity ensures that even the clumsiest flier is rarely injured.

Demographics

Luna has a prosperous, well-educated populous. The vast majority of Lunars have the equivalent of a college degree and work in a wide variety of technical jobs. The high level of automation on the Moon, coupled with the early shortages in personnel, has resulted in almost all service jobs and other unskilled and semi-skilled labor being performed by sophisticated machines. While there are a number of very wealthy Lunars, extreme poverty is effectively non-existent on the Moon. Extensive government-funded social services support the indigent, and an effective program of retraining and placement finds satisfactory and fulfilling jobs for most citizens. Conservatives have labeled some of these jobs as government-funded make-work, but the system functions and everyone seems content.

The vast majority of Lunars are born on the Moon. Since all population growth on the Moon entails both increasing the capacity of the life-support and physical infrastructure, immigration to Luna is strictly controlled. Immigrating to the Moon requires that the immigrant already have a job reserved and pass a series of education and competency tests. Emigration from the Moon is quite easy, and as long as Lunar citizenship is retained, the emigrant is free to return at any time.

Government

In spite of its close proximity to Earth, the Moon is a fully independent world. In 2093, Luna declared a total embargo on all contact with Earth in a successful effort to keep the Fischer Blight from spreading to the lunar agricultural pods. Contact was not resumed until after the Blight was finally controlled in 2130. During this era, the Moon's inhabitants learned to be wholly self-sufficient and were even able to help the struggling Mars Colony survive the loss of contact with Earth. The Lunars learned independence during these difficult times and are not eager to relinquish it.

Luna is ruled by an elected governor, with each city having its own elected mayor. The legislative branch consists of the entire lunar populace acting as a direct, electronic democracy for major issues, while minor issues are handled by a council of advisers to the mayor or governor. Elections of all kinds are large media events, with competing parties and sponsors of competing legislation each organizing advertising campaigns and public festivals to popularize their cause. The current lunar governor is Col-

leen Martinez; the current mayor of Ibrium City is Joseph Kamil.

Lunar Law

The law is strictly enforced on the Moon, because one mistake or infraction has the potential to kill thousands. All firearms other than stun guns are illegal, and their possession results in either a heavy fine or immediate deportation. Any violence that endangers the safety of the cities results in the immediate deportation of the offender. The Moon has no prisons, and the only people locked up are those awaiting trial or highly disturbed individuals under psychiatric care. This does not mean that Luna is a utopian paradise. Property crime and data crime are as common as in any other cities. Organized crime exists and thrives in the larger cities, and petty violence, ranging from bar brawls to stabbings, is not uncommon.

The politics of the Moon are also far from utopian. In some ways, politics on the Moon resemble US politics in the era of the 19th Century political bosses. Graft, bribery, and nepotism are all fairly common. In the higher levels of government and the local corporations, politics can become quite byzantine.

The Earth-based corporations, including the Incorporate city-states, are prohibited by law from having branches on Luna. While the local lunar corporations have not attempted to become separate states, they are quite willing to win contracts and influence decisions by any means necessary. In addition to bribery and blackmail, several high officials have died from poisoning, and a number of others have died in suspicious accidents. In part, the nature of lunar politics is due to the closed and bounded nature of lunar life, but it is also due to the constant struggle to maintain autonomy from Earth. Luna is a very civilized and complex place. As such, it is subject to all of the problems that civilized, complex societies have had since humans first started living in cities.

Economic Base

Luna has vacuum and raw materials in abundance, and is one of the major centers for electronics manufacture and other vacuum-based industries. In addition, the 50- meter optical telescope and the two kilometer radio telescope have made Tsiolkovsky, also known as Observatory City, the center of astronomy and astrophysics in the Solar System. After the telescopes were completed in 2076, Luna University expanded and grew. Now 150,000 of Tsiolkovsky's population of one million are students, faculty, or support personnel for the university. In general, Luna

is a center for electronics, academia, and the manufacture of space vehicles which are used throughout the Solar System and beyond.

The Lunar Railgun

Completed in 2091, the lunar railgun is a 500-kilometer-long-electromagnetic catapult that can be used to launch material at speeds of up to 25 kilometers/second. With accelerations of up to 50 Gs, the lunar railgun is only used to transport durable cargo. However, it is a very inexpensive way to send cargo into Earth and Mars orbit. Sending a cargo from Luna to Mars in this way takes less than 150 days, and is much less expensive than carrying the same cargo on a spaceship. This catapult was a major factor in the Martian relief efforts of the late 2090s, when Luna sent Mars essential food and materials while Earth was cut off by the Blight. The lunar railgun is a long, slender, metal railway with magnetic acceleration rings mounted every 10 meters along its length. Alloy cargo pods up to 100 cubic meters in size are accelerated through the rings and into space.

Luna and Earth

Luna is rich and prosperous; Earth is poor and recovering. Luna has a population measured in the millions, while Earth's is measured in the billions, and the deadly vacuum waiting outside makes every Lunar settlement extremely vulnerable to attack. Both the GEO and the Incorporate would dearly love free access to the riches of Luna. However, the Lunars fiercely resist all such suggestions.

Shortly after Earth once again began sending missions into space in the second quarter of the 22nd Century, the Lunar government completed an anti-meteor defense network consisting of high-powered lasers designed to deflect meteors at long range. The fact that these lasers could also be directed at spacecraft was not lost on the civilian and military leaders of Earth.

Luna is a rich world and supplies many of the electronics and other products that Earth requires. This wealth both attracts Earth interests and protects Luna. In two historic votes, the Lunars rejected the option of accepting official GEO presence on Luna by more than four to one. The Lunars want their freedom, and they have been willing to fight for it. Tariffs, trade wars, and an eight-month embargo in 2167 showed the inhabitants of Earth that they needed Lunar products.

This does not mean that there is open hostility between Earth and Luna. The Lunar government is actually one of the GEO's biggest supporters. The Lunar populace has voted several times to devote funds in support of several of the more expensive environmental reclamation efforts on Earth. However, while Lunars mostly support the GEO, they also value their independence and greatly distrust the Incorporate states and those national governments that have retained their autonomy. The GEO is seen as the savior of a troubled world, and the Incorporate are seen as a constant threat to Earth's salvation. The Lunars are determined to maintain their own autonomy and aid the GEO where they can, rather than becoming enmeshed in Earth's many troubles.

The only exception is the Earth consulate in Ibrium City. The consulate was established in 2147 to provide a neutral forum for discourse to all political institutions and representatives of Earth—GEO, Incorporate, and Independent alike. The consulate is an important center for both political and economic negotiations and is a popular setting for spy novels and action holovids. The reality is somewhat more tame, as representatives of Earth's power blocs make contacts, cut deals with the various Lunar factions, and occasionally work out some of their own problems. There are infrequent protest marches held outside the consulate boundaries by concerned Lunars, but generally the most interesting and disturbing actions occur within the walls of the Earth consulate, behind closed, sound-proofed doors.

THE SKYHOOK

Years before the first human beings walked on the Moon, scientists began to look for a more efficient way to reach Earth orbit than conventional rockets. In 1960, Soviet engineer Yuri Artsutanov published specifications for an elevator that could climb into space. This "skyhook" theoretically consisted of cable stretching from the equator to a satellite station in geostationary orbit, counterbalanced by an asteroid tethered beyond the station. NASA and other space agencies conducted space tether experiments throughout the 1990s, and with advances in materials technology, skyhooks finally became feasible in the 21st Century.

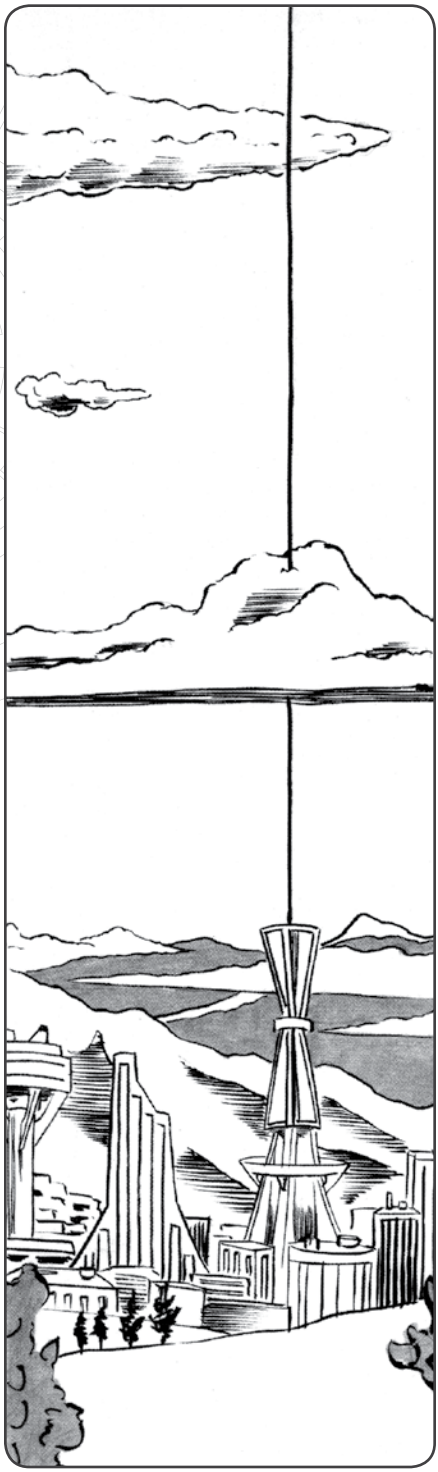
The first skyhook in the Solar System was completed on Mars in 2068. With its low gravity and high rotation rate, Mars was the planet best suited for a space elevator. The Mars Skyhook runs from Mons Pavonis, a 20-kilometer-high mountain on the equator, to *Ares One* in stationary orbit. The facility allows cargo to be transported between the surface and orbit at a fraction of the cost of even fusion-powered landers. The Skyhook solidified Mars' reputation as the "Gateway to the Belt," supporting the UN's construction of a station on Ceres, and numerous corporate mining efforts in the late 21st Century.

Following the tremendous success of the Mars Skyhook, the United Nations spearheaded an effort to build a similar structure in Earth orbit. In 2071, a large station was assembled in geostationary orbit. Using materials mined on Luna, manufactured in orbit, and shipped by conventional rocket from Earth, a massive cable was slowly constructed and lowered toward the planet below. The cable was 30 meters in diameter and constructed of virtually unbreakable fullerene fibers. When it was completed in 2079, the Skyhook stretched 38,000 kilometers from its base at the equator to the asteroid counterweight. In geostationary orbit, *Clarke Station* was the largest orbital facility constructed in the 21st Century. The station quickly became the primary docking and receiving facility for spacecraft transporting passengers and cargo through the Earth's gravity well.

When this monumental project was launched in 2071, its designers were convinced the Skyhook would be crucial in the further development of space. Five years later, two astronomers discovered a space-time wormhole in the outer Solar System. Less than a year before the Skyhook was completed, an unmanned probe traversed the wormhole and arrived in a distant star system with a habitable planet in its second orbit. The designers did not know how right they had been.

The Athena Project would likely have been impossible without the Skyhook. The facility supported the *Argos 12* mission, and more significantly, the construction of the massive colony ship that carried humanity to the stars. The cost of transporting thousands of tons of materials and equipment into orbit would have been more than 2,000 times greater without the Hook. By the time the *UNSS Cousteau* embarked from Clarke Station in 2086, Earth's Skyhook had paid for itself many times over.

By the late 21st Century, the Skyhook had become a monument to human ingenuity and determination, and served as a shining symbol of a hopeful future. It is somewhat ironic that, like humanity, the Skyhook was nearly destroyed by the Blight. In 2096, terrorists detonated a



series of explosive charges along a length of the Skyhook about 10 kilometers from the surface. The explosions ripped through the cable, completely severing it. A coordinated investigation launched by the UN Marshal Service and the world's major police organizations failed to identify the terrorists, though many suspected that the Lunars had organized the attack in an effort to enforce the quarantine of Earth. Through most of the 22nd Century, the ruined Skyhook hung in the skies of Ecuador, a silent testimony to the devastation of the Blight.

In 2135, the GEO completed repairs on the damaged cable, and traffic to and from Earth orbit increased dramatically. In the 2160s, the Skyhook was instrumental in the construction and launch of the *Adm. Robert Perry*, the GEO vessel that first recontacted the colony on Poseidon. At the end of the 22nd Century, it remains the largest, most impressive structure ever built by human beings.

The Skyhook truly is an elevator into space. Four pairs of transport pods travel along the Skyhook from the surface to *Clarke Station*. These cylindrical modules each have a capacity of 100 tons of cargo and 90 passengers. For the first 100 km of their climb from the Earth's surface, the pods travel at approximately 1,000 km/h. Once they leave the atmosphere, they accelerate to 2,400 km/h. The entire trip to *Clarke Station* takes just less than 16 hours. Sleeping and dining compartments are available, and the view from the observation bubbles is the most inspiring in the Solar System. A one-way passenger ticket on the Skyhook costs about 500cs.

Port Horizon is built around the base of the Skyhook on the outskirts of Quito. Nestled in a beautiful Andean valley at the foot of a volcano, this historical city has been the capital of an Inca kingdom, the Republic of Ecuador, and a GEO Federal District. Serving the thousands of travelers and metric tons of cargo that use the Skyhook each year, Port Horizon is an expansive spaceport and international city with a population of more than two million.

MARS COLONY

Welcome to retroland. Mars is like stepping back into some kind of early 20th Century, European drama-with-air-masks. Most Martians are fairly normal—a little louder, a little more pushy, but also very open and friendly, just like all the stories. Then you meet the Families. Yeah, with a capital 'F'. The Families are just strange. They are a self-styled aristocracy, and they even expect you to address them as "Lord" or "Lady."

The strangest thing is that Martians don't even blink when dealing with all this. Thankfully, if you leave the big cities you leave all that behind and hit the so-called "real" Mars. Domed towns, weather-beaten miners and farmers, and lots of red dust. Even the rivers and lakes have a reddish tinge.

These folks don't talk as much to strangers, at least not to strangers from Earth, but they will risk their lives to save anyone in trouble. When our buggy flipped, people arrived from two separate towns within 20 minutes. They checked our suits, took us to the nearest town for free dinner and a room, and checked out our buggy. No cost, no questions. They're not much like folks back home, but this generally seems to be to their credit.

—Excerpt from *An Underground Guide to the Solar System*, Janice Yager, 2191

HISTORY

There are few contrasts greater than the contrast between Lunar and Martian life. While Lunars are very civilized and often somewhat secretive, Martians are a typically boisterous and direct frontier people. Mars was first explored in 2015, and the first permanent settlement was established in 2062. Mars has been settled for 137 years, but many of these years were quite hard for the Martian people. Mars Colony was just becoming self-sufficient when Luna embargoed Earth because of the Blight. It was clear to the Martian leaders that if the Blight spread to Mars, everyone would starve. Mars struggled along for the next 40 years, with critical help from Luna.

PHYSICAL LAYOUT

In 2075, shortly before the Blight, the Martians started their most ambitious endeavor, which they completed in 2150. Large deposits of carbon-dioxide ice were discovered lying under the water-ice deposits at the poles. The Martians placed large thin-film mirrors over both poles and proceeded to melt

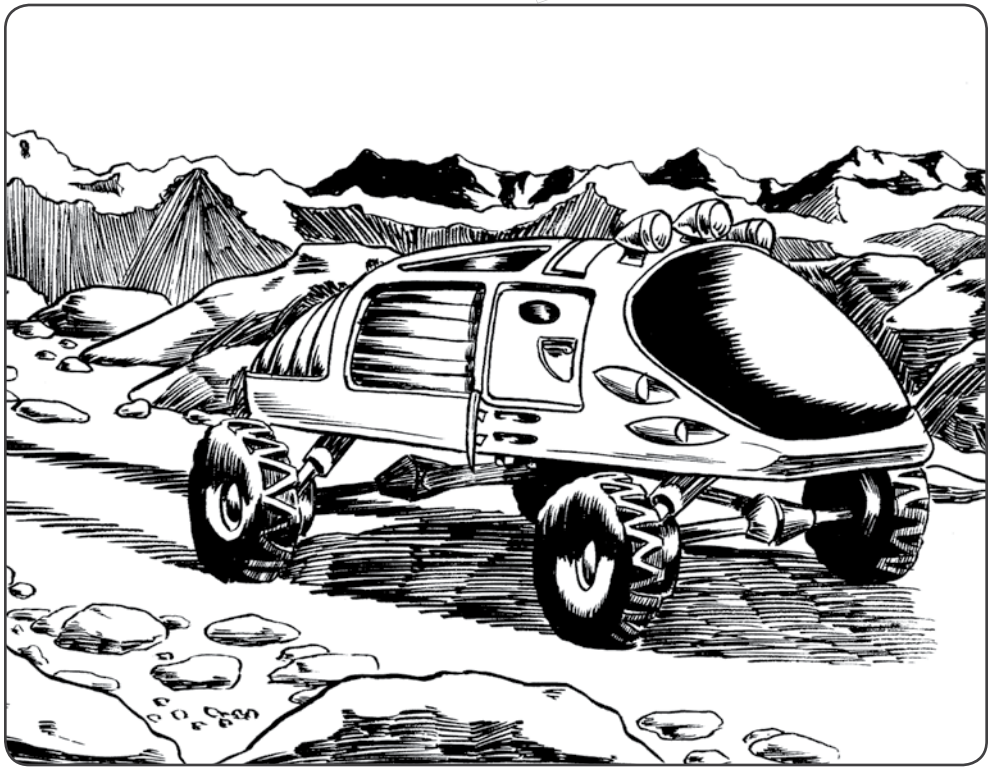
the majority of the polar caps. This melting, combined with diverting several ice asteroids from the asteroid belt and using low-yield fusion devices to reactivate dormant volcanoes, provided carbon dioxide and other gasses for the atmosphere, as well as water for the land.

Mars now has a substantially thicker atmosphere. This atmosphere has a pressure around 33% of Earth's and is composed of 90% carbon dioxide and 10% nitrogen. Water can now stay liquid on the Martian surface, and the inhabitants need only basic respiratory equipment to venture outside. Cities require only low-pressure domes, and are typically kept at 35% Earth air pressure. Mars is still a desert world, however, with only 11% of the surface covered by water.

Originally, there were plans to totally terraform Mars, but these were discarded as technical difficulties and resource scarcities proved insurmountable. Recently it has been suggested that specially engineered plants might be bred which can slowly transform the Martian atmosphere into a more breathable mixture, but the lifespan of this project likely exceeds the patience and political will of the colonists. Mars is now a wild world with hardy lichens and mosses living in crevices sheltered from the dust storms.

While it is still a cold, dry planet with a hostile atmosphere, Mars is also home to five million hardy settlers. Unlike the Moon, living on the surface of Mars requires comparatively little equipment, so while 3.5 million Martians live in cites with populations greater than 50,000, 1.5 million live in small towns and numerous farming, mining, and prospecting settlements.

There are numerous Martian cities, but the three largest are the capital, Mangala Landing (1.1 million), Argyire (800,000), built on the shore of the Argyire Sea, and Tharsis (500,000). The typical Martian city is a low dome with numerous houses and other low buildings inside. Few buildings are more than 10 stories tall, and every building is required to be airtight in case of a dome breach. While Martian streets are paved in all but the smallest settlements, most Martians drive large-tired buggies or heavily built skimmers that can brave the dusty, rough Martian outback.



ACCESS DENIED

Civil Unrest

Mars is a true frontier where small settlements exist almost autonomously, and the Families have little daily influence over the rural populations. However, in the major settlements, their economic and political power are beginning to weigh heavily on the general citizenry. As a result a low level, but growing grassroots unrest has flourished in recent years. Disjointed, directionless, and to date ineffective, certain key groups have begun organizing the opposition. Far from being on the verge of armed revolt, the opposition to the Families has begun gaining rural support as a direct result of recent increases in import-export and shipping tariffs.

A Black Planet

Deep in the recesses of the Marineris canyon, the deepest chasm in the explored systems, atmospheric pressure is almost twice the surface average and temperatures are more than 10° higher as a result. Eleven years ago, Lavender Organics took advantage of this natural laboratory and established a small research station on the canyon floor. The station's objective was to develop a viable, low-cost means to truly terraform the surface of Mars on a global level. Known for their willingness to take risks on long shots in hope of high returns, Lavender executives were hopeful but realistic. Their investment seems to have paid off.

The Jab's research has led to the development of a polygenetic, multimorph plant that is well suited to life on the hash surface of Mars. Its primary morph is a large-leaved shallow-rooted plant. Each plant has several high stalks that disperse pods in the thin Martian winds, and an intricate web of osmotic air roots efficiently collect water from the almost-dry Martian air. The secondary pods contain a payload of different plant morphs, each optimized to colonize slightly different temperature, nutrient, and water regimes. Each of these new colonies in tum will spread a variety of pods, assuring adaptive diversity until regional ecologies stabilize.

Each plant sends out a maze of runners that can quickly give rise to colonial neighbors. Additionally, the chlorophyll used in these plants is black, and simulations indicate a rise in average global temperatures of up to 20° as a result of lowered planetary albedo once the plant becomes well established. Other simulations indicated that if the initial crop of pods is widely dispersed over key equatorial regions of the planet, significant changes in the current Martian ecology will begin to occur within 10 years.

For obvious reasons, genetic engineering and its use in an uncontained system is strictly prohibited by the GEO. As a consequence, the Lavender lab has had to work under tight security. Now that their project has come to fruition, they will need to somehow circumvent, or gain dispensation from, GEO regulations. Additionally, the Martian Families may not be enthusiastic about opening the landscape as this would greatly reduce their influence and power.

Demographics

Martians are a mixed lot. The division between rich and poor on Mars Colony is comparable to that in the 20th Century United States. Martians receive state-funded education to only a basic level. After that, the individual is left to rely on personal and family resources. While the Martian government does have limited programs for support of the elderly and the indigent, poor Martians are often left to their own devices. Immigration to Mars Colony is encouraged, but also controlled. Immigrants must meet a fairly easy set of minimum educational requirements and show that they possess skills which will be useful on Mars. However, given the relative lack of opportunity on the planet, immigration is low, even from the troubled Earth.

Currently, a growing number of Martians are emigrating to the Belt and to the Serpentis System. Martians who emigrate are always free to return and may bring their families with them.

Government

Mars is ruled by the descendants of the colony's first settlers. Each of the 35 surviving families has become, effectively, a large corporation. Each Family rules a distinct section of the settled regions of the colony. The power of these Families is partly checked by a popular senate, elected by the entire citizenry. However, the true power, as well as much of the colony's economic resources, lies with the First Families. Jonathan Bloom, of Bloom Family Ltd., is the current head of the Martian Directorate. Lauren Rodriguez is the President of the Senate.

The Families and the Senate rule the cities, but the many small, isolated, settlements are largely autonomous. There is little law except local justice in most of these settlements. Gun laws are notoriously loose on Mars, but any intentional violence that endangers the safety of a dome carries the death penalty.

Economic Base

Most industry on Mars is for local use only. The primary Martian exports are specialty foods and gemstones. Given the relative habitability of Mars, it is even practical to raise cattle and grow rare or exotic plants. Most of these commodities are exported to Luna and the Belt Colonies. Since the Blight, there has even been some demand on Earth for Martian luxury foods. In addition, Martian emeralds are considered the best in the system. Mars is a largely self-sufficient world, and interplanetary trade is less important to Mars than to Luna or the Belt.

The Mars Skyhook

Mars is the gateway to the Belt and the partial terraforming of the planet required extensive work in the asteroid belt. In 2068, the Martians completed the Mars Skyhook. The Skyhook is 18,000 km of high tensile strength polymers running from a small asteroid tethered just above stationary orbit to the Martian surface. The Skyhook is an actual elevator into space. The combination of low gravity and relatively rapid rotation makes Mars one of the easiest places in the Solar System to build such a structure. Transportation from the Martian surface to and from stationary orbit costs only 10cs per 100 kilograms.

Seventeen thousand kilometers up the Skyhook and 1,000 km below the asteroid counterweight is *Ares One*, the primary Mars space station. *Ares One* began as a spherical station 300 meters in diameter and has grown outward from there. It has a permanent population of 70,000, and is the primary supply and outfitting station for Martian expeditions to the Belt. *Ares One* is where most Belter ships are constructed, bought, and crewed. It is also where many Belters come to sell the ores and minerals they have harvested.

Mars and Earth

Mars Colony, like Luna, remains fully independent of the GEO and is likely to stay that way. The simple fact of the matter is that Mars has very little that the GEO or the Incorporate want. In many ways, Mars is a poor, dry world that has a few useful minerals and only moderate food exports. Currently, both the GEO and the Incorporate states have decided that Poseidon and the Belt are much more tempting targets than Mars. However, before the discovery of Long John, Mars was a promising site for GEO and Incorporate expansion.

In 2167, the government of Mars leased 100,000 square kilometers of land to the GEO. In reality, this lease is a token payment, since the Martian government has neither the resources nor the inclination to prohibit Earth settlement of Mars. Currently, there are 400,000 people living and working on this land. Most people work in GEO-owned mining and manufacturing operations, but there are also extensive collective farms growing a variety of food products for distribution on Earth. These bases were growing rapidly during the 2170s, but the discovery of Long John has diverted many resources away from this project.

The Martian moon, Phobos, provides a strategic link between Earth and the GEO settlement on Mars. Since the Martians use *Ares One* and Demos as their primary space bases, Phobos was claimed by the GEO in return for a small annual fee paid to the Martian government. Phobos Base currently has a permanent population of 10,000. Started merely as an Earth-run orbital station, Phobos Base has become one of the major trading ports of the Solar System. Belters who wish to avoid the Incorporate colonies in the Belt and wish to trade directly with the GEO travel to this base as an easy alternative to having to take their goods all the way to Earth. Phobos Base is one of the few places where Belters and people from Earth regularly mix, and as such, GEO law enforcement agents are especially watchful.

THE ASTEROID BELT AND BEYOND

Hey people, it's weird out here. The Sun's a whole lot dimmer and a whole lot smaller. You're standing on some rock in the middle of a million klicks of vacuum, and that's the normal stuff.

Belters are strange. We've all seen articles about "the people of the Belt." Let me tell you, there's no such critter. The Vestans of Arthur are mostly happy capitalists who happen to like living in huge zero-g cities. The people on Juno live in separate domes, each built around a single genetically engineered bush. Each dome is home to an extended family, and they hold all property in common. Meanwhile, people on Strike have no families and constantly take mood drugs to avoid feeling any unwanted emotions. The list just goes on—and gets weirder all the time.

The easy answer is once you get this far from home, everyone goes nuts. What I do know is that everyone here is wary around Grounders. Easy advice for visiting the Belt: dress like a tourist. They don't mind tourists, or anyone else who will spend money and leave. Mostly people don't mind prospective immigrants either, but local opinions can vary a lot. The one thing most everyone agrees on is that the Grounders who work in the Belt are bad news. There are hard feelings, worries about Earth Imperialism, the whole political banana. Best to stay out of it, try the local food, and just hang out.

I'm not even going to try to describe "Belt Culture." I doubt there is one, but I will tell you about the weirdest place I went. Golden is a little rock near the middle of the Belt. The locals have messed around with it a bit, I've no idea what they did, but it's like nothing you've ever seen. The whole inside looks like foam. Life's a head of beer and you're living in the bubbles. 'Course the bubbles here are made of rock, with openings cut between them. They did have the sense to spin it a tiny bit. There's just enough gravity so you have a clue where down is. Other than that, it's a maze that would make even Lunars go nuts. Each bubble is a room, a park, a shop…

—Excerpt from *An Underground Guide to the Solar System*, Janice Yager, 2191

History

After the Skyhook was completed, in the depths of the Blight, Martians spread out through the asteroid belt and eventually into the Jovian and Saturnian moons. Several of the First Families have extensive interests in the Belt, but most Belters are independents who have founded their own communities far from the control of the Families, the GEO, and everyone else.

The Belters originally made a living using solar-powered mass drivers to propel ice- and ore-yielding asteroids into Martian or Lunar orbit. Since that time, new industries have developed in the Belt—some legal, some not. The Belt is a major center for research, especially secret research best done in zero-g, far from the prying eyes of any rivals.

The Belt currently has around 4.7 million inhabitants, almost half of which are spacers, as the genetically engineered Belters are known. Created in the late 21st Century in an effort to further human colonization of the Belt, spacers have prospered and thrived. Most Belt colonies are entirely in zero-g.

Physical Layout

Zero-g cities are strange experiences for planet-dwellers. Many are merely huge networks of tunnels drilled through the asteroids. Some are much more ambitious. Arthur, the main city on Vesta and one of the financial centers of the Belt, is one such

city. Arthur is a thriving metropolis of 100,000 built in an artificial cavern. The cavern is roughly spherical and about a kilometer in diameter. At first glance, Arthur looks like the inside of an enormous geode. Thousands of brightly colored towers line all sides of the inside of the cavern.

In Vesta's minute gravity, up and down have almost no meaning. The buildings, made largely of sturdy fabric or thin plastic over a durable supporting framework, jut from all angles. In the center of the sphere is a large open space, dominated by the trading exchange. The trading exchange is an ornately decorated, nearly spherical building almost 100 meters in diameter, connected to the walls of the cavern by cables that carry an unending stream of magnetic trolleys to and from the exchange.

Arthur, and countless other cities like it, challenge all conventional notions of architecture, communal life, and privacy. A description of the social and governmental system in the Belt is almost impossible given the vast diversity of the colonies. Some are huge polyamorous families, others strictly regimented colonies where everyone owes devotion to a single charismatic leader. Some are tiny holdings on small asteroids, while the colonies on Titan, Europa, Callisto, and Ceres each contain more than 200,000 people each.

Demographics

Generalizations about the Belt are almost impossible to make. Some colonies are closed communities composed solely of the clones of two or three individuals, others enjoy staggering genetic and cultural diversity. Almost anyone who can buy a ticket to the Belt can find a welcoming colony. What this colony will be like varies quite wildly. The Belt is composed of five million people and the population is still growing at a moderate rate. Even Belters seek new horizons, and immigrating to the Serpentis Belt is becoming a popular alternative.

Government

What central government there is in the Belt is a loose senate in which every colony has representation based solely on its population. How a colony chooses its senators is its own concern, and the actual power of the senate is little more than that of the original United Nations. Good and bad, orderly and chaotic, dozens of cultures, societies, and ways of life can be found in the Belt. Some societies allow freedoms and standards of living unheard of on Earth, while others are cruel to the majority of their inhabitants and worse to outsiders. The Belt is quite anarchic, but it is also quite prosperous.

Economic Base

Smuggling, asteroid mining, pharmaceutical and genetic research, and gambling are found in the Belt. Most colonies support themselves through mining and the manufacture of a wide variety of electronic components and precision machine parts that are best made in the weightless vacuum of space. However, even here generalities are impossible. Some colonies support themselves growing specialty foods for consumption by other Belt colonies, while a few own casinos or are involved in other tourism and service-related industries.

Recent Developments

The discovery of Long John has begun to further transform life in the Belt. Currently, several colonies have projects designed to create humans who can survive in vacuum and live in the Belt with a minimum of technical support. So far, none of these projects have met with even limited success, but rumors abound.

Another project involves the cultivation of specially engineered colonial plants on several ice asteroids and on the Jovian moon, Callisto. Within five years of the introduction of Long John, vacuum vines sprouted in the Belt. Drawing nourishment from ice and mineral, these huge, bushy vines provide Belters with organic products and precious oxygen. One large polygenetic bush can supply the basic life-support needs of a small colony. So far, there are only slightly more than a hundred such plants, but they appear to be thriving.

Some ambitious, or perhaps merely foolish, Belters are planning to establish colonies in the Oort cloud, on comets. Currently, they are working on designing a vacuum vine variant that could grow large enough leaves to gather enough light to survive beyond the edge of the Solar System. Soon, these pioneers hope that all that will be needed to settle a comet is the material for the dome and several vine seedlings.

The New Belters

A new force has appeared in the Belt in the last 40 years. Anxious to obtain materials to rebuild Earth, and eager to avoid paying the prices that Belters

charge, Earth has returned to the Belt. The Incorporate, sometimes even working with the GEO, have settled several dozen asteroids, and have also established a base on Ganymede and on two of the smaller Jovian moons. These colonies are very different from the wild diversity of the original Belters.

Here, 300,000 people live amid the gray industrial uniformity that has begun to characterize many Earth projects. The bases are laid out according to a standard plan, with floors aligned along the plane of the local gravity, even on the smallest asteroids. All of the bases are fully under the control of their superiors on Earth, and the residents are either Incorporate workers who managed to offend their superiors enough to wind up in the Belt, or people desperate enough to risk vacuum and radiation, hoping the bonus they receive at the end of their four-year stay will enable them and their families to have a better life. New to the rigors of the Belt, these bases are both less safe and often somewhat less productive than those run by the native Belters. In spite of these problems, the low wages and lack of tariffs make them profitable enough to continue. Several of the Incorporate bases are high-security areas where dangerous or possibly illegal experiments are conducted far from prying eyes.

HOLE CITY

Orbiting the wormhole on the Solar System side at a distance of 500 kilometers is the GEO base, *Wormhole One*. Constructed in 2179, *WH–1* is the most remote human settlement in the Solar System. Hole City, as the inhabitants know it, is a collection of 76 cylindrical pods connected to a central axis by 200-meter spokes. Hole City rotates at a rate sufficient to produce .5g, a useful compromise for the 1,100 spacer and non-spacer inhabitants of the station.

The inhabitants are mostly scientists and support personnel, though *WH–1* also houses the 91 members of the GEO transport authority, which is responsible for maintaining the message pod service between *WH–1* and its companion outpost station in the Serpentis System, *WH–2*. These unmanned message pods shuttle digital transmission recordings through the wormhole from station to outpost and back again. Pods are sent each way at 12-hour intervals, and their cargo of recordings is downloaded and rebroadcast via laser array to their addressed destinations. While this method of communication is expensive, with civilian rates normally running at 100cs/minute, it does allow two-way communication between Earth and Poseidon within 10 days to two weeks. The GEO transport authority also oversees all shipments to and from the Serpentis System, and stands ready with emergency support for any vessels that may experience trouble traversing the wormhole.

WH–1's other major role is as a refueling station for the massive fusion torchships that travel between the inner Solar System and Poseidon. At peak velocity, the fastest transports reach a few percent of light speed—much too fast to safely traverse the wormhole. Since they must decelerate before entering the wormhole anyway, they can cut the fuel mass they must carry—and accelerate—drastically by refueling at *WH–1*. Reaction mass is typically mined from the asteroid belt and comets and shipped to the refueling station at *WH–1* in slow, efficient transports. The torchships dock with *WH–1*, fill their massive tanks with fusion fuel, then accelerate either through the wormhole or towards the inner Solar System.

There is also a small GEO Aerospace Command garrison at *WH–1*, including docking and support facilities for three small, system-patrol cutters. These cutters and their crews are tasked with responding to any emergencies in the vicinity of the wormhole and offering assistance to any transport ships in distress. The cutters frequently traverse the wormhole, traveling back and forth between the two star systems, and rumors circulate that they are involved in everything from time-travel experiments to raids on the smuggling and piracy rings in the Serpentis Belt. There is no evidence to support these rumors, and the GEO insists that the ships are simply intended to keep travel through the wormhole safe.

CHAPTER 8: DANGEROUS GAME

One of the most laborious and daunting tasks facing the Game Master is the creation of non-player characters to provide the group with memorable friends and foes. This task becomes more difficult when faced with a detailed character generation system. The information in this chapter will allow the Game Master to create non-player characters quickly and easily, yet still detailed. A list of generic NPCs follows the creation section, needing only a few finishing touches to bring to life.

NON-PLAYER CREATION SYSTEM

This system shortcuts the process of generating a character by allowing the Game Master to assign attributes, skills, and skill levels.

Attributes are point-assigned the same as for player characters, based on whether the NPC is Everyday, Professional, Remarkable, or Elite (See the *Player's Guide*). **Derived Attributes** are calculated normally. **Aptitudes** are selected the same as for player characters, based on power level.

Skills fall into one of two categories: Everyone skills and Core skills. **Everyone skills** are skills that everyone has, usually at a low level. **Core skills** are the skills the define the NPC archetype. For some archetypes, an Everyone skill actually becomes a core skill, such as Computers for a technician. Regardless of type, skills should be chosen to represent the **Primary Skills** of the NPC, the skills that matter most towards defining them.

Everyone Skills

The following skills are generally known to everyone. Exceptions for certain archetypes are noted in each description. Each skill lists a suggested range for the skill level. It is up to the Game Master to select the value desired for the skill.

Aquatics (1–3): Nearly everyone on Poseidon has this skill to some degree. Those in Athletics or Survival will likely have this as a core skill. Natives will always have a minimum of Aquatics 3, but since all natives are aquaforms they gain a +3 bonus to the skill, granting Aquatics 6. All cetaceans have an Aquatics skill of 10.

Computers (1–3): Anyone with a post-Recontact background will have some skill with computers as they are ubiquitous in modern life. People in Tech or Science will often have it as a core skill. Natives have had little to no contact with high technology and substitute Foraging 1–3.

Culture (varies): Everyone has at least two Culture skills that reflect their background and current life. The primary Culture will usually be level 4–6, secondary Culture 3–5, and further Culture skills 1–3. Those in Diplomacy or Sentient Sciences may have Culture as a core skill.

Driving (1–2): Like computers, anyone with a post-Recontact background will know it. Colonials may substitute Piloting 1–2 or Boating 1–2, as most of Poseidon doesn't have roads. Natives substitute Boating 1–3 instead. Cetaceans substitute Remote Operations 2–4.

Foraging (2–4): Cetaceans hunt for food out of preference for fresh meat.

Core Skills

These are the skills that define the non-player character. They can be based on a classic archetype, such as a street thug or doctor, or a combination of influences. The number of skills and skill levels are based on the power level of the non-player character and are detailed below, along with suggestions of skills.

Everyday: An Everyday NPC will have 6 to 8 core skills. One of these will be level 5–6, one will be 4–5, and the remainder will be levels 2–4.

Professional: A Professional NPC will have 6 to 8 core skills. One of these will be level 6–7, one will be 5–6, and the remainder will be levels 2–5.

Remarkable: A Remarkable NPC will have 6 to 10 core skills. Two of these will be levels 6–7, two will be 5–6, and the remainder will be levels 3–5.

Elite: An Elite NPC will have 6 to 10 core skills. Two of these will be levels 7–8, three will be 5–7, and the remainder will be levels 3–5.

Suggested Skills by Archetype

Academics: This covers scholars, scientists and others who have a career based on academic knowledge. Core skills can include any Culture skill, any Sentient Science skill, any Sciences skill, Bureaucracy (low), Economics, Law, Language, Writing, Pharmacology, and Psychology. The Game Master is encouraged to stay focused on one field rather than use this as a "jack of all trades" archetype.

Administrators, Bureaucrats, Executives: Government functionaries and Incorporate executives

share similar core skills. Bureaucrats and administrators will have Bureaucracy, Law, Leadership, Logistics, Planning, Persuasion, Politics, and sometimes even Fast-Talk or Forgery. Executives typically have Bureaucracy,Economics, Fast-Talk, Leadership, Logistics, Planning, Persuasion, and sometimes Law at a low level (1–3).

Artists, Actors, Performers: Classically trained artists, professional actors or clever street magicians and performers are all considered here. Core skills can include Computers, Crafting, Culture, Fast-Talk, Graphics, Misdirection, Performance, Persuasion, Psychology (low), and even Electronics or Mechanics.

Criminals: Criminals run the gamut from simple thugs, burglars and con men to organized crime enforcers and bosses. Typical core skills are Armed Melee, Bureaucracy, Fast-Talk, Forced Entry, Forgery, Law (low), Misdirection, Persuasion, Small Arms, Stealth, and Unarmed Melee.

Farmers, Colonists: These are pioneers and colonists who arrived post-Recontact to carve their own niche out of the Poseidon wilderness. Typical core skills are Animal Husbandry, Agriculture, Aquaculture, Aquatics, Boating, Driving, Ecoscience (low), Foraging, Mechanics, and Small Arms (low). This is a good category for some natives as well; simply eliminate Driving.

Guides, Survivalists: This includes wilderness guides and other survival types. Core skills include Aquatics, Boating, Ecoscience, Foraging, Mountaineering, Navigation, Piloting, Small Arms, Stealth, and Tracking. This is a good category for some natives; just eliminate Piloting.

Intelligence: This includes agents, analysts and operatives of government and Incorporate intelligence services. Core skills are Armed Melee, Bureaucracy, Computers, Demolitions, Disguise, Electronics, Fast-Talk, Forced Entry, History, Logistics, Persuasion, Planning, Politics, Small Arms, Stealth, and Unarmed Melee. Operatives and agents will have more combative skills, while analysts will have more academic skills.

Law Enforcement: GEO Patrol, Incorporate security and local lawmen all fall into this group. Core skills are Armed Melee, Bureaucracy, Driving, Forensic Medicine (low), Law, Leadership, Medicine (low), Persuasion, Piloting, Small Arms, Stealth, and Unarmed Melee.

Medical Professionals: This includes physicians, Emergency Medical Techs and Emergency Rescue Teams. Core skills include Electronics (low), Forensic Medicine, Life Science, Medicine, Pharmacology, Psychology, and Surgery. EMT/ERT would include Boating, Driving, or Piloting.

Military: This group covers current and ex-military types such as GEO Peacekeepers, Incorporate troops, mercenaries and terrorists. Core skills include Armed Melee, Bureaucracy (low), Demolitions, Heavy Weapons, Leadership, Medicine (low), Piloting, Planning, Remote Operations, Remote Weapons, Small Arms, Stealth, and Unarmed Melee.

Pilots: This covers military, ex-military and civilian pilots. Civilian pilot core skills are Computers, Economics, Electronics, Geoscience (low), Mechanics, Navigation, Persuasion, and Piloting. Military and ex-military pilot core skills are Armed Melee, Computers, Electronics, Geoscience (low), Mechanics, Navigation, Persuasion, Piloting, Remote Weapons, Small Arms, and Unarmed Melee.

Teachers, Instructors: This includes all who make a living teaching or instructing others; teachers in schools, military drill instructors, and other trainers. Core skills are Leadership and Persuasion. Other core skills are based on what the instructor is teaching and can be anything from History to Heavy Weapons. As above, total number of core skills apply by power level.

Technicians: This includes engineers, computer techs, mechanics, and other high tech workers. Core skills include Boating, Computers, Demolitions, Driving, Electronics, Mechanics, Physical Science, Piloting, Remote Operations, and Remote Weapons. Spacer techs include Freefall, and Hydroponics.

NON-PLAYER CHARACTER PROFILES

The following profiles present each NPC with attributes, Aptitudes and skills defined, as well as a short description. In cases where the species of the NPC is already listed, the attributes and skills will reflect that. All the Game Master needs to do is select a species and biomods, modify the attributes based on those choices and then select equipment. If the NPC is going to be long term, then select a Goal, Motivation, and Attitude from the *Player's Guide*.

Administrators, Executives, Officials

Cetacean Executive—Bottlenose Dolphin (Professional)

A Hydrospan cetacean executive.

Primary Attributes: Physique 2, Coordination –1, Cognition 1, Psyche 1

Derived Attributes: Endurance 4, Reflexes 0, Toughness 1

Aptitudes: (Superior) Administration; (Strong) Communication, Culture, Tech

Primary Skills: Aquatics 10, Bureaucracy 5, Computers 4, Culture (Cetacean) 6, Culture (Earth) 4, Culture (Incorporate) 5, Economics 7, Foraging 3, Law 4, (Interspec) 5, Leadership 6, 5, Persuasion 5, Remote Operations 4

Diplomat (Professional)

A typical GEO-employed diplomat specialized in colonial relations.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Sentient Sciences

Primary Skills: Aquatics 2, Bureaucracy 5, Computers 3, Culture (Colonial) 5, Culture (GEO) 6, Culture (Native) 4, Driving 2, Fast-Talk 2, History 2, Law 4, Persuasion 7, Planning 4, Politics 6, Psychology 4, Writing 4

GEO Bureaucrat (Everyday)

A low-level GEO clerk or administrator.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration; (Strong) Communication, Culture

Primary Skills: Aquatics 2, Bureaucracy 4, Computers 3, Culture (Colonial) 5, Culture (GEO) 6, Driving 2, Law 4, Leadership 4, Logistics 3, Persuasion 5, Politics 6

Incorporate Executive (Professional)

A typical mid-level executive in most Incorporates.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration; (Strong) Communication, Culture, Stealth

Primary Skills: Aquatics 2, Bureaucracy 5, Computers 4, Culture (Colonial) 4, Culture (Earth) 2, Culture (Incorporate) 6, Driving 2, Economics 6, Fast-Talk 4, Law 4, Leadership 5, Persuasion 7

Artists, Performers

Street Magician (Everyday)

A street performer specializing in sleight of hand, card tricks and other feats of misdirection.

Primary Attributes: Physique 0, Coordination 1, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Fine Arts; (Strong) Communication, Stealth

Primary Skills: Aquatics 3, Computers 2, Culture (Colonial) 6, Culture (Cetacean) 5, Culture (Street) 2, Driving 2, Medicine 2, Misdirection 6, Performance (Actor) 5, Persuasion 4, Psychology 3, Stealth 4

Street Performer—Dancer (Everyday)

A performer specializing in interpretations of native dances.

Primary Attributes: Physique 0, Coordination 1, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Fine Arts; (Strong) Athletics, Culture

Primary Skills: Aquatics 3, Computers 2, Culture (Colonial) 6, Culture (Native) 5, Culture (Cetacean) 3, Driving 2, Medicine 3, Performance (Dancer) 6, Persuasion 5, Psychology 3, Stealth 3

Bush Pilots

Civilian Bush Pilot (Professional)

A civilian pilot who delivers people and supplies to remote regions via fixed wing plane or jumper.

Primary Attributes: Physique 0, Coordination 1, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Vehicle; (Strong) Administration, Survival, Tech

Primary Skills: Aquatics 2, Bureaucracy 2, Computers 3, Culture (Colonial) 5, Culture (Incorporate) 6, Economics 3, Electronics 3, Geoscience 2, Mechanics 4, Navigation 4, Persuasion 5, Piloting 7

Ex-military Bush Pilot (Professional)

An ex-military pilot who has pursued a career in bush piloting.

Primary Attributes: Physique 0, Coordination 1, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Vehicle; (Strong) Combat, Survival, Tech

Primary Skills: Aquatics 2, Bureaucracy 2, Computers 5, Culture (Colonial) 3, Culture (GEO) 5, Culture (Military) 4, Electronics 4, Geoscience 2, Mechanics 4, Navigation 4, Persuasion 3, Piloting 7, Remote Weapons 6, Small Arms 4, Unarmed Melee 2

Criminals

Contract Killer (Professional)

An assassin for hire who kills for money and is usually not picky about who the target is.

Primary Attributes: Physique 0, Coordination 1, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Combat; (Strong) Administration, Culture, Stealth

Primary Skills: Aquatics 2, Armed Melee 4, Culture (Colonial) 4, Culture (GEO) 3, Culture (Incorporate) 3, Culture (Street) 6, Fast-Talk 7, Forced Entry 2, Law 3, Persuasion 5, Planning 2, Small Arms 5, Stealth 6, Unarmed Melee 4

Freebooter (Professional)

A modern day pirate who is part sailor, part soldier, and part technician.

Primary Attributes: Physique 2, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Survival, Tech, Vehicle

Primary Skills: Aquatics 4, Armed Melee 3, Boating 7, Computers 3, Culture (Colonial) 5, Culture (Military) 3, Demolitions 2, Electronics 4, Heavy Weapons 2, Mechanics 4, Medicine 2, Remote Operations 3, Small Arms 6, Unarmed Melee 2

Native Grifter—Aquaform (Everyday)

A native who has turned to running con scams to make money. He may play a city guide and lead tourists into areas to be robbed, or may simply pick someone's pocket while talking aimlessly to them.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 2, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Culture, Stealth

Primary Skills: Aquatics 6, Culture (Native) 5, Culture (Street) 6, Fast-Talk 5, Forced Entry 2, Forgery 3, Misdirection 4, Performance (Actor) 3, Persuasion 6, Small Arms 2, Stealth 3, Unarmed Melee 2

Smuggler (Everyday)

A commercial pilot who supplements part or all of his income carrying illegal cargoes, such as pharium.

Primary Attributes: Physique 0, Coordination 1, Cognition 0, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Vehicle; (Strong) Stealth, Tech

Primary Skills: Aquatics 2, Computers 3, Culture (Colonial) 5, Culture (Street) 6, Economics 5, Fast-Talk 4, Forgery 3, Mechanics 3, Navigation 4, Piloting 6, Small Arms 2, Stealth 4

Street Thug (Everyday)

A typical street ganger, mugger, strong-arm. or robber.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Combat; (Strong) Communication, Stealth

Primary Skills: Aquatics 2, Armed Melee 3, Computers 1, Culture (Colonial) 5, Culture (Street) 6, Fast-Talk 4, Forced Entry 3, Persuasion 5, Small Arms 5, Stealth 4, Unarmed Melee 6

Doctors and Medical Techs

Colonial Doctor (Professional)

A doctor at a hospital or medical center in a city or town.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Medicine; (Strong) Communication, Culture, Science

Primary Skills: Aquatics 3, Computers 4, Culture (Colonial) 6, Culture (Native) 3, Life Science 6, Mechanics 3, Medicine 7, Pharmacology 5, Psychology 3, Surgery 5

Colonial ERT (Professional)

A member of an Emergency Response Team, trained in rescue and emergency medical care. Typically rescue people from remote or hostile environments.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Medicine; (Strong) Science, Survival, Vehicle

Primary Skills: Aquatics 3, Boating 4, Computers 2, Culture (Colonial) 6, Culture (Native) 3, Life Science 3, Mechanics 3, Medicine 4, Mountaineering 4, Navigation 5, Pharmacology 3, Piloting 7, Surgery 2

Native Healer—Aquaform (Professional)

A native doctor who uses the flora and fauna of Poseidon to cure disease and heal injuries. Less formal training than a typical doctor, but far more knowledgeable about natural cures.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 2, Reflexes 0, Toughness 1

Aptitudes: (Superior) Medicine; (Strong) Culture, Science, Survival

Primary Skills: Aquatics 6, Culture (Colonial) 4, Culture (Native) 6, Ecoscience 6, Foraging 5, Life Science 2, Mechanics 3, Medicine 7, Pharmacology 5, Psychology 4, Surgery 4

Guides

Colonial Guide (Professional)

A colonial guide based out of a city or settlement that specializes in guiding tourists into popular areas by boat or air.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Survival; (Strong) Communication, Stealth, Vehicle

Primary Skills: Aquatics 4, Boating 3, Computers 2, Culture (Colonial) 6, Culture (Native) 2, Ecoscience 3, Foraging 5, Geoscience 2, Medicine 2, Mountaineering 4, Navigation 7, Piloting 4, Small Arms 4, Stealth 3, Tracking 5

Native Guide—Aquaform (Professional)

A native who uses his skills to guide tourists to remote areas on foot or by boat.

Primary Attributes: Physique 2, Coordination 1, Cognition 0, Psyche 0

Derived Attributes: Endurance 2, Reflexes 0, Toughness 1

Aptitudes: (Superior) Survival; (Strong) Combat, Science, Stealth

Primary Skills: Aquatics 7, Boating 4, Culture (Colonial) 4, Culture (Native) 6, Ecoscience 3, Foraging 7, Geoscience 2, Medicine 2, Mountaineering 3, Navigation 5, Small Arms 4, Stealth 3, Tracking 6

Incorporate Security

Hydrospan Security—Orca (Professional)

A typical orca security officer in the employ of Hydrospan.

Primary Attributes: Physique 4, Coordination –2, Cognition –1, Psyche 1

Derived Attributes: Endurance 5, Reflexes 0, Toughness 3

Aptitudes: (Superior) Combat; (Strong) Communication, Tech

Primary Skills: Aquatics 10, Bureaucracy 3, Culture (Cetacean) 6, Culture (Human) 4, Culture (Incorporate) 5, Foraging 5, Language (Interspec) 5, Law 4, Navigation 5, Persuasion 4, Remote Operations 5, Remote Weapons 6, Unarmed Melee 7

Security Guard (Everyday)

A typical security guard at a store, warehouse or Incorporate office.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration; (Strong) Combat, Communication

Primary Skills: Aquatics 2, Armed Melee 3, Bureaucracy 2, Computers 1, Culture (Colonial) 4, Culture (Incorporate) 5, Driving 2, Law 3, Persuasion 5, Small Arms 4, Unarmed Melee 6

Security Officer (Professional)

An officer in charge of coordinating security at one location. Usually has a group of security guards under his command.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Administration; (Strong) Combat, Communication

Primary Skills: Aquatics 2, Armed Melee 4, Bureaucracy 3, Computers 2, Culture (Colonial) 4, Culture (Incorporate) 6, Driving 2, Law 4, Persuasion 5, Small Arms 6, Unarmed Melee 7

Incorporate Spec-Ops (Professional)

A soldier trained in special operations in the employ of an Incorporate. They are used for everything from defending the Incorporate's properties to conducting black ops against the Incorp's enemies.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Stealth, Tech, Vehicle

Primary Skills: Aquatics 2, Armed Melee 5, Bureaucracy 3, Computers 2, Culture (Incorporate) 6, Culture (Military) 5, Fast-Talk 2, Forced Entry 2, Heavy Weapons 6, Medicine 2, Persuasion 4, Piloting 3, Small Arms 7, Stealth 4, Unarmed Melee 4

Intelligence Agents

Covert Operative (Professional)

A ex-military person trained in intelligence and counter-intelligence. Employed by government and Incorporates alike to protect interests and ferret out secrets from others.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Stealth; (Strong) Combat, Communication, Tech

Primary Skills: Aquatics 3, Armed Melee 4, Bureaucracy 3, Computers 4, Culture (Colonial) 5, Culture (GEO or Incorporate) 6, Demolitions 3, Disguise 3, Driving 3, Electronics 4, Fast-Talk 5, Forced Entry 4, Persuasion 6, Small Arms 5, Stealth 7, Unarmed Melee 4

Intelligence Analyst (Professional)

A professional intelligence analyst trained to examine evidence, media and other information and distill it down into reports for government or Incorporate intelligence services.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration ; (Strong) Culture, Sentient Sciences, Tech

Primary Skills: Aquatics 2, Bureaucracy 5, Computers 5, Culture (Colonial) 5, Culture (GEO or Incorporate) 6, Driving 2, Electronics 3, Fast-Talk 3, History 4, Logistics 3, Persuasion 6, Planning 5, Politics 7, Small Arms 2

Journalist

Investigative Reporter (Professional)

A journalist working for a media service on Poseidon. Usually looking for a "big" story and not afraid to poke his nose into anything to find it.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Administration, Sentient Sciences

Primary Skills: Aquatics 2, Bureaucracy 4, Computers 2, Culture (Colonial) 6, Culture (Incorporate) 4, Culture (Street) 3, Driving 2, Economics 3, Fast-Talk 4, Law 3, Leadership 3, Persuasion 7, Politics 3, Theology 3, Writing 5

Law Enforcement

GEO Patrolman (Everyday)

The average GEO policeman seen on the streets in all of Poseidon's cities.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration; (Strong) Combat, Communication

Primary Skills: Aquatics 2, Armed Melee 2, Bureaucracy 3, Culture (Colonial) 3, Culture (GEO) 5, Culture (Native) 3, Culture (Street) 3, Driving 2, Medicine 1, Law 4, Persuasion 6, Small Arms 5, Unarmed Melee 4

GEO Patrol Officer (Professional)

A detective-level GEO officer in charge of a group of patrolmen. Involved in investigating crimes in detail and coordinating activities and information with the judicial system.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Administration; (Strong) Combat, Communication, Culture

Primary Skills: Aquatics 2, Armed Melee 2, Bureaucracy 5, Culture (Colonial) 3, Culture (GEO) 6, Culture (Native) 3, Culture (Street) 5, Driving 3, Medicine 2, Law 5, Persuasion 6, Small Arms 4, Stealth 3, Unarmed Melee 3

Native Patrolman (Everyday)

A native trained as a policemen who acts as a familiar liaison between GEO law enforcement and native settlements

Primary Attributes: Physique 2, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 2, Reflexes 0, Toughness 0

Aptitudes: (Superior) Administration; (Strong) Combat, Communication

Primary Skills: Aquatics 2, Armed Melee 2, Boating 3, Bureaucracy 5, Culture (Colonial) 3, Culture (GEO) 3, Culture (Native) 5, Culture (Street) 3, Medicine 1, Law 4, Persuasion 7, Small Arms 5, Unarmed Melee 5

Private Investigator (Professional)

An ex-patrolmen who has gone into business for himself as an investigator for hire.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Stealth

Primary Skills: Aquatics 2, Bureaucracy 4, Computers 3, Culture (Colonial) 6, Culture (GEO) 3, Culture (Incorporate) 3, Culture (Street) 4, Driving 3, Fast-Talk 7, Forced Entry 4, Law 3, Misdirection 3, Persuasion 6, Small Arms 5, Stealth 4, Unarmed Melee 3

Mercenaries and Militaries

Combat Tech (Professional)

A typical combat technician trained to maintain weapon systems, combat equipment and fighting vehicles.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Combat; (Strong) Administration, Tech, Stealth

Primary Skills: Aquatics 3, Armed Melee 2, Bureaucracy 3, Computers 2, Culture (Military) 6, Demolitions 4, Electronics 4, Heavy Weapons 2, Leadership 2, Mechanics 7, Planning 3, Remote Operations 4, Remote Weapons 4, Small Arms 6, Stealth 3, Unarmed Melee 2

Corpsman (Professional)

A soldier trained as an Emergency Medical Technician and skilled in dealing with battlefield level trauma care.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Combat; (Strong) Administration, Medicine, Stealth

Primary Skills: Aquatics 3, Armed Melee 2, Bureaucracy 3, Computers 2, Culture (Military) 6, Heavy Weapons 2, Leadership 2, Life Science 3, Medicine 4, Pharmacology 3, Planning 6, Small Arms 7, Stealth 4, Surgery 2, Unarmed Melee 2

GEO Cetacean Peacekeeper—Bottlenose Dolphin (Professional)

A bottlenose dolphin trained and employed as a soldier by the GEO.

Primary Attributes: Physique 2, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 3, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Communication, Tech

Primary Skills: Aquatics 10, Bureaucracy 3, Culture (Cetacean) 6, Culture (GEO) 5, Culture (Human) 4, Foraging 5, Language (Interspec) 5, Navigation 5, Planning 5, Remote Operations 6, Remote Weapons 5, Stealth 5, Unarmed Melee 7

GEO Cetacean Peacekeeper—Orca (Professional)

An orca trained and employed as a soldier by the GEO.

Primary Attributes: Physique 4, Coordination –2, Cognition –1, Psyche 1

Derived Attributes: Endurance 5, Reflexes 0, Toughness 3

Aptitudes: (Superior) Combat; (Strong) Communication, Tech

Primary Skills: Aquatics 10, Bureaucracy 3, Culture (Cetacean) 6, Culture (GEO) 5, Culture (Human) 4, Foraging 5, Language (Interspec) 5, Navigation 5, Remote Operations 5, Remote Weapons 6, Stealth 4, Unarmed Melee 7

GEO Peacekeeper (Professional)

Soldiers trained and employed by the GEO, for use when law enforcement is not enough.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Administration, Communication, Stealth

Primary Skills: Aquatics 3, Armed Melee 4, Bureaucracy 3, Computers 2, Culture (GEO) 6, Culture (Military) 5, Heavy Weapons 5, Leadership 4, Medicine 2, Planning 6, Small Arms 7, Stealth 5, Unarmed Melee 3

GEO Shock Trooper—Aquaform (Elite)

The GEO Marine Corps Heavy Cavalry, heavily modified and designed for rapid response situations.

Primary Attributes: Physique 2, Coordination 2, Cognition 1, Psyche 1

Derived Attributes: Endurance 3, Reflexes 2, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Stealth, Survival, Vehicle

Primary Skills: Aquatics 6, Armed Melee 7, Bureaucracy 3, Computers 2, Culture (GEO) 6, Culture (Military) 5, Foraging 5, Heavy Weapons 6, Leadership 5, Piloting 4, Planning 6, Small Arms 8, Stealth 5, Unarmed Melee 6

Mercenary (Professional)

An ex-military soldier for hire. Will work for anyone who provides a steady paycheck.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Stealth, Tech, Vehicle

Primary Skills: Aquatics 3, Armed Melee 6, Bureaucracy 2, Culture (Military) 6, Culture (GEO) 2, Culture (Street) 3, Demolitions 2, Heavy Weapons 3, Leadership 4, Medicine 2, Planning 4, Small Arms 7, Stealth 4, Unarmed Melee 3

Mercenary/Military Pilot (Professional)

A mercenary or active military pilot skilled in operating armed aircraft.

Primary Attributes: Physique 0, Coordination 1, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Vehicle; (Strong) Combat, Stealth, Tech

Primary Skills: Aquatics 3, Armed Melee 2, Bureaucracy 2, Computers 4, Culture (Military) 6, Electronics 4, Mechanics 4, Medicine 2, Navigation 5, Piloting 7, Planning 3, Remote Weapons 6, Small Arms 4, Unarmed Melee 2

Warden (Professional)

A GEO law enforcement official assigned to enforce environmental protection laws, from poaching and over-fishing to illegal waste dumping.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 1, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Communication, Survival, Vehicle

Primary Skills: Aquatics 3, Armed Melee 2, Bureaucracy 2, Computers 2, Culture (Colonial) 4, Culture (GEO) 6, Culture (Native) 3, Foraging 4, Law 3, Navigation 5, Persuasion 4, Piloting 4, Small Arms 6, Tracking 7, Unarmed Melee 2

Pioneers and Colonists

Merchant Sailor (Everyday)

A sailor who works on a cargo or fishing boat, and is part sailor, part technician.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Survival, Vehicle

Primary Skills: Aquatics 3, Boating 5, Computers 4, Culture (Colonial) 6, Culture (Incorporate) 5, Electronics 4, Foraging 3, Mechanics 6, Navigation 4, Piloting 3, Small Arms 3

Pioneer (Everyday)

A person who has come to Poseidon to start a new life in a remote area of the planet. They are typically farmers and livestock (terrestrial or aquatic) ranchers.

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Farming; (Strong) Survival, Tech

Primary Skills: Agriculture 6, Animal Husbandry 5, Aquaculture 3, Aquatics 3, Culture (Colonial) 6, Culture (Native) 4, Ecoscience 3, Driving 2, Foraging 4, Geoscience 2, Mechanics 4, Piloting 4

Prospector (Professional)

A person who has come to Poseidon with the hopes of striking it rich by finding a Long John deposit. He is skilled in operating submersibles or hardsuits and knows a little about mining.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Sciences, Survival, Vehicle

Primary Skills: Aquatics 3, Boating 4, Computers 4, Culture (Colonial) 6, Culture (Native) 4, Electronics 3, Geoscience 3, Mechanics 4, Navigation 7, Physical Science 4, Piloting 3, Remote Operations 6, Small Arms 3

Scientists

Anthropologist (Professional)

An academic scholar who specializes in the origins, history and development of sentient beings. The anthropologist here studies, colonial, native and cetacean cultures.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Sentient Science; (Strong) Administration, Communication, Culture

Primary Skills: Anthropology 7, Aquatics 3, Archaeology 3, Bureaucracy4, Computers 3, Culture (Cetacean) 4, Culture (Colonial) 6, Culture (Native) 5, History 3, Language (Interspec) 5, Navigation 4, Persuasion 4, Writing 6

Astrophysicist (Professional)

A space scientist employed by the GEO. He spends his time on an orbital facility or one of Poseidon's moons studying stellar phenomena.

Primary Attributes: Physique 0, Coordination 0, Cognition 2, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Sciences; (Strong) Communication, Tech, Vehicle

Primary Skills: Aquatics 1, Astronomy 7, Bureaucracy4, Computers 4, Culture (Colonial) 4, Culture (GEO) 3, Culture (Spacer) 6, Freefall 3, Mechanics, Piloting 3, Remote Operations 3, Writing 6

Field Biologist (Professional)

A trained biologist who spends more time out in the wilds studying Poseidon's life first-hand, rather than from books or other media.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Sciences; (Strong) Farming, Survival, Vehicle

Primary Skills: Aquatics 3, Bureaucracy3, Computers 3, Culture (Colonial) 6, Culture (Incorporate) 3, Culture (Native) 5, Ecoscience 6, Foraging 4, Life Science 7, Navigation 4, Piloting 3, Remote Operations 3, Small Arms 2, Tracking 4, Writing 5

Whalesong Mystic—Bottlenose Dolphin (Professional)

A dolphin priest of the Whalesong theology.

Primary Attributes: Physique 2, Coordination –1, Cognition 0, Psyche 2

Derived Attributes: Endurance 4, Reflexes 0, Toughness 1

Aptitudes: (Superior) Sentient Science; (Strong) Communication, Culture, Survival

Primary Skills: Anthropology 4, Aquatics 10, Bureaucracy4, Culture (Cetacean) 6, Culture (Human) 4, Culture (Native) 5, Foraging 5, History 5, Language (Interspec) 5, Navigation 5, Persuasion 6, Theology 7

SPACERS

Space Crewman (Everyday)

A person who primarily lives in space and works as a technician maintaining the critical systems of an extra-planetary habitat.

Primary Attributes: Physique 0, Coordination 1, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Farming, Vehicle

Primary Skills: Bureaucracy 3, Computers 4, Culture (Spacer) 6, Electronics 5, Freefall 4, Hydroponics 4, Mechanics 6, Physical Science 2, Piloting 4, Remote Operations 4

TECHNICIANS

Cetacean Technician—Bottlenose Dolphin (Professional)

A dolphin trained in electronic and mechanical engineering.

Primary Attributes: Physique 2, Coordination –1, Cognition 2, Psyche 0

Derived Attributes: Endurance 3, Reflexes 0, Toughness 1

Aptitudes: (Superior) Tech; (Strong) Administration, Communication, Sciences

Primary Skills: Aquatics 10, Bureaucracy 3, Computers 4, Culture (Colonial) 4, Culture (Incorporate) 6, Electronics 7, Foraging 4, Language (Interspec) 5, Leadership 4, Mechanics 6, Navigation 5, Physical Science 4, Planning 4, Remote Operations 5

Engineer (Professional)

A trained electronic and mechanical engineer who designs equipment for an Incorporate.

Primary Attributes: Physique 0, Coordination 0, Cognition 2, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Administration, Communication, Sciences

Primary Skills: Aquatics 2, Bureaucracy 3, Computers 4, Culture (Colonial) 4, Culture

(Incorporate) 6, Driving 2, Electronics 7, Leadership 4, Mechanics 6, Physical Science 4, Planning 4, Remote Operations 5, Writing 5

Programmer (Professional)

A computer programmer who has turned to criminal activities to earn money. He may crack accounts to steal money, steal information to blackmail people with or steal secrets from an Incorporate to sell to the highest bidder.

Primary Attributes: Physique 0, Coordination 0, Cognition 2, Psyche 0

Derived Attributes: Endurance 0, Reflexes 1, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Administration, Communication, Sciences

Primary Skills: Aquatics 1, Bureaucracy 4, Computers 7, Culture (Colonial) 6, Culture (Incorporate) 3, Culture (Street) 3, Driving 2, Electronics 6, Mechanics 4, Physical Science 3, Planning 4, Remote Operations 5, Writing 4

Mechanic (Everyday)

A repairman who fixes everything from CICADA remotes to jumpers. May work for an Incorporate or small shop, or may even own his own business.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Tech; (Strong) Vehicle

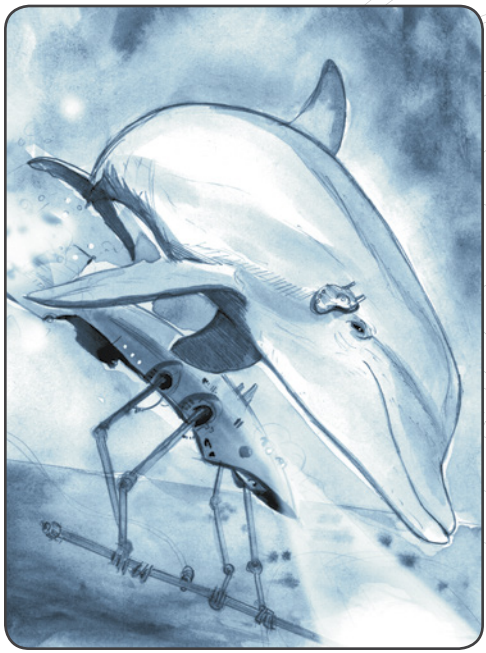
Primary Skills: Aquatics 2, Boating 3, Bureaucracy 3, Computers 3, Culture (Colonial) 4, Culture (Incorporate) 5, Driving 3, Electronics 5, Leadership 4, Mechanics 6, Physical Science 2, Piloting 3, Remote Operations 5

TERRORISTS

Cetacean Insurgent—Bottlenose Dolphin (Everyday)

A cetacean member of a terrorist organization such as the New Rastafarian Movement.

Primary Attributes: Physique 2, Coordination 0, Cognition 0, Psyche 0



Derived Attributes: Endurance 4, Reflexes 0, Toughness 1

Aptitudes: (Superior) Survival; (Strong) Combat, Stealth

Primary Skills: Aquatics 10, Culture (Cetacean) 6, Culture (Human) 4, Culture (Native) 5, Demolitions 4, Ecoscience 4, Foraging 4, Navigation 4, Stealth 4, Theology 3, Tracking 6, Unarmed Melee 5

Ecoterrorist (Everyday)

A member of an environmental terrorist organization such as Blue Water Circle or Zero Nation.

Primary Attributes: Physique 1, Coordination 0, Cognition 1, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Combat; (Strong) Survival, Vehicle

Primary Skills: Aquatics 3, Armed Melee 3, Computers 1, Culture (Colonial) 5, Culture (Native) 3, Demolitions 5, Heavy Weapons 2, Medicine 2, Piloting 2, Small Arms 6, Stealth 2, Unarmed Melee 3

Native Insurgent—Aquaform (Everyday)

A native member of a terrorist organization such as the New Rastafarian Movement.

Primary Attributes: Physique 1, Coordination 1, Cognition 0, Psyche 0

Derived Attributes: Endurance 1, Reflexes 0, Toughness 0

Aptitudes: (Superior) Survival; (Strong) Combat, Stealth

Primary Skills: Aquatics 6, Boating 4, Culture (Colonial) 4, Culture (Native) 6, Demolitions 4, Ecoscience 3, Foraging 4, Mountaineering 3, Navigation 4, Small Arms 5, Stealth 4, Tracking 6, Unarmed Melee 3

TRADERS

Shopkeeper (Everyday)

The owner of a small shop in a city or town.

Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Vehicle

Primary Skills: Aquatics 2, Boating 3, Bureaucracy 3, Computers 3, Culture (Colonial) 6, Culture (Incorporate) 4, Culture (Native) 3, Culture (Street) 3, Driving 2, Economics 5, Fast-Talk 4, Law 2, Persuasion 6

Trader (Professional)

A traveling trader or owner of a trading post that makes deliveries to remote locations.

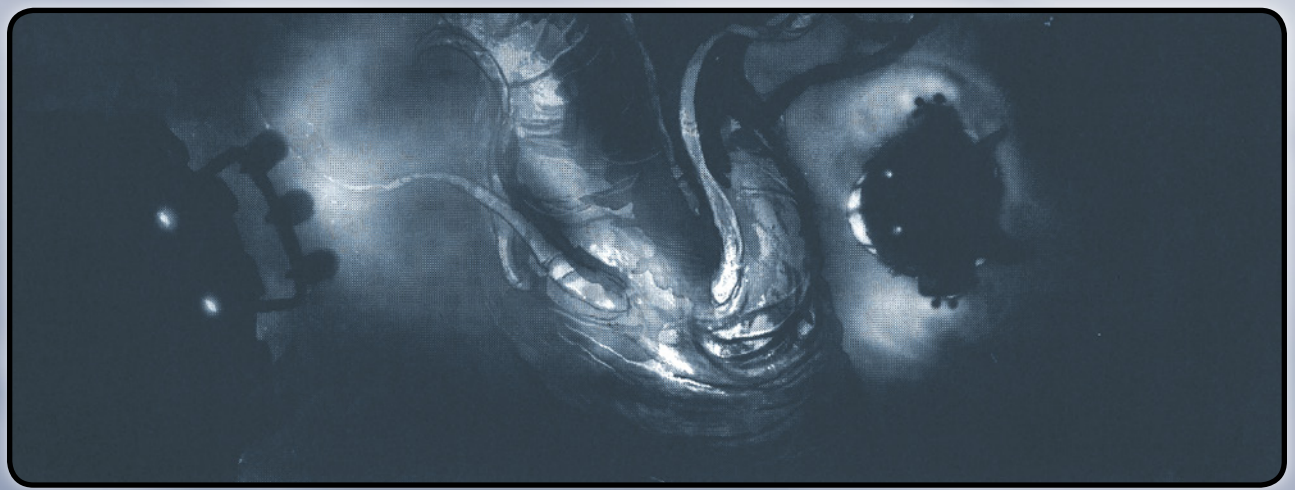
Primary Attributes: Physique 0, Coordination 0, Cognition 1, Psyche 1

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Communication; (Strong) Administration, Culture, Vehicle

Primary Skills: Aquatics 2, Bureaucracy 2, Computers 3, Culture (Colonial) 6, Culture (Incorporate) 4, Culture (Native) 3, Economics 6, Fast-Talk 4, Forgery 3, Law 2, Mechanics 3, Persuasion 7, Piloting 4, Small Arms 3

CHAPTER 9: DISTANT DEEPS



INTRODUCTION

Tyger! Tyger! burning bright
In the forests of the night,
What immortal hand or eye,
Dare frame thy fearful symmetry?
—William Blake

Since the dawn of the Stone Age, humanity has depended more and more on technology for survival. For most of this history, the species ceased adapting to new environments—it used technology to adapt new environments to it.

With the development of advanced biotechnology, humanity is once again learning to adapt—but this time, the species manipulates the very building blocks of evolution to its own ends. However, biotechnology simply allows humans to alter their bodies' capabilities, to improve their usefulness as tools. Humanity, as always, is defined by its use of tools. Take the tools away, and all that is left is a slow, weak ape.

Distant Deeps is designed to force the players to question—and test—their characters' reliance on technology. The scenario takes away many of the shields and safety nets that technology offers, and shows the player characters that on Poseidon, the divide between civilization and the wilderness is far more narrow than it is anywhere else.

The scenario is nominally set in New Hawaii, in the Coronado reefs region. It can be moved to another location, but this should be a remote area that is volcanically active—fortunately, lots of places on Poseidon meet these criteria. The Nippon Industrial State plays an important role in the background of the scenario, but the Game Master can replace the NIS with another Incorporate state if the scenario is repositioned closer to another company town or Incorporate holding. Much of the action takes place underwater, so characters must have access to diving gear or biomods.

The scenario's events center on a group of unusual colonists who call themselves "neo-tribalists." One of them is an escapee from the NIS arcology at Simushir. Her name is Konomiko, and she is a cognitive synergist, a genie designed for enhanced intelligence. She is a certified genius and a master of computers and electronics. Sadly, she is also insane and will probably get a lot of people killed, perhaps even the player characters.

HOOKING THE CHARACTERS

Ideally, the characters should be drawn in using one of these plot hooks. The characters could be:

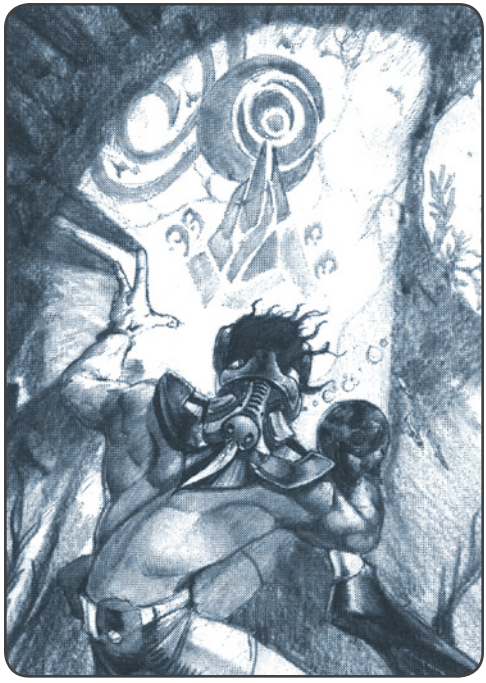
- Hired to locate a runaway called Konomiko from Simushir.
- Investigating the disappearance of an NIS cargo blimp.
- Tracking down wanted criminals who were last seen heading for the Coronado reefs.
- Researchers from Coronado Station.

If none of these suit, and you need to force the characters to get involved, their transport can fall victim to Konomiko's computer virus (p. 393).

THE TIGER ROCKS REGION

The Coronado Reef is a 250 kilometer-wide maze of corals and kelp forests, a vast and often beautiful wilderness. One of the most beautiful sections is called the Tiger Rocks. A 300-meter-deep fault in the ocean floor delves dangerously close to a small magma pocket. Hot springs and plumes of sulfurous, smoky water rise out of the rift. The reef-making polyps in the area have adapted to tolerate these conditions, and feed off the carbon and sulfur in the water. The corals they make are tinged with black carbon and bright yellow sulfur, and from the air, the region is a spectacular sight.

Looking at the Tiger Rocks region from the air is certainly the wisest approach. The hot currents make navigation tricky, and underwater visibility is greatly reduced by the volcanic dust and silt. Dangerous predators, from polypods to the occasional ghoster, lurk in the reefs. The fault at the heart of the Tiger Rocks is two kilometers long, and varies between 50 and 500 meters in width. The ocean floor was cracked open by rising magma about 10,000 years ago, and there is still a reservoir of molten rock beneath the surface. This is the tail end of the volcanic material, and it has almost broken through again. There have been many small tremors and lava flows in the region lately, and the signs point to there being a small eruption within a few hundred years.



There are numerous lava tunnels beneath the reefs. These tunnels, formed when the outer shell of a lava flow cools and solidifies while the inner core keeps flowing along, can mainly be found to the east and north of the rift, where the continental shelf slopes down towards the deeps of Poseidon's Reach. Most of the lava tunnels are flooded, although a few of the ones on high ground are partially drained at low tide.

Biogene owns the only really good maps of the region. Most characters will have to rely on GEO records, which are of poor quality. Any Piloting or Navigation rolls made in the Tiger Rocks region will suffer a –1 TN penalty, –3 in the deeper reefs.

The Neo-Tribalist Movement

The rise of neo-tribalism began during the Blight Years. As governments and societies crumbled, the old forms of the tribe, of small groups of extended families, began to reassert themselves. Even when the GEO and Incorporate states managed to restore some level of law and order, not all the tribes chose to reintegrate into 22nd Century civilization. The neo-tribalist philosophy is that technology has advanced enough to support a high quality of life outside the traditional structures of modern civilization. Most neo-tribal groups on Earth live in Free Zones. Some are farmers or pastorals, others are semi-nomadic hunter-gatherers with a spear in one hand and a bodycomp in the other.

The revelation in 2165 that the Athena Colony had not only survived but prospered by adopting a similar approach was seen as a validation of the neo-tribalist philosophy, but there are great differences between neo-tribalism and native culture. The natives were forced to abandon their advanced technology—neo-tribalist groups rely on technology for their autonomy and quality of life. The natives were forced by circumstances to change, but neo-tribalists have chosen their way of life.

In 2199, however, the neo-tribalist movement has largely vanished. A few scattered groups remain in the wilds of the Free Zones, while many others have been reabsorbed into urban civilization. There is a small subculture of "weekend tribalists" who live in cities and work regular jobs, then slip out for weekend excursions into the wild, but by and large, neo-tribalism as a way of life is seen as the preserve of cranks and knife-fetishists outside the Free Zones.

Diana Fair believes that CommCore, the global computer network, is largely to blame for the demise of neo-tribalism. Ubiquitous computer access means that civilization is everywhere, that there is no divide between tribe and not-tribe. It is impossible to build a new way of life when the old one is no more than a voice command away. CommCore's satellites reach every point on Earth, and the infrastructure of the net is woven into the very fabric of life on Luna and Mars. Poseidon is the only truly free world, and even its information networks are growing rapidly.

The neo-tribalist community on Poseidon is completely isolated from CommCore, as well as private and government networks. There has been no trace of them since they left the spaceport in Haven. They have built a hidden community in the lava tunnels around the Tiger Rocks, fishing and hunting to sustain themselves. They have a maincomp, a well-equipped infirmary, and a bioplastics press. They generate their own electricity from the geothermal springs.

Diana Farr's original following consisted of a dozen Earth-born people looking for a new life on Poseidon. Since she established the tribe in 2195, it has grown to 39 people. A third of these are refugees from Simushir, the Nippon Industrial State's company town. Conditions in Simushir are harsh, and these former indentured workers chose to take their chances in the wild rather than continue to suffer in the shantytowns. There are also several escaped

criminals from Atlantis. Both the ex-cons and the ex-NIS refugees were drawn to the neo-tribalists for the same reason—an escape from the pervasive information networks. It is almost impossible for a fugitive in a major settlement not to leave some kind of electronic footprint or digital trail. An escapee can be literally caught in the net.

Diana is the acknowledged head of the tribe, although she merely considers herself the first-among-equals. She had the original idea of starting a neo-tribalist commune on Poseidon, and it is her drive and fervent belief that keeps the tribe together. She has managed to integrate starry-eyed idealists, downtrodden indentured workers, and hardened criminals into the same tribe. She has a powerful personal charisma and enthusiasm. She believes that the Incorporate states—and, for that matter, the notion of the nation-state—is as outdated as feudalism. The future of humanity lies in small tribal groups. She points to the asteroid colonies and the Families on Mars as evidence of this trend.

Her staunchest supporter is a silva hybrid named Aldo, a former GEO Peacekeeper. He accepted the offer of relocation, but found that the old myths and stereotypes about hybrids were still prevalent in civilian life, even on Poseidon. He met Diana before she left Haven. He was caught up in her visions of a new way of life, one in which the lies and stories propagated by CommCore and the media industry would be forgotten. In the tribe, Aldo accepted the role of protector and has managed to acquire a few black-market weapons for self-defense. Aldo strenuously opposed Diana's decision to allow the escaped convicts to join the tribe, and he has been very moody and irritable for the last three months.

Rumors of a newcomer settlement hidden from the GEO have been circulating amid the criminal underground for some time. Four prisoners in a Justice Commission holding cell in Atlantis bribed a guard to let them escape, and sailed out into the Coronado Reefs looking for this safe haven. Iko Yoshitama (pharium dealing), Ronald Gray (armed robbery), Carl Hoffman (pharium possession, smuggling) and Nia Temi (illegal mining) encountered the neo-tribalists and were allowed to join the group. Hoffman and Yoshitama have adapted well to their new lives, but both Gray and Temi are looking for a way out. Gray privately holds the opinion that Diana and her little neo-tribalist cult are lunatics, and would have run out weeks ago if he could. However, he is well aware that this is one of the safest places on Poseidon for an escaped criminal to hide. He is also terrified of Aldo.

Temi wants to leave the Tiger Rocks region, not because she dislikes this new, simpler life with the neo-tribalists, but because she is a trained geologist and is worried about the volcanic activity in the rift. A medium-intensity sea quake could cause an eruption or outflow. She has been trying to convince Diana to move the settlement to another location for some time now, but the tribe will not migrate until they can work out a method of transporting their heavy equipment without being detected.

The Simushir Refugees

There are worse places than prison. The coffin-hotel residential stacks of Simushir, for example, make most prisons look clean and comfortable. Rotting bioplastic buildings infested with fast fungus choke the narrow streets. Chain-link fences and roaming camera drones keep the workers in line and under surveillance 30 hours a day. The Tower looms over the whole city like a watchful giant. Escape is virtually impossible. A microchip is implanted in the wrist of every NIS worker, and these chips track their every move. If any worker gets past the security perimeter, the chips begin to broadcast a low-power homing signal that NIS security can trace from up to 10 kilometers away. Even if one escapes from Simushir, there are no other major settlements on Ina Island.

While the low-ranking workers suffer, the NIS elite live in luxury in the shining corporate arcology. At the heart of this vast complex are research laboratories, staffed by the best minds the NIS can acquire—or create. Cognitive synergists, or "brainchildren," are expensive to genetically engineer, but their incredible intellect is worth the investment for the Incorporate states. Six engineered children were born in the NIS Advanced Medical Institute on Earth in 2182, and two were sent to Poseidon.

By the time she was 16, Konomiko had graduate degrees in computer science, electronic engineering, and mathematics, as well as severe paranoia and schizophrenia and an addiction to numerous mood-stabilizing and anti-depressant drugs. The move to Poseidon seemed to have a positive effect on her mental condition, and her psychologists recommended her drug dosages be decreased. For six months, Konomiko excelled in the lab. Then she vanished.

She has become consumed by her paranoia about being watched. To Konomiko, Simushir was full of staring eyes. The stars in the sky were surveillance satellites tracking her. The sound of the surf was feedback from hidden microphones or the fans of unseen surveillance remotes. Over six months, she carefully laid a plan of escape. She wrote computer viruses to disable the security systems. She tracked down the likely location of the rumored "netfree tribe." She hacked into the Simushir personnel database, identified 12 workers tagged as "malcontents," and anonymously arranged for them to find out about the neo-tribalists. Finally, she altered inventory and shipping records and had a maincomp and other gear loaded onto a cargo blimp—which was then hijacked by the escapees.

During their escape, the former indentured workers found a teenaged girl dressed in native clothing. She claimed to have been abducted from her village by an NIS security officer. The escapees took her with them. Some suspect the girl of being more than she appears, but the Simushir refugees have adopted her as a good luck charm. When the cargo blimp grounded on the Coronado Reefs, the fugitives protected Konomiko until they were all rescued by the neo-tribalists.

Konomiko has moved the computer equipment from the crashed drone to a nearby sea cave, and has continued her work on cryptography and anti-surveillance technology. Her paranoia drives her onwards, and she dreams of a future where the skies are clear of hateful eyes. The natural, harmonious lifestyle of the neo-tribalists makes far more sense to her, to be free from government and authority and law. What she has not realized is that the true law on Poseidon is enforced not by computers and drones, but by the old common law of the jungle and the deeps.

WHAT DREAD HAND?

The player characters enter the Tiger Rocks region in pursuit of whatever goal drew them here. The scenario assumes they are in a powered vehicle of some sort, such as a jumpcraft. If they have onboard sensors capable of analyzing ocean variables, scans will detect signs of geothermal activity, principally elevated temperature readings. If the characters are actively looking for another craft (a crashed jumpcraft or the missing cargo blimp), a Challenging Intellect+Electronics roll will allow them to pick up some metallic debris on radar about three kilometers to the northeast of the central rift.

The characters are passing over an extensive section of the yellow-black mottled reef when they are unlucky enough to be spotted by Konomiko. As far as the neo-tribalists know, she is out hunting rubber shrimp. In actuality, she came out onto the reef so she could do some work on her implanted microcomputer in privacy. She assumes the characters are an NIS retrieval team and panics.

Konomiko uses her microcomputer and uplink jack to connect to the stolen NIS maincomp, which in turn contacts the computer on the characters' vehicle. The maincomp broadcasts a digital signal disguised as an electronic distress call. If the characters answer the call and try to lock in the source of the signal, the maincomp unleashes a specialized virus on the vehicle's computer system.

It then hits their onboard computer with a specialized virus. As the virus spreads through the computers, the vessel begins to crash. The surface of the water rushes up to engulf the characters' vessel.

The Game Master should allow the pilot to make an Average Coordination+Piloting roll to put the jumpcraft down more-or-less safely. The waters around Tiger Rocks are shallow, and the vessel will smash off various reefs and outcroppings before coming to rest amid the patterned rocks. The water is deep enough that the jumpcraft will completely submerge if it is not equipped with a marine conversion package, but the characters should have time to get out before it sinks.

Even as the aircraft crashes, Konomiko's viruses will spread to and shut down any computer systems networked to the vehicle's onboard computer. Depending on the severity of the crash, the characters may be injured, and if the jumpcraft sank, much of their equipment and supplies may be damaged or lost. Their craft will be disabled and possibly irreparable. The basic goal of this encounter is to strip away the technological advantages of the characters, plunging them into a hostile and dangerous wilderness.

THE WILDERNESS

Once the characters have recovered from the crash, and retrieved whatever equipment survived, they can start traveling. Swimming with any sort of heavy equipment is difficult, so the characters will have to abandon much of their gear or rig some sort of floating raft. The nearest outpost is Coronado Station to the east; the native village of Delta is about 300 kilometers to the south.

If the characters' plot hook requires them to travel deeper into the Tiger Rocks, they should head north. They may also have detected metallic debris a short distance to the northeast (see The Cargo Blimp, below). The crash will have been disorienting at the very least, so the characters will first have to work out which way they are facing.

Once they start moving, the characters will discover that the Tiger Rocks region is a labyrinth of reefs and volcanic ejecta. Maintaining a steady course is next to impossible. The characters will have to clamber in and out of the water, over reefs and rocks, to proceed in a straight line. If they try to keep to a course while staying in the ocean, they have to navigate a maze of orange-and-black-patterned rock walls and lava tunnels.

Emphasize the confusing terrain, and call for regular Navigation or Orienteering rolls, as appropriate. Ask the players what route they take at every possible junction. Describe the maze-like reefs, the currents of hot water, and the clouds of fish and shrimp that swarm around.

Terrain features the characters might encounter include:

• A tall, steep reef, exposed at low tide, which the characters must climb over or spend some time swimming around.

• A hot water vent, which is mobbed by thousands of small sea-horse-like creatures that enjoy the current. A blimp was feeding on these creatures, but has become tangled in the rocks. The water is heating the blimp's internal gases, and it is dangerously close to exploding violently.

• A soft spurt, hidden beneath a thin layer of silt. Unwary characters may step on it and risk being poisoned.

• Hungry bloodhunters may be attracted to any food the characters are carrying.

• Black smokers—rock chimneys belching out soot and carbon-heavy water from deep underground—are the chief cause of the strange colors of the Tiger Rocks, and can be found throughout the area.

Don't let the players relax. Keep describing the terrain and asking them questions about what they are doing. Interrogate each player individually—if they split up, so much the better. Eventually, one or more players will probably get frustrated with the slow progress and stop paying attention to the Game Master's descriptions of the terrain and questions about their route. Anybody who stops paying attention out in the wild is being foolish.

If one or more characters split off from the main group, or forge ahead without due care, they are in trouble. Polypods—the great tentacled hunters of Poseidon's deeps—are not especially common around Coronado, but they are not unheard of. This particular female specimen has taken up residence in a hole next to a deep-water channel in the reefs. Larger creatures like sunbursts swim down the channel to the rich feeding grounds of the hot, inner reefs. Without warning, the polypod explodes out of the hole, wrapping its powerful tentacles around the body of its prey, crushing and devouring it. The deep-water channel crosses the route the characters are taking, so the lead character is the first one scented by the polypod. The only warning sign is a single sniffer tendril—one of the poly-pod's sensory organs—resting on the lip of the hole. The lead character should be allowed an Awareness roll to notice the tendril. If the character

Konomiko's Viruses

Before she escaped from the NIS Arcology, Konomiko was working on the development of military-grade viruses designed to infect and disrupt C3 (Command, Control and Communication) networks. The viruses had to be able to penetrate security measures and shut down as many different computer systems as possible. Her solution was to create a set of "beachhead" programs. These mimic normal data packets, and can be inserted into a data stream. When the packet reaches the target computer, its only function is to command the target to contact the attacking computer and upload a virus tailored to that machine.

While Konomiko's system is effective, it can be easily defeated simply by isolating computers from the network. Of course, on a battlefield, such a defense would be suicidal—if every defending unit cuts itself off from the network to hide from the virus, the attack has essentially succeeded in disrupting the lines of command and communication. Out in the wild, losing CommCore, MetWatch, and GPS data is not as much of a disaster. Since leaving Simushir, Konomiko has developed many new second-generation viruses, allowing her to disable civilian craft, drones, and even bodycomps.

fails, their first sight of the polypod comes as it bursts out of the hole and grabs at them.

Characters injured in the fight will attract the attention of smaller predators and scavengers, drawn by the scent of the blood in the water. Wounds may also become infected in the warm, silted water. If the characters have no supplies with them, they will have to forage or hunt for food. The most advanced firearms are not as good as a simple fishing spear when hunting small game, and any larger creatures on the reefs are dangerous predators. Reefworms are the easiest source of food, but if the characters can rig a net, they can scoop up all sorts of small fish and shrimp.

This sojourn in the wilderness can last from a few hours to several days, depending on where the characters are heading. When they are in danger of wandering out of the Tiger Rocks and out of the scenario, or if they're in trouble, then move on to the next encounter.

IN THE MIDST OF CHAOS

The neo-tribalists go on six-person hunting expeditions, lasting three to six days depending on how far they range. One of the expeditions, led by Petyr Rachmanov, is returning to the neo-tribalist base at the heart of the Tiger Rocks when they meet the characters. The hunters look like natives at first glance, but while they wear native-style clothing, their hunting gear is of modern design, and they carry high-quality medical and survival equipment.

Rachmanov was born on Earth, in the Hanover city-state, where he was trained as an engineer. He applied for a transfer to Poseidon after a disastrous divorce and spent three years working in the xenosilicate refinery at Lebensraum. The sight of all the refined Long John, and the thought of all the longevity treatments it represented, overwhelmed him. If xenosilicate meant that he would live thousands of years, then he was damned if he was going to spend any more time at a job that bored him and trivialized his life. He took his hydrofoil and sailed off into the ocean.

As long as the characters are not acting in an obviously threatening manner, Rachmanov will make contact with them, offering them food and medical treatment if they need it. He will explain that he is part of a community of people trying to forge a new life out here, away from GEO or Incorporate supervision. He will suggest that the characters come back to the neo-tribalist base with him. He will try to avoid getting into a long discussion of who the neo-tribalists are: The community depends on being a secret from the rest of Poseidon, and he doesn't want to let the location of the tribe slip until the characters are heavily outnumbered and can be subdued if necessary. If the characters do attack, or attempt to flee, Rachmanov and his hunters will not try to stop them. Instead, they will swim back to the neo-tribalist's lava tunnels, and send Aldo, Ronald Gray, and a few other, better-armed tribesmen out hunting.

THE CARGO BLIMP

If the characters were looking for a downed flyer, or if they picked up a magnetic anomaly before Konomiko forced them to crash, they may encounter the wreckage of the NIS Cargo Blimp used in the escape from Simushir. Most of the balloon material was salvaged by the neo-tribalists, so only the skeletal framework of the cargo gondola remains, wedged between two reef walls. Examining the wreckage reveals that the blimp was made in Simushir. The empty cargo crates once contained bioplastic molds, although one crate is marked "electronic equipment."

THE LAVA TUNNELS

Rachmanov leads the characters into the heart of the Tiger Rocks, to the lava tunnels where the neo-tribalists make their home. Entering the tunnels is a strange experience. Primitive wooden structures hold stacks of crated supplies and salvage; a hand-crafted hunting spear rests against a brand-new autodoc. Throughout the tunnels, people wearing native clothing and carrying high-tech equipment go about their business.

About a kilometer of tunnel has been completely drained and sealed off with airlocks. There are two entrances, both of which are carefully concealed behind foamed bioplastic sculpted to look like stone, and infused with stone chips to give a more realistic sonar and thermal profile. One of the exits is currently under repair, but can be used in an emergency. Inside, the tunnels are well lit and very warm due to the geothermal power plant in the lowest tunnel. Hanging metallic curtains (made of material from the blimp) divide the side corridors up into small rooms, while the central corridor contains the few pieces of machinery the tribe uses, the medical robot, and the meeting hall.

A staircase has been carved out of the rock, following the path of a lava tunnel down the wall of the rift, to a chamber where geothermal steam runs a small electrical generator. The steam is then vented out into the ocean. There is also a small cache of seismic equipment. Anyone examining the data they produce and making a Routine Intellect+Geology check will see that the rift is highly unstable, and that a small eruption could occur at any time.

The characters will be introduced to Diana, the leader of the tribe. Aldo will lurk in the background, trying to size up the characters and determine how much of a threat they are. Diana will invite the characters to stay and rest for a day or so, as guests of the tribe. She will willingly answer any questions the characters have, and will talk about her philosophy at length. Diana should be played as a pleasant, enthusiastic person. She firmly believes that she is right and the rest of society is wrong, but she is not a crazed fanatic.

While speaking with the characters, Diana will be called away by Nia Temi (an ex-con and geologist) to examine the power plant. Temi has been urging Diana to move the tribe away from the volcanic region for some time now. The characters are free to wander the lava tunnels, but they will not be allowed out without an escort—Aldo will inform them of this. If the characters protest, he will growl that the reefs are dangerous for the unwary. Aldo has been in a bad mood ever since the ex-cons were allowed to join—he really dislikes Ronald Gray— and he does not like the characters much either.

The rest of the tribe will keep out of the characters' way. They will not ignore the characters completely, but they will exclude the outsiders from the day-to-day life of the tribe. Observant characters will note that there are three distinct groups in the tribe —the original tribalists, the Simushir refugees, and the ex-cons. The tribalists come from a range of backgrounds on Earth, but here they are all working towards a common dream. They defer to Diana when it comes to dealing with people outside the tribe.

The Simushir refugees may have exchanged their NIS-issue jumpsuits for the native garb of the tribe, but they still have not shed their corporate mentality and habits. They huddle around the edges of the tunnels when not working, and act in six-person work teams. When talking to the characters, they stare at the floor and act as quiet and respectful as possible. If the characters are looking for the missing cargo blimp, the refugees will be quite helpful, describing how they escaped and where they ditched the blimp. They will not mention Konomiko at all, and will not let the characters leave without Aldo acting as an escort.

If the characters ask the refugees about Konomiko, they will be met with blank stares and shrugs. The refugees are very protective of her, and hide her origins from everyone. If the characters press the issue or ask other members of the tribe, the refugees will attempt to remove the characters, either by framing them, convincing Aldo or Diana that the characters are dangerous, or arranging an accident for them. They feel they have nothing to lose, and if backed into a corner, will go to any lengths to protect one of their own.

Of the escaped convicts, Ronald Gray will immediately try to ingratiate himself with the characters. He will try to get one or more of them to talk to him away from the tribesmen, and then launch into a long diatribe about how insane Diana Farr is and what Aldo is going to do to them. Gray will insist that the characters will not be allowed to leave the lava tunnels. After all, the tribe is based around secrecy—no one gets back to civilization to inform on them. He will offer to help the characters if they help him escape. He will say anything to get them to help him: For example, if a character mentions something about their vehicle crashing, Gray will claim he overheard Aldo and Farr discussing electromagnetic pulse weapons.

If any characters go down to the lower tunnel to the geothermal plant, they will meet Nia Temi. She is convinced that the settlement's current location is too unstable, and that the tribe should move. The major problems will be transporting the heavy equipment and machinery and constructing a new home without being noticed. While Diana and Aldo plan to send scouts to deal with the latter problem, Temi's task is to work out a solution to the transport issue. The tribe has a single minisub and a pair of catamarans hidden in the reefs. When the lava tunnel settlement was originally being constructed, the parts for the various machines were brought in the sub over several weeks. Temi wants to move more quickly than that.

Finally, Konomiko will follow and observe the characters, trying to decide if they are a danger to her. Most of the tribalists believe the story that she was a native runaway picked up by the Simushir refugees. Certainly, Konomiko dresses and acts like a genuine native, but her disguise is far from flawless. All she knows about native culture is culled from NIS reports and CommCore, and if anyone with a good Native Culture skill questions her, she will not be able to give the right answers. Of course, the most serious problem with Konomiko's disguise, and one she tries desperately to conceal, is that she lacks aquaform biomods.

Konomiko is skilled at deflecting questions. If she has heard the characters asking about "Konomiko" before they talk to her, she will adopt the name "Jessica". One reason she pretends to be a native is that many people assume natives know nothing about technology or current affairs, and therefore do not question them. Among newcomers, they tend to fade into the background, becoming almost irrelevant. If someone does ask her questions, she will try to turn the conversation back on them, getting them to reveal details about themselves. When that doesn't work, she has a whole range of personalities to use, ranging from an irritatingly perky and sarcastic kid to a sullen teen to a near-catatonic abuse victim. She'll adopt whichever persona and mode of behavior she thinks is most likely to stop the questions.

When roleplaying Konomiko, the Game Master should remember that she is a manipulative genius, and possibly a sociopath. She will play into any expectations the characters have, and will identify any characters likely to be protective of her. Any emotion she shows, no matter how genuine, is just her logical solution to a problem. When Konomiko loses her emotional control, which can happen at almost any time, she is prone to fits of severe depression, crying, and screaming, and has the disturbing tendency to claw the skin around eyes (hers or others) with her fingernails.

None of the people in the tribe (other than Konomiko) know anything about what caused the characters' vehicle to crash, although they are aware that at least one other jumpcraft has crashed in the reefs within the last few weeks. The Tiger Rocks are a fairly out-of-the-way place, so two crashes means that most of the recent traffic has fallen out of the sky. Most blame it on a Styx-like effect, although a few are beginning to wonder if Aldo has not acquired a missile launcher or some other anti-aircraft weapon.

Let the characters wander around talking to people for a while. Aldo will keep shadowing them: If the characters want to speak to anyone alone, some of the characters will have to somehow occupy or distract the huge GEO-trained hybrid. Once things begin to drag, Diana will find the characters and invite them to dine with her. One section of the tunnels is furnished with simple bioplastic chairs and

tables. The meal is, unsurprisingly, fish and seaweed-derived food. About twenty people eat at the same time as the characters.

Diana will begin by asking if the characters have any questions about the tribe or the settlement. She will enthusiastically explain the philosophies and origins of neo-tribalism, as well as her opinions of the current political situation on Poseidon. If asked, she will relate where the various members of the tribe came from. She will openly admit that four members of the tribe are wanted criminals, and that the Simushir refugees left the NIS illegally. If asked about the native girl, Diana will be more reticent. Privately, she suspects the girl's family abused Konomiko, and that the best place for her is with the tribe, surrounded by people who care for her.

The conversation will also touch upon topics such as the relationship between humans and the wilderness in the current era. Diana's belief is that technology and biomodification have made cities and governments obsolete, that humanity can go back to older forms of social organization without sacrificing any quality of life. The characters should be encouraged to argue and consider their own opinions. The tribalists may also give the characters survival tips about any problems encountered on the trek through the reefs.

Diana will ask the characters about what brought them to the Tiger Rocks, and will ask them to describe their crash in detail. Her next action will largely depend on who the characters are, why they are here, and what they have done since meeting the tribe. The location of the tribe must be kept secret. She must decide if she can let the characters return to civilization knowing where the settlement is. Due to Temi's urgings, Diana has decided to move to a more stable area, but moving the tribe will take weeks. Diana must decide whether or not to keep the characters in custody until the move is finished, so the tribe can slip away to an unknown home.

If the characters are GEO Marshals, Native Patrol, or any other sort of law-enforcement agents, or the sort of people who would report the tribe to such authorities, then Diana will regretfully tell them they cannot be allowed leave. She trusts Incorporates even less than she trusts the GEO, so any characters who openly declare they work for an Incorporate state will be imprisoned. Diana is well disposed towards natives, independents, and anyone who seems to be genuinely interested in her neo-tribalist philosophy.

Obviously, the manner in which Diana presents this news will depend on the characters. If the group consists of heavily armed Peacekeepers or Incorporate operatives, then Aldo and a half-dozen other armed tribesmen will be lurking in the shadows, and will rush out to cover the characters. It should be made clear to the players that fighting back will result in one or more of them getting killed. Of course, if the characters are elite combat machines, it is entirely possible that they could take on the entire tribe and win. Try to guide the scene towards a non-violent ending, but if the players want to go on a killing spree, let them, and skip on to the Konomiko Runs section.

If the characters argue, Diana will listen. Her goal is to protect the secrecy of the tribe—she doesn't want to imprison anyone if she can avoid it. If the characters come up with a plan to protect the tribe's secrecy and it sounds plausible, Diana will agree… but Aldo will not. He will insist that the characters remain with the tribe for at least five days, while preparations for moving are begun. That way, even if the characters do betray the tribe, there will be enough lead-time to get most of the equipment to a safe location.

Assuming a firefight has not erupted, the characters are shown to a private section of the tunnels and left alone. Aldo stands guard, watching them unobtrusively.

FORESTS OF THE NIGHT

The next section of the scenario can go in several different directions, depending on what the characters do. The following events wills occur:

• A jumpcraft from the NIS flies over the rift. It is carrying a Human Resources Retrieval Team. The neo-tribalists hide.

• Konomiko panics, convinced that the HRRT are there to recapture her (they are) and that the characters led them here (they didn't). She sneaks out of the tunnels and heads for her hidden maincomp.

• If the characters try to catch Konomiko, the NIS spot them, and the tunnels are attacked.

• If Konomiko isn't stopped, she forces the NIS to crash in the same way she attacked the characters. The NIS jumpcraft sinks into the rift and explodes.

• The explosion ruptures the rock encapsulating the magma chamber and the eruption Temi feared begins.

Human Resources

To the Nippon Industrial State, Konomiko is a significant investment, one that must be recovered. When she first escaped, the best agents in Simushir were sent out to find her. Now, months later, the NIS have been forced to bring in cheap labor to cover more ground. The group known as "NIS HRR Team #4" is a hired band of low-grade thugs from Nomad. They have a decommissioned military jumpcraft, which they have rearmed with twin racks of missiles and a chaingun. NIS satellite scans finally noticed the wreckage of the cargo blimp, and Team #4 was sent to search the region.

When they approach the blimp, they will launch a constellation of scout drones, which will examine the wreckage. The drones will then spread out looking for any signs of settlement. Anyone outside the neo-tribalists' lava tunnels has a chance of being spotted by the drones.

If the drones do spot something interesting, the jumpcraft flies in for a closer look. The team operates on a strict "shoot first, ask questions later" policy. They know they are looking for an Asian girl in her teens, so anyone else is a valid target. The thugs will use their sonic stunners if collateral damage to Konomiko is an issue, but otherwise they have no qualms about hurting people.

Konomiko Runs

Believing that the jumpcraft is full of NIS bogeymen come to take her back to the lab, Konomiko decides the only thing to do is use her computer viruses. Her uplink jack does not have the range to contact the maincomp, so she will have to swim closer to it. She puts on her gill pack and attempts to sneak out of the tunnels. If the characters try to stop her, the Simushir refugees will try to restrain or slow them—anybody who threatens Konomiko is an enemy in their eyes.

Once she is in the airlock, she will wait until it is flooded and the outer door is open, then shoot the locking mechanism, jamming the door open. The airlock cannot be used without flooding the tunnels. There is a second exit, but it is being repaired. A Routine Physique+Mechanics roll is sufficient to open the inner door.

Konomiko will swim to her maincomp, which is hidden in a cave about four kilometers from the rift. The characters can try to catch her, but she is terrifyingly intelligent and dangerous. She is probably weaker and slower than most characters, but the Game Master should give her every advantage. If followed, she will attack from ambush at the right time, in the right place. Despite her tactical genius, she is unsuited to any sort of combat, and will employ hit-and-run tactics if she fears the characters are trying to capture or delay her.

The HRRT's drones may spot the characters or Konomiko while they are swimming in the region. The Game Master should call for Routine Cognition+Hiding rolls at irregular intervals. Characters who fail have been spotted by the drones, and the jumpcraft will home in on their location. Ideally, if the characters are chasing her, they should catch Konomiko before she reaches uplink range. The jumpcraft should then arrive. The best way to defeat the HRRT is to let Konomiko hit them with her virus programs.

If the characters stay in the tunnels and ignore Konomiko, the Game Master should play up the claustrophobia and paranoia of the tribe trapped in a confined space. Aldo has a small surveillance drone in the waters outside the airlock and can track the HRRT drones and jumpcraft.

Eventually, one of the HRRT drones will notice the jammed airlock, and the jumpcraft will fly over the rift to investigate. Aldo will decide to fight back and lead a contingent of armed natives out the other airlock to try to shoot down the jumpcraft in a surprise attack. This short firefight will end when Konomiko reaches her maincomp.

BURNING BRIGHT

The area at the heart of the Tiger Rocks region is volcanically unstable. Beneath a thin sheath of stone is a rising bubble of magma, the last dregs of an old eruption. Any significant impact or explosion could rupture the capsule around the magma chamber. A torpedo or a crashing jumpcraft certainly qualify.

If the characters have managed to defeat the HRRT before Konomiko activates her viruses, or if they lured the jumpcraft away from the rift, the eruption will be avoided. Otherwise, the characters see either a torpedo exploding on the floor of the rift, or an out-of-control jumpcraft power-diving into the seabed.

The initial impact shakes the reefs, and can be felt up to kilometer away. As the magma begins to shift and flow, water rushes into the cracks in the sea floor. The resulting clouds of steam and boiling water flood the rift area. Lava begins to ooze out, following the channels in the reefs. Inside the tunnels, the hot water spring powering the generator becomes choked with rising molten rock. The generator shuts down, and the tunnels are plunged into darkness. Many of the tribe members panic and stampede for the second airlock. Characters still in the tunnels are likely to be trampled or crushed if they get in the way.

Diana will try to restore order, but as the air temperature in the tunnels rises, her attempts will become increasingly half-hearted. As molten rock floods the lower tunnel, she will agree that the settlement must be abandoned. Evacuating the tunnels will take some time using only one airlock. A maximum of four people can fit in the airlock, and it takes nearly three minutes to run through an exit cycle. If the characters were imprisoned, they can seize the opportunity caused by the combat and explosions to escape.

Outside, in the water, the local wildlife panics. Thousands of fish rush away from the central rift, swimming desperately for cooler, safer waters. The reefs are normally full of activity, but this migration is far more impressive. Clouds of fleeing marine animals will blot out the light from the surface. This is extremely disorientating and confusing to those attempting to orient themselves underwater. The combination of the billowing steam and panicked fish makes any action or combat more uncertain. Visibility is reduced to a fraction of normal, and the sea is turbulent with frantic motion.

Predators will take advantage of the situation, chasing after the retreating schools. The Game Master may wish to introduce a school of bloodhunters or even a lesser white or two to make the characters' situation even more precarious.

As the eruption progresses and more lava reaches the surface, the water temperature rises considerably. The Game Master can use the Burning rules in the *Player's Guide* to resolve exposure to the water, but the Damage Rating should begin at 2. The Damage Rating will rise depending on how long the characters remain exposed, how well protected they are, and how close they get to the eruption.

Depending on their goals and situation, the characters may be trying to:

- Get as many people out of the lava tunnels as possible.
- Escape from the lava tunnels themselves.
- Capture Konomiko.
- Capture any of the escaped criminals.

Confusion and chaos should dominate this section of the game. To emphasize this, hit the players with quick-fire questions about what each character is doing. Describe everything in short, choppy bursts, and remember that visibility is at a fraction of normal range.

ON WHAT WINGS?

The eruption will make the central area of the Tiger Rocks a hostile environment. To survive, the characters will have to move out into the reefs. They may be injured, and may have some or all of the non-player characters in tow.

The nearest settlement is Coronado Station—however, the NIS were tracing the HRRT Jumpcraft until Konomiko's virus hit it, and they will send out a rescue team. Any character who passes a Routine Intellect+GEO Culture roll will also remember that the Haven Institute of Science and Technology usually dispatches an observation drone or science team to the site of an interesting eruption. The characters can choose to wait for one of these to rescue them.

None of the characters should have a functional communications device, thanks to Konomiko's viruses. An Average Cognition+Electronics roll allows a character to jury-rig a simple radio transmitter, which might be able to reach Coronado Station or Delta. If the characters have retrieved Konomiko's maincomp, it has a satellite uplink and radio transmitter than can easily reach civilization. It will take between two and five days for a rescue craft to arrive.

After the eruption, the inner reefs will be nearly empty of fish. Hunting will be considerably more

difficult than normal. Any supplies that were in the lava tunnels will have been destroyed, so the characters will have to survive on the bounty of the sea. The best shelter is probably in the small sea cave where Konomiko hid her computer.

Of the 39 neo-tribalists, at least 10 will have died in the confusion unless the characters somehow intervened. The survivors will be in shock, but Diana will be able to rally them to action. They intend to travel to the native village at Delta. If the characters are friendly with the neo-tribalists, they can help this exodus. Delta is over 300 kilometers from the Tiger Rocks, too far for the entire tribe to swim. Diana will send a small, experienced group to the village. This group is to make contact with the natives and arrange for fishing boats and rescue vessels to pick the tribe up.

If the characters ended up opposing the neo-tribalists, or if they are blamed for the attack on the settlement, Aldo will decide that it would be for the best if the characters do not make it back to civilization. The Silva has a small weapons cache that survived the eruption, which contains a sniper rifle and a few handguns. He will recruit a few loyal and angry tribesmen, and go hunting.

This final firefight will take place amid the shallow channels and reefs. While Aldo is a trained soldier, the rest of the tribesmen are not, and will simply rush in, guns blazing. Aldo will try to track the characters and shoot at them from a high ridge. The best approach for the characters is to bring the fight underwater, where the guns will be less effective.

If the characters survive the wilderness and the attack, a GEO or NIS jumpcraft will eventually arrive to pick them up. The first thing they will see when they get back on CommCore is a news report mentioning the underwater eruption and their rescue.

WRAPPING UP

If the characters were sent out to retrieve Konomiko, and succeeded, the NIS will pay them. The fee is likely to depend on how valuable the characters think Konomiko is. If they know she is an engineered brainchild, they can extort considerably more money from the NIS. She is worth at least 2,000,000 scrip to the NIS, but they are more likely to have the characters killed and Konomiko captured by another team than pay that much. Konomiko's computer contains her notes and copies of her viruses. The notes are written in an extremely eccentric code, and are nearly useless to anyone else. The viruses are capable of shutting down a variety of systems, but after a few attacks, computer programmers will develop countermeasure programs. Still, the software will be extremely valuable on the black market.

Both the Simushir refugees and the ex-cons are wanted by the authorities. The characters can help hide the neo-tribalists, or give their location to the NIS or the Marshal Service. If the tribe manages to reach Delta intact, they will spend two months there resting and rebuilding.

Diana's vision of a new social order will be informed by her contact with a real native tribe. Eventually, she and Aldo will decide to form a new settlement in the Sierra Nueva, and will join Bataku's insurrection. Many of the neo-tribalists, led by Nia Temi, will object to joining a terrorist organization and will found a second settlement in Shangri-La, north of the Pacifica Archipelago. If the characters helped the tribalists, they now have one or two hidden refuges they can go to if they need help.

NPC STATS

KONOMIKO

Species: Genetic Redesign—Brainchild
Goal: Survival
Motivation: Paranoia
Attitude: Varies
Role: Tech (Remarkable)
Primary Attributes Normal (Current): Physique 0, Coordination 1, Cognition 3 (4), Psyche 0 (–2)
Derived Attributes: Endurance 1 (0), Reflexes 1 (0), Toughness 0
Aptitudes: (Superior) Tech; (Strong) Communication, Sciences, Stealth, Survival
Primary Skills: Aquatics 3, Computers 7, Culture (Colonial) 6, Culture (Incorporate) 4, Culture (Native) 1, Demolitions 3, Ecoscience 3, Electronics 5, Forced Entry 4, Geoscience 3,

Mechanics 4, Persuasion 4, Piloting 3, Remote Operations 6

Biomods: Uplink Neural Jack, Improved Blood Oxygenation, Salt Tolerance, Immunological Symbiote

Weapons: None

Armor: None

NIS Thugs

Species: Modified Human

Goal: Survival

Motivation: Pride

Attitude: Arrogant

Role: Mercenary (Professional)

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 1

Derived Attributes: Endurance 2, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Athletics, Culture, Stealth

Primary Skills: Aquatics 3, Armed Melee 2, Demolitions 2, Fast-Talk 4, Forced Entry 3, Medicine 2, Persuasion 3, Piloting 2, Remote Operations 2, Small Arms 5, Stealth 4, Unarmed Melee 4

Biomods: Improved Blood Oxygenation, Salt Tolerance

Weapons: Large-Caliber Handgun, Handheld Stunner

Armor: Light Vest

Aldo the Hybrid

Species: Genetic Redesign—Hybrid (Silva)

Goal: Survival

Motivation: Professionalism

Attitude: Confident

Role: Survivalist (Professional)

Primary Attributes: Physique 3, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 3, Reflexes 0, Toughness 1

Aptitudes: (Superior) Combat; (Strong) Culture, Stealth, Survival

Primary Skills: Aquatics 4, Armed Melee 4, Culture (GEO) 5, Ecoscience 2, Foraging 4, Geoscience 2, Mechanics 2, Medicine 3, Navigation 4, Persuasion 2, Small Arms 5, Stealth 4, Tracking 4, Unarmed Melee 2

Biomods: Neural Jack, Multiglands, Night Vision

Weapons: Hanover Arms HA-PA9 PDW, Large-Caliber Handgun, Diamond knife

Armor: Light Vest

Neotribalists

Species: Modified Human

Goal: Survival

Motivation: Discontent

Attitude: Rebellion

Role: Colonist (Everyday)

Primary Attributes: Physique 1, Coordination 0, Cognition 0, Psyche 0

Derived Attributes: Endurance 0, Reflexes 0, Toughness 0

Aptitudes: (Superior) Survival; (Strong) Athletics, Stealth

Primary Skills: Aquatics 5, Culture (Colonial) 6, Culture (Native) 1, Fast-Talk 3, Foraging 3, Medicine 2, Navigation 2, Persuasion 3, Piloting 2, Small Arms 2, Stealth 2, Tracking 3, Unarmed Melee 1

Biomods: Salt Tolerance

Weapons: Small-Caliber Handgun

Armor: None

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