



FROG GOD GAMES ADVENTURES

# HAZARDOUS HABITATS

## Mountains



by Tom Knauss



SYSTEM  
NEUTRAL

# HAZARDOUS HABITATS

## Mountains

**Author**  
Tom Knauss

**Producer**  
Bill Webb

**Project Manager**  
Zach Glazar

**Editor**  
Jeff Harkness, Edwin Nagy,  
Steven Wells, and Sean King

**Layout and Graphic Design**  
Charles A. Wright

**Cover Design**  
Jim Wampler

**Front Cover Art**  
Terry Pavlet

**Interior Art**  
Chris McFann

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# Mountains

According to popular myth, an interviewer once asked the renowned mountaineer George Mallory the question, “Why do you want to climb Mount Everest?” Legend tells us that he quipped, “Because it’s there.” In the minds of many seasoned mountaineers and novices alike, these three words best summarize their motivation for risking life and limb to climb to the figurative top of the world. Explorers imbued with an innate sense of adventure do not look upon these mighty giants as obstacles. They see them as challenges that beckon a select handful of courageous souls to match their minds and bodies against the ultimate immovable objects. Mountains inspire humanity to dream of achieving the impossible. The tallest peaks literally reach into the clouds, daring brave men and women to climb into the heavens and behold the world in the same manner the gods do. Those who possess the grit and determination to stand atop and conquer one of these stony behemoths walk among an elite brotherhood for the rest of their days.

The same steely resolve courses through the veins of adventurers who embark on a journey into this rugged, unforgiving landscape. Although they also possess the inner drive that propels climbers onto greater heights, more tangible rewards motivate many of them to bore into the heart of a foreboding, haunted mountain or scale the walls leading to a distant, snowcapped summit cloaked in a veil of ominous fog. Vast deposits of precious gems, metals, and minerals await the courageous few who dare delve into the mountain’s underbelly and wrest their prize from its covetous owner. Some adventurers hold firm to the belief mountain summits are sacred sites. Their faith tells them the denizens dwelling atop the frozen mountaintops hold the answers to the world’s profoundest mysteries and may be willing to share their secrets with those they deem worthy. The cause of righteousness spurs others to ascend into the clouds and battle against the malevolent men and monsters who commit heinous acts far from prying eyes in these remote, isolated locales. Regardless of their reason for setting foot into this inhospitable environment, in order to prevail in their quest, adventurers must not defeat only their enemies. They must also vanquish the mountain itself.

## Mountain Basics

It is impossible to discuss humanoids’ motivation for climbing mountains without defining what a mountain is. In simplest terms, a mountain is an elevated portion of land taller than the area surrounding it. What differentiates a hill, which is a similar landform, from a mountain is not universally agreed upon, but the general consensus holds that the landforms’ height, size, and steepness are the determining factors. Mountains are taller, larger, and steeper than hills. No exact line of demarcation exists to distinguish a mountain from a hill, but 1,000 feet and 2,000 feet above sea level are the elevation figures most widely used to set the two apart from one another. Scholars usually classify landforms taller than the preceding figures as mountains, while categorizing landforms shorter than the preceding figures as hills. Mountains also encompass a significantly larger area than hills. In fact, a single mountain can cover an area of several hundred square miles — as in the case of Mount Everest — whereas the largest hill is hard-pressed to claim dominance over a one-square-mile area.

Mountains are rarely standalone objects. Instead, they typically cluster close together in geological formations referred to as mountain ranges or mountain chains. In many cases, hills act as a transition zone or buffer between neighboring flat terrain such as forests, deserts, or grasslands on one side, and their superior mountainous brethren overshadowing them on the opposite side. Mountains are never sculpted into a contiguous, uniform shape. They start as an uncut block of stone. Wind, water, glaciers, fault lines, lava, intense heat, and other natural forces chisel away at the raw building material and fashion them into rocky statues of varying heights, widths, and steepness. Despite the differences, all mountains share a handful

of universal features. The portion of the mountain closest to the ground is referred to as either the base or the foot of the mountain. Although the terms mountain and peak are synonymous in some instances, in this context, the word peak is used to describe sharply ascending protrusions that are typically found at or near the mountain’s highest elevations. The mountain’s summit is its highest peak. Therefore, it is possible for a mountain to have multiple peaks, but only one summit. Valleys are low-lying areas between neighboring mountains or a tightly packed group of mountains.

Beyond the simple basics, mountains flaunt many diverse geological features. Magnificent ridges, sheer cliffs, deep blue icy crevasses, perilous escarpments, multicolored rock walls, and snowcapped summits cloaked in wispy fog add to the mystique and wonderment that make these earthen giants a breathtaking sight to behold. The hardy plants and animals that call this rugged terrain home see things differently. Firsthand experience teaches them that the mountains are a callous and temperamental host. One misplaced step on a patch of rubble or a melting snowpack can easily be a creature’s last. A torrential downpour can wash layers of tenuous topsoil down the slope, while a ferocious blizzard can blanket the earth beneath thick layers of snow and ice. However, these occasional dangers pale in comparison to the mountains’ interwoven and omnipresent hazards of extreme cold, lack of oxygen, and ferocious winds.

Gravity is the glue that binds existence together, and even microscopic air molecules cannot escape its grasp. Air is at its densest closest to the surface. Its density decreases as the altitude increases because the planet exerts less gravitational force against objects farther from its surface. Air molecules are no exception. Less air means there is less oxygen for animals to breathe and less carbon dioxide for plants to photosynthesize. Air molecules also retain heat and moisture, so their reduction at higher elevations results in colder temperatures and drier conditions. It would therefore seem logical that less air would also translate into lighter winds. However, the opposite is true. Fewer air molecules means less friction when the winds howl through the upper atmosphere. Air molecules moving close to the planet’s surface are partly slowed by their contact with the ground and elevated objects in their path. Mountains tower over the surrounding landscape, so the winds do not encounter any resistance while they race across the skies. In some cases, tightly clustered peaks force the wind into narrow, winding corridors, akin to pouring water into a funnel. This effect may not only accelerate the winds’ speed, but it can also radically change their direction. A formula exists to roughly calculate the decrease in air temperature based upon increased altitude. Unfortunately, no similar mechanism exists to accurately compute the increase in windspeed attributable to higher altitudes because of the numerous variables that contribute to this effect.

In the preceding respect, mountains differ dramatically from conventional biomes because they create much of their own environment and are not wholly dependent upon external forces to shape them. They do not owe their existence to fickle wind patterns, adjacent bodies of water, proximity to the equator or poles, frequent rainfall, or any weather phenomenon. Mountains can spring into existence anywhere. Moreover, their presence often has a dramatic impact on weather conditions in neighboring regions as exemplified by the rain shadow effect. The jet stream pushes warm, moist air molecules up the mountainside, causing them to rapidly cool and become thinner with the increasing altitude. Cold air retains less moisture than warm air, thus the humid air morphs into clouds and releases this excess moisture as precipitation. When the air rolls over the mountaintop on the other side, it is much drier than it was when it first began its ascent up the mountain. It takes less thermal energy to heat dry air than humid air, causing the air molecules to rapidly warm when they reach the valley on the other side. In scientific terms, the side of the mountain that faces the wind and first encounters the warm, moist air mass is commonly referred to as the windward side of the mountain. It obviously receives more rainfall and thus cooler temperatures than the opposite side of the mountain, which is referred to as the leeward

side of the mountain. The leeward side experiences warmer temperatures and substantially less rainfall. In the real world, the rain shadow effect is responsible for creating Death Valley's notoriously hot and parched environment on the eastern side of the Sierra Nevada Mountains.

In addition to the mountains' effects on weather conditions in nearby and in some cases distant regions, the uneven terrain within the range itself creates its share of localized meteorological anomalies. Variations in temperature and atmospheric pressure between neighboring air masses provide the fuel necessary to spawn ferocious winds and storms. A large air mass on a smooth, level surface uniformly heats and cools, much like cooking food in a flat pan upon a stovetop. On the other hand, an air mass spread out over a rough, uneven surface fails to heat and cool in a consistent manner. The differences in altitude cause greater divergence in the temperatures and atmospheric pressure between rival air masses, which ignites the fuse required to create unsettled weather. In most cases, the fierce winds and storms spawned under these circumstances do not give rise to weather events affecting a broad area for a prolonged period of time. Still, the squalls' unpredictable nature and short-lived intensity compound upon the difficulties that natives and adventurers face during an excursion into the mountains. Despite the mountains' impact on the atmosphere, the forces that bring one of these titans to life cannot be found in the clouds or outer space. Instead, the seeds are sown in the planet's roiling interior, where fire and stone constantly vie for supremacy.

## Making a Mountain

Mountains soar into the sky and tower above the surrounding landscape, yet they owe their creation to forces deep beneath the ground. They are born from two geological processes: plate tectonics and volcanism. Although it is not normally visible from the surface, the earth's crust consists of numerous,

interconnected landmasses called tectonic plates. These tectonic plates float upon a giant sea of superheated molten rock known as the mantle. The fit is far from perfect. Land masses crammed atop the fiery ocean above the planet's core constantly jockey for position. When pressure forces two tectonic plates into one another, a battle ensues. In many cases, the land at the point of impact between the two tectonic plates compresses not unlike what happens when someone crushes a tin can. The crumbled part of the can bulges outward, while the end of the can emerges comparatively unscathed. The same thing occurs when two land masses crash together. The land along the tectonic plates' edges that is compacted by the collision swells and leaves mountains in its wake. For instance, the impact between the Eurasian Plate and the Indian Plate created the world's tallest mountain range, the Himalayas, which also include the planet's highest peak, Mount Everest.

The processes that conjoin tectonic plates to one another sometimes cause them to separate as well. Despite outward appearances, land is hardly unbreakable. There are occasions where the earth's crust literally cracks and gives birth to a deep fissure commonly known as a fault. Earthquakes are more frequently associated with faults than mountain building, but the same geological forces that cause the ground to violently tremble also lay the foundation for new mountains. While it is normally presumed that the ground on each side of a fault line shifts from side to side during an earthquake, there are times when the tremors cause the land on one side of the fault to uplift and list sideways akin to a ship taking on too much water. The land mass on the opposite side of the fault plunges downward, creating a depression. Over time, erosion from the uplifted portion of the fault accumulates in the neighboring depression, building it up as well. Subsequent earthquakes increase the uplift and add more height to the mountains born from this volatile separation. The Sierra Nevada Mountains are an ideal example of this geological process at work.

When it is not possible to go up, it becomes necessary to go down. On these occasions, a thicker oceanic plate slides under a lighter continental



plate in a geological process referred to as subduction. The denser plate burrows beneath the lighter plate, causing the land atop the upper plate to bulge and form a mountain. The friction caused by two enormous land masses grinding against one another generates tremendous amounts of heat, which also melts substantial quantities of rock. With nowhere else to go, the intense heat and pressure pushes this molten material through cracks in the earth's crust and up toward the surface. Sometimes, enough magma is present to push the land mass upward into a dome-shaped mountain, but there is an insufficient quantity of magma and pressure to completely penetrate the outer surface. These areas often become plateaus — large, flat expanses of elevated land within or adjacent to other mountains. Over time, water erodes portions of this uplifted rock and stone, leaving spectacular canyons and escarpments in its wake. Yet more often than not, the force bubbling beneath the earth is so great that the swollen surface cannot prevent the superheated lava, ash, and dust beneath it from tearing through the earth's crust and creating a massive gouge known as a volcano. The resulting eruption spews unimaginable quantities of melted rock, noxious gases, ash, dust, and other debris hundreds and often thousands of feet into the air.

As demonstrated in the previous paragraph, plate tectonics and volcanism sometimes work in tandem, rather than as separate forces to spawn these mighty peaks. Obviously, volcanism is more dramatic and visually breathtaking than plate tectonics. A particularly violent volcanic explosion can add as much as several hundred cubic miles of rock, dust, and volcanic ash to the surrounding terrain in a matter of days, whereas it could take eons for plate tectonics alone to duplicate the same feat. In some cases, the explosion is so powerful that the volcano collapses under the weight of the debris and becomes an elevated, flattened abscess in the earth known as a caldera. Active volcanoes erupt on a recurring basis, though few adhere to any regular schedule. Dormant volcanoes are those that have not exploded for a considerable period of time, but still have a

magma chamber beneath them. Extinct volcanoes last erupted countless ages earlier. They no longer have a magma chamber and are deemed to be unable to ever erupt again.

Although it cannot create mountains *per se*, water in its liquid and frozen states plays a key role in shaping these gargantuan blocks of stone. Mountains in regions subjected to seasonal temperature variations accumulate large quantities of snow and ice on their slopes during late autumn and winter months. Spring's arrival ushers in warmer temperatures and soaking rains that weaken and eventually melt the snow packed onto the slope. Gravity pulls the water down the mountain's imperfect surface toward its lowest point. Over time, the surface runoff erodes the underlying stone and carves new permanent features into the mountain. Among these are gullies, caves, chasms, and crevasses. The same principles apply to larger bodies of water such as rivers flowing through an elevated plateau. With the passing millennia, the relentless rushing water bores through elevated rock and stone, creating the geological formation known as a canyon. The Grand Canyon in Arizona owes its creation to the Colorado River, which gouged enormous fissures into the Colorado Plateau. Thus, while water did not elevate the Colorado Plateau landmass, it gave birth to the mountains that make up the enormous canyon's impressive walls.

Glaciers perform a similar function. These enormous slabs of compressed ice and snow are in constant, albeit painstakingly slow motion. As the glacier contacts the surface, the colossal mass's incalculable weight pulverizes the underlying bedrock into fine particles in a geological process known as abrasion. Glaciers can frequently take credit for carving the extremely steep rock walls and crevasses that dog mountain explorers on their trek to the mountain's summit. Glaciers also sculpt the mountain's features through another geological process known as plucking. In this instance, the glacier literally picks up large blocks of rock and stone that it pried away from the surface and incorporates them into its monstrous mass. The boulders then move with the glacier on its ascent up or its



retreat down the mountainside. The aftereffects of plucking are not as readily visible as abrasion, but they can be far more conspicuous. Plucking can deposit a massive rock precariously on the edge of a cliff or misplace a boulder in another bewildering, hard-to-reach spot or location where the kind of rock shouldn't be found. As in the case of water, glaciers cannot erect a mountain. They instead redecorate it.

## One Mountain, Many Biomes

In many respects, a mountain's ecosystem resembles a series of concentric bands that wrap around the entire peak. In some circles, these bands are referred to as life zones. On flat ground, moist forests yield to drier grasslands before surrendering to sere deserts. A similar pattern exists on mountains, albeit on a miniaturized scale. Instead of stretching out for countless miles in every direction, the life zones on a mountain's slope measure only a few thousand feet in width before abruptly merging with their neighbor. Not surprisingly, these transitions coincide with the altitude. It is as if an artist took his brush and painted a series of contiguous rings around the mountain with one ring on top of the other.

Grasses and flowering plants dominate the lowest elevations. Trees and shrubs flourish on the gentler slopes at the lower elevations, draping the mountain's base in swirling shades of dark greens, drab olives, and earthy browns. In temperate and tropical environments, deciduous forests typically are prevalent at the peak's bottom rung just above the grasses. The warmer temperatures and abundant rainfall provide the ideal conditions for these woody giants to thrive. As the altitude increases, the air grows chillier and moisture scarcer. The leafy trees found in the deciduous forest give way to the coniferous trees such as pine and an assortment of evergreen shrubs. This life zone is classified as the montane forest. When conditions become too cold and dry or the mountain's slope too severe, it takes a tremendous toll on the indigenous trees. They become gnarled, stunted, and deformed. These twisted stumps of misshapen wood are sometimes known as *krummholz*. This narrow band of contorted and disfigured trees may also be referred to as the subalpine zone.

At some point, the trees disappear entirely, and grasses along with hardy flowering plants once again take their place. This boundary is known as the tree line. The life zone above the tree line is typically classified as the alpine zone. In most cases, the tree line separates the trees from the neighboring grasses, which can endure the harsher climate and dried conditions found above the tree line. Of course, there must be sufficient topsoil to support plant life above the tree line, otherwise exposed rock takes over as the predominant feature. An array of low-lying shrubs, sedges, multicolored flowering plants including the iconic edelweiss, mountain laurels, and rhododendrons add to the tapestry of grasses covering the slopes.

The fauna that inhabit mountainous environments almost all have outstanding balance, jumping skill, and specialized adaptations to deal with the cold temperatures and lack of oxygen at high altitudes. Llamas, alpacas, yaks, bears, cougars, mountain goats, and sheep seem to have adapted best to life in the mountains. Yet even these creatures have their limits. Depending upon the prevailing climate in the region, the increasing altitude eventually makes it too frigid and arid for even the hardiest plants and animals. The lack of oxygen and carbon dioxide at the highest elevations almost completely inhibit all forms of life. Eventually snow, ice, and glaciers coat the mountainside in a shimmering white pall that extends all the way to the distant summit, which is typically shrouded in gray fog and mist.

## Game Applications

In many cases, mountains are formidable and nearly impassable obstacles, making them the ideal borders for rival nations and peoples. Because of their strategic location, mountains are often the site of numerous covert activities fomented by political, military, and economic foes on opposite sides of the rocky boundary. Smugglers, spies, fugitives, cultists, prospectors, and other individuals wishing to remain unseen use this rugged terrain to their advantage. Hidden tunnels, caves, and undiscovered mountain passes let some slip past mountain patrols without

being noticed. Secluded locales high atop the mountain provide refuge for criminals trying to evade capture. The followers of forbidden deities frequently delve into the mountain's belly or find nearly inaccessible places where they can venerate their malevolent god far from the judgmental eyes of disapproving foes. Greedy miners scour mountain riverbeds, exposed rock formations, and precarious crevasses in search of the mountain's bountiful natural riches. As the indigenous residents frequently say, "Mountains harbor many secrets, and their stone lips tell no tales." Experience teaches many adventurers to begrudgingly agree with the adage.

## Types of Mountains

At first glance, all mountains basically look alike. They are elevated landforms predominantly made of the same composite materials, earth and stone or some combination thereof. In some instances, it is even impossible to determine what the mountain is made of because its entire surface may be covered in snow and ice, as is the case with peaks found in an arctic environment. Still, an eye for detail and some specialized knowledge is all it takes to differentiate one type of mountain from the next. Mountains are classified into three basic types — volcanic, folded, and block mountains. Each category has unique characteristics that greatly affect the flora and fauna found atop its summit, along its slope, and within its shadow.

### Volcanic Mountains

Volcanic mountains are not the most prevalent type of mountains, yet many of these giants are among Earth's most iconic peaks. Mount Fuji, Mount Kilimanjaro, and Mount St. Helens are real-world examples of volcanic mountains. Most volcanic mountains form in regions where the denser oceanic crust subducted beneath the lighter continental crust as described in the preceding section **Making a Mountain**. This geological process accounts for the notorious "Ring of Fire," a belt of volcanic mountains along the western spine of the South American and North American continents that continues across the Pacific Ocean and stretches through the eastern edges of Asia and Indonesia. Hotspots account for the balance of the world's volcanic mountains. While the mechanics responsible for creating hotspots are not well understood, these anomalous volcanoes do not form around the edges of a subducted oceanic plate and instead spring up within the interior of an oceanic or continental plate. As the name suggests, hotspots are areas where superheated portions of the earth's mantle melt adjacent rock into liquid magma that rises through cracks in the planet's crust through a process known as convection. Hotspots gave birth to the volcanoes found in Iceland and the Hawaiian Islands among others.

The terrain encountered on a volcanic mountain depends upon two important factors — its status as an active, dormant, or extinct volcano, and the climate surrounding it. For the purposes of these tables, active volcanoes are those mountains that have erupted within the last century. Obviously, a volcano currently erupting spews lava, ash, and other superheated materials that substantially alter the terrain elements found on these tables. A dormant volcano is a mountain that has not erupted for a long period of time. However, the mountain still contains a magma chamber and has the potential to erupt again at some time in the future. An extinct volcano has no magma chamber and is not considered a threat to ever erupt again. The lack of any recent activity allows the vegetation on these mountains to establish more permanent roots than the flora found growing along the slopes of an active volcano. Therefore, the tables are classified based upon whether the mountain is an active volcano or it is a dormant/extinct volcano.

Mountains are not a true biome *per se*. Volcanoes exist everywhere on Earth, from Mount Erebus in Antarctica to Cayambe, which practically sits on the equator. At the frozen South Pole, ice and snow covers every inch of Mount Erebus. The much warmer Cayambe, on the other hand, contains several vegetation zones along its slopes, though it too finally cedes dominance to the ice and snow at its highest elevations. The terrain elements presented on the following tables presume similar vegetation may be found in the areas surrounding the mountains. For instance,



the trees found in neighboring forests would logically also grow in the mountain's lower elevations. However, a mountain range bordering a hot and dry desert would not host the same vegetation as a mountain within a tropical rainforest. The tables generally capture the terrain elements most commonly found in boreal, temperate, and warm climates, but they cannot account for every contingency. Therefore, the GM is free to exercise discretion when determining whether a terrain element can be found at a particular locale.

The following tables describe the terrain features adventurers can expect to encounter during their expeditions into the volcanic mountains. The tables do not take seasonal changes into account. Therefore, the GM may double the chances of snow during the winter months and decrease the odds of snow during the summer months by roughly 50%. The following adjustments only apply to fresh snow and deep snow. Ice sheets generally build up over a period of years and are unaffected by seasonal changes. If any form of plant life is present in an area, it rests upon firm soil, which has no effect on overland movement or speed. If there are no plants in the area, the ground consists of solid rock, which also has no effect on overland movement or speed. Because an individual mountain can encompass numerous square miles, the results from each table apply to a specific mountain, though they should be fairly similar to the peaks around them. When consulting these tables, the GM rolls percentile dice for each feature to determine if it is present in the area. One or more types of terrain and/or vegetation may coexist in the same general area, though certain features negate the effects of others as described in the

following tables. Difficult terrain, as described in the tables, applies only to determining the actions a character can take when moving through an area containing this feature rather than its effect on the creature's speed. The tables do not include the natural hazards described later in this section.

**Table 1: Terrain Elements on an Active Volcanic Mountain in Boreal Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	20%	15%	10%	5%
Deep snow <sup>b</sup>	5%	—	—	—
Ice sheet <sup>c</sup>	60%	90%	100%	100%
Gravel <sup>d</sup>	50%	30%	20%	10%
Undergrowth <sup>e</sup>	15%	5%	—	—
Short grass <sup>f</sup>	10%	5%	—	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests

atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, undergrowth, and short grass cannot be present.

<sup>d</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Undergrowth and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>e</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with gravel. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>f</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

**Table 2: Terrain Elements on a Dormant/Extinct Volcano in Boreal Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	25%	20%	15%	10%
Deep snow <sup>b</sup>	10%	10%	5%	5%
Ice sheet <sup>c</sup>	50%	80%	100%	100%
Tree <sup>d</sup>	20%	10%	—	—
Gravel <sup>e</sup>	40%	50%	50%	50%
Shrub <sup>f</sup>	15%	10%	—	—
Undergrowth <sup>g</sup>	10%	—	—	—
Short grass <sup>h</sup>	20%	25%	—	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long,

narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a boreal mountain or hill are almost exclusively coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with gravel. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

**Table 3: Terrain Elements on an Active Volcanic Mountain in Temperate Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	10%	20%	35%	20%
Deep snow <sup>b</sup>	5%	5%	10%	10%
Ice sheet <sup>c</sup>	—	40%	80%	100%
Gravel <sup>d</sup>	—	20%	40%	70%
Tree <sup>e</sup>	80%	50%	—	—
Undergrowth <sup>f</sup>	30%	25%	10%	—
Short grass <sup>g</sup>	—	10%	10%	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, undergrowth and short grass cannot be present.

<sup>d</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Undergrowth and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>e</sup> Trees found on a temperate mountain or hill are predominately coniferous, though there may be some deciduous species as well. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.<sup>c</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with gravel.

<sup>f</sup> Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>g</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

**Table 4: Terrain Elements on a Dormant/Extinct Volcano in Temperate Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	10%	30%	30%	10%
Deep snow <sup>b</sup>	—	5%	10%	5%
Ice sheet <sup>c</sup>	—	30%	70%	100%
Tree <sup>d</sup>	80%	20%	—	—
Gravel <sup>e</sup>	—	20%	40%	40%
Shrub <sup>f</sup>	20%	10%	—	—
Undergrowth <sup>g</sup>	40%	15%	—	—
Short grass <sup>h</sup>	5%	30%	10%	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a temperate mountain or hill are predominately coniferous, though there may be some deciduous species as well. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Undergrowth and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the

gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with gravel. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

**Table 5: Terrain Elements on an Active Volcanic Mountain in Warm Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	—	5%	10%	15%
Deep snow <sup>b</sup>	—	—	—	5%
Ice sheet <sup>c</sup>	—	—	—	90%
Gravel <sup>d</sup>	60%	60%	50%	50%
Tree <sup>e</sup>	10%	20%	—	—
Undergrowth <sup>f</sup>	10%	—	—	—
Short grass <sup>g</sup>	40%	—	—	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, undergrowth and short grass cannot be present.

<sup>d</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>e</sup> Trees found on a temperate mountain or hill are predominately coniferous, though there may be some deciduous species as well. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>f</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with gravel. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>g</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

**Table 6: Terrain Elements on a Dormant/Extinct Volcano in a Warm Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	—	—	15%	20%
Deep snow <sup>b</sup>	—	—	5%	10%
Ice sheet <sup>c</sup>	—	—	20%	80%
Tree <sup>d</sup>	20%	60%	20%	—
Gravel <sup>e</sup>	—	—	30%	25%
Shallow water <sup>f</sup>	10%	15%	30%	—
Shrub <sup>g</sup>	40%	20%	10%	—
Undergrowth <sup>h</sup>	60%	80%	10%	—
Short grass <sup>i</sup>	20%	—	40%	5%

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a warm mountain or hill may be deciduous or coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shallow water is 1 foot or less in depth. It reduces overland speed by half and halts all wheeled vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. If shallow water is present, the area cannot also contain shrubs, undergrowth, or short grass. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>g</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable.

<sup>h</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the floor. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>i</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

Volcanic mountains are further broken down into three main groups — stratovolcanoes, shield volcanoes, and cinder cone volcanoes. Stratovolcanoes are the world's most easily recognizable and legendary volcanoes. Mount Vesuvius, the Italian peak responsible for burying the Roman era towns of Pompeii and Herculaneum may be the best known of these smoldering behemoths. These mounds of rock and solidified lava resemble an enormous, upright pointed hat. The mountain's base ascends at a steep angle to create a cone-shaped peak with a gaping cavity at or near the summit. During an eruption, steam, lava, ash, and super-heated dust surge up the mountain's interior and are then expelled high into the air through the open wound at the mountain's apex. While the typical stratovolcano hurls immense volumes of fine particles high into the air, the lava that surges out of its cavity has a viscous quality that causes it to slowly roll down the slope. The plodding journey takes so long that the lava cools and solidifies before it leaves the mountain's shadow. The following tables allow the GM to randomly generate the height, average slope, and the variation of that slope found on a stratovolcano.

**Table 7: Stratovolcano Height**

D100	Height
01–20	100 ft. plus 6d6 x 50 ft.
21–40	1,900 ft. plus 12d6 x 50 ft.
41–80	5,500 ft. plus 6d6 x 100 ft.
81–00	9,150 ft. plus 12d6 x 100 ft.

**Table 8: Stratovolcano Slope**

D100	Average Degree of Slope	Variation
01–30	2d4 + 2	1d4
31–70	10 + 2d4	2d4
71–00	18 + 3d4	3d4



Shield volcanoes are wider and flatter versions of stratovolcanoes. They acquired this name because they greatly resemble a warrior's round shield lying on the ground. Shield volcanoes have an extremely broad base that can encompass a vast area measuring nearly 100 miles in diameter. These mountains spew more-fluid lava that flows faster and much farther than the lava ejected from a stratovolcano. This dynamic gives the shield volcano its unique shape. The lava rolls down the mountain's gentle slope and adds to the size of its base rather than just accumulating at and around the base as in the case of a stratovolcano. The typical shield volcano has a flat summit that drops off at a moderate angle before gradually flattening out until there is almost no slope to the mountainside. The volcanoes found in the Hawaiian Islands are the world's best-known shield volcanoes. In fact, one of these volcanoes, Mauna Loa, is considered by many to be the largest volcano on Earth. It stands more than 13,000 feet above sea level. However, the massive shield volcano's roots reach deep into the ocean. According to some measurements, Mauna Loa is more than 55,000 feet high, nearly double the height of Mount Everest. The following tables allow the GM to randomly generate the height, average slope, and the variation of slope found on a shield volcano.

**Table 9: Shield Volcano Height**

D100	Height
01–20	100 ft. plus 6d6 x 10 ft.
21–40	460 ft. plus 10d6 x 10 ft.
41–80	1,060 ft. plus 6d6 x 50 ft.
81–00	2,860 ft. plus 10d6 x 50 ft.

**Table 10: Shield Volcano Slope**

D100	Average Degree of Slope	Variation
01–30	1d3	1d2
31–70	3 + 1d3	1d3
71–00	6 + 1d4	1d4

Cinder cone volcanoes are the smallest and simplest volcanic mountains. They resemble symmetrical cones with gentler slopes than a stratovolcano and comprise far less area than a shield volcano. Cinder cone volcanoes expel melted fragments of rock from a vent protruding through the earth's crust. The eruption's force is fairly weak. These silicon chunks infused with hot gases — commonly referred to as cinders or scoria — rapidly cool and fall back to the ground in close proximity to the vent. Over time, the cinders accumulate to create a hill or a mountain depending upon the volcano's size. Cinder cone volcanoes differ from their larger cousins in the regard that they did not begin their existence as a mountain or a hill. Instead, their deposits of cinders and scoria transformed them from an open vent in the earth's crust into a cone-shaped mountain or hill. Cinder cone volcanoes can be found as a standalone entity, but they are more commonly encountered as part of a substantially larger volcanic arc that includes their figurative big brothers, the stratovolcanoes and the shield volcanoes. The following tables allow the GM to randomly determine a cinder cone volcano's height, average slope, and the variation of slope found on a cinder cone volcano.

**Table 11: Cinder Cone Volcano Height**

D100	Height
01–20	10 ft. plus 1d4 x 10 ft.
21–40	50 ft. plus 2d4 x 10 ft.
41–80	130 ft. plus 5d6 x 10 ft.
81–00	430 ft. plus 1d6 x 100 ft.

**Table 12: Cinder Cone Volcano Slope**

D100	Average Degree of Slope	Variation
01–30	20 + 2d4	2d4
31–70	28 + 2d4	2d4
71–00	36 + 2d4	2d4

The GM may consult the following table to determine the fauna, flora, and random events the characters may encounter while trekking across volcanic mountains. These items may be used solely as wilderness dressing, to plant the seeds for an upcoming adventure, or as an interesting side trek.

**Table 13: Volcanic Mountain Flora, Fauna, and Random Events**

D20	Encounter
1	Grapevines protrude from a mound of ash.
2	A silversword plant grows atop the volcanic soil.
3	A lava flow cooled into the shape of an extended finger pointing toward a neighboring summit.
4	Two llamas pick through moss clinging to the rocks.
5	Numerous thrushes congregate around an anomalous formation in the stone.
6	Without warning, the mountain hurls a single oval stone high into the heavens.
7	Splintered wooden beams, presumably from a tent, litter the ground.
8	Strips of wool from a heavy coat lie sandwiched between two stones.
9	A thick, gray fog suddenly rolls across the mountain.
10	Someone or something carved the likeness of a tortoise out of pumice.
11	Pieces of tile from a mosaic are visible beneath a thin layer of fine dust on the ground.
12	Shards of a shattered, ceramic amphora are scattered across the ground.
13	A massive condor circles the skies, where it presumably scans for prey on the mountainside.
14	The branches and limbs of two neighboring larches intertwine with one another.
15	Two young boys harvest coffee beans.
16	Although it makes every attempt to move silently, a young puma betrays its position by constantly walking atop dried leaves.
17	Three mountain goats seemingly "dance" atop a flat plateau of dust and ash.
18	Wisps of smoke seep through vents in the earth.
19	A foul smell of burning sulfur occasionally offends the olfactory senses.
20	Breezes push tufts of brown animal fur across the ground.

The most potent volcanic eruptions may transform the land where the stratovolcano or shield volcano stands into a caldera. In these rare instances, the detonation is so powerful it literally swallows up the earth around it, causing the entire mountain and as many as several hundred square miles of land around the mountain to collapse into the completely drained magma pool beneath it. Some scholars categorize these massive craters as supervolcanoes because these eruptions generate exponentially more energy and expel more lava, pumice, and ash than their ordinary counterparts. If the Yellowstone Caldera in modern day Wyoming duplicated the power of its last three major eruptions, the effects would be utterly catastrophic. According to some scientists, several meters of volcanic ash would coat most of the western continental United States and global temperatures might plummet by nearly 20° F practically overnight.

Taking up residence anywhere near one of these enormous mounds of fire would lead most observers to conclude that the individuals must have some bizarre death wish or insane devotion to a fire deity. With little warning, the sleeping giant can stir from its nap and belch fiery lava, choking dust, and toxic gases from its agitated belly, destroying everything in the materials' path. Yet some men and women are willing to take that chance so they can cultivate perhaps the most fertile soil on the planet. While few would stake a claim to land in the shadow of an active volcano, it is not uncommon for communities to take root in the shadow of a dormant or extinct volcano. The soil in these regions is particularly rich because the eruption expels immense quantities of tephra (fragmented rocks) that are eventually broken down into essential elemental nutrients through weathering and chemical interactions between the tephra, the atmosphere, and any existing soil.

Naturally, these communities' survival depends upon appeasing the volcanic mountain looming overhead. While there is no universal agreement as to what causes an eruption, most humanoids attribute the explosion's cause to an angry being dwelling somewhere deep inside the mountain. Some contend it is a fire god, whereas others believe wicked monsters such as red dragons, fire giants, or other creatures immune to fire damage are responsible for setting off a detonation. Some wizards and sorcerers purport that volcanoes are conduits linking this world to another dimension wreathed in perpetual flame, smoke, and ash. Regardless of what mechanism is deemed to be the culprit, it is not unusual for inhabitants to sacrifice food, wealth, and even their fellow citizens to placate the whims of the dormant beast.

When adventurers encounter humanoids in a predetermined location or in a randomly generated community near a mountain pass (see **Tables 47 and 48**), the population size affects its demographic makeup as reflected in the following table.

**Table 14: Population Effect on Demographics**

Population	Modifier
Fewer than 50	-4d10
51-200	-2d10
201-2,000	none
2,001-5,000	+ 2d10
5,001-15,000	+ 4d10
15,001-30,000	+ 6d10
31,000 +	+ 8d10

After determining the modifier based upon the population size, the GM may then apply that modifier to the following table to determine the demographics of a volcanic mountain community.

**Table 15: Humanoid Demographics**

d100	Racial Makeup
<16	<b>Exclusively Homogenous:</b> Everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.
16-30	<b>Predominately Homogenous:</b> Almost everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.
31-45	<b>Largely Homogenous:</b> The majority are members of the same humanoid race, religion, or ethnicity, if applicable.
46-60	<b>Neutral:</b> One race, religion, or ethnicity, if applicable, outnumbers all others but does not comprise a majority. Nonetheless, their culture, traditions, and beliefs define society, though other peoples exert lesser degrees of influence as well.

d100	Racial Makeup
61-75	<b>Moderately Diverse:</b> Some races, faiths, and ethnicities, if applicable, are more prevalent than others, but none greatly outnumbers all others. The traditions of several races, religions, and ethnicities combine forces to determine society's overall cultural makeup.
76-85	<b>Largely Diverse:</b> A multitude of races, religions, and ethnicities make up the largely integrated population. The fusion of backgrounds creates a unique society embodying traits borrowed from numerous traditions, though some perspectives influence the community more than others.
>85	<b>Completely Diverse:</b> Nearly every race, faith, and ethnicity imaginable can be found among the population. Most citizens are multicultural and multilingual, embracing their own customs as well as adopting those acquired from neighboring peoples.

The following table modifies the results on **Table 17** based upon the community's demographics.

**Table 16: Demographics Effect on Humanoid Attitudes**

Demographic	Modifier
Exclusively homogenous	-5d10
Predominately homogenous	-3d10
Largely homogenous	-1d10
Neutral	none
Moderately diverse	+ 1d10
Largely diverse	+ 3d10
Completely diverse	+ 5d10

Volcanic mountain humanoid populations can range from extremely primitive in polar environments to cosmopolitan in temperate environments. In classical times, the resort towns of Pompeii and Herculaneum thrived in the shadow of Mount Vesuvius. Likewise, other bustling settlements sprang up around these dormant or smoldering giants. When determining humanoid attitudes found on **Table 17**, the GM may impose a -2d10 penalty to settlements in remote, isolated areas, while adding a +2d10 bonus for settlements closer to the hubs of civilization. The demand for coffee, grapes, tomatoes, and other agricultural products grown in the fertile soil brings traders and merchants from distant lands to these communities. The exposure to other cultures and traditions generally lessens the residents' apprehension toward them.

**Table 17: Humanoid Attitudes**

d100	Attitude
<21	<b>Segregated:</b> Society is strictly divided along racial, religious, or ethnic lines with the more populous groups assuming a dominant role. They treat minorities as inferiors, relegating them to subservient status. Civil or religious authorities strictly enforce boundaries between divergent populations through threats, intimidation, and if necessary violence.

d100	Attitude
21–35	<b>Prejudiced:</b> Although some integration takes place, racial, religious, or ethnic tension hangs heavy in the air. Many people hold persistent, deep-seated opinions sowing mistrust between members of different groups. Residents keep a wary eye on those different than themselves, perceiving them as second-class citizens who pose a constant threat to their supposedly superior way of life.
36–50	<b>Biased:</b> Few individuals publicly express their misgivings about other people, yet it is difficult to ignore the undercurrent of bias bubbling beneath the surface. Although people can move freely about without restriction, subtle acts of discrimination still permeate society. Interactions between different sets of people may seem courteous and polite on the surface, yet words, gestures, and body language belie the person's compartmentalized suspicions.
51–65	<b>Indifferent:</b> An indifferent society strives to maintain the society's <i>status quo</i> , sweeping any pervasive prejudices under the proverbial rug. Gradual modification of existing attitudes can occur, though some find its pace too plodding for their liking. Residents rarely let their biases govern their actions and perceptions of other people, yet few go out of their way to welcome those different than themselves.
66–80	<b>Tolerant:</b> Multiple languages, religions, and cultures mingle together, though members of the same race, religion, or ethnicity feel more comfortable with others of their kind than outsiders. A live-and-let-live attitude best summarizes a tolerant society's outlook toward the community at large, though some innate biases linger in certain circles.
81–95	<b>Accepting:</b> Members of different races, religions, and ethnicities live side by side in almost completely integrated communities. Familiarity forms the cornerstone of an accepting society. However, those hailing from unfamiliar places or arriving with previously unseen customs encounter some misgivings and suspicion from startled observers.
>95	<b>Welcoming:</b> Society welcomes immigrants and visitors, regardless of race, religion, or ethnicity into the fold. Newcomers are encouraged to quickly assimilate into their surroundings as they adapt to their neighbors' customs and traditions while adding their uniqueness to the mix. Indeed, most members perceive themselves as citizens first and foremost relegating association with their race, religion, or ethnicity to a secondary status. Prejudice persists in some isolated corners, but the overwhelming majority strongly condemn such viewpoints and celebrate diversity.

The neighboring mountain plays a key role in determining the settlement's political views. Many people attribute some religious significance to the smoldering volcano. Some believe it to be a living deity. Others attest the mountain to be the dwelling place of the gods. Another segment of the population swears a monster or other potent entity slumbers inside the rocky beast. For these reasons, volcanic mountain communities incorporate some element of religion into the political systems. The GM may use the following table to determine the political system found in a volcanic mountain community.

**Table 18: Political System**

d100	Political System
01–10	<b>Autocracy:</b> A single individual who seized control of the state through bloodless or violent means wields absolute power over his people. This individual may have attained this position from his or her predecessor who was a family member or who handpicked this person as a successor. An autocrat often targets one or more segments of society as his or her sworn enemies, encouraging their subjects to take some punitive actions against the autocrat's real or imaginary foes.
11–20	<b>Gerontocracy:</b> While birthright, wealth, or political connections normally determine membership in the ruling class, this political system grants supreme authority to the community's eldest residents regardless of their gender or social status. Age is a relative term based upon the person's longevity for their race rather than their age measured in years. Because these individuals cannot bequeath their station to a designated heir or successor, they often rule in a just manner, relying upon their extensive life experiences to better the lives of their subjects. Nonetheless, exceptions exist, especially for those who fear death and pursue every avenue to defy their own mortality.
21–30	<b>Monarchy (Absolute):</b> A group of blood relatives rules the land with ultimate authority vested in one or two persons known as the monarch. This individual's power is absolute, though the crown may vest some jurisdiction in others. In patriarchal societies, the eldest male descendent of the previous leader functions as the monarch, assuming the title of chieftain, elder, or another suitable designation. In a matriarchy, the oldest female descendent performs the same role as the state's queen, empress, or other lofty heading. The monarch's spouse, typically hailing from a neighboring royal family or a distant relative, functions solely as a consort, preventing the surviving spouse from inheriting the throne when the monarch dies. Younger siblings, living parents, and children undertake other civic and religious duties within the state, while extended family members also enjoy the trappings of nobility.
31–40	<b>Oligarchy:</b> A group of individuals determined by birthright, military might, or personal wealth oversee all matters of state and economic development. The oligarchy's views toward personal freedoms range from moderately tolerant to oppressive, with most examples skewing closer to the latter option than the former. The oligarchy's members — along with their family and friends, if they choose — act with impunity while those outside the inner circle must abide by the oligarchy's edicts. On some occasions, individuals outside the elite group who are fortunate enough to amass wealth under this system may be granted membership into the oligarchy.

d100	Political System
41–60	<b>Theocracy (Clerical State):</b> In a clerical state, the clergy interprets the deity's or deities' commands and codifies them as law. Priests enforce the gods' edicts, allowing them to preside over all religious and secular matters. Unlike the god state, the priests may select one of its members to serve as its high priest, a role granting the individual supreme authority but not divinity.
61–75	<b>Theocracy (God Figure):</b> All civil authority derives from a divine source. In the case of a god figure, political power rests in the hands of one individual who may be a living deity, a demigod, or a representative chosen by one or more gods. The god figure wields absolute authority over all matters of state including serving as the head of its church.
76–90	<b>Theocracy (Shared Authority):</b> A single individual serves as the head of state and the titular leader of the church. While recognized as the supreme religious leader, the political figure defers judgment on all ecclesiastical matters to the clergy. This person may have inherited this position from his or her predecessor, acquired it through force or shrewd political maneuvering, or used their vast wealth to usurp the title.
91–95	<b>Tribal:</b> This society lacks any formal government. Instead, a familial patriarch, matriarch, or a family council usually consisting of the group's elders presides over their individual clans who may live cooperatively or competitively with other bloodlines in a shared community or as parts of smaller, rival communities dwelling close together. Military might, more than lineage, frequently determines an individual's status within the tribe.
96–00	<b>Warrior State:</b> Incorporating elements of tribalism and autocracy, the community's warriors enjoy an exalted status within society, gaining civic rights and privileges denied to average citizens. Military commanders or celebrated heroes may assume rulership over the state, though these individuals usually defer daily oversight of civic and religious matters to others.

The men and women who live in the shadow of these volcanic mountains tend to remain within its gaze. The fertile soil at the mountain's base supports large-scale agriculture, while the lush grasses flourishing around the mountain's base provide ample food for livestock. Although the volcano can be temperamental and unpredictable, residents usually put down permanent roots around its perimeter. The GM may consult the following table to determine the people's lifestyle.

**Table 19: Lifestyle**

<01	<b>Nomadic:</b> The people live exclusively off the land and are constantly on the move, never staying in the same location for more than one night. They are exclusively hunter-gatherers. To cover more ground in a single day, most nomadic peoples ride atop domesticated animals and frequently travel with large herds of livestock. Most share common lineage with their fellow travelers.
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01–10	<b>Semi-nomadic:</b> These individuals have no permanent home, though they may settle down in one location for several days, weeks, or even a few months under the right conditions. Their movements usually coincide with seasonal changes, though they rarely revisit the same exact locale. Although they are predominately hunter-gatherers, they may engage in limited agricultural activities before moving on to their next destination. These individuals typically reside in mobile, temporary shelters they erect soon after their arrival.
11–25	<b>Semi-sedentary:</b> Although they construct permanent settlements, these people divide their time among a few predetermined locations based upon the seasons. They may spend several months in one favorable spot to raise crops, fish its bountiful waters, or hunt a herd of game animals traveling along a migratory route. While they may still be classified as hunter-gatherers, they spend a roughly equal amount of their time raising domesticated livestock, growing agricultural products, and engaging in commercial activities.
>25	<b>Sedentary:</b> The residents live in the same location year-round, where they farm the land, tend to their domesticated flocks, hunt game in the surrounding wilderness, and develop commercial enterprises. Trade routes, civic engineering projects, and a reliable water source can be typically found in a sedentary society.

When monsters rear their ugly heads in these lands, rational minds turn to adventurers for answers. Nearby communities may hire these daring souls to rid the volcano's passages and tunnels of any meddlesome denizens aspiring to awaken the sleeping giant and unleash its fury on the residents below the mountain. Ambitious characters may venture into a volcano of their own accord, hoping to find a red dragon's hoard or a fire giant chieftain's treasure vault within the network of lava tubes and chambers at the heart of the mountain. Practitioners of arcane magic may seek rare minerals, pyroclastic matter, and curious fragments of volcanic material within the volcano. On the other hand, some powerful magical items and artifacts can be destroyed only within the roiling reservoir of molten lava inside the bowels of a fiery mountain. Those adequately equipped to endure the hot, stifling conditions encountered inside of a volcano can discover great wonders and recover immense wealth in this forsaken version of earthly hell.

The GM may use the following table for plotlines when running a volcanic mountain campaign. These ideas may be used as a side quest or may form the basis for an intriguing storyline. In addition, the GM may combine these elements with the adventure settings found in the subsequent table.

**Table 20: Volcanic Mountain Adventure Ideas**

d10	Event
1	<b>Alpine Forget-me-not:</b> These lavender, perennial flowering plants flourish at high altitudes. By all accounts, this cluster of plants scattered across a wide area dates back at least several centuries. Apropos to its name, many local residents believe the plants may be silent witnesses to the fate of a missing scion who disappeared in the mountains six years earlier. The only physical evidence ever found, an embroidered leather satchel, was recovered on the ground among the flowers. His family swears he left home with a precious family heirloom. Several druids have tried to communicate with the plants about the man's whereabouts, but the forget-me-nots remain silent. Nonetheless, those searching for him attest the plants offer the only solid lead in the case.

d10	Event
2	<b>Ash:</b> The volcano steadily spews out a column of fine ash that ascends high into the heavens. Under normal circumstances, the expelled material eventually disperses and falls back to earth. However, in this case, the region surrounding the volcano is free of ash. Where the ash ultimately goes defies explanation, though one theory claims it feeds an unseen entity concealed far above the clouds.
3	<b>Basalt Figurine:</b> The artist who created this tiny statue of an elongated flame chiseled it from a chunk of basalt, an igneous rock formed from cooled lava. A miner recently unearthed the curious artwork while digging for other precious metals. The object's craftsmanship would be deemed mediocre in the eyes of most critics, but the miner kept the odd piece because of its unusual ability to retain heat on warm days. Intrigued by this unexpected property, he tossed it into an open fire to see how it would react. Much to his horror, the statue rapidly grew in size into a living flame. The sentient blaze then set fire to its former owner, transforming the man into a pile of charred bone and flesh. When the flame cooled, it reverted into a figurine where it waits for a new owner to take control of it.
4	<b>Beauty:</b> Most people perceive volcanic material as a destructive nuisance, but the superheated particles occasionally bestow beneficial properties. One such example is rejuvenating ash. Some describe the powdery, gray material as the secret to perpetual beauty. Alchemists combine the volcanic discharge with exotic oils to create what they refer to as the fire mask. When applied to the skin, the substance erases wrinkles and restores elasticity, giving the user a youthful appearance. A bride who developed an itchy, unattractive rash just days before her wedding desperately seeks an application of restorative ash to remove the blemish. The distraught woman tells anyone willing to listen that the material is most commonly found at the base of cinder cone volcanoes.
5	<b>Clouds:</b> Dense black clouds settle around the mountain. The vapors obscure vision. More importantly, creatures inhaling the wispy fibers notice that they also exhale the dark vapors. These wisps momentarily coalesce as tiny imp-like creatures and then dissipate into nothingness. Electrical charges periodically course through the clouds but discharge neither lightning nor thunder.
6	<b>Glider:</b> Splintered wood and torn fabric are the only surviving remnants from a crude glider that apparently crash landed in a remote ravine. The device's pilot is nowhere to be found, implying the individual survived the impact and incredibly walked away from the scene. Local gossip mentions an eccentric inventor who told neighbors he discovered a way to soar like a bird. He never returned home after his boasts, though his disappearance roughly coincides with that of a young woman who captured his fancy.

d10	Event
7	<b>Plaster Man:</b> Several years ago, a local sculptor and mason came upon an odd void in the surrounding rock and stone. Rather than excavate the abscess, he instead poured plaster into the hole. To his shock, the plaster cast resembled a young man with his hands inexplicably tied behind his back and his legs bound. He quickly realized the mold depicted a corpse formerly embedded within the now-hardened volcanic ash. He further surmised his plaster cast captured the likeness of a condemned prisoner. Shortly after removing it from the compressed ash, his family discovered him hanging from a noose. The plaster cast changed hands several times thereafter, though each owner died under mysterious circumstances. Rumors suggest the plaster cast recently resurfaced in a nearby settlement.
8	<b>Tremors:</b> Every few hours, the earth surrounding the base of a dormant volcano violently rumbles. Increased seismic activity often precedes an eruption, yet in this case, the volcano remains stone cold, not even emitting a puff of smoke or a single ball of ash. Indeed, the magma chamber is totally empty. However, the tremors persist and slowly intensify. After several days of instability, the tremors finally tear open a gash in the earth, revealing a subterranean network of passageways and chambers. The sounds of stone grinding against stone emanate from this fissure. Worse still, something about the noises feels unnatural.
9	<b>Virgin:</b> Some cultures perceive volcanoes as godlike entities who demand appeasement. Fickle deities often desire the blood of the young and innocent. Although this young girl's parents agreed to sacrifice their daughter to the volcano shortly after her birth, they now regret this decision to surrender their only child to a mindless fire pit. Despite her parents' protestations, their daughter considers it a great honor to plummet to her demise in the volcano's magma chamber. Unable to convince their daughter not to partake in this ritual, her distraught parents are willing to try anything to save their child's life.
10	<b>Yodel:</b> Although commonly associated with singing, alpine herders use the distinctive vocal technique to communicate with their flocks or fellow herders. A local boy tending to his sheep tells of an eerie female voice reverberating through the mountains. She sang in a guttural, indecipherable language that spooked his herd, scattering the animals in every direction. He understood none of the lyrics, yet he felt a strong compulsion to slaughter his sheep or slice open his wrists despite his lack of comprehension. The discovery of six butchered sheep in the wild and a missing shepherd lends credence to the boy's story.

Volcanic mountains and the areas surrounding them offer numerous opportunities for adventuring. Crevasses and abscesses cut into the mountainside may serve as an ideal lair for a monstrous being or humanoids plundering the mountain for its resources. Molten lava, ash, and other volcanic materials can transform the land around the mountain, turning formerly fertile fields into a wasteland or making once-fallow earth into fertile soil. When exploring the volcanic mountains and their immediate vicinity, the GM may consult the following table to determine a location for the adventure.

**Table 21: Volcanic Mountain Adventuring Sites**

d10	Location
1	<p><b>Amphitheater:</b> Artisans sculpted the elevated seats from the side of a dormant stratovolcano. The rows ascend at a steep 60-degree angle, which accommodates more viewers but makes for a laborious climb to the upper levels. The seats offer a spectacular view of the round stage in the valley's nadir. Likewise, the amphitheater's acoustics are second to none. On this occasion, the enthusiastic crowd is abuzz as it waits for Abruzzo, the legendary baritone to take the stage. His most ardent fans swear his voice can shatter stone, which they believe will open a portal into the heart of the mountain where an imprisoned earth spirit longs for escape.</p>
2	<p><b>Buried Villa:</b> Centuries ago, a potent volcanic eruption rained tons of pumice and ash on a luxurious villa erected on a plateau near the mountain's base. When the cataclysm ended, the stately residence lay beneath several feet of volcanic debris. Over time, people forgot about the magnificent abode until a young woman stumbled upon an entrance to the villa. When she peered into the void, she saw long-forgotten wondrous tile mosaics on the floor and exquisite frescoes adorning the walls. Yet beyond the exterior beauty, she also spied crude paintings and drawings depicting ghastly, erotic rituals. Indeed, the villa had a reputation for debauchery and bloodlust during its heyday. Some firsthand accounts from the era speak of weeklong bacchanals and gladiatorial games within its walls.</p>
3	<p><b>Caldera:</b> The expulsion of incalculable amounts of magma and other materials can cause the mountain's support structures to collapse upon itself to create a caldera. These crater-like formations are generally associated with supervolcanoes. Six centuries earlier, a massive eruption gave birth to this gargantuan caldera encompassing roughly 20 square miles. The explosion devastated the surrounding area, yet one patch of earth survived the onslaught unscathed. The ground appears completely undisturbed and devoid of any of the volcanic materials covering the surrounding area. The earth in this small parcel feels warm to the touch and the soil is fallow.</p>
4	<p><b>Lava Tube:</b> Superheated molten rock burrowed into hardened lava flow, creating a subterranean tunnel in its wake. After the eruption ceased, and the lava drained out of the tube, the explosion's survivors sought temporary shelter within the naturally carved cave. As they ventured deeper into the tube, goutts of flame would suddenly appear. Most hovered above the ground for several seconds before vanishing, but some settled just above their heads. With the fire floating directly above them, the stunned explorers acquired the ability to channel spirits who perished when they were sacrificed to the fiery mountain shortly after its birth. The angry souls inhabiting their captive bodies demand revenge against their presumably long-deceased murders. Amid the rambling tirade of threats and pathos, the spirits make one unsettling statement, "We will return."</p>
5	<p><b>Monitoring Station:</b> The shadow of a neighboring volcano looms over these barebones living quarters where a handful of sentries monitored the slumbering giant's activities. The dilapidated structure appears abandoned, though it is impossible to tell why the occupants left. Perhaps they felt there was no longer a need to keep an eye on the volcano or something untoward happened to them. The only clue appears in the last entry of an open logbook resting on a table. It reads, "Investigating the smoke billowing from the opening. Will report our findings."</p>
6	<p><b>Pumice Stone Field:</b> Centuries earlier, a massive eruption dumped 60 feet of pumice and ash onto this vast swath of land, transforming previously fertile soil into a fallow wasteland. Nothing grows in this barren earth, and few living creatures venture here. That may be about to change. Several commercial interests are considering building a road across this desolate landscape to facilitate trade between neighboring regions. However, persistent rumors about unnatural dust storms and stone creatures scare off potential laborers. The financiers seek adventurers to trek along their proposed route and quash the stories once and for all.</p>
7	<p><b>Rope Bridge:</b> This rope bridge with wooden planks spans a deep chasm between two precarious, rocky outcroppings. The thick ropes and moorings supporting the structure look sturdy, yet even the gentlest breeze violently shakes and rattles the floorboards. Local legends claim an invading army built the bridge to facilitate its troop movements. When the defenders discovered their plan, one of their priests cursed the bridge, condemning any who stepped upon it to plummet to their deaths.</p>
8	<p><b>Sulfatura:</b> Noxious sulfuric gases surge from a field of cracks in the earth scattered across 10 acres of land. Some fissures measure only a few inches while other crevasses encompass hundreds of square feet. Because this field is far away from any active volcano, many people fear them to be an unnatural phenomenon. Parents warn their children that the field connects this world with the depths of Hell. Few really believe these old wives' tales, but most everyone agrees some fiery creature dwells in the subterranean void beneath the field.</p>
9	<p><b>Tomato Farm:</b> Connoisseurs covet tomatoes grown in volcanic soil for their exquisite taste and reduced acidity. Chefs swear these luscious vegetables produce the finest sauces, making them a valuable commodity throughout the land. While the plum tomatoes plucked from these vines display the same desirable qualities, isolated accounts claim several people momentarily gained the ability to breathe fire or wave their hands through open flames without injury. Naturally, some individuals gorged on these tomatoes to duplicate the feat, but without success. However, the lack of verifiable reports fails to dissuade curiosity seekers from venturing to this remote locale.</p>

## d10 Location

**Tuff Formation:** Volcanic ash expelled from a gargantuan supervolcano eventually cooled and was later compacted into a tuff formation encompassing 250,000 square miles. Residents have quarried stone from the tuff formation for centuries, though sinkholes have increasingly swallowed up previously solid ground. Some attribute the development to geological degradation. The consensus blames an unknown subterranean entity for the collapses because they are clustered in a small area. A few people reported hearing something moving below ground just before the collapse.

10

## Folded Mountains

Folded mountains are not as iconic as the more recognizable volcanic mountains, but they are no less significant or challenging. In fact, this type of mountain is the most prevalent variety found on Earth. The world's largest mountain, the legendary Mount Everest, and the tallest mountain range on Earth, the Himalayas, are real-world examples of folded mountains. As discussed in the preceding section, **Making a Mountain**, folded mountains are the byproducts of crashes between continental plates. The edges of the colliding landmasses fold like a junkyard car crushed by a compactor. The crumpled portions that protrude from the surface become mountains.

These types of mountains are typically far longer than they are wide, so they more frequently act as national boundaries than volcanic mountains,

which are not as densely concentrated over a comparatively smaller area. The folding process that gave birth to these mountain ranges also created steep ridges that can span great distances, making them an even more formidable natural boundary than less tightly packed volcanic mountains. Elongated plateaus are another geological feature commonly associated with folded mountain ranges. Some of these strips of flat land are found high atop folded mountain chains, as in the case of the Tibetan Plateau in the Himalayas.

Water runoff from the melting snowpack found at higher elevations carves channels in the surface rock before collecting in depressions on these elevated plateaus. The mountain springs and lakes supply men and beasts alike with ample supplies of water, allowing farmers to irrigate the rich mountain soil, and to keep their livestock adequately fed and watered. Because of the comparatively abundant food and water supplies, humanoid communities and wild beasts are more likely to be found in folded mountain ranges than in any other type of mountain range. This environment also boasts the most populous humanoid settlements.

The following tables describe the terrain features adventurers can expect to encounter during their expeditions into the folded mountains. The tables do not take seasonal changes into account. Therefore, the GM may double the chances of snow during the winter months and decrease the odds of snow during the summer months by roughly 50%. The following adjustments apply only to fresh snow and deep snow. Ice sheets generally build up over a period of years and are unaffected by seasonal changes. If any form of plant life is present in an area, it rests upon firm soil, which has no effect on overland movement or speed. If no plants are in the area, the ground consists of solid rock, which also has no effect on overland movement or speed. Because an individual mountain can encompass numerous square miles, the results from each table apply to a specific mountain, though they should be fairly similar to the peaks around them. When consulting these tables, the GM rolls percentile dice for each



feature to determine if it is present in the area. One or more types of terrain and/or vegetation may coexist in the same general area, though certain features negate the effects of others as described in the following tables. Difficult terrain, as described in the tables, applies only to determining the actions a character can take when moving through an area containing this feature rather than its effect on the creature's speed. The tables do not include the natural hazards described later in this section.

**Table 22: Terrain Elements on a Folded Mountain in Boreal Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	30%	20%	20%	15%
Deep snow <sup>b</sup>	10%	10%	5%	5%
Ice sheet <sup>c</sup>	60%	90%	100%	100%
Tree <sup>d</sup>	15%	5%	—	—
Gravel <sup>e</sup>	20%	30%	30%	30%
Shrub <sup>f</sup>	10%	5%	—	—
Undergrowth <sup>g</sup>	10%	—	—	—
Short grass <sup>h</sup>	10%	15%	—	—
Shallow water <sup>i</sup>	15%	5%	—	—
Deep water <sup>j</sup>	10%	5%	—	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a boreal mountain or hill are almost exclusively coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, an ice sheet, shallow water, or deep water are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable. Shrubs cannot cohabitate areas with deep water.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with deep

water. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement. Short grass cannot cohabitate areas with shallow or deep water.

<sup>i</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all land vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>j</sup> Deep water reaches a depth of 2d4 feet. It reduces overland speed by three-quarters and halts all land vehicles in their tracks. Charging and running are impossible for creatures whose height is less than five times the water's depth. Creatures not tall enough to keep their heads above water risk drowning, though they benefit from cover, if applicable. Watercraft with a draft equal to or less than half the water's depth can safely navigate through deep water. Watercraft with a draft greater than half the water's depth but less than its depth have a 50% chance of running aground for every 100 feet traveled, while vessels with a draft equal to or greater than the water's depth automatically run aground. Areas containing deep water are treated as difficult terrain, if applicable.

**Table 23: Terrain Elements on a Folded Mountain in Temperate Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	20%	20%	15%	5%
Deep snow <sup>b</sup>	—	5%	5%	5%
Ice sheet <sup>c</sup>	—	30%	70%	100%
Tree <sup>d</sup>	80%	20%	—	—
Gravel <sup>e</sup>	—	20%	40%	40%
Shrub <sup>f</sup>	40%	20%	—	—
Undergrowth <sup>g</sup>	30%	20%	10%	—
Short grass <sup>h</sup>	10%	20%	10%	—
Shallow water <sup>i</sup>	25%	15%	5%	—
Deep water <sup>j</sup>	15%	10%	5%	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a temperate mountain or hill are predominately coniferous with some deciduous species also present. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, an ice sheet, shallow water, or deep water are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable. Shrubs cannot cohabitate areas with deep water.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with deep water. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement. Short grass cannot cohabitate areas with shallow or deep water.

<sup>i</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all land vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>j</sup> Deep water reaches a depth of 2d4 feet. It reduces overland speed by three-quarters and halts all land vehicles in their tracks. Charging and running are impossible for creatures whose height is less than five times the water's depth. Creatures not tall enough to keep their heads above water risk drowning, though they benefit from cover, if applicable. Watercraft with a draft equal to or less than half the water's depth can safely navigate through deep water. Watercraft with a draft greater than half the water's depth but less than its depth have a 50% chance of running aground for every 100 feet traveled, while vessels with a draft equal to or greater than the water's depth automatically run aground. Areas containing deep water are treated as difficult terrain, if applicable.

**Table 24: Terrain Elements on a Folded Mountain in a Warm Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	—	—	20%	15%
Deep snow <sup>b</sup>	—	—	10%	5%
Ice sheet <sup>c</sup>	—	—	25%	90%
Tree <sup>d</sup>	30%	40%	10%	—
Gravel <sup>e</sup>	—	—	30%	25%
Shrub <sup>f</sup>	30%	25%	15%	—
Undergrowth <sup>g</sup>	50%	60%	30%	5%
Short grass <sup>h</sup>	10%	15%	30%	5%
Shallow water <sup>i</sup>	10%	15%	20%	15%
Deep water <sup>j</sup>	15%	10%	10%	5%

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short

grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a warm mountain or hill may be deciduous or coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth and short grass cannot grow atop gravel. If fresh snow, deep snow, or an ice sheet are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all wheeled vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. If shallow water is present, the area cannot also contain shrubs, undergrowth, or short grass. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>g</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable.

<sup>h</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the floor. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>i</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

The following tables allow the GM to randomly generate the height, average slope, and the variation of slope found on a folded mountain.

**Table 25: Folded Mountain Height**

D100	Height
01–15	100 ft. plus 6d6 x 50 ft.
16–35	1,900 ft. plus 10d6 x 50 ft.
36–60	4,900 ft. plus 6d6 x 100 ft.
61–85	8,500 ft. plus 10d6 x 100 ft.
86–00	14,500 ft. plus 10d6 x 200 ft.

**Table 26: Folded Mountain Slope**

D100	Average Degrees of Slope	Variation
01–30	2d6	1d6
31–70	12 + 2d6	2d4
71–00	24 + 3d6	2d6

Folded mountain ranges typically attract residents for economic and spiritual purposes. The montane forests thriving at the lower elevations pique the interest of loggers who harvest and sell the timber to nearby residents or transport it to distant markets. The geological process that creates these stony monstrosities also forces valuable commodities such as iron ore and salt deposits to the surface, making it easier for miners to

bore into the face of a structurally stable mountainside than dig far below the surface. In some instances, veins of silver and copper can be found alongside their less precious counterparts. Folded mountains are generally taller than their brethren, thus in many cases the lofty summits shrouded in dense clouds hold spiritual significance for worshippers and adherents to several philosophical schools of thought. Magnificent temples and shrines stand atop a number of mountain peaks beckoning pilgrims to pay homage to their faith from on high. Likewise, monasteries built upon isolated mountaintops often overlook serene valleys below them. The structures' seclusion and breathtaking views fill accepting hearts and minds with tranquility and unity with nature.

When adventurers encounter humanoids in a predetermined location or in a randomly generated community near a mountain pass (see **Tables 47** and **48**) the population size affects its demographic makeup as reflected in the following table.

**Table 27: Population Effect on Demographics**

Population	Modifier
Fewer than 50	-4d10
51-200	-2d10
201-2,000	none
2,001-5,000	+ 2d10
5,001-15,000	+ 4d10
15,001-30,000	+ 6d10
31,000 +	+ 8d10

After determining the modifier based upon the population size, the GM may then apply that modifier to the following table to determine the demographics of a folded mountain community.

**Table 28: Humanoid Demographics**

d100f	Racial Makeup
<21	<b>Exclusively Homogenous:</b> Everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.
21-35	<b>Predominately Homogenous:</b> Almost everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.
36-50	<b>Largely Homogenous:</b> The majority are members of the same humanoid race, religion, or ethnicity, if applicable.
51-65	<b>Neutral:</b> One race, religion, or ethnicity, if applicable, outnumbers all others but does not comprise a majority. Nonetheless, their culture, traditions, and beliefs define society, though other peoples exert lesser degrees of influence as well.
66-80	<b>Moderately Diverse:</b> Some races, faiths, and ethnicities, if applicable, are more prevalent than others, but none greatly outnumbers all others. The traditions of several races, religions, and ethnicities combine forces to determine society's overall cultural makeup.
81-95	<b>Largely Diverse:</b> A multitude of races, religions, and ethnicities make up the largely integrated population. The fusion of backgrounds creates a unique society embodying traits borrowed from numerous traditions, though some perspectives influence the community more than others.

d100f	Racial Makeup
>95	<b>Completely Diverse:</b> Nearly every race, faith, and ethnicity imaginable can be found among the population. Most citizens are multicultural and multilingual, embracing their own customs as well as adopting those acquired from neighboring peoples.

The following table modifies the results on **Table 30** based upon the community's demographics.

**Table 29: Demographics Effect on Humanoid Attitudes**

Demographic	Modifier
Exclusively homogenous	-5d10
Predominately homogenous	-3d10
Largely homogenous	-1d10
Neutral	none
Moderately diverse	+ 1d10
Largely diverse	+ 3d10
Completely diverse	+ 5d10

Spiritualism lies at the core of many folded mountain settlements. People dwelling in the rarified air among the clouds perceive their world in a different light than visitors inhabiting more hospitable realms. Outsiders often wrongly equate the residents' spiritualism with piety. Although most profess some religious beliefs, many feel a greater affinity for their deceased ancestors than remote deities. Nonetheless, their close proximity to the heavens and the mountain's strategic location along national and regional borders ensures a steady influx of traffic into the folded mountains.

**Table 30: Humanoid Attitudes**

d100	Attitude
<31	<b>Segregated:</b> Society is strictly divided along racial, religious, or ethnic lines with the more populous groups assuming a dominant role. They treat minorities as inferiors, relegating them to subservient status. Civil or religious authorities strictly enforce boundaries between divergent populations through threats, intimidation, and if necessary violence.
31-40	<b>Prejudiced:</b> Although some integration takes place, racial, religious, or ethnic tension hangs heavy in the air. Many people hold persistent, deep-seated opinions sowing mistrust between members of different groups. Residents keep a wary eye on those different than themselves, perceiving them as second-class citizens who pose a constant threat to their supposedly superior way of life.
41-50	<b>Biased:</b> Few individuals publicly express their misgivings about other people, yet it is difficult to ignore the undercurrent of bias bubbling beneath the surface. Although people can move freely about without restriction, subtle acts of discrimination still permeate society. Interactions between different sets of people may seem courteous and polite on the surface, yet words, gestures, and body language belie the person's compartmentalized suspicions.

d100	Attitude
51-60	<b>Indifferent:</b> An indifferent society strives to maintain the society's <i>status quo</i> sweeping any pervasive prejudices under the proverbial rug. Gradual modification of existing attitudes can occur, though some find its pace too plodding for their liking. Residents rarely let their biases govern their actions and perceptions of other people, yet few go out of their way to welcome those different than themselves.
61-70	<b>Tolerant:</b> Multiple languages, religions, and cultures mingle together, though members of the same race, religion, or ethnicity feel more comfortable with others of their kind than outsiders. A live and let live attitude best summarizes a tolerant society's outlook toward the community at large, though some innate biases linger in certain circles.
71-80	<b>Accepting:</b> Members of different races, religions, and ethnicities live side by side in almost completely integrated communities. Familiarity forms the cornerstone of an accepting society. However, those hailing from unfamiliar places or arriving with previously unseen customs encounter some misgivings and suspicion from startled observers.
>81	<b>Welcoming:</b> Society welcomes immigrants and visitors, regardless of race, religion, or ethnicity, into the fold. Newcomers are encouraged to quickly assimilate into their surroundings as they adapt to their neighbors' customs and traditions while adding their uniqueness to the mix. Indeed, most members perceive themselves as citizens first and foremost relegating association with their race, religion, or ethnicity to a secondary status. Prejudice persists in some isolated corners, but the overwhelming majority strongly condemn such viewpoints and celebrate diversity.

Folded mountain residents exhibit dichotomous views toward authority. Most value self-determination and individual liberties, yet they also display a strong sense of community and a willingness to place the needs of the many above the desires of the few. Although most adhere to the tenets of homespun faith, spiritual figures still hold some sway in these settlements. Against this brief backdrop, the GM may use the following table to determine the political system found in a folded mountain community.

**Table 31: Political System**

d100	Political System
01-05	<b>Autocracy:</b> A single individual who seized control of the state through bloodless or violent means wields absolute power over his people. This individual may have attained this position from his or her predecessor who was a family member or handpicked this person as a successor. An autocrat often targets one or more segments of society as his or her sworn enemies, encouraging their subjects to take some punitive actions against the autocrat's real or imaginary foes.

d100	Political System
05-15	<b>Elected Official:</b> Residents select an individual to serve as the settlement's leader. The person may wield absolute authority or share civic responsibilities with a council of fellow citizens. The elected official, known as a mayor, magistrate, or similar title typically defers judicial matters to a judge or sheriff appointed by the elected official.
16-25	<b>Gerontocracy:</b> While birthright, wealth, or political connections normally determine membership in the ruling class, this political system grants supreme authority to the community's eldest residents regardless of their gender or social status. Age is a relative term based upon the person's longevity for their race rather than their age measured in years. Because these individuals cannot bequeath their station to a designated heir or successor, they often rule in a just manner, relying upon their extensive life experiences to better the lives of their subjects. Nonetheless exceptions exist, especially for those who fear death and pursue every avenue to defy their own mortality.
26-30	<b>Monarchy (Absolute):</b> A group of blood relatives rules the land with ultimate authority vested in one or two persons known as the monarch. This individual's power is absolute, though the crown may vest some jurisdiction in others. In patriarchal societies, the eldest male descendent of the previous leader functions as the monarch, assuming the title of chieftain, elder, or another suitable designation. In a matriarchy, the oldest female descendent performs the same role as the state's queen, empress, or other lofty heading. The monarch's spouse, typically hailing from a neighboring royal family or a distant relative, functions solely as a consort, preventing the surviving spouse from inheriting the throne when the monarch dies. Younger siblings, living parents, and children undertake other civic and religious duties within the state, while extended family members also enjoy the trappings of nobility.
31-35	<b>Oligarchy:</b> A group of individuals determined by birthright, military might, or personal wealth oversee all matters of state and economic development. The oligarchy's views toward personal freedoms range from moderately tolerant to oppressive with most examples skewing closer to the latter option than the former. The oligarchy's members along with their family and friends, if they choose, act with impunity while those outside the inner circle must abide by the oligarchy's edicts. On some occasions, individuals outside the elite group who are fortunate enough to amass wealth under this system may be granted membership into the oligarchy.

## d100 Political System

**36–40** **Republic:** Citizens elect representatives to create laws and govern the populace. These representatives may choose an executive to oversee the legislative body, establish the judiciary, command the state's military forces, craft economic policies, or undertake any other task delegated to that individual. Alternatively, the citizens can directly elect the executive. The written charter creating this form of government may be drafted by the executive, the representatives, the people themselves, or any combination of these individuals. The charter, usually referred to as a constitution or governing articles, outlines the powers delegated to each branch of government. By their nature, most republics grant enhanced rights to citizens. However, there are circumstances where the executive or a group of representatives abuses their authority and transforms the republic into an autocracy or an oligarchy. Although they may keep the vestiges of the republic alive, elected representatives wield no real power.

**41–60** **Theocracy (Clerical State):** In a clerical state, the clergy interprets the deity's or deities' commands and codifies them as law. Priests enforce the gods' edicts, allowing them to preside over all religious and secular matters. Unlike the god state, the priests may select one of its members to serve as its high priest, a role granting the individual supreme authority but not divinity.

**61–65** **Theocracy (God Figure):** All civil authority derives from a divine source. In the case of a god figure, political power rests in the hands of one individual who may be a living deity, a demigod, or a representative chosen by one or more gods. The god figure wields absolute authority over all matters of state including serving as the head of its church.

**66–70** **Theocracy (Shared Authority):** A single individual serves as the head of state and the titular leader of the church. While recognized as the supreme religious leader, the political figure defers judgment on all ecclesiastical matters to the clergy. This person may have inherited this position from their predecessor, acquired it through force or shrewd political maneuvering, or used his or her vast wealth to usurp the title.

**71–85** **Tribal:** This society lacks any formal government. Instead, a familial patriarch, matriarch, or a family council usually consisting of the group's elders presides over their individual clans who may live cooperatively or competitively with other bloodlines in a shared community or as parts of smaller, rival communities dwelling close together. Military might, more than lineage, frequently determines an individual's status within the tribe.

**86–00** **Warrior State:** Incorporating elements of tribalism and autocracy, the community's warriors enjoy an exalted status within society, gaining civic rights and privileges denied to average citizens. Military commanders or celebrated heroes may assume rulership over the state, though these individuals usually defer daily oversight of civic and religious matters to others.

The people who dwell in the folded mountains lead a predominately sedentary lifestyle. Game is often plentiful at the lower elevations, while verdant pastures atop isolated plateaus provide enough grazing material for domesticated animals to eat their fill. The rigors of traveling vast distances across the mountains also limits their range. However, residents in boreal climates may migrate to lower elevations during the chilly winters. With this consideration in mind, the GM may subtract –1d10 from the die roll when adventurers encounter humanoid settlements in polar mountain ranges. The GM may consult the following table to determine the people's lifestyle.

**Table 32: Lifestyle**

**<06** **Nomadic:** The people live exclusively off the land and are constantly on the move, never staying in the same location for more than one night. They are exclusively hunter-gatherers. To cover more ground in a single day, most nomadic peoples ride atop domesticated animals and frequently travel with large herds of livestock. Most share common lineage with their fellow travelers.

**06–15** **Semi-nomadic:** These individuals have no permanent home, though they may settle down in one location for several days, weeks, or even a few months under the right conditions. Their movements usually coincide with seasonal changes, though they rarely revisit the same exact locale. Although they are predominately hunter-gatherers, they may engage in limited agricultural activities before moving on to their next destination. These individuals typically reside in mobile, temporary shelters they erect soon after their arrival.

**16–30** **Semi-sedentary:** Although they construct permanent settlements, these people divide their time among a few predetermined locations based upon the seasons. They may spend several months in one favorable spot to raise crops, fish its bountiful waters, or hunt a herd of game animals traveling along a migratory route. While they may still be classified as hunter-gatherers, they spend a roughly equal amount of their time raising domesticated livestock, growing agricultural products, and engaging in commercial activities.

**>30** **Sedentary:** The residents live in the same location year-round, where they farm the land, tend to their domesticated flocks, hunt game in the surrounding wilderness, and develop commercial enterprises. Trade routes, civic engineering projects, and a reliable water source can be typically found in a sedentary society.

## Block Mountains

Block mountains occur where two adjacent plates are moving away from one another and create a deep fissure in the earth known as a fault. As the plates pull apart, one side of the block uplifts sharply and forces the block on the opposite side downward. Over time, erosion takes its toll on the protruding portion, causing washed away debris to fill the depression on the opposite side. Block mountains are most recognizable for their sheer rock walls. In most cases, one side of the mountain range rises at very gentle increments whereas the opposite side ascends at an incredibly sharp angle, creating the mountains' telltale, nearly vertical stone surfaces or escarpments. However, some mountains instead have steep slopes on both sides. These elevated landforms are referred to as lifted type block mountains as opposed to the more conventional tilted type block mountains. Although they attribute their creation to the same geological process as tilted type block mountains, they appear as if some force literally lifted a singular massive block of stone directly upward. The effect resembles pulling up a loose cobblestone from a road and elevating it higher than its neighbors.



Block mountain ranges are significantly longer than they are wide, much like folded mountain ranges. They differ from folded and volcanic mountains in the respect that their sides are extremely steep, but their summits are relatively flat. Rivers from water runoff carve paths through the mountains, spawning huge canyons bounded by massive escarpments on both sides. Nonetheless, block mountains are probably best known for bringing vast deposits of gold and other precious minerals close to the surface as exemplified by the discovery of gold in the foothills of the Sierra Nevada Mountains that sparked the California Gold Rush.

The following tables describe the terrain features adventurers can expect to encounter during their expeditions into the block mountains. The tables do not take seasonal changes into account. Therefore, the GM may double the chances of snow during the winter months and decrease the odds of snow during the summer months by roughly 50%. The following adjustments apply only to fresh snow and deep snow. Ice sheets generally build up over a period of years and are unaffected by seasonal changes. If any form of plant life is present in an area, it rests upon firm soil, which has no effect on overland movement or speed. If there are no plants in the area, the ground consists of solid rock, which also has no effect on overland movement or speed. Because an individual mountain can encompass numerous square miles, the results from each table apply to a specific mountain, though they should be fairly similar to the peaks around them. When consulting these tables, the GM rolls percentile dice for each feature to determine if it is present in the area. One or more types of terrain and/or vegetation may coexist in the same general area, though certain features negate the effects of others as described in the following tables. Difficult terrain, as described in the tables, applies only to determining the actions a character can take when moving through an area containing this feature rather than its effect on the creature's speed. The tables do not include the natural hazards described later in this section. However, rock walls and similar terrain features found under the **Hazards** heading are more likely to be encountered in block mountains than any other type of mountain.

**Table 33: Terrain Elements on a Block Mountain in Boreal Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
<b>Fresh snow<sup>a</sup></b>	20%	30%	40%	10%
<b>Deep snow<sup>b</sup></b>	15%	15%	10%	10%
<b>Ice sheet<sup>c</sup></b>	50%	80%	100%	100%
<b>Tree<sup>d</sup></b>	35%	10%	—	—
<b>Gravel<sup>e</sup></b>	20%	30%	30%	30%
<b>Shrub<sup>f</sup></b>	15%	10%	—	—
<b>Undergrowth<sup>g</sup></b>	10%	—	—	—
<b>Short grass<sup>h</sup></b>	5%	—	—	—
<b>Shallow water<sup>i</sup></b>	20%	10%	—	—
<b>Deep water<sup>j</sup></b>	10%	5%	—	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose

chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a boreal mountain or hill are almost exclusively coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, an ice sheet, shallow water, or deep water are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable. Shrubs cannot cohabitate areas with deep water.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with deep water. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement. Short grass cannot cohabitate areas with shallow or deep water.

<sup>i</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all land vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>j</sup> Deep water reaches a depth of 2d4 feet. It reduces overland speed by three-quarters and halts all land vehicles in their tracks. Charging and running are impossible for creatures whose height is less than five times the water's depth. Creatures not tall enough to keep their heads above water risk drowning, though they benefit from cover, if applicable. Watercraft with a draft equal to or less than half the water's depth can safely navigate through deep water. Watercraft with a draft greater than half the water's depth but less than its depth have a 50% chance of running aground for every 100 feet traveled, while vessels with a draft equal to or greater than the water's depth automatically run aground. Areas containing deep water are treated as difficult terrain, if applicable.

**Table 34: Terrain Elements on a Block Mountain in Temperate Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	20%	20%	15%	5%
Deep snow <sup>b</sup>	—	5%	5%	5%
Ice sheet <sup>c</sup>	—	30%	70%	100%
Tree <sup>d</sup>	80%	20%	—	—
Gravel <sup>e</sup>	—	20%	40%	40%
Shrub <sup>f</sup>	20%	10%	—	—
Undergrowth <sup>g</sup>	20%	10%	5%	—

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Short grass <sup>h</sup>	10%	10%	5%	—
Shallow water <sup>i</sup>	15%	20%	5%	—
Deep water <sup>j</sup>	20%	10%	5%	—

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a temperate mountain or hill are predominately coniferous with some deciduous species also present. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, an ice sheet, shallow water, or deep water are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable. Shrubs cannot cohabitate areas with deep water.

<sup>g</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the forest floor. These plants cannot cohabitate areas with deep water. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>h</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement. Short grass cannot cohabitate areas with shallow or deep water.

<sup>i</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all land vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>j</sup> Deep water reaches a depth of 2d4 feet. It reduces overland speed by three-quarters and halts all land vehicles in their tracks. Charging and running are impossible for creatures whose height is less than five times the water's depth. Creatures not tall enough to keep their heads above water risk drowning, though they benefit from cover, if applicable. Watercraft with a draft equal to or less than half the water's depth can safely navigate through deep water. Watercraft with a draft greater than half the water's depth but less than its depth have a 50% chance of running aground for

every 100 feet traveled, while vessels with a draft equal to or greater than the water's depth automatically run aground. Areas containing deep water are treated as difficult terrain, if applicable.

**Table 35: Terrain Elements on a Block Mountain in a Warm Climate**

Terrain Element	Altitude			
	1,000–5,000 ft.	5,001–10,000 ft.	10,001–15,000 ft.	15,000+ ft.
Fresh snow <sup>a</sup>	—	—	20%	15%
Deep snow <sup>b</sup>	—	—	10%	5%
Ice sheet <sup>c</sup>	—	—	25%	90%
Tree <sup>d</sup>	30%	40%	10%	—
Gravel <sup>e</sup>	—	—	30%	25%
Shrub <sup>f</sup>	30%	25%	15%	—
Undergrowth <sup>g</sup>	50%	60%	30%	5%
Short grass <sup>h</sup>	10%	15%	30%	5%
Shallow water <sup>i</sup>	10%	15%	20%	15%
Deep water <sup>j</sup>	15%	10%	10%	5%

<sup>a</sup> Fresh snow reduces overland speed by half and reduces wheeled vehicle speeds by three-quarters. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If fresh snow is present, it rests atop any undergrowth and short grass, thus temporarily negating the vegetation's effects in that area. Areas containing fresh snow are treated as difficult terrain, if applicable.

<sup>b</sup> Deep snow measuring 1d3+1 feet covers the ground and most vegetation. If deep snow is present, it completely covers any undergrowth and short grass in the area, negating their effects. It reduces overland speed by three-quarters and halts all wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. If an ice sheet occupies the same area as deep snow, it becomes an ice sheet covered by deep snow. Deep snow cannot occupy the same area as fresh snow. Areas containing deep snow are treated as difficult terrain, if applicable.

<sup>c</sup> The ice sheet reduces overland speed by half and halts wheeled vehicles in their tracks. Land vehicles whose chassis rest upon a long, narrow surface such as blades, rails, skis, or similar devices move without impediment over this terrain. Areas containing an ice sheet are treated as difficult terrain, if applicable. A creature who attempts to run, charge, suddenly stop, or abruptly turn falls prone if it fails a Moderate difficulty Dexterity check or appropriate Dexterity-based skill check. If fresh snow or deep snow are present, the frozen precipitation rests atop the ice sheet. Likewise, if an ice sheet is present, shrubs, undergrowth, and short grass cannot be present.

<sup>d</sup> Trees found on a warm mountain or hill may be deciduous or coniferous. The tree's trunk provides cover, if applicable, to any creature behind it. When trees are present, each individual tree is 1d4+1 x 5 feet away from the its closest neighbor. Trees have no effect on overland speed, but they reduce the speed of all land vehicles and watercraft by half.

<sup>e</sup> Gravel consists of small, loose rocks and stones resting atop a base of solid rock. Trees, shrubs, undergrowth, and short grass cannot grow atop gravel. If fresh snow, deep snow, an ice sheet, shallow water, or deep water are present, these features cover the gravel and negate its effects. Gravel has no effect on overland speed, but areas containing gravel are treated as difficult terrain, if applicable.

<sup>f</sup> Shallow water is less than 1 foot in depth. It reduces overland speed by half and halts all wheeled vehicles in their tracks. Watercraft with a draft greater than the water's depth automatically run aground while those with a draft greater than 1d4 inches have a 50% chance of running aground per 100 feet traveled. If shallow water is present, the area cannot also contain shrubs, undergrowth, or short grass. Areas containing shallow water are treated as difficult terrain, if applicable.

<sup>g</sup> Shrubs have no effect on overland speed, but areas containing shrubs are treated as difficult terrain, if applicable.

<sup>h</sup> Undergrowth includes vines, roots, and soft-stemmed vegetation covering the floor. Undergrowth has no effect on overland speed, but areas containing undergrowth are treated as difficult terrain, if applicable.

<sup>i</sup> Short grass reaches a height of 3d4 inches and has no effect on overland movement.

The following tables allow the GM to randomly generate the height, average slope, and the variation of slope found on a block mountain.

**Table 36: Block Mountain Height**

D100	Height
01–30	100 ft. plus 10d6 x 50 ft.
31–70	3,100 ft. plus 10d6 x 100 ft.
71–00	9,100 ft. plus 10d6 x 100 ft.

**Table 37: Block Mountain Slope**

D100	Average Degrees of Slope	Variation
01–30	4d6	2d6
31–70	24 + 4d6	4d6
71–00	48 + 6d6	6d6 <sup>a</sup>

<sup>a</sup> Cannot exceed 90 degrees.

Block mountains' steep slopes make them a poor choice for agricultural purposes, thus settlements are few and far between in these regions outside of the valleys and canyons bounded by individual block mountains. Some communities may be found on the broad plateaus overlooking these low-lying areas. Unfortunately, these plateaus are extremely hard to reach, thus any settlements found in these regions are likely to be extremely isolated and very xenophobic. On the other hand, the mountains' inaccessibility grants refuge to men and monsters seeking to evade detection. Fugitives, criminals, and murderous cultists may use this rugged terrain to escape justice and conduct their immoral activities.

When adventurers encounter humanoids in a predetermined location or in a randomly generated community near a mountain pass (see **Tables 47 and 48**), the population size affects its demographic makeup as reflected in the following table.

**Table 38: Population Effect on Demographics**

Population	Modifier
Fewer than 50	–4d10
51–200	–2d10
201–2,000	none
2,001–5,000	+ 2d10
5,001–15,000	+ 4d10
15,001–30,000	+ 6d10
31,000+	+ 8d10

After determining the modifier based upon the population size, the GM may then apply that modifier to the following table to determine the demographics of a block mountain community.

**Table 39: Humanoid Demographics**

d100	Racial Makeup
<01	<b>Exclusively Homogenous:</b> Everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.
01–25	<b>Predominately Homogenous:</b> Almost everyone is a member of the same humanoid race, religion, or ethnicity, if applicable.

d100	Racial Makeup
26–50	<b>Largely Homogenous:</b> The majority are members of the same humanoid race, religion, or ethnicity, if applicable.
51–75	<b>Neutral:</b> One race, religion, or ethnicity, if applicable, outnumbers all others but does not comprise a majority. Nonetheless, their culture, traditions, and beliefs define society, though other peoples exert lesser degrees of influence as well.
76–90	<b>Moderately Diverse:</b> Some races, faiths, and ethnicities, if applicable, are more prevalent than others, but none greatly outnumbers all others. The traditions of several races, religions, and ethnicities combine forces to determine society's overall cultural makeup.
91–00	<b>Largely Diverse:</b> A multitude of races, religions, and ethnicities make up the largely integrated population. The fusion of backgrounds creates a unique society embodying traits borrowed from numerous traditions, though some perspectives influence the community more than others.
>00	<b>Completely Diverse:</b> Nearly every race, faith, and ethnicity imaginable can be found among the population. Most citizens are multicultural and multilingual, embracing their own customs as well as adopting those acquired from neighboring peoples.

The following table modifies the results on **Table 41** based upon the community's demographics.

**Table 40: Demographics Effect on Humanoid Attitudes**

Demographic	Modifier
Exclusively homogenous	-5d10
Predominately homogenous	-3d10
Largely homogenous	-1d10
Neutral	none
Moderately diverse	+ 1d10
Largely diverse	+ 3d10
Completely diverse	+ 5d10

Block mountains' sheer cliffs and steep escarpments greatly impede travel, limiting the residents' contact with the outside world. For some, isolation is a byproduct of the land they call home. For others, deliberate segregation from the general populace represents a deliberate choice. The mountain's humanoid inhabitants almost universally greet strangers with rampant suspicion and mistrust as presented in the following table. In addition to the modifiers appearing in **Table 40**, the GM may apply an additional -2d10% penalty when adventurers deal with fugitives and other individuals actively endeavoring to avoid others.

**Table 41: Humanoid Attitudes**

d100	Attitude
<41	<b>Segregated:</b> Society is strictly divided along racial, religious, or ethnic lines with the more populous groups assuming a dominant role. They treat minorities as inferiors, relegating them to subservient status. Civil or religious authorities strictly enforce boundaries between divergent populations through threats, intimidation, and if necessary violence.

d100	Attitude
41–60	<b>Prejudiced:</b> Although some integration takes place, racial, religious, or ethnic tension hangs heavy in the air. Many people hold persistent, deep-seated opinions sowing mistrust between members of different groups. Residents keep a wary eye on those different than themselves, perceiving them as second-class citizens who pose a constant threat to their supposedly superior way of life.
61–80	<b>Biased:</b> Few individuals publicly express their misgivings about other people, yet it is difficult to ignore the undercurrent of bias bubbling beneath the surface. Although people can move freely about without restriction, subtle acts of discrimination still permeate society. Interactions between different sets of people may seem courteous and polite on the surface, yet words, gestures, and body language belie the person's compartmentalized suspicions.
81–90	<b>Indifferent:</b> An indifferent society strives to maintain the society's <i>status quo</i> , sweeping any pervasive prejudices under the proverbial rug. Gradual modification of existing attitudes can occur, though some find its pace too plodding for their liking. Residents rarely let their biases govern their actions and perceptions of other people, yet few go out of their way to welcome those different than themselves.
91–95	<b>Tolerant:</b> Multiple languages, religions, and cultures mingle together, though members of the same race, religion, or ethnicity feel more comfortable with others of their kind than outsiders. A live-and-let-live attitude best summarizes a tolerant society's outlook toward the community at large, though some innate biases linger in certain circles.
96–00	<b>Accepting:</b> Members of different races, religions, and ethnicities live side by side in almost completely integrated communities. Familiarity forms the cornerstone of an accepting society. However, those hailing from unfamiliar places or arriving with previously unseen customs encounter some misgivings and suspicion from startled observers.
>00	<b>Welcoming:</b> Society welcomes immigrants and visitors, regardless of race, religion, or ethnicity into the fold. Newcomers are encouraged to quickly assimilate into their surroundings as they adapt to their neighbors' customs and traditions while adding their uniqueness to the mix. Indeed, most members perceive themselves as citizens first and foremost relegating association with their race, religion, or ethnicity to a secondary status. Prejudice persists in some isolated corners, but the overwhelming majority strongly condemn such viewpoints and celebrate diversity.

Formal government is the last thing on the minds of those trying to evade justice or society. In addition to avoiding strangers, many block mountain residents want to dodge others in general. Nonetheless, settlers are apt to reluctantly acquiesce to the authority of those who earn their respect or forcibly demand their subjugation. With these considerations in mind, the GM may use the following table to determine the political system found in a block mountain community.

**Table 42: Political System**

d100	Political System
01-15	<b>Autocracy:</b> A single individual who seized control of the state through bloodless or violent means wields absolute power over his people. This individual may have attained this position from his or her predecessor who was a family member or who handpicked this person as a successor. An autocrat often targets one or more segments of society as their sworn enemies, encouraging their subjects to take some punitive actions against the autocrat's real or imaginary foes.
16-20	<b>Gerontocracy:</b> While birthright, wealth, or political connections normally determine membership in the ruling class, this political system grants supreme authority to the community's eldest residents regardless of their gender or social status. Age is a relative term based upon the person's longevity for their race rather than their age measured in years. Because these individuals cannot bequeath their station to a designated heir or successor, they often rule in a just manner, relying upon their extensive life experiences to better the lives of their subjects. Nonetheless exceptions exist, especially for those who fear death and pursue every avenue to defy their own mortality.
21-25	<b>Monarchy (Absolute):</b> A group of blood relatives rules the land with ultimate authority vested in one or two persons known as the monarch. This individual's power is absolute, though the crown may vest some jurisdiction in others. In patriarchal societies, the eldest male descendent of the previous leader functions as the monarch, assuming the title of chieftain, elder, or another suitable designation. In a matriarchy, the oldest female descendent performs the same role as the state's queen, empress, or other lofty heading. The monarch's spouse, typically hailing from a neighboring royal family or a distant relative, functions solely as a consort, preventing the surviving spouse from inheriting the throne when the monarch dies. Younger siblings, living parents, and children undertake other civic and religious duties within the state, while extended family members also enjoy the trappings of nobility.
26-40	<b>Oligarchy:</b> A group of individuals determined by birthright, military might, or personal wealth oversee all matters of state and economic development. The oligarchy's views toward personal freedoms range from moderately tolerant to oppressive, with most examples skewing closer to the latter option than the former. The oligarchy's members along with their family and friends, if they choose, act with impunity while those outside the inner circle must abide by the oligarchy's edicts. On some occasions, individuals outside the elite group who are fortunate enough to amass wealth under this system may be granted membership into the oligarchy.

d100	Political System
41-80	<b>Tribal:</b> This society lacks any formal government. Instead, a familial patriarch, matriarch, or a family council usually consisting of the group's elders presides over their individual clans who may live cooperatively or competitively with other bloodlines in a shared community or as parts of smaller, rival communities dwelling close together. Military might, more than lineage, frequently determines an individual's status within the tribe.
81-00	<b>Warrior State:</b> Incorporating elements of tribalism and autocracy, the community's warriors enjoy an exalted status within society, gaining civic rights and privileges denied to average citizens. Military commanders or celebrated heroes may assume rulership over the state, though these individuals usually defer daily oversight of civic and religious matters to others.

The block mountains' treacherous topography is not conducive to large-scale agriculture or animal husbandry. Food must typically be procured elsewhere. The settlement's hunter-gatherers must make the arduous descent down the mountain to search for wild fruits, berries, and other edible plants as well as game animals. Although they predominately live in permanent residences often built into the side of the mountain or atop one of the few plateaus, many inhabitants spent at least part of their time in temporary shelters on their quest for vital resources. The GM may consult the following table to determine the people's lifestyle.

**Table 43: Lifestyle**

<06	<b>Nomadic:</b> The people live exclusively off the land and are constantly on the move, never staying in the same location for more than one night. They are exclusively hunter-gatherers. To cover more ground in a single day, most nomadic peoples ride atop domesticated animals and frequently travel with large herds of livestock. Most share common lineage with their fellow travelers.
06-25	<b>Semi-nomadic:</b> These individuals have no permanent home, though they may settle down in one location for several days, weeks, or even a few months under the right conditions. Their movements usually coincide with seasonal changes, though they rarely revisit the same exact locale. Although they are predominately hunter-gatherers, they may engage in limited agricultural activities before moving on to their next destination. These individuals typically reside in mobile, temporary shelters they erect soon after their arrival.
26-70	<b>Semi-sedentary:</b> Although they construct permanent settlements, these people divide their time among a few predetermined locations based upon the seasons. They may spend several months in one favorable spot to raise crops, fish its bountiful waters, or hunt a herd of game animals traveling along a migratory route. While they may still be classified as hunter-gatherers, they spend a roughly equal amount of their time raising domesticated livestock, growing agricultural products, and engaging in commercial activities.
>70	<b>Sedentary:</b> The residents live in the same location year-round, where they farm the land, tend to their domesticated flocks, hunt game in the surrounding wilderness, and develop commercial enterprises. Trade routes, civic engineering projects, and a reliable water source can be typically found in a sedentary society.

# Folded and Block Mountain Campaigns

Although the ominous specter of a volcanic eruption does not loom over the residents of humanoid settlements on and nearby the slopes of folded mountain ranges, the habitat is not without its dangers. Deadly avalanches are a constant threat in this environment, particularly in temperate climates that experience substantial snowfall during the long winter and undergo rapid thawing during the spring. The fickle weather is a constant menace, too. Bright sunny skies can disappear in an instant and be replaced with howling winds and ominous storm clouds, especially in the case of settlements on the mountain range's windward side. Natural hazards are not the only perils facing adventurers exploring the folded mountains in search of riches and enlightenment.

Wicked men and sinister monsters roam the land for nefarious purposes. Many of them prey upon the commercially vital mountain passes that crisscross the rugged terrain. Traveling merchants and refugees are favored targets for these depraved bandits. Raiders and giant humanoids hunting in these areas often set their sights on the isolated communities that dot the mountainside. Some thieves clandestinely steal livestock from the fields and burglarize undefended homes. Trolls and giants opt for the direct approach and simply take whatever appeals to them at the moment, including food, alcohol, money, and, in some instances, slaves.

While some may seek solitude in these mountain ranges, the discovery of gold and other precious minerals in these areas draws grizzled prospectors and desperate people to these remote locales. The friction found in fault lines and earthquakes create extremely high temperatures that vaporize rocks and stones, leaving just the gold behind. The gold deposits are forced upward. It stands to reason that block mountains, which are created by rising and shifting fault lines, contain deep veins of the valuable commodity. Humanoids are not the only creatures fascinated with gold. Dragons' legendary love affair with the metal dates back to the dawn of creation. Brutish giants and greedy monsters cannot pass up an opportunity to amass more treasure, making goldmines and any other mine a hotbed of activity for adventurers exploring block mountain ranges.

The relatively smooth summit of a block mountain can also make an excellent fortification subject to several caveats. Ideally, gaining access to the mountaintop is challenging, but not impossible. This feature allows the defenders to restock their provisions and dispatch messengers to communicate with the outside world, while in turn greatly inhibiting the abilities of an enemy force to reach the entrenched defenders without sustaining heavy casualties or encountering tremendous logistical difficulties along the way. The mountain stronghold must also afford an excellent vantage point that overlooks an area of strategic importance, such as a critical river or a mountain pass. Depending upon where their allegiances lie, adventurers may be called upon to infiltrate and dismantle this vital defensive position or repel an invading army attempting to capture it. Either way, such efforts typically involve a great deal of subterfuge and intrigue before either party sets such a massive operation into motion.

The steep ridges commonly found in either of these mountain ranges make them an ideal location for national and regional borders. Remote hostels, fortifications, and small villages built along the boundary's proverbial weak spots abound with plots and intrigue. Most are as mundane as smuggling small quantities of illicit goods past customs inspectors. A select handful are more grandiose. Plots to attack mountain strongholds, assassinate important leaders, destroy crucial infrastructure, or cause mass fatalities demand immediate intervention from local political, military, and economic authorities. Once again, adventurers may be called upon to intervene in these delicate matters and thwart the perpetrators from carrying out their deadly actions.

The GM may use the following table for plotlines when running a block or folded mountain campaign. These ideas may be used as a side quest or may form the basis for an intriguing storyline. In addition, the GM may combine these elements with the adventure settings found in the subsequent table.

**Table 44: Block and Folded Mountain Adventure Ideas**

d10	Event
1	<b>Alphorn:</b> This musical instrument carved from a single piece of white spruce and adorned with painted images of festive dancing scenes boasts a celebrated history. It has been handed down within the same family for generations. Its owners claim the horn's blare can inspire even the staunchest wallflowers to leap to their feet and dance for joy. An old legend suggests its creator used this property to compel four attacking goblins to dance. More recently, the family's flirtatious daughter used the horn to compel her handsome friend to dance with her, a development that deeply troubles her jealous secret admirer.
2	<b>Boulder:</b> A 6,000-pound roughly spherical boulder sits on the edge of a cliff overlooking a mountain pass located hundreds of feet beneath it. Chisel marks and grooves cut into the rock's base as well as the ground next to it indicates that something or someone tried to move this boulder but to no avail. In addition, someone carved a depiction of a lightning bolt and the word "Fate" onto the stone. It is impossible to tell whether one individual or multiple people performed these actions.
3	<b>Bounty Hunter:</b> The man who identifies himself solely as "Bloodhound" wears a long trench coat, a wide-brimmed hat, and khaki pants. He speaks of a reward for the capture or killing of a notorious highway robber nicknamed "The Ravishing Raven." The brunette woman is wanted for 16 thefts in this mountain range, as well as several brutal beatings. Although he normally works alone, the skilled tracker offers a portion of the reward for assistance in locating and subduing the wily bandit. 4
5	<b>Flag:</b> The wind buffets a flag depicting the image of a ram's head on a light blue field. The cloth flag hangs from a metal pole imbedded into the rock atop the summit of a nearby peak. Although the surrounding mountains tower over this shorter counterpart, the path to the top proves considerably more challenging than those encountered on the taller peaks. No one can associate the emblem with any nation or other recognizable entity. The flag presumably symbolizes an individual person or a small group, though the creature's identity and the flag's purpose remain unknown. The increased presence of rams on this mountain suggest a possible correlation between the emblem and this location.
6	<b>Oryx:</b> From sunrise to sunset, a lone oryx perches atop a precarious escarpment overlooking the terrain beneath it. The animal remains virtually motionless throughout the day as it constantly scans the ground below its perch. When the sun sets, the beast makes a daring leap back onto the mountain where it searches for food before resting for the night. Some speculate the oryx seeks a potential mate, while others believe someone compelled the animal to engage in this strange behavior for an unknown purpose.

d10	Event
7	<p><b>Rappel Line:</b> Mountaineers sometimes rappel down a sheer surface using a doubled rope wrapped around the waist that is affixed to a solid object. In this case, the fastening device appears intact, but the rope is cleanly severed, implying someone or something deliberately cut it. An indentation in the ground beneath the sliced cord confirms that something heavy fell to the ground. However, whatever plummeted to earth is no longer there.</p>
8	<p><b>Rescue Dog:</b> A stout dog covered in thick black, brown, and white fur nonchalantly strolls across the mountain. The dog weighs 200 pounds. A miniature stoppered vial hangs from a thick, leather collar strapped around its neck. The friendly beast readily approaches strangers, allowing others to detach the vial and drink from it. While most expect to imbibe refreshing mountain water, the container instead holds a sweet, licorice flavored green liqueur. Some who fully drink the vial's contents claim to see an alluring green mountain fairy who points them in the direction of an odd rock formation.</p>
9	<p><b>Sherpa:</b> A bedraggled man cloaked in damp, moldy furs aimlessly stumbles around in a fog while holding a broken piton in his bloody hand. Dirt clings to his ragged, greasy beard and hair. His face appears gaunt and emaciated. The Sherpa does not speak, but when questioned about his troubling behavior or circumstances, he quickly glances at the damaged piton and then stares back up the mountain. Otherwise, he remembers nothing about his ordeal or his past for that matter.</p>
10	<p><b>Tartan Kilt:</b> Blood covers a partially slashed wool kilt bearing a tartan pattern of blue vertical stripes and green horizontal stripes set against a gray background. The pattern bears no affiliation to any local clans of recent memory, suggesting the wearer hailed from elsewhere or the kilt predates all living memory. The kilt emits a strong smell of barley and peat, offering the only clues to its potential origins while debunking any claims of its extreme age. When brought to a tavern, some seasoned drinkers associate the smell with a rare whiskey distilled at a remote, mountainous island. The distillers are renowned for partaking in religious quests seeking ancient relics. Finding the kilt here strongly suggests the wearer may have been on such a mission.</p>

Block and folded mountains offer numerous locations for adventuring. Adventurers may delve into abandoned mines, explore mountain lodges, or watch the stars from the top of a lonely peak. When traveling through block and fold mountains as well as their immediate vicinity, the GM may consult the following table to determine a location for the adventure.

**Table 45: Folded and Block Mountain Adventuring Sites**

d10	Location
1	<p><b>Adit:</b> Although presumably abandoned, an adit still burrows into the mountainside. Heavy wooden beams and masonry reinforce the entrance and passageway delving into the stone and packed earth. Rusty tools and chunks of rock litter the floor, indicating that the miners hurriedly fled the tunnel. Although the passage abruptly comes to a dead end, a foul current of air rushes out of the mountain along with the distant sound of metal striking stone.</p>

d10	Location
2	<p><b>Beacon:</b> Soldiers who fall out of favor with their superiors typically end up manning this lonely beacon station in the shadow of the summit. The five men and women who share this thankless job have been here for at least two continuous years. Supplies are scarce, forcing the troops to fend for themselves. To the best of their knowledge, the signal fire has not been lit for hundreds of years. In fact, they have no idea who the beacon signals. They lament that this duty merely serves as punishment for transgressions, both real and imagined. Before they can finish explaining, the beacon fire spontaneously combusts. The baffled soldiers mill about in stunned silence while the sound of massive, lumbering footsteps resound in the distance.</p>
3	<p><b>Holler:</b> A narrow, sheltered valley meanders a path through the mountains. A lush pasture flourishes at the base of these tightly clustered peaks. Wild animals nervously graze on the fresh grasses while keeping a wary eye on their surroundings. The beasts are not alone in their trepidation. The humanoid dwellers along the holler's edge rarely venture into the valley. They claim a pack of aggressive, sentient wolves hunts in the holler. Some believe they serve a greater power, while others assert they are really werewolves. Rumors circulating through the nearby settlements speak of a mysterious, ramshackle keep deep inside the holler where a disgraced zoologist conducts unethical experiments and breeding practices.</p>
4	<p><b>Lodge:</b> Nestled on the edge of a plateau overlooking the mountainside, this luxurious lodge plays host to the region's most influential people. Drawn to the location by the crisp air and breathtaking vantage points, the rich and famous hobnob in style. Many attendees mix business and pleasure during these gatherings, especially in light of several recent developments. The public disclosure of closely guarded secrets by an unknown party has some of the guests on edge. The aggrieved parties are eager to unmask the culprit who callously aired their dirty laundry regardless of the price. Suspicions point in many directions, but the consensus believes the individual responsible for these heinous acts likely walks among them.</p>
5	<p><b>Pass:</b> For centuries, traders, merchants, and pilgrims have slogged through this narrow winding pass to avoid the rigors of climbing the nearly sheer vertical escarpment of the neighboring mountains. The pass is the preferred route across this perilous range, especially for vehicles. Of course, the increased traffic also makes the pass into a lucrative hunting ground for bandits looking for a quick score. A dashing, elusive thief commonly referred to as The Shadow Highwayman ranks foremost among them. The handsome rogue exhibits the demeanor of an aristocratic gentleman, yet his courteous behavior conceals his sinister intentions. Many interests offer a hefty bounty for the mysterious scoundrel who plagues the mountain pass and its travelers.</p>

**6** **Observatory:** Built atop the tallest peak, this stone structure offers an unmatched view of the night sky, allowing scholars, sages, and soothsayers alike, to chart the movements of the heavenly bodies. They use their observations to track the changing seasons, perform mathematical computations, or predict the future. The observatory is continually manned around the clock by at least five persons who are currently abuzz about an object that suddenly and inexplicably appeared in the night sky on the previous evening. They furiously debate whether it is a comet, meteor, a sign from the gods, or another cosmic anomaly, though they universally agree on one thing — it is headed toward the planet's surface at high speed.

**7** **Rockface:** At first glance, this sheer surface appears ordinary. However, mountaineers who stare at it for several minutes swear the rocks and stones resemble a kindly woman's face. Indeed, local folklore tells of a heroine's epic sacrifice on the mountain. Although she perished centuries ago, many explorers believe she still blesses noble adventurers climbing the mountain she still cherishes. Many insist she indirectly intervenes on behalf of heroes fighting against the forces of evil under her watchful eye.

**8** **Summit:** Clouds blanket the mountain's rocky summit in a perpetual haze. Even the fierce winds buffeting the peak cannot dissipate the dense fog surrounding the apex and the area around it. However, some unseen force periodically transforms the wispy tendrils of mist into the likeness of winged humanoid warriors armed with mighty swords. Mythology claims the summit conceals a stairway leading to heaven.

**9** **Trading Post:** Travelers from various corners of the world frequent this establishment tucked beneath an escarpment at the convergence of several mountain passes. In addition to exchanging goods and providing mountaineering gear, the travelers here share stories and gossip about neighboring realms and far-off lands. The business's proprietor, a gregarious fellow named Ammen Trugray, boasts about his exploits in the surrounding peaks, claiming he summited every mountain in the region. Customers dismiss his tales as the exaggerated ramblings of a braggart, yet some take stock in his stories about a hidden monastic order whose members dwell in the clouds at the top of a nearby mountain. Ammen says the monks wear robes made from water vapor and have mastered the ability to soar across the skies or plummet to earth without harm.

**10** **Waterfall:** Crisp, clear water rolls across the mountain from multiple sources before converging in a narrow strait above a sheer cliff. The water tumbles down the mountainside and into a churning cauldron of swirling currents and eddies. Visitors travel from far and wide to marvel at the spectacular waterfall. Despite attracting significant traffic, the vast majority of onlookers admire the site from afar. Only the hardiest explorers brave the treacherous currents to peek behind the shimmering cascade of water. Those who did stumbled upon a curious sight — the carved image of a devilishly handsome man surrounded by rainbows. Unfortunately, no one can identify the person depicted in the artwork nor can they explain his significance to this location.

Just as gravity pulls air molecules close to the surface, water also flows downhill and collects in low-lying areas. Water, whether in its solid or liquid state, sculpts mountains into unique shapes. It exposes magnificent rock formations to the light of day and carves out spectacular canyons that make for remarkable vistas. Water boring into bare rock and earth on the mountainside gouges out caves and cavern complexes that tunnel into the heart of the stony giant. In most cases, it is not too difficult to find ample water at the lower elevations where water runoff from melting snowfall and rainfall pour into mountain streams that in turn feed larger bodies of water in the mountains' basin. Many of the world's great rivers, including the Indus and the Ganges River, originate high in the mountains. In fact, rivers spawned from mountain water runoff account for nearly all the water found in arid and semi-arid regions.

The difficulty arises at the higher elevations, where cooler and drier conditions prevail, especially in arid and semi-arid regions. While snow blankets the summits and upper reaches of many exceptionally high peaks, the truth is that precipitation is a rare event at extreme altitudes. As previously discussed, the rain shadow effect forces warm air up the slope where it eventually transforms into clouds and then releases its excess moisture as rain. Thus, areas below that transition point receive ample quantities of rain and snow, whereas those above that point and on the opposite side of the mountain receive substantially less precipitation.

Like all other biomes, mountain settlements are commonly found in arable lands where water is abundant. In addition to meeting the water demands of its humanoid residents, the region must have sufficient water to grow crops and enough rainfall to sustain green pastures for livestock. It is impractical to settle steep mountain slopes or inhabit treacherous peaks, so the overwhelming majority of communities and important sites at the higher elevations are found on plateaus within or adjacent to mountain ranges. These flat pieces of land can encompass an area of several thousand square miles that can also contain large bodies of water including rivers and lakes. Seismic activity is predominantly responsible for creating depressions large enough to capture immense quantities of water. Lake Titicaca, which straddles the border between Bolivia and Peru, is a perfect example of this geological process.

Despite the preceding exceptions, finding large quantities of water can still be a grueling undertaking at the highest elevations, most especially when traveling in large numbers or with livestock. A lone individual or small group can find water easily enough. However, water is normally too scarce to support any meaningful population of humanoids or animals in a small, concentrated location. Engineers endeavoring to construct fortresses, temples, and monasteries high in the mountains must either erect these structures close to a natural water supply or devise some means of transporting water to the site. This may be accomplished by damming up a river farther upstream, thus diverting its flow to the desired location or even tapping into an underground aquifer somewhere beneath the settlement.

In the end, seismic forces deep beneath the earth quarry the blocks that ultimately become mountains. Water functions as the artist's chisel, turning featureless stone into something extraordinary. Earth serves as the medium, and water puts the finishing touches on its marvelous creation.

## Mountain Travel

An old adage states that every journey begins with a single step. In the mountains, an almost equally ancient aphorism snidely declares that a single wayward step can bring every journey to an abrupt end. Seasoned mountaineers are all too familiar with this harsh reality. Mountains are brutal and unforgiving hosts. Hidden dangers lurk around every bend. Unstable earth and stones can instantly collapse, hurling the unfortunate traveler headlong down the mountainside toward certain death. It takes only one slip to send even a grizzled explorer careening down an icy surface and into a frozen tomb at the slope's base. Still, the perils that adventurers cannot see are no more daunting than those staring them right in the face. Vertical rock walls, massive crevasses, and bad weather are just a few of the plainly visible foes that stand in the way of every mountain's would-be vanquishers.

If travel were not difficult enough for a lone explorer, transporting large quantities of men and goods through the mountains exponentially



compounds the logistical nightmares that the terrain imposes. No amount of provisions or equipment can overcome the myriad challenges that stand in the travelers' way. While camels can lug countless gallons of water and other supplies for a grueling slog across the scorching desert, no beast of burden can pull a wagon up a perpendicular cliff or across mounds of uneven, jagged rubble. Horses can gallop vast distances across the plains, but they cannot scale rock walls or leap across gaping chasms. The same difficulties plague armies aspiring to cross the mountains and invade the territory on the opposite side. For this very reason, mountains are naturally well suited to function as borders between rival states. However, like walls, even a mountain chain is not an insurmountable obstacle. Every barrier has a weak spot or a soft underbelly. It just takes time and patience to find it.

## Mountain Passes

Mountains soar higher into the heavens than any manmade barricade, but unlike their artificially created counterparts, they lack uniformity. Men can build structures that incorporate the existing terrain and craft a contiguous wall that stretches for thousands of miles as exemplified by the Great Wall of China. Yet it requires less effort and fewer financial resources for an enemy to destroy a wall than it takes to build one. Walls must be manned and maintained on a continuous basis to be effective. Mountains offer a substantially cheaper yet imperfect defense against neighboring nations and unwelcome intruders. They require no repairs and are much taller and more forbidding than any manmade obstacle. But mountains conform to their own designs instead of those formulated by their humanoid neighbors.

The geological forces that give rise to mountains do not take continuity into consideration. By their very nature, mountains are enormous mounds of rock and stone sculpted into varying shapes and sizes without any

forethought or explicit purpose. Like the tectonic plates that they rest upon, they do not interlock according to any logical pattern. However, mountains are rarely molded into standalone peaks surrounded by flat land. In almost all cases, hills and mountains form a ridge. This geological feature consists of a chain of adjacent hills and mountains that link together to create a continuous elevated crest stretching across a wide expanse. From an architectural perspective, the mountain chain's individual peaks function as elevated guard towers whereas the remaining portions of the ridge constitute the adjoining wall sections.

Of course, not all ridges are created equally. Some dip a considerable distance below adjacent peaks and create a gap through an otherwise intact ridge. Water plays a key role in carving out these abscesses in the mountains. Ancient rivers and drainage gullies eroded the rocks and stones that compose this isolated part of the ridge, further deepening its weak spot. Mountain explorers frequently refer to these geological gaps as saddles because they resemble the equestrian device in many respects.

The saddle's elevated front and rear represent the mountains, while the seat's nadir functions as the low point between the two hills or mountains. The saddle's sides then extend downward into the two valleys bordering the ridge. From a mathematical viewpoint, the saddle point is the lowest point on the ridge and the highest point between the two valleys. It is the only level ground encountered in the gap.

Of course, mountaineers cannot find gaps that do not exist. The following table gives the percentile chance of a gap being present within a 100-square-mile area based upon the type of mountains that the creatures encounter. A 100-square-mile area is roughly equal to an area 10 miles wide by 10 miles long. A particular area may contain more than one gap, so the GM is encouraged to continue rolling on the table until the roll results in "no gap." Presented below is the table for volcanic mountains, fold mountains, and block mountains. The volcanic mountains are further subdivided based upon the type of volcanic mountain encountered.

**Table 46: Percentile Chance of a Gap**

	Strato-volcano	Shield Volcano	Cinder Cone	Folded	Block
<b>Gap</b>	01–80	01–60	01–80	01–40	01–25
<b>No Gap</b>	81–00	61–00	81–00	41–00	26–00

A gap's presence does not automatically indicate that creatures immediately locate it. The table only indicates a gap is in the area. It is up to the characters to find it. When the GM determines a gap exists within a 100-square-mile area, he may randomly determine its distance and direction from the creatures when they first enter the area. In general, the GM rolls 1d10 for each gap to determine how many miles away it is from the creature's current location. Because the characters are presumed to be moving forward, he may roll 1d8 to determine a random direction in a 180-degree arc in front of them. A successful Moderate difficulty skill check pertaining to geography or geology helps the character precisely locate any existing gaps based upon the topography in the area. Likewise, a Moderate difficulty skill check pertaining to the character's knowledge of the region or experience traveling through mountains also determines the gap's location. The characters may also locate well-known or frequently traveled gaps by tracking the movement of creatures heading toward the gap by succeeding on a Moderate difficulty skill check pertaining to tracking other creatures or learning about the gap's existence from local residents with a successful Moderate difficulty Charisma ability check or skill check pertaining to gathering information.

Gaps that are easily accessible to men and beasts become mountain passes. These trails carve a negotiable route through the mountains and allow travel across the natural barrier to the other side. Mountain passes are a potential weakness from a military standpoint, but a boon from an economic perspective. Although these highways allow enemy armies to move columns of troops and supplies in a faster and more-efficient manner than scaling bare rock, they invite valuable commodities, necessary goods, and ingenious ideas to enter as well. Not surprisingly, states routinely build fortifications atop the saddle point of strategic mountain passes. This location grants the defenders an outstanding vantage point to conduct surveillance on their enemies as well as to monitor the activities of their allies stationed on opposing sides of the ridge. However, these defenses serve another lucrative purpose as the soldiers manning these remote passes also act as customs officials. They inspect the wares being transported across the pass for illegal goods, and also closely scrutinize travelers to prevent known criminals and potential spies from entering their lands. More importantly, they assess and collect tariffs against all commodities that move across the pass, regardless of their place of origin. Individual creatures must also pay a toll in order to use the mountain pass.

In many regards, mountain passes are the social and economic hub of humanoid activity in this environment. Naturally, the influx of exotic products from foreign lands and visitors from far-flung destinations attracts entrepreneurs from all professions to these otherwise isolated locales. Settlements frequently spring up alongside mountain passes in areas with an ample water supply and arable land. These communities offer a full complement of goods and services to passing travelers as well as the military personnel stationed at the outpost. The men and women who populate these villages and towns are generally more cosmopolitan than their backwater counterparts. Shopkeepers and merchants are more common than farmers and shepherds, so many residents came here from overcrowded cities in search of a fresh start in a less-competitive marketplace. In the sparsely populated mountains, these communities are akin to an oasis in a desert.

The following tables represent the percentile chance of encountering a settlement at or near the saddle point and at more remote locations. (Cities are not included on the table, because they are large enough to generally appear on a map of the immediate area.) The GM may consult **Table 47** whenever creatures reach the saddle point of a mountain pass.

**Table 47: Settlement on Saddle Point of a Mountain Pass**

Settlement Type	Percentage Chance of Presence
<b>Hostel<sup>a</sup></b>	01–15%
<b>Village<sup>b</sup> (fewer than 201 residents)</b>	16–40%
<b>Town<sup>b</sup> (201–5,000 residents)</b>	41–45%
<b>Fortification only</b>	46–80%
<b>No Settlement</b>	81–00%

<sup>a</sup> See the upcoming **Traveling Mountain Passes** section for information regarding hostels.

<sup>b</sup> Fortification is also present.

The GM may consult **Table 48** at the beginning of every 25-mile interval while traveling along a mountain pass. This table applies only to actively maintained mountain passes. If the characters are slated to come across a settlement at some point during the next 25 miles, the community appears at an appropriate or random location somewhere along the way. Vehicles that can cover more than 25 miles in a single day may require the GM to consult the table more than once over the course of the day, and those moving slower may roll on the table every other day instead. The GM should attempt only one roll for each 25-mile interval.

**Table 48: Settlements on Other Areas of a Mountain Pass**

Settlement Type	Percentage Chance of Presence
<b>Hostel<sup>a</sup></b>	01–05%
<b>Village<sup>b</sup> (fewer than 201 residents)</b>	06–15%
<b>Town<sup>b</sup> (201–5,000 residents)</b>	16–17%
<b>Fortification only</b>	18–30%
<b>No Settlement</b>	31–00%

<sup>a</sup> See the upcoming **Traveling Mountain Passes** section for information regarding hostels.

<sup>b</sup> Fortification is also present.

## Making and Keeping a Pass

Settlements offer the trappings of civilization and well-earned respite in an otherwise untamed wilderness, but nature is not the only entity responsible for creating mountain passes. Some highways are also born in the imagination of ambitious men and pious devotees alike. A stronghold built atop a strategically located mountain offers an unobstructed view of the surrounding territory for countless miles in every direction. This unsurpassed observation point allows the fortress's commander to maintain constant surveillance over vast expanses without any reduction in available manpower. He can also deploy his forces to respond to unwelcome trespassers encroaching on his lands.

Nature rarely acts in accordance with men's aspirations, thus political rulers and wealthy aristocrats usually take matters into their own hands and build manmade passes through the mountains. While the conventional mountain pass facilitates passage into and through the ridge, the artificial trails connecting the outside world with the fortress are designed for warfare first and commerce second. To give the defenders a tactical advantage against the castle's attackers, the path into and out of the mountain compound is typically very narrow and winding with numerous hairpins and steep inclines. This intentional design scheme prevents foes from charging headlong uphill without utterly exhausting themselves. It also leaves attackers extremely vulnerable to the hail of arrows, stones, and flaming oil that the defenders rain down upon them. In addition, it is practically impossible to haul massive siege engines up the steep, treacherous slopes without getting stuck somewhere along the way. Although the same obstacles plague the fortress' suppliers and

reinforcements, the stronghold's residents have foreknowledge and time on their sides. They can construct vehicles dexterous enough to maneuver around the tight squeezes and reach the military installation. Furthermore, they are in no particular hurry to get to their destination, so they can take the extra time necessary to navigate around the obstacles along the route.

Whereas these mountain passes are predominately built to keep invaders out, the roads leading to shrines and monasteries atop the peaks are constructed to encourage pilgrims to complete their spiritual journey to the summit. The pass's gradual slopes and the frequent prayer stations found at regular intervals along the ascent allow even the feeblest worshippers to reach their intended destination in due time. However, many of these sacred sites soar past the 5,000-foot plateau, requiring creatures that are not indigenous to the mountains to become acclimated to the high altitude or risk fatigue. Fortunately, priests and monks are equipped to handle these situations using alchemical products and magical intervention.

Although the manmade passes leading from the base of the mountain to its summit are generally much shorter than their natural counterparts, they are no less significant. Whether the locale is an isolated fortress atop a forbidding peak or a holy site overlooking a serene valley, these structures give people a reason to venture into the mountains instead of sitting at home in front of a warm fire. Nearly everyone who sets off for these distant destinations does not magically appear on a mountain pass in view of their final stop. Most have to travel far and wide to reach their desired goal. This increased traffic in turn creates a need for new trails linking communities in far-off lands with their intended target. To meet the demand for faster routes, daring adventurers explore pristine swaths of mountain wilderness in search of safer and more direct roads. Although these burgeoning highways are mostly trampled patches of earth and animal paths cleared of vegetation, they ultimately point mountain adventurers in the right direction.

The conventional pass cuts a path across the mountain's crest, but some manmade and occasionally natural passes traverse the ridge itself. These passes run parallel to or atop the ridge and are not exclusively intended to transport goods and people from one side of the mountains to the other. Instead, they link the range's mountains together. The Qhapaq Ñan, otherwise known as the Great Incan Road, is one such pass. This pass and the branches connected to it and other major arteries ran along the spine of the Andes Mountains in South America during the time of the Incan Empire. Some sections of these mountain passes reached elevations in excess of 15,000 feet, indicating they were not necessarily built to create shortcuts through the mountains. Instead, the Incans used the mountain passes to transport goods and correspondence between the capital city of Cuzco and the outlying cities, towns, and villages, including the religious center of Machu Picchu. These types of passes are predominately used by mountain kingdoms, and are generally the exception rather than the rule.

Like manmade walls and buildings, artificially created passes require routine maintenance and constant oversight. Over time, stones erode, grasses and trees reclaim beaten down stretches of well-worn earth, rocks fall off the mountain face, and wind sweeps dirt and loose stones onto the most clearly marked roads. Preserving their integrity demands long-term financial investment and commitment on the part of the roads' primary benefactors. Political entities can levy taxes and collect tariffs from travelers and citizens alike to pay for the pass's continual upkeep. Clergy members and monastic orders rely upon monetary donations and voluntary servitude from followers to keep their internal network of roadways operational.

Regardless of the type of pass, there are times when geological forces refuse to bend to humanity's whims. The typical mountain pass is an unbroken stretch of land, but there are occasions where it is necessary to literally bridge the gap by constructing a link to span a chasm or crevasse bisecting the mountain pathway. The builders' available resources and the mountain pass's economic, religious, social, and tactical importance ultimately determine the bridge's composite materials, size, and level of sophistication. Obviously, large, permanent stone bridges are predominately found on major traffic arteries. Smaller bridges crafted from wood and rope make up the majority of mountain bridges, but it is not uncommon to encounter a simple rope bridge in the most rural areas. The following table determines the type of bridge that the PCs encounter whenever they enter a section of mountain pass containing a chasm or visible crevasse.

**Table 49: Type of Bridge Encountered on Mountain Pass**

Type of Pass	Stone Bridge	Wood and Rope Bridge	Rope Bridge	No Bridge
<b>Heavily traveled pass</b>	01–60%	61–90%	91–00%	—
<b>Moderately traveled pass</b>	01–30%	31–70%	71–90%	91–00%
<b>Lightly traveled pass</b>	01–10%	11–40%	41–80%	81–00%
<b>Abandoned pass<sup>a</sup></b>	—	01–10%	11–30%	31–00%

<sup>a</sup> This represents a pass not maintained for at least one year or more regardless of its former status.

Naturally, permanent stone bridges are stable and easy to cross. Those constructed from wood and rope are a far cry from their mortared counterparts. It takes a successful Hard Intelligence ability check or skill check pertaining to engineering to confirm that a wood and rope bridge is structurally sound. A defective bridge has a 1% chance of collapsing for every 5 pounds of weight on the bridge. This check is made once every minute. Creatures standing on or walking across the bridge at the time of its collapse plummet to the ground and take falling damage unless they leap onto solid ground or grab hold of a solid object such as an outcropping or an affixed strand of rope. Creatures attempting to scramble to safety must succeed on a Moderate difficulty Dexterity-based saving throw. Those attempting to grab hold of the adjacent rock wall must succeed on an Arduous Strength ability check or skill check pertaining to climbing. Those attempting to grab hold of and hang onto a section of rope must succeed on an Arduous Strength ability check. The character must be within arm's reach of the wall or the rope; otherwise, the attempt automatically fails. It takes a successful Easy Dexterity ability check to cross a rope bridge. If the bridge is not structurally sound, the check's difficulty increases to Moderate difficulty. It is not unusual for powerful mountain kingdoms to recoup their financial expenditures and protect their critical infrastructure by stationing troops at the bridge to defend it from saboteurs and to collect tolls.

When it is impossible to go over or around a mountain even with a network of bridges, the only remaining alternative is to go through it. Needless to say, tunneling into the heart of a mountain is a dangerous and expensive business. Even with modern tools and equipment, it took workers five years to build the Eisenhower-Johnson Memorial Tunnel in Colorado. Engineers in a fantasy world may not have internal combustion engines and mechanical drills, but they have one advantage on their side that current technology lacks — the power of magic. Spells and magic items affecting earth and stone can excavate expansive tunnels in a fraction of the time it takes laborers to chisel through tons of packed earth and solid stone by hand. In addition, some humanoid races tame monsters that can bore through dirt and rocks with ease, leaving tunnels in their wake.

Tunnels cut into soft ground such as dirt and earth are easier to excavate than rock tunnels. Soft ground tunnels lack the structural integrity of rock tunnels. Therefore, the builders must contemporaneously construct tunnel shields to prevent the granular, earthen walls from collapsing under the stress. Tunnel shields are typically fabricated from wooden beams and boards that must eventually be repaired or replaced by trained experts. Rock tunnels require little or no buttressing, eliminating the need for regular maintenance. On the downside, the process of burrowing through stone and removing it is significantly more laborious and time consuming than creating an absciss out of loose materials. The logistical difficulties and excessive costs involved in constructing a mountain tunnel solely for the purpose of facilitating personal and even commercial traffic makes them extremely rare indeed. Yet, as in the case of some bridges, permanent garrisons and tolls are not an uncommon sight on one or both sides of the tunnel.

## Traveling Mountain Passes

The tasks of rooting out weeds, replacing damaged stones, and clearing debris are minor annoyances when compared with the arduous task of safeguarding mountain passes against murderous intruders. Regardless of whether the route is natural or manmade, the men and beasts who prey on mountain travelers do not recognize passes as safe havens. Wild animals and unintelligent beasts cannot differentiate a mountain pass from an ordinary tract of ground in a conceptual sense, but the most cunning predators take note that men and livestock travel along a particular route more often than not. Opportunists such as wolves and cougars regularly stalk mountain passes for suitable prey. They prefer to ambush their victims from a position that grants them sufficient cover, such as from a rocky outcropping, rather than attack their foes on open ground.

Sentient monsters such as trolls and hill giants can easily spot mountain passes. These oafish brutes are at least smart enough to know that a road or path generally leads to a humanoid settlement teeming with fresh food and drink or, better still, an active mineshaft bristling with gold, precious gemstones, and valuable metals. The giants are too big and clumsy to pursue travelers to their lairs without being noticed. Instead, they use the straightforward approach and simply follow the pass to wherever it leads and deal with any resistance they encounter in the only way they know how — by bashing it into submission. On these occasions, alarmed officials and citizens alike often call upon the aid of adventurers to rid the pass of these malevolent and troublesome humanoids.

Giants and beasts are not the only menaces plaguing mountain passes. Men and women living on the fringes of society ply their nefarious trade on these highways in the clouds. In most cases, they relieve unwary passing travelers and merchants of their worldly possessions. Psychologically unbalanced criminals are capable of much worse atrocities than highway robbery. Fortunately, only the most naïve explorers are oblivious to this persistent threat. Seasoned mountaineers always prepare for this likely contingency. Amateur mountain climbers, thrill-seekers, adventurers, and entrepreneurs properly arm themselves for just such an occasion, or they hire trained soldiers to fight on their behalf. Temples, shrines, and political states with assets in mountainous regions also have a vested interest in keeping mountain passes safe for commercial and religious reasons.

The most influential and wealthiest entities operate hostels at strategic locations along the elevated highway. In addition to providing the basic necessities such as food, rest, and provisions to weary travelers and merchant companies, an elite handful of hostels also serve as hospitals and garrisons. Troops stationed at these isolated locations regularly patrol the mountain passes, ridding them of any dangerous wild animals, monsters, and men they encounter on their daily reconnaissance missions.

## Untraveled Roads

Lightly encumbered creatures are not bound to the confines of the roads like conventional armies and wagon trains. They can stray from the comparative safety and ease of the mountain pass in search of new routes through the mountains or an adventuring locale far off the beaten path. In most environments, the trek into the unknown poses no significant logistical difficulties, but the mountains are an entirely different animal. Abandoning the highway in the grasslands or desert foregoes the convenience, security, and amenities that come with staying on the road. Deviating from well-worn mountain passes can potentially plunge the traveler into vast stretches of nearly impassable terrain, especially when attempting to cross over or through a forbidding mountain or ridge. For openers, venturing through trackless areas in the mountains may reduce the creature's speed depending upon the terrain elements found in the area. Mountain passes are generally free from the rubble, debris, and vegetation that impede adventurers' progress, causing most trackless areas to be treated as difficult terrain. To make matters worse, the bridges and tunnels that circumvent the most difficult obstacles along the passes are noticeably absent in the wilderness. The preceding impediments can reduce an explorer's speed to a virtual crawl, especially during his ascent up the treacherous slopes. Yet there are times when an adventurer cannot take the easy way out and must venture down untraveled roads on his quest for fame and fortune.

## Modes of Travel

Mountains can only be conquered and not tamed. To defeat a mountain, the explorer must strategize as if he were setting out on a military campaign. He must plan his route, secure his provisions, and prepare for any possible contingency he may face along the way. The means of getting to his destination and transporting needed supplies are key parts of this decision. If the explorer intends to exclusively stick to mountain passes, he can ride atop a mount, sit in a vehicle, or walk the distance on his own two feet. When he wanders off the highway, his options become much more limited. Wagons and carriages cannot negotiate the rough, uneven terrain without constantly breaking down. Conventional mounts such as horses and camels are also better suited for well-worn trails than scaling steep rock faces and cantering through rubble. Still, some animals can physically exert themselves at high altitudes and travel for long distances without stopping for water and in some cases food. Foremost among these specialized pack and riding animals is the llama.

## Llamas

Perhaps no animal is better adapted for life in the mountains than the llama. In fact, the ungulate has more red blood cells per unit volume of blood than any other mammal, an adaptation that keeps the animal oxygenated at extremely high altitudes. At first glance, the shaggy animal appears to be a strange-looking species of sheep, but a more thorough examination reveals the odd truth that the llama is a member of the Camelidae family, which also includes the desert-dwelling camel. Although it lacks its relative's very recognizable hump, the llama shares the camel's characteristic ability to journey for miles without stopping for water, a trait that proves extremely advantageous at higher elevations where food and water can be very scarce. Llamas are surefooted and can traverse narrow surfaces without cause for concern. Still, like most other pack animals, they are poor climbers; thus, llamas cannot scale steep slopes and cliffs.

On average, llamas stand 6 feet tall (4 feet tall at the shoulder) and weigh 250 pounds. They lack the size and strength to serve as a mount for any creature other than a small humanoid. The typical llama can haul a maximum load of 100 pounds, although doing so heavily encumbers and annoys the animal. The domesticated animal is a docile and willing travel companion up to a certain limit. Once the llama reaches its boiling point, such as when it is overexerted or overburdened, the animal displays the same foul temperament found among camels. It refuses to cooperate with its master's instructions and literally pouts in dramatic fashion until it gets its way. Its handler must succeed on a Moderate difficulty Charisma ability check or skill check pertaining to animal handling to keep the animal's anger in check whenever it hauls any weight greater than 50 pounds. The handler must make this check every hour while the llama is encumbered in this manner. On a failed check, the llama sits down and refuses to move for 1 hour, regardless of what the handler does to motivate it. While it is theoretically possible for a gnome or other adult humanoid of extremely slight stature to ride a llama, the animal does not relish the role and expresses its displeasure at every available opportunity. On the other hand, llamas can be trained to pull carts and wagons individually or as part of a team. It is not unusual to see caravans of llamas lugging vehicles and goods across the crests of dizzying mountain ridges to far-flung destinations.

Nevertheless, the llamas' ability to thrive at high altitudes is enough in most cases to overcome its limited carrying capacity, inability to support a rider, and marginal climbing skills. The llama is the most important domesticated animal in mountain settlements above 10,000 feet in altitude. In addition to serving as a pack animal, the llama provides residents with a renewable source of wool and milk. Humanoids also raise llamas for their meat as well as their skin, which is transformed into leather.

## Yaks

This muscular, long-haired bovid thrives in cold, mountainous terrain. On average, these large, powerfully built animals stand 6 feet tall at the shoulder, weigh 1,000 pounds, and measure 8 feet in length. A pair of upright horns protrudes from the sides of the creature's massive head.



Yaks are closely related to bison, though they have larger lungs and hearts than their grasslands-dwelling relatives. The preceding adaptation coupled with their thick coat of shaggy hair make them ideally suited for life in their frigid, low-oxygen environment. However, the same features that allow them to tolerate arctic and high-altitude conditions work against them in gentler climes. Yaks have significantly fewer sweat glands than other mammals, making them very susceptible to heat exhaustion and heat stroke. The massive, hairy bovinds retreat into the cooler mountainous regions whenever the temperatures reach 60° F.

The domesticated yak's raw strength and low center of gravity allow the muscular animal to perform many important functions within mountainous settlements. It can till fields, carry a rider, pull a cart, or serve as a pack animal. Despite their versatility, yaks do not fare as well as llamas over long distances. They are finicky beasts that eat only fresh grass, a commodity that can be in very short supply in mountainous regions. Yaks must also frequently stop for water. Unless there are known supplies of grass and water along the way, using these mighty beasts as pack animals or as a means of transport can be a very dicey proposition. Because of the preceding limitations, yaks are best used as a method of short-distance travel at extremely high elevations. In a nutshell, the bovinds are good sprinters, but poor marathoners.

## Horses, Donkeys and Mules

Unlike llamas and yaks, horses, donkeys, and mules are not indigenous to mountainous regions. At elevations of fewer than 5,000 feet, the sturdy and nimble animals fare well journeying across the gentle, rolling hills and mountain passes that stand in the peaks' ominous shadows. However,

the animals struggle in the thin air they encounter at higher altitudes. Horses, donkeys, and mules are not inherently acclimated to the low-oxygen environment they face at elevations of greater than 5,000 feet. Unless their owner allows them several weeks to adapt to life at high altitudes, the animals quickly tire under the grueling conditions and must return to a lower elevation to alleviate their altitude fatigue.

For this reason, these animals rarely venture above this dizzying height. Of course, the tradeoff is that these beasts of burden can bear a rider in most cases and haul significantly more weight than the comparably sized, but physically weaker llama. Yaks compare favorably to horses, donkeys, and mules in terms of their ability to bear a rider and carry staggering amounts of weight, but these shaggy bovinds cannot tolerate mild temperatures without quickly overheating. Horses are bigger and faster than donkeys and mules. They can bear one or even two small riders in some cases, so they are the preferred mounts for humans and humanoids of medium stature. Donkeys and mules are slower and have less carrying capacity than a horse. However, they are more surefooted than their larger relative, making them better pack animals in rugged, mountainous terrain. Horses, donkeys, and mules must eat and drink at regular intervals. Because of these food requirements, riders must remain in close proximity to known sources of food and water throughout the journey. This restriction forces the owner to remain on the mountain passes unless the animal's master has knowledge of green pastures and running streams somewhere off the beaten path.

## Dogs

No domesticated dog breed has the strength and size to support a full-grown man atop his back, though some are large enough to be mounted by small humanoids, particularly halflings and gnomes. Since these canines entered into their special relationship with humanoids, mountain dwellers developed several breeds tailor made for the brutal weather conditions found in the higher elevations. The prototypical mountain dog weighs between 100 and 250 pounds and has a thick coat of white, brown, or mixed-colored fur. The St. Bernard may be the breed most commonly associated with the mountains, but other imposing canines such as mastiffs and shepherd dogs are also loosely classified as mountain dogs.

Dogs are fiercely loyal and very responsive to training. Most help their humanoid masters herd livestock grazing in mountain pastures, but these squat, muscular animals can also pull wagons along mountain passes or drag sleds through the snow. Dogs are better jumpers than llamas, yaks, and horses; thus, it is not unusual to use them as pack animals on ventures off the beaten track across extremely treacherous terrain. A select handful of highly intelligent breeds serve as search-and-rescue dogs to aid lost, stranded and injured explorers. The St. Bernard is the most iconic and famous of these animals, but they are not the only breed that exhibits this behavior. If the breed is indigenous to mountainous areas, it is appropriate to grant it acclimatization to high altitudes.

## Exotic Mounts

Some bold explorers forego traditional mounts and trend toward the wild side. Some untamed animal and monstrous mountain denizens make outstanding mounts, at least in theory. Tempering their surly dispositions and conditioning them to follow instructions is much easier said than done. The beast's master must first succeed on an Arduous Charisma ability check or a Hard skill check pertaining to animal handling or raising to domesticate the feral creature before he can train it to respond to his commands. When he accomplishes this task, the animal or monster can serve as a guard, a pack animal, or a mount.

Mountain goats are a popular choice because of their stout builds, fearsome horns, and excellent jumping ability. The agile beasts can navigate tight corners and perilous cliffs as well as leap over narrow chasms and crevasses. Other mountain dwellers such as deer and moose also make exceptional mounts for this terrain. Smaller humanoid races including gnomes and halflings prefer fast and nimble deer mounts, whereas taller humanoids such as humans and elves generally opt for the sturdy moose.

Fortunately, herbivores that cannot be tamed pose only a passing danger to those that aspire to bend them to their will. Carnivorous predators such

as bears, cougars, and wolves tend to be less forgiving. Few civilized humanoid races dare attempt to break these animals. However, it is not unheard of for goblinoids, orcs, giants, and other warmongering humanoid races to give it a try. Handling these potentially aggressive, wild animals is not for the faint of heart. One wrong move or misinterpreted gesture on the trainer's part can spell the difference between gaining a formidable ally or feeling the sting of the enraged animal's sharp claws and teeth.

## Walking

Although mounts save a considerable amount of energy and time while traveling on mountain passes, they are far less practical on the steep inclines and rough, uneven surfaces prevalent at higher elevations. In addition to being unable to negotiate the rugged terrain, finding suitable food and water for a mount can be an adventure unto itself. For this reason, many adventurers heading into the untamed wilderness corral their mounts in a safe location and complete the rest of their journey by foot. Walking is usually slower and definitely more physically exerting than riding, but it also grants the explorer greater freedom to traverse wherever he wants on his own timetable, rather than being forced to accommodate the mount's needs and limitations.

Shoes are an important consideration for any mountain climber. Shoes or boots require proper insulation and durability to walk across loose rocks, jagged stones, snow, and other obstacles that stand in the traveler's way. Crampons are an integral component of any climber's gear. While crampons aid a character's ability to climb difficult surfaces, they are worn over the adventurer's shoes. Therefore, they are not a substitute for adequate footwear. Other specialized pieces of footwear such as hobnailed boots and mukluks may also aid travelers trekking over and across the mountains.

## Skiing

Snow and ice are a common sight on most mountains, especially in the higher elevations. In most instances, this frozen precipitation impedes movement, but some ingenious humanoid use this slick surface to their advantage. At some point in human history, a clever inventor came up with the idea of using a long, thin wooden board tethered to each foot to slide down the mountain. The devices became known as skis. Skis allow the wearer to slide downhill on snowy or icy surfaces at normal speed on a gentle slope. A character can ski faster on a steeper slope, but it is very easy for the character to lose control and fall. For the purposes of determining overland movement, a character who succeeds on a Moderate Dexterity ability check or a skill check pertaining to maintaining one's balance can increase his normal speed by one-quarter of the mountain's slope, provided there are no intervening obstacles in his path, and he is skiing on snow. If he attempts to ski through snow-covered areas containing trees, undergrowth, and other obstacles, the check's difficulty increases to Hard or even Arduous. Creatures cannot ski down slopes in excess of 60 degrees or ski uphill. Skiing over an icy surface increases the difficulty of the check by one category, i.e. Moderate becomes Hard. The check must be made once every 10 minutes. This check represents the character skiing at a comfortable and controlled rate of descent. A failed check does not allow the character to increase his speed by one-quarter of the mountain's slope and the creature takes an appropriate amount of falling damage. If the creature is skiing near a dangerous natural hazard such as a cliff or rock wall, the GM may increase the difficulty as appropriate.

## Expeditions

Supplies and stamina go a long way toward conquering a mountain, but there are times where it takes more than food, water, and moxie to ascend to the figurative top of the world. Sometimes, expert guidance is needed to find the most accessible path to the summit while also avoiding the unseen dangers lurking around the bend. Fortunately, an elite handful of men and women are willing to risk their own wellbeing to help others on their perilous ascent up or around the mountain. Their clients typically refer to them as guides, and to no one's surprise, their services do not come for free. The monetary cost depends upon the climb's technical difficulty and the other dangers that travelers can expect to face on the mountain.

The fee naturally increases with the degree of peril. Purchasing a guide to lead climbers up a peak bristling with crevasses, rock walls, icy cliffs, and monstrous denizens is going to cost significantly more than crossing a gradual slope devoid of these obstacles.

Obviously, guides cater to the needs and expectations of the individuals who hire them. The client's demands coincide with their reason for climbing the mountain. Thrill-seekers looking to add another challenging mountain to their list of conquests want an adventure filled with breathtaking scenery and lifelong memories. The most daring of these explorers actively seek out danger, whereas others count on their guides to minimize the hazards while still giving them enough autonomy so as not to diminish their bragging rights. On the other hand, people climbing the mountain for pragmatic purposes want the guide to lead them on the route that best balances their concerns for speed and safety. They have no interest in panoramic views and unique rock formations. In their minds, the mountain is merely an unnecessary barrier that stands in the way of their ultimate goal. The faster they get over, through, or around it, the better.

At a minimum, the typical guide charges each person a base cost roughly equal to a night's stay at a decent inn for every 1,000 feet of elevation. This price does not include any additional fees for setting up mountaineering gear and equipment such as a simple rope traverse, belay system, or a rappel system. As a general rule of thumb, guides charge clients one-quarter of the equipment's base cost as the labor charge and rental fee for their mountaineering gear. Fortunately for any unlucky client, rescuing a fallen climber is included in the preceding price. Conversely, contending with the mountain's humanoid, wild, and monstrous denizens usually is not part of the guide's duties. His clients must fend for themselves against unexpected visitors unless they agree to pay their guide a nonrefundable charge before they head into the mountains. The fee varies depending upon the amount of activity in the region. The typical guide is an expert mountaineer first and foremost. However, the vast majority of mountain guides have at least some training with the bow or blade. Although they are primarily experts by trade, they also have some adventurer in them as well. Many are barbarians, druids, and rangers as well as mountaineers.

## Mountain Hazards

In many cultures, mountains are the domains of the gods. In Greek mythology, the mighty Zeus and his fellow deities watched over the affairs of mortals from their lofty home atop Mount Olympus. Men associate the heavens with divinity, and the common man's most readily available means of reaching into the skies and walking among immortals is to climb to the top of the tallest peak. Yet ascending into the realm of the gods is not a task for the fainthearted. The mountains do not welcome visitors with open arms. They instead dissuade trespassers at every turn. One ill-fated step can hurtle a nascent adventurer into the jaws of a lethal crevasse or over a treacherous cliff to certain death. Sheer vertical surfaces covered in ice can thwart the most experienced climbers. At the highest elevations, ferocious winds, frigid temperatures, and the lack of breathable air literally stop explorers in their tracks. If the environmental hazards were not daunting enough, the handful of native denizens that dwell in the higher elevations — including the proverbial “death zone” — do not take kindly to uninvited guests.

Mountains are not an environment in the traditional sense. Although their shape, height, and surrounding topography affect the temperature, windspeeds, and visibility atop the mountain, conditions at the lower elevations are more akin to those found in adjacent low-lying areas. For example, a mountain within the borders of a temperate forest shares much of the same flora and fauna as its neighboring biome. Thus, hazards typically encountered in a forest are also found on the mountain's lower elevations.

## Overview

This sourcebook organizes the mountains' major hazards into four categories. The first category — *terrestrial hazards* — presents rules and information to adjudicate the effects of non-weather related natural dangers. These include volcanic eruptions, earthquakes, avalanches, rockfalls, crevasses, and oxygen deprivation. The second category — *plants* —

describes the dangers caused by the native flora, particularly those with toxic properties. The third category — *mountain inhabitants* — discusses the hazards posed by the hardy creatures that call this terrain home. The final category — *weather* — discusses the environment's most fearsome weather events such as high winds, frigid temperatures, and storms as well as touching upon lesser-recognized dangers such as sunburn and snow blindness. This section also provides guidance for calculating the temperature and windspeeds encountered in mountainous regions.

## Terrestrial Hazards

On the surface, the planet's crust appears to be a contiguous structure magically welded together into a seamless topography. Looks can be very deceiving. In reality, the planet's surface is actually composed of numerous separate land masses commonly referred to as tectonic plates. These tectonic plates do not rest upon a rigid foundation. Instead, they bob and float atop an extremely hot, viscous fluid that slowly moves them in varying directions. In many respects, these tectonic plates are somewhat akin to the pieces of a jigsaw puzzle with one notable exception — they do not neatly fit together. The irresistible forces deep beneath the surface constantly smash neighboring tectonic plates into one another, forcing each of the plates to jockey for supremacy. These violent collisions ultimately give birth to mountains.

Nature does not have the luxury of ensuring that neighboring tectonic plates properly line up with one another. In many cases, mountains rest atop a very imperfect fit. Intense pressure deep below the surface forces magma and noxious gases to seep through the cracks and crevices in the earth's crust. These "holes" allow magma, ash, and other materials to escape their confinement beneath the ground and to roil to the surface in the form of a volcanic eruption, which in turn adds more material and debris to the volcano. The Pacific Ring of Fire, a chain of volcanic mountains that includes the Andes Mountains in South America, the Cascades in the western United States and Canada, and stretches across the Pacific Ocean to Russia, Japan, the Philippines, and Indonesia is the prime, real-world example of this geological process. In addition, the bonds' inherent weakness makes mountainous regions especially susceptible to earthquakes as evidenced by the recent earthquakes that devastated the tiny mountainous country of Nepal. Volcanoes and earthquakes are the most-powerful terrestrial forces to shake the mountains, but they are not the only terrestrial hazards that face adventurers trekking into the mountains.

Avalanches and crevasses represent more localized dangers. Without warning, a blanket of unstable snow, rocks, or other debris can be jarred loose and sent hurtling down the mountainside much like a massive, unstoppable wave crashing ashore. The avalanche sweeps away everything in its path, and buries all objects and creatures beneath gigantic mounds of its composite material. On the other hand, crevasses are unstable sections of rock or ice that lack any firm support beneath them. An errant step onto one of these natural deadfall traps can drop the unfortunate victims hundreds and sometimes thousands of feet into a narrow crevice or other hard surface.

Mountain explorers may encounter the preceding dangers at any elevation, but the danger posed by oxygen deprivation does not become apparent until the 5,000-foot plateau. At this point, the air is noticeably thinner, requiring most humanoids to slowly acclimate their bodies over the course of several weeks to this environment. As the explorer soars higher into the heavens, the amount of breathable air significantly lessens. Acclimated creatures and even those indigenous to the mountains can rarely survive for extended periods of time at altitudes of 15,000 feet or more without alchemical or magical assistance. Altitudes of 26,000 feet or more are referred to as the "death zone" because of the extremely cold temperatures, fierce winds, and the almost complete absence of air. Only the most experienced and best-equipped adventurers dare brave the conditions in this inhospitable realm.

## Avalanche (Terrestrial)

**Detection:** Easy Wisdom ability check or skill check pertaining to audio or visual perception at range of 1 mile; obvious at range of one-half mile or less

**Identification:** Moderate Intelligence ability check or skill check pertaining to moving through wilderness or nature identifies areas more susceptible to avalanches (see below)

**Avoidance:** Hard Dexterity-based saving throw partially reduces effects

**Escape:** Fleeing the area

**Dimensions:** Large-scale

**Effects:** Deadly

**Damage Type:** Cold, bludgeoning

**Condition:** Pinned, restrained

**Complication:** Creature buried beneath 2d10 feet of snow and ice; buried creature may suffocate

**Cure/Remedy:** A successful Hard Strength check digs the creature out of the ice and snow

Mountain explorers fear avalanches more than any other natural disaster. Avalanches frequently strike without warning, giving those in their paths almost no opportunity to escape the rumbling mound of snow heading in their direction. Avalanches typically occur on slopes between 30 degrees and 45 degrees. Snow and ice generally slough down the sides of slopes greater than 45 degrees, while slopes less than 30 degrees are not steep enough to allow sliding snow to gain enough momentum to accumulate more snow and speed down the mountain. However, this is the general rule of thumb rather than an absolute law. The terrain in a particular location may be conducive to avalanches despite the fact that the slope's angle does not conform to the preceding parameters. Terrain conducive to an avalanche can be detected ahead of time, though a successful check does not predict an exact time or guarantee that an avalanche is going to occur. It only determines that an avalanche is possible in the region.

In simplest terms, an avalanche occurs when the load of the snowpack exceeds its strength. The load is the snowpack's weight. Therefore, one of two things must happen to create an avalanche — either the snowpack's weight increases, or the snowpack's strength decreases. The former takes place when the area experiences additional precipitation in the form of snowfall or rain. If the area is susceptible to avalanches, there is a 2% chance per inch of snowfall of setting off an avalanche. This check is made every hour during the storm. Rain represents a dual threat. In addition to adding weight onto the snow pack, the warmer water seeps through the snowpack's upper layers and destabilizes the snowpack's base, thus weakening its strength. While the leeward side of a mountain rarely receives precipitation, rain can be especially problematic on the windward side of the mountain during spring, summer, and autumn. If the area is susceptible to avalanches, there is a 3% chance per one-tenth of an inch of rainfall to set off an avalanche.

Whereas snowfall and rain are sure signs an avalanche may occur, events that weaken the snowpack's strength are nearly impossible to see and predict. A powerful tremor is almost certain to cause an avalanche. Sadly, forecasting future earthquakes is as speculative as predicting a spontaneous avalanche. Weather events other than precipitation can also cause an avalanche, but these effects are less dramatic and take more time to weaken the snowpack or increase its load than a storm. The ideal conditions for preventing an avalanche are daytime temperatures just above the freezing point, and nighttime temperatures that dip back below the refreezing point. This gradual melting and refreezing cycle strengthens the snowpack's bonds by solidifying the structure into a singular mass. Persistently cold or rapidly fluctuating temperatures weaken the snowpack's strength. When temperatures constantly remain below freezing, the snow and ice is looser and more granular. Winds can easily pick up these grains and sweep them into an area that promotes the creation of a weak snow structure. In addition, temperature gradients between the snowpack and the ambient air also weaken the snowpack structure through moisture loss. Unusually warm temperatures duplicate the effects of rainfall. The upper layers of snow melt and seep into the snowpack's base, weakening the structure. Under less than ideal weather conditions, there is a 5% chance of an avalanche in the affected area. This check is made once per day.

Nature is not the only party guilty of triggering avalanches. Creatures can also deliberately or unwittingly start a wave of snow and ice barreling down the mountainside. Just like snow and rain, creatures moving across a snowpack add to its load. Whenever creatures move through an area

susceptible to an avalanche, there is a 1% chance per creature of triggering an avalanche. This check is made every hour. In addition, this check is also modified by the size of the largest creature in the group. Small creatures halve the chance of an avalanche, while large creatures double, triple, or even quadruple the chances of an avalanche based upon their size. The preceding modifiers can reduce the creatures' chances of starting an avalanche below 0%. In this case, it is impossible for them to trigger an avalanche. If the creatures are intentionally trying to trigger an avalanche, their chances of starting an avalanche are doubled.

## Earthquakes (Terrestrial)

**Detection:** Obvious

**Identification:** Hard Intelligence ability check or skill check pertaining to geography identifies areas more susceptible to earthquakes (see below)

**Avoidance:** Hard Dexterity-based saving throw completely or partially reduces effects (see below)

**Escape:** Fleeing the area

**Dimensions:** Localized (see below)

**Effects:** Lethal

**Damage Type:** Bludgeoning, falling

**Condition:** Confused, pinned, prone, restrained

**Complication:** Creature may be trapped beneath rubble of collapsed structure; trapped creature can suffocate; creature may fall into fissure in the earth

**Cure/Remedy:** A successful Arduous Strength ability check digs the creature out of the debris

Like most features of the natural world, man frequently takes the stability of solid ground for granted, but at any given time nature can literally shake this belief to its very foundations. As previously discussed, the planet's surface is not fixed or immobile. It is composed of tectonic plates. The space between adjoining tectonic plates is known as a fault or a fault line. Of course, faults are created by the same geological processes that gave rise to mountains, thus many fault lines run parallel to mountainous regions. (The San Andreas Fault, perhaps the world's best-known fault, carves a path alongside several mountain ranges in California.) The tectonic plates' coexistence is anything but harmonious. The competing land masses are constantly subjected to the tremendous pressure exerted by the tectonic plates surrounding them. When a portion of one or more tectonic plates can no longer withstand the pressure, they shift, resulting in an earthquake. In addition, some earthquake activity may be attributable to a hotspot, a volcanic region where the earth's mantle is inexplicably hotter than the surrounding mantle. Earthquakes in these regions typically occur in conjunction with volcanic activity. However, these types of earthquakes are the exceptions rather than the rule.

Earthquakes are among nature's most powerful forces, but they pose no real danger to someone standing out in the open unless they are literally standing atop the fault line. In this case, the creature may avoid falling into the fault with a successful Hard Dexterity-based saving throw. Otherwise, the tremor simply knocks him to the ground and disorients him for a few minutes afterward. However, an earthquake in a mountainous region with heavy snow cover or large quantities of loose debris may trigger an avalanche. The chance of setting off an avalanche is equal to the amount of damage dealt by the earthquake to structures in the immediate vicinity of the area vulnerable to an avalanche. If the earthquake deals 100 or more points of damage, an avalanche always occurs.

In areas where seismic activity is relatively common, i.e. in close proximity to an active fault, there is a 2% daily chance of experiencing a localized tremor that affects all areas within 1d10 miles of the epicenter. There is a 1% chance that this tremor expands into a cataclysmic earthquake that affects all areas within 3d6 x 10 miles of the epicenter. In areas where seismic activity is rare, the chances of encountering an earthquake drop to a meager 1% per year.

Settlements are extremely vulnerable to an earthquake's devastating effects. The violent shaking can easily damage poorly constructed buildings or extremely tall structures. The earthquake deals Lethal damage to all structures adjacent to the epicenter and within the first 20% band of the affected area. (For instance, in the case of a tremor affecting

a 1-mile radius, the epicenter would include one-fifth of a mile area surrounding the epicenter.) The damage decreases by one category for every 20% increment thereafter. Therefore, in the preceding example, a building a half mile from the epicenter would sustain Dangerous damage, while a structure on the outskirts of the affected area would take Nuisance damage. A creature inside a structure when it collapses must succeed on a Hard Dexterity saving throw to partially reduce the effects. On a failed saving throw, the creature becomes trapped beneath the rubble and debris and must escape.

Many mountain natives believe earthquakes are caused by miners delving too deeply into the earth and rousing the anger of a patron deity, or adventurers awakening some ancient evil from its slumber. Dwarves shoulder the burden for much of this blame. Their propensity for seeking out precious stones and metals buried within the mountain's core leads many to conclude that their actions caused this calamity.

## Hidden Crevasse (Terrestrial)

**Detection:** Obvious or Hard Wisdom ability check/skill check pertaining to visual perception or Moderate skill check pertaining to moving through wilderness or getting along in the wild (see below)

**Identification:** Hard Intelligence ability check or skill check pertaining to geology, geography, or nature identifies areas more susceptible to crevasses (see below)

**Avoidance:** Hard Dexterity-based saving throw completely avoids hazard

**Escape:** Hard Strength ability check or Moderate skill check pertaining to climbing if there is a surface to climb out of the crevasse

**Dimensions:** Small-scale

**Effects:** Dangerous

**Damage Type:** Cold, falling

**Condition:** Pinned, restrained

**Complication:** Tight space restricts ability to climb out of crevasse; prolonged exposure to cold deals additional cold damage every hour

**Cure/Remedy:** Escape

Glaciers are imperfect creations. They may appear sturdy and uniform to the naked eye but looks can be deceiving. Whenever this mobile block of compacted ice and snow flows over a rough, uneven surface, it creates one of the polar explorer's most visually breathtaking and dangerous foes — the crevasse. Crevasses are encountered only in the ice sheet at the highest elevations. In general, for every 1,000 feet traveled across mountainous ice sheets, there is a 1% chance of stumbling across a visible or hidden crevasse (50% chance for each type).

A crevasse is a rift in the snow or ice, a deep crack with vertical walls narrowing steadily as it descends. As the thick sheet of ice moves across the frequently rocky and undulating earth, cracks develop in the brittle ice sheet. These cracks reach a depth of 3d6 x 10 feet (provided that the ice sheet is actually that thick), while the width can vary from a few inches to 60 feet. The crevasse's belly takes on a very rich beautiful blue color because the tremendous weight presses the air out of the ice. In most cases, the crevasse is easily visible, thus allowing the character to circumvent it if possible, or to take precautionary measures such as setting up a rope system or other climbing device to avoid falling into the crevasse. A plunge into the crevasse's belly is no different than any other fall in terms of damage.

Those fortunate enough to survive the fall must then devise a means of escape. Some crevasses narrow significantly as they descend, much like the sides of a funnel. A creature reaching the bottom becomes wedged against the sides. Others may attempt to pull the stuck character loose from the bottom of the crevasse. Once free, the character must then attempt to scale the crevasse's icy, vertical walls. This endeavor is impossible without the use of specialized equipment, provided that the cramped quarters give the explorer enough room to use this gear to set pitons and construct handholds and footholds in the ice.

The air inside most crevasses is about  $3d6 + 10$  degrees Fahrenheit colder than the surface air temperature. It is entirely possible for a person to survive a fall into a crevasse, only to become pinned and freeze to death shortly afterward. As previously discussed, if the crevasse is readily visible, the explorer can formulate a plan to avoid or safely traverse the deadly crack in the ice. Crevasses are most dangerous when they are not visible. This occurs when a snow bridge obscures the entrance. The snow cover makes it appear that the surface is unbroken and poses no danger to those crossing it. Terrain conducive to creating a hidden crevasse can be spotted ahead of time, though a successful check does not verify the presence of a hidden crevasse or pinpoint one's exact location. It merely tells the character a hidden crevasse is more likely to be found in a given region than elsewhere. Creatures who fail to detect the crevasse walk 2d6 feet past the edge before the snow bridge suddenly gives way and collapses. Those who fall into the crevasse suffer the effects previously described. Naturally, hidden crevasses can be found only in areas where snow and ice are prevalent.

## Icefall (Terrestrial)

**Detection:** Easy Wisdom ability check or skill check pertaining to visual perception notices icicles  
**Identification:** Moderate Intelligence ability check or skill check pertaining to moving through wilderness, nature, or weather identifies weather conditions conducive to producing icefall (see below)  
**Avoidance:** Moderate Dexterity-based saving throw partially reduces effects  
**Escape:** Fleeing the area; taking cover  
**Dimensions:** Small-scale  
**Effects:** Nuisance  
**Damage Type:** Cold, piercing  
**Condition:** Blinded, prone  
**Complication:** Creature struck by an icicle may be blinded; icefall may cause a climbing creature to lose its grip and fall  
**Cure/Remedy:** A successful Moderate Strength check or skill check pertaining to climbing allows the creature to maintain its grip and avoiding falling when struck by icefall

Although beautiful to behold, ice and snow are not designed as construction materials. Icicles are a particular hazard to mountain climbers. Icicles form on steep rock faces. While they are relatively stable during the cold evenings, warm temperatures and sunlight can melt the icicles and send these long, pointed spears of frozen water hurtling downward to earth. The chance of encountering falling ice is 1% for every 1° F (.55° C) that the temperature is above the freezing point. This check is made at every 50-foot interval of the climb. Weather conditions conducive to icefall can be spotted ahead of time, though a successful check does not predict an exact time or guarantee that icefall is going to occur. It only determines that icefall is possible in the area.

## Oxygen Deprivation (Terrestrial)

Gravity attracts objects to one another. Objects with enormous mass such as a planet exert tremendous gravitational pull on smaller objects, thus preventing them from escaping the larger object's gravitational bond and eventually forcing them to fall back to earth. However, gravity's strength weakens as the distance between the two objects increases. Even something as minute as an air molecule is no exception. Gravity drags air molecules closer to the surface. Because the planet's gravity weakens as one ascends farther away from the ground, more air molecules accumulate closer to the surface than in the heavens. Therefore, the air at the surface is significantly denser than the air at higher elevations. Because there are fewer air molecules at higher altitudes, there is proportionately less oxygen to breathe. Although avalanches and falls account for the majority of deaths on the world's tallest peaks, oxygen deprivation likely played a contributing factor in many of these fatalities. The lack of air takes its

toll on the climber's stamina and mental sharpness. The inability to think clearly leads to poor decisions, and lapses of judgment in an inhospitable environment that never forgives mistakes create a recipe for disaster.

Creatures do not feel the effects of oxygen deprivation until reaching an altitude of 5,000 feet (1,524 meters) above sea level. This preliminary altitude band known as high altitude ends at a dizzying height of 12,000 feet (3,657 meters). At this level, creatures experience altitude sickness, which encompasses a variety of symptoms such as headache, fatigue, and nausea.

## High Altitude (Terrestrial) (5,000 ft. to 12,000 ft.)

**Detection:** Easy Intelligence ability check or skill check pertaining to nature  
**Identification:** Easy Intelligence ability check or skill check pertaining to medicine or nature  
**Avoidance:** Easy Constitution-based saving throw completely avoids hazard (see **Escape** and **Complication** below)  
**Escape:** Descending to lower altitude; creatures indigenous to this altitude band are deemed to be acclimated to the effects of high altitude and suffer no effects; three successful Constitution-based saving throws made over a four-day period acclimates a non-indigenous creature to high altitude, but not to very high or extreme altitude (see below)  
**Dimensions:** Individual  
**Effects:** Harmful  
**Damage Type:** Constitution  
**Condition:** Fatigue, nauseated, sickened  
**Complication:** Creatures must succeed on an Easy Constitution-based saving throw every day until the creature becomes acclimated to high altitude  
**Cure/Remedy:** Until acclimated, a successful Easy Constitution-based saving throw forestalls the effects of high altitude for 24 hours

When a creature ascends above the 12,000-foot threshold, the ravages of oxygen deprivation become more apparent. The very-high altitude band begins at 12,000 feet and culminates at 19,000 feet (5,791 meters).

## Very High Altitude (Terrestrial) (12,001 ft. to 19,000 ft.)

**Detection:** Easy Intelligence ability check or skill check pertaining to nature  
**Identification:** Easy Intelligence ability check or skill check pertaining to medicine or nature  
**Avoidance:** Moderate Constitution-based saving throw completely avoids hazard (see **Escape** and **Complication** below); a creature not already acclimated to high altitude automatically fails the preceding saving throw  
**Escape:** Descending to lower altitude; creatures indigenous to this altitude band are deemed to be acclimated to the effects of very high altitude and suffer no effects; six successful saving throws made over an eight-day period acclimates a non-indigenous creature to very high altitude, but not to extreme altitude (see below)  
**Dimensions:** Individual  
**Effects:** Dangerous  
**Damage Type:** Constitution, Dexterity, Wisdom  
**Condition:** Confused, exhausted, fatigue, nauseated, sickened  
**Complication:** Creatures must succeed on a Moderate Constitution-based saving throw every day until the

creature becomes acclimated to very high altitude; on a failed saving throw at this altitude there is a 10% chance the creature develops either HACE or HAPE (determine randomly, see **Sideboxes**)

**Cure/Remedy:** Until acclimated, a successful Moderate Constitution-based saving throw forestalls the effects of very-high altitude for 24 hours; the use of supplemental oxygen from a magical or non-magical source may counter the effects of high altitude

Extreme altitude tests the limits of physiological endurance. Although creatures can eventually acclimate to life at these staggering heights for an extended period of time, permanently residing at extreme altitudes ranging from 19,000 feet (5,791 meters) to 26,000 feet (7,924 meters) is impossible. The likelihood of developing HACE or HAPE also increases substantially.

## Extreme Altitude (Terrestrial) (19,001 ft. to 26,000 ft.)

**Detection:** Easy Intelligence ability check or skill check pertaining to nature

**Identification:** Easy Intelligence ability check or skill check pertaining to medicine or nature

**Avoidance:** Hard Constitution-based saving throw completely avoids hazard (see **Escape** and **Complication** below); a creature not already acclimated to high altitude and very high altitude automatically fails the preceding saving throw

**Escape:** Descending to lower altitude; 12 successful saving throws made over a 15-day period acclimates a creature to extreme altitude (see below)

**Dimensions:** Individual

**Effects:** Deadly

**Damage Type:** Constitution, Dexterity, Strength, Wisdom

**Condition:** Confused, exhausted, fatigued, nauseated, sickened, slowed, staggered

**Complication:** Creatures must succeed on a Hard Constitution-based saving throw every day until the creature becomes acclimated to extreme altitude; on a failed saving throw at this altitude there is a 40% chance the creature develops either HACE or HAPE (determine randomly, see **Sideboxes**) and a hacking cough (see below)

**Cure/Remedy:** Until acclimated, a successful Hard Constitution-based saving throw forestalls the effects of extreme altitude for 24 hours; the use of supplemental oxygen from a magical or non-magical source may counter the effects of extreme altitude

When a creature takes any damage from extreme altitude, he develops a persistent hacking cough within 2d4 hours as the cold, arid air dries the mucus membranes of the individual's throat and lungs. The coughing spasms are frequent and impose penalties to ability checks and skill checks pertaining to any actions requiring physical exertion or performing tasks demanding concentration, fine manipulation, moving quietly, or speaking including casting spells and uttering command words. These coughing spasms are so frequent and can become so violent that they can even break ribs. Moving to a lower altitude zone relieves this cough, as does 2 hours spent in an extremely humid environment (such as *fog cloud*). The cough is not from an actual disease condition and cannot be cured by a *remove disease*.

## Death Zone (Terrestrial) (26,000+ ft. [7,924+ m])

**Detection:** Easy Intelligence ability check or skill check pertaining to nature

**Identification:** Easy Intelligence ability check or skill check pertaining to medicine or nature

**Avoidance:** Arduous Constitution-based saving throw partially reduces effects (see **Escape** and **Complication** below); a creature not already acclimated to high altitude, very high altitude, and extreme automatically fails the preceding saving throw

**Escape:** Descending to lower altitude

**Dimensions:** Individual

**Effects:** Lethal

**Damage Type:** Constitution, Dexterity, Strength, Wisdom

**Condition:** Confused, exhausted, fatigued, nauseated, sickened, slowed, staggered, unconsciousness

**Complication:** Creatures must succeed on an Arduous Constitution-based saving throw every six hours. On a failed save the creature develops either HACE or HAPE (determine randomly, see **Sideboxes**) and a hacking cough (see above)

**Cure/Remedy:** Acclimation is not possible in the death zone; the use of supplemental oxygen from a magical or non-magical source do not counter the death zone's effects, but increase the duration between Arduous Constitution-based saving throws from six hours to 12 hours.

Normal life is not possible above an altitude of 26,000 feet; there simply is not enough atmospheric pressure to allow sufficient oxygen to be inhaled by breathing creatures. Furthermore, creatures cannot acclimate to this extreme environment, making any trek into the death zone a short-term proposition even with the use of supplemental oxygen.

Creatures that do not breathe or have a natural or physiological resistance to such considerations are not affected by any of the damage, conditions, and complications. Examples of these are constructs and undead. Spells, alchemical substances, and magic items that supply oxygen or do not require the owner to breathe also eliminate the harmful effects wrought by high altitudes, except for the death zone. Spells that access extraplanar spaces such as *rope trick* can also be used to provide temporary respite from altitude effects. The extradimensional spaces created by a *bag of holding* or a *portable hole* do not provide this protection, as they merely draw their air reserve from the atmosphere outside when they are opened. Ultimately the GM should make a judgment about whether any particular spell or item provides protection against the oxygen deprived environment.

## High-Altitude Cerebral Edema (HACE)

**Detection:** Moderate Intelligence ability check or skill check pertaining to nature

**Identification:** Moderate Intelligence ability check or skill check pertaining to medicine or nature

**Avoidance:** Arduous Constitution-based saving throw completely avoids hazard (see **Escape** and **Complication** below); a creature not already acclimated to high altitude and very high altitude automatically fails the preceding saving throw

**Escape:** Descending to an altitude lower than 15,000 feet

**Dimensions:** Individual

**Effects:** Deadly

**Damage Type:** Dexterity, Intelligence

**Condition:** Confused, dazed, distracted, nauseated, unconsciousness

**Complication:** HACE deals additional damage each day until the creature descends to a lower altitude; creatures

suffering from HACE become disoriented for 1 minute every 1d6 minutes

**Cure/Remedy:** Descending to an altitude lower than 15,000 feet

HACE is not a disease in the conventional sense and, therefore, cannot be cured by *remove disease*. As the body responds to oxygen deprivation by increasing blood flow to the brain, fluid accumulates around the brain, creating swelling in the tissues and increased intracranial pressure that can even result in herniation of the cerebellum through the foramen magnum into the spinal canal.

Those suffering from HACE become nauseated. Intense headaches prevent the character from using any skills or abilities that require concentration, including spellcasting. If the creature lapses into unconsciousness, he falls into a coma and dies 1d4 days later unless the HACE is alleviated. Characters afflicted by HACE continue to suffer the preceding effects until they descend to an altitude below 15,000 feet. Although a descent to this altitude may alleviate HACE's effects, the character may still suffer from the effects of high altitude or very high altitude.

## High-Altitude Pulmonary Edema (HAPE)

**Detection:** Moderate Intelligence ability check or skill check pertaining to nature

**Identification:** Moderate Intelligence ability check or skill check pertaining to medicine or nature

**Avoidance:** Arduous Constitution-based saving throw completely avoids hazard (see **Escape** and **Complication** below); a creature not already acclimated to high altitude and very high altitude automatically fails the preceding saving throw

**Escape:** Descending to an altitude lower than 15,000 feet

**Dimensions:** Individual

**Effects:** Lethal

**Damage Type:** Constitution, Strength

**Condition:** Exhausted, fatigued, unconsciousness

**Complication:** HAPE deals additional damage each day until the creature descends to a lower altitude; creatures suffering from HAPE become disoriented for 1 minute every 1d6 minutes

**Cure/Remedy:** Descending to an altitude lowering than 15,000 feet

Like its closely related cousin, HAPE is not a traditional disease that can be cured by *remove disease*. Rather HAPE is a medical condition where fluid accumulates in the lungs as the heart rate increases, pushing more blood through the lungs in an attempt to increase oxygen extraction from inhaled air. This increased blood flow causes fluid accumulation and swelling in the tissues of the lungs and inhibits the creature's ability to breathe.

HAPE quickly saps the character's strength and endurance. If the creature lapses into unconsciousness for any reason, the creature immediately dies instead. Characters afflicted by HAPE continue to suffer the preceding effects until they descend to an altitude below 15,000 feet. Although a descent to this altitude may alleviate HAPE's effects, the character may still suffer the effects from high altitude and very high altitude.

## Rockslides (Terrestrial)

**Detection:** Easy Wisdom ability check or skill check pertaining to audio or visual perception at range of 1 mile; obvious at a range of one-half mile or less

**Identification:** Arduous Intelligence ability check or Hard skill check pertaining to geology, mining, or mountaineering identifies areas more susceptible to rockslides (see below)

**Avoidance:** Hard Dexterity-based saving throw partially reduces effects

**Escape:** Fleeing the area

**Dimensions:** Large-scale

**Effects:** Dangerous

**Damage Type:** Bludgeoning

**Condition:** Pinned, restrained

**Complication:** Creature buried beneath 2d4 inches of rocks and stones; buried creature may suffocate

**Cure/Remedy:** A successful Moderate Strength check digs the creature out of the rocks and stones

A rockslide is an avalanche made up of loose rocks and stones rather than ice and snow. Although both types of avalanches have the same effects from a game mechanics standpoint, the chances of spotting a potential rockslide and actions that trigger one are slightly different. It is impossible for an observer to notice fissures and cracks beneath the outer layers of bedrock without close examination. To determine whether a rock formation is vulnerable to a rockslide, the character must visually and physically inspect a sampling of the stones. On a successful check, he determines that the conditions necessary for a rockslide are present in the area. However, the character cannot predict when and where the rockslide may occur or even guarantee one is going to happen.

Earthquakes are responsible for the vast majority of rockslides. The trembling earth frequently creates fissures in the mountain's foundation and jars loose stones from their temporary resting places, sending them barreling down the slope. The chance of an earthquake triggering a rock slide is half that of triggering a snow avalanche, i.e. 1% per 2 points of damage dealt by the earthquake to structures in the immediate vicinity. While a driving rainstorm can quickly erode a snowpack, it takes considerably more time for erosion to wear down the underlying bedrock supporting the rock formation. A structurally sound rock formation has no chance of collapsing because of excessive precipitation. However, there is a 1% chance per half inch of total rainfall of triggering a rockslide in a weakened area. This check is made once per day. Another natural factor in creating rockslides is temperature changes. Water seeping through the outer rock layers freezes and then later expands when it melts, lengthening existing cracks in the rock face. This process is extremely slow and gradual. However, if the rocks have been exposed to frequent temperature changes over the course of an entire week, there is a 1% chance of a rockslide. This check is made once per week.

The greatest danger to rock faces vulnerable to an avalanche, outside of an earthquake, is humanoid activities. Mining can be exceptionally problematic. Just as an underground mine can spawn one or more sinkholes on level ground, a mine entrance carved into the base of a mountain, or worse yet into the face of an unstable mountainside, can reap devastating consequences. Mining tunnels weaken the mountain's foundation by extracting layers of supporting rocks and stones, leaving only abscesses in its wake. If the mountain is vulnerable to a rockslide, there is a 1% chance of triggering a rockslide. This check is made once per week.

## Rockfall (Terrestrial)

**Detection:** Easy Wisdom ability check or skill check pertaining to audio or visual perception at range of 1 mile; obvious at range of one-half mile or less

**Identification:** Moderate Intelligence ability check or Easy skill check pertaining to geology, mining, or mountaineering identifies areas more susceptible to rockfall (see below)

**Avoidance:** Moderate Dexterity-based saving throw completely avoids hazard

**Escape:** None

**Dimensions:** Small-scale

**Effects:** Dangerous

**Damage Type:** Bludgeoning, falling (see below)

**Condition:** None

**Complication:** A creature struck by falling debris while climbing on an affected surface may fall

**Cure/Remedy:** A successful Moderate Strength ability check or skill check pertaining to climbing allows a creature struck by rockfall to maintain its grip and not fall; a successful Arduous Strength ability check allows a falling creature to grab onto a ledge or outcropping, provided the creature

has at least one free hand and the surface is within arm's length of the falling creature

Although similar to a rockslide, a rockfall occurs when a large fragment of stone detaches from a cliff or other sheer surface and crashes to the ground beneath it, creating a layer of scree or rubble. Seasoned mountaineers recognize this trail of debris as a telltale sign that the adjacent rock walls and cliffs are the source of the rubble or scree. Therefore, whenever encounters occur in an area containing rubble or scree, at least one of the surrounding rock walls or cliffs is vulnerable to rockfall. Experienced climbers wisely avoid the potentially unstable surface, but novice explorers may press forward and attempt to scale the façade. A character climbing up a rock wall or cliff with unstable rocks and stones has a 1% chance of dislodging a rock or stone from its resting place. This check is made at every 50-foot interval of the climb. Unlike a rockslide, stones detached in this manner fall straight down rather than roll down the mountainside and spark an avalanche. At the GM's discretion, extremely large stones, 2 feet in diameter and larger, deal significantly more damage.

## Volcano (Terrestrial)

Although not all mountains are volcanoes, all volcanoes are either hills or mountains. The most common type of volcano encountered in mountainous areas is the stratovolcano. This tall, conical mountain is literally composed of layers of material ejected from previous eruptions. Ash and cinders spewed forth from an earlier explosion settles upon the mountain's slope and is then covered by magma that eventually cools and hardens into a jagged, rocky surface. Fortunately, stratovolcanoes may remain dormant for hundreds and possibly thousands of years before they unleash their fury again. However, some stratovolcanoes are in a constant state of volcanic activity. Although it would seem wise for humanoids to completely avoid the smoldering giants altogether, the fertile volcanic soil supports a wide range of agricultural activities. Many farmers insist this rich earth supports some of the world's finest vineyards, orchards, and vegetables, particularly tomatoes. In their minds, the increased crop yield and product superiority justify the risk of earning a living so close to the possible cause of their demise. Most eruptions are mild and sporadic. Normally, the volcano belches out a tall, thin column of ash accompanied by gentle lava flow a few times per year. There is a 3% chance per day of experiencing such an eruption. However, there is a 5% chance that the minor eruption expands into a major eruption complete with pyroclastic flows and lava bombs.

Classic real examples of active stratovolcanoes include Mount Etna in Sicily and Galeras in Columbia. Stratovolcanoes are typically part of a chain, such as those found in the Pacific Northwest and Indonesia, but there are some noteworthy exceptions. Mount Kilimanjaro, the tallest mountain in Africa, is a dormant stratovolcano that is not part of a mountain range and towers over everything around it in the comparatively flat savanna surrounding the imposing peak.

An erupting volcano generates several different hazards, which are presented separately. These dangers include lava, lava bombs, and pyroclastic flows.

### Lava

**Detection:** Easy Wisdom ability check or skill check pertaining to visual perception at range of 10 miles; obvious at a range of fewer than five miles

**Identification:** Easy Intelligence ability check or skill check pertaining to geology or nature

**Avoidance:** Moderate Dexterity-based saving throw partially reduces effects (see below)

**Escape:** Fleeing the area

**Dimensions:** Large-scale

**Effects:** Dangerous

**Damage Type:** Fire

**Condition:** None

**Complication:** Lava deals additional damage each round while immersed in the superheated material and for 1d3 rounds thereafter

**Cure/Remedy:** None

Lava is a volcano's most recognizable and iconic danger, even though its lethality pales in comparison to that of other volcanic hazards. These viscous molten rocks roll down the volcano's slope, incinerating anything in their path. When the material finally cools, it once again solidifies, returning to its original state. In most cases, lava moves at a leisurely pace of roughly 30 feet per round, making it possible to avoid the oncoming liquid by either outrunning it or taking refuge atop a safe location above the lava flow.

### Lava Bomb (Terrestrial)

**Detection:** Hard Wisdom ability check or skill check pertaining to visual perception at range of a quarter mile; Moderate Wisdom ability check or skill check pertaining to visual perception at ranges less than one-quarter of a mile

**Identification:** Easy Intelligence ability check or skill check pertaining to geology or nature

**Avoidance:** Moderate Dexterity-based saving throw completely avoids hazard

**Escape:** None

**Dimensions:** Small-scale

**Effects:** Deadly

**Damage Type:** Bludgeoning, fire

**Condition:** Pinned, restrained

**Complication:** Creature struck by larger lava bombs may be pinned beneath it; trapped creature may suffocate

**Cure/Remedy:** Hard Strength ability check frees trapped creature buried beneath lava bomb

The slow-moving lava usually poses a less-significant danger to mountain adventurers than lava bombs. Despite the name, lava bombs are actually igneous rocks that can be hurled 1d20 miles in a random direction away from the volcano. Normal lava bombs range in size from that of a goblet to a wagon wheel. Larger lava bombs may be as large as a small cottage. The bombs do not literally explode, but the resulting impact roughly duplicates the effects of a planned detonation.

### Pyroclastic Flow (Terrestrial)

**Detection:** Easy Wisdom ability check or skill check pertaining to visual perception at range of 1 mile; obvious at range of one-half mile or less

**Identification:** Moderate Intelligence ability check or skill check pertaining to geology or nature

**Avoidance:** Arduous Constitution-based saving throw partially reduces effects (see below)

**Escape:** Fleeing the area

**Dimensions:** Large-scale

**Effects:** Lethal

**Damage Type:** Fire, poison

**Condition:** Pinned, poisoned, restrained

**Complication:** The pyroclastic flow's toxic gases deal additional damage every minute until the creature escapes the area; creature buried beneath 1d6 feet of ash; buried creature may suffocate

**Cure/Remedy:** Moderate Strength ability check digs the creature out of the ash.

The destruction wrought by lava and lava bombs pales in comparison to the apocalyptic effects of a pyroclastic flow. When a volcano partially collapses, it ejects a superheated cloud of ash that rolls down the mountainside at breakneck speed and incinerates everything in its path. To make matters worse, poisonous gases accompany this wave of heat and debris. Pyroclastic flows as well as countless tons of ash wiped out the ancient Roman towns of Pompeii and Herculaneum nearly 2,000 years ago during a particularly violent eruption of the still-active stratovolcano Mount Vesuvius.

# Plants

Mountainous regions are not renowned for their flora, but some plant species found in low-lying areas are resilient enough to endure life at high altitudes as well. Trees and woody shrubs dominate many mountain slopes, along with an array of flowers, mosses, and vines. Plants do not breathe in the conventional sense, so the lack of air at high altitudes plays a lesser role in deterring their growth at extreme elevations. Instead, the bone-chilling temperatures and the accompanying snowfall, drier air, and wind are the main factors inhibiting plant growth as the mountain ascends into the heavens.

## Poison Oak and Poison Ivy (Poison)

**Detection:** Hard Intelligence ability check or Moderate skill check pertaining to botany, nature, or moving through wilderness

**Identification:** Hard Intelligence ability check or Moderate skill check pertaining to botany or nature

**Avoidance:** Moderate Constitution-based saving throw completely avoids hazard

**Escape:** Removing or washing items that came into contact with poison ivy prevents future exposure to the poison

**Dimensions:** Individual

**Effects:** Nuisance

**Damage Type:** Constitution (if inhaled), poison

**Condition:** Distracted, poisoned

**Complication:** Poison deals additional damage each day until cured

**Cure/Remedy:** Successful Moderate Constitution-based saving throw immediately after taking damage

While they are not members of the same family, these two plants share the same unique trait. Whenever their leaves or stems are injured, they excrete a toxic concoction of oils known as urushiol. Poison oak is a woody vine or shrub that inhabits coniferous forests and is typically found at a maximum elevation of 4,000 feet. Poison ivy grows in almost any environment and some varieties can survive at a maximum elevation of 8,000 feet. In many respects, these plants are the chameleons of the plant kingdom. They can grow as a small vine along the ground, as a shrub, or as a climbing vine, making it difficult to positively identify poison oak or poison ivy. Even if the character can identify the plant, it is sometimes impossible to see it tangled amid the neighboring grasses and wrapped around tree trunks.

The chemical known as urushiol is an irritant. Injury occurs whenever a creature brushes against any part of the plant. The oil clings to skin, fur, and clothing, though it only irritates skin. Removing and thoroughly washing any clothing or fur that comes in contact with the poison ivy or poison oak plant eliminates any possibility of future contamination. If these items are not removed in a timely manner, transferring the urushiol to the skin becomes a foregone conclusion. Urushiol causes a severe rash and blisters to develop on the skin. In spite of its ugly appearance, the rash and blisters cannot be spread from person to person unless the second individual comes in direct contact with any urushiol residue still present on the first person.

## Mountain Laurel and Rhododendron (Poison)

**Detection:** Easy Intelligence ability check or skill check pertaining to botany, nature, or moving through wilderness

**Identification:** Easy Intelligence ability check or skill check pertaining to botany or nature; Hard Wisdom ability check or skill check pertaining to taste to identify “mad honey” (see below)

**Avoidance:** Moderate Constitution-based saving throw completely avoids hazard

**Escape:** None

**Dimensions:** Individual

**Effects:** Harmful

**Damage Type:** Constitution, poison

**Condition:** Nauseated

**Complication:** Poison deals additional damage each hour until cured

**Cure/Remedy:** Successful Moderate Constitution-based saving throw immediately after taking damage

This evergreen shrub ranges from 10 feet to 30 feet high, and it is predominately found growing on rocky slopes and in the fertile soil of forested mountainous regions. In its ideal habitat, this plant can even take the form of a tree with brittle wood that indigenous humanoids sometimes harvest to create decorative wicker baskets as well as crude armor and shields. Mountain laurel is best known for its colorful and uniquely shaped blossoms. Its white petals with pink markings open into a 10-pointed, inverted goblet, making the mountain laurel a popular addition within the outdoor gardens of kings and nobles alike. Its leaves and stems have a leathery texture with dark green upper surfaces atop a yellowish-green undercarriage. Despite its showy and benign appearance, the entire plant (leaves, flowers, stem, and roots) is poisonous.

Fortunately, mountain laurel poses no direct danger to humanoids unless they ingest some part of the plant. However, unlike many toxic species, the plant's leaves and stems have a neutral rather than the typical bitter taste that normally deters hungry herbivores from devouring the deadly meal. Domesticated animals such as sheep and goats along with wild animals such as deer are particularly susceptible to falling into the mountain laurel's lethal trap. Grayanotoxin is the chemical culprit responsible for the plant's deadly cocktail. Mountain laurel is a member of the heath family and shares its venomous properties with the rhododendron, another very similar member of this family. The two plants share their mountainous environment. Like the mountain laurel, domesticated animals such as the horse are far more likely to eat the rhododendron's toxic leaves and stems than a curious humanoid.

Humanoids can fall prey to mountain laurel and rhododendron in an indirect, yet rather sinister manner. Honeybees find it hard to resist the plants' large, colorful flowers. They collect their nectar and bring it back to their hive where it is later converted into honey. The toxin has no effect on the insects, but humanoids and other animals with an affinity for the bees' homespun delicacy can become deathly ill from consuming what many mountain residents refer to as “mad honey.” The so-called “mad honey” has a bitter taste that may dissuade further consumption of the toxic concoction.

## Wolf's Bane (Poison)

**Detection:** Moderate Intelligence ability check or Easy skill check pertaining to botany, nature, or moving through wilderness

**Identification:** Moderate Intelligence ability check or Easy skill check pertaining to botany or nature

**Avoidance:** Moderate Constitution-based saving throw completely avoids hazard

**Escape:** None

**Dimensions:** Individual

**Effects:** Dangerous

**Damage Type:** Constitution, poison

**Condition:** Paralyzed, poisoned

**Complication:** Poison deals additional damage each minute until cured

**Cure/Remedy:** Successful Hard Constitution-based saving throw immediately after taking damage

Legendary for its fabled ability to undo the curse of lycanthropy, wolf's bane, also known as monkshood, is a highly toxic flowering plant indigenous to mountainous regions. Although it is typically found in mountain meadows, the durable perennial can survive at elevations of up to 10,000 feet. As its alternate name suggests, wolf's bane is easily recognized because one of its elongated petals resembles a conical shaped hood that looks like a cloaked monk.

## Bikh

The following entries describe the modification the GM should make to the preceding listing to simulate the effects of bikh.

**Bikh.** Reduce the *Effects* to Harmful and the *Cure/Remedy* to Moderate.

The compound aconitine gives the plant's stems and leaves its toxic properties. This powerful neurotoxin affects the central nervous system, causing paralysis and lethal cardiac arrhythmias in living creatures. Wolf's bane is normally administered by tricking the victim into ingesting food or drink containing pieces of the plant's pulverized leaves and stems. Naturally, the poison's effects are stronger and more dramatic when delivered by the preceding method, but ingestion is not the only means of using wolf's bane to kill an enemy. Aconitine seeps into open wounds and even unbroken skin with relative ease. In fact, humanoids who handle the poisonous stems and leaves without protective gloves run the risk of being accidentally poisoned. (A character that does not take this precautionary step has a 10% chance of accidentally exposing himself to the poison whenever he applies, readies, or concocts the poison.) Some cultures forego deception and instead coat their weapons with a different alkaloid, pseudaconitine, which is derived from the roots of some wolf's bane species. This toxin, commonly known as bikh, is less potent than aconitine, but it is also much safer to handle. This paralytic agent is more commonly used to hunt game animals, as skilled adventurers more often than not ignore its effects.

## Mountain Inhabitants

Outsiders commonly assume that mountains are desolate mounds of bare rock and loose stones soaring into the frigid heavens. The thin air, cold temperatures, and ferocious winds that buffet the tall peaks render them into an icy wasteland. While it is true that the conditions found at the highest elevations are not conducive to life in the traditional sense, vermin, animals, and sentient beings populate the mountain's fertile and temperate lower elevations. Large beasts roam the rugged terrain feeding on the lush grasses, shrubs, and leaves found beneath the tree line on the mountainside. The resident humanoids domesticate some of these indigenous herbivores and prey on others for meat, leather, and bone. In addition to animal husbandry and hunting, farming is also a way of life in many mountain villages, especially those that take root in the fertile soil surrounding dormant volcanoes. Yet humans are not the terrain's apex predators. Powerful animal predators stalk the land, too, along with malevolent monsters furthering their wicked agendas. Naïve mountain explorers soon learn that first impressions can be deceptive as they fall victim to one of the land's gigantic or one of its tiniest, but most insidious denizens.

## Ticks (Disease)

**Detection:** Hard Wisdom ability check or skill check pertaining to visual perception detects tick before it bites

**Identification:** Easy Intelligence ability check or skill check pertaining to entomology, nature, or getting along in the wild

**Avoidance:** Moderate Wisdom ability check or skill check pertaining to feeling physical sensations allows creature to feel tick biting it; Easy Constitution-based saving throw to resist disease, if any

**Escape:** Spotting and removing tick in skin with a successful Hard Dexterity ability check or Moderate skill check pertaining to hand and eye coordination or manipulation of tools and small objects; failure injures tick and automatically spills any contagions into the wound

**Dimensions:** Individual

**Effects:** Nuisance

**Damage Type:** Piercing

**Condition:** Distracted

**Complication:** Creature bitten by tick may contract a tick-transmitted Disease (see **Tables 50** and **51** as well as the **Sidebox** below); Disease deals additional damage every day until cured; using a tool or precision instrument may grant a bonus to removing the tick

**Cure/Remedy:** Successful Easy Constitution-based saving throw immediately after taking damage

Ticks, a member of the arachnid family, lurk in the shrubs, grasses, and light woodlands, waiting to hitch a ride on a suitable host for a future blood meal. These clever parasites are often concentrated near mountain passes and trails where they are more likely to encounter a suitable host than in a remote locale. Ticks prefer warm, humid habitats and are most active during the late spring and summer months. Still, they can be found practically anywhere and are ideally suited for life in the mountains' lower elevations, provided that temperatures year-round remain mild. These insidious bloodsuckers cannot fly or jump. Instead, they use two pairs of legs to attach their bodies to a leaf or a blade of grass and use their forelegs to climb onto a victim as it passes their hiding spot. Ticks have acute senses that allow them to detect the nearby presence of a potential host and find a weak spot in the creature's skin so that it can easily burrow through the outer epidermis. Ticks hang around for the long haul. It can attach itself to a single host for days at a time until it finally sates its appetite for blood. They are silent, tiny parasites whose coloration blends well with clothing and are difficult to locate without a thorough, tactile examination.

A solitary, adult tick is no match for even a small child. The youngster can crush the arachnid with ease. Ticks are hard to spot and tricky to permanently remove. Smashing a tick kills the pest, but may leave its mouth and head buried beneath the skin, increasing the chance of contracting an infection from the creature. The following table details the daily chances of encountering a disease-carrying tick based upon the time of year. The GM can and should interject encounters with non-disease carrying ticks to increase the characters' fear and paranoia of these pests.

**Table 50: Daily Percent Chance of Encountering Disease-Carrying Tick**

Spring	Summer	Autumn	Winter
01–03%	01–05%	01–02%	01%

To come into contact with the tick, the person must brush against the tick's temporary home, and the tick must latch onto the target's clothing or its body. Ticks move relatively slowly and can spend 1d4 hours looking for an ideal feeding location on its host. This gives the character or his companions a chance to spot the hitchhiker before it has an opportunity to deal any damage. If the check succeeds, the character may kill or remove the tick without making an attack roll.

An undetected tick eventually settles on a feeding location and burrows into the skin. Because ticks stick around for a while, they secrete an anticoagulant that prevents the blood from clotting, giving the pest an uninterrupted flow of blood. Catching a tick in the act of feeding requires a delicate procedure to completely remove the hungry arachnid. Crushing the tick kills it, but its detached mouth and head remain buried beneath the skin. Other than using magical means, ticks are best removed with a steady hand and a small precision grasping tool. **Table 51** may be used to determine which disease the tick carries, and the Sidebox presents details on the diseases.

**Table 51: Disease Transmitted by Tick**

Encephalitis	Hemorrhagic Fever	Lyme Disease	Spotted Fever	Tularemia
01–35%	36–40%	41–55%	56–80%	81–00%

Presented on the next page are the effects for each of these diseases.

## Tick-transmitted Diseases

The follow entries detail the modifications the GM should make to the preceding hazards listing to simulate the effects of the following tick-transmitted diseases.

**Encephalitis:** Add Wisdom to the *Damage Type* and confused to the *Condition* listing. Increase *Effects* to Harmful.

**Hemorrhagic Fever:** Add Constitution and Wisdom to the *Damage Type* and bleed to the *Condition* listing. Increase *Effects* to Dangerous and *Cure/Remedy* to two consecutive Moderate Constitution-based saving throws.

**Lyme Disease:** Add Dexterity to the *Damage Type*. Increase *Effects* to Harmful and *Cure/Remedy* to a Moderate Constitution-based saving throw.

**Spotted Fever:** Add Constitution and Wisdom to the *Damage Type* and sickened to the *Condition* listing. Increase *Effects* to Dangerous and *Cure/Remedy* to two consecutive Moderate Constitution-based saving throws.

**Tularemia:** Add Constitution to the *Damage Type*. Increase *Effects* to Harmful and *Cure/Remedy* to a Moderate Constitution-based saving throw.

## Animals

Ungulates such as sheep and deer are the most numerous large animals in mountainous regions. These herbivores predominately dwell in the deciduous forests, coniferous forests, and grasslands below the tree line. Although these beasts are not hunters by nature, some species such as elk, moose, bison, and sheep can become aggressive when approached or threatened by humanoids. This is especially true during mating season, when lustful males fueled by torrents of testosterone literally lock horns with their rivals for the right to pass their genes onto the next generation. Just as they do with their animal adversaries, angry male ungulates lower their heads and charge headlong toward their humanoid foes. This can be especially problematic if the encounter takes place near the edge of a cliff, rock wall, or other sheer surface. Yet despite their occasionally unruly behavior, on most occasions these animals opt for flight over fight, especially when confronted by the mountains' apex predators — wolves, cougars, and bears.

Wolves are the smallest of the three predators, yet their superior numbers and tactical cohesion make up for their smaller size. Whereas cougars and bears are solitary creatures, wolves are social animals. They live and hunt as a family unit commonly referred to as a pack. In most cases, the pack consists of a mated pair and their offspring, though there are cases where unrelated wolves band together. Wolves roam across a vast hunting ground, defending their territory against trespassers from rival packs and other predators. Their preferred method of attack against large herbivores is to spur their prey to run and then chase the victim down while biting their vulnerable flanks and rear. Using these tactics, a wolf pack can kill an adult ungulate with a minimal chance of injury to the predators. They take a more direct tack against small animals and launch a frontal assault against these overmatched foes, sinking their canines into the victim's throat.

Their relationship with humanoids is checkered with mutual mistrust and suspicion. Wolves with limited or no contact with humanoids retain their inherent fear of these sentient beings. By nature, they keep their distance from their bipedal rivals and attack only when provoked, threatened, or plagued by other exigent circumstances such as extreme food stress. Yet repeated exposure to humanoid populations gradually abate the predators' instinctive reluctance to attack people. Man-eating wolves almost always target infirmed individuals and children who are generally slower, smaller, and weaker than healthy adults. The pack typically surrounds their humanoid prey and repeatedly bites their opponents' faces and heads. Once they develop a taste for humanoid flesh, the attacks escalate until outraged family members and adventurers eliminate the offending wolves.

Like most felines, the cougar, also known as the mountain lion, is a nocturnal ambush predator. The reclusive, solitary animal remains out of sight during the day, and emerges from its hiding spot only after dark in its tireless search for food. Cougars prefer areas with thick undergrowth and rocky outcroppings that grant them ample cover to sneak up and leap down upon their unsuspecting prey. The sleek, muscular cats primarily target deer and other smaller ungulates, especially humanoid livestock such as domesticated sheep and goats. In a pinch, they may attack rodents and even insects. Like wolves, cougars rarely attack people unless they experience the same behaviors or circumstances that prompt their canine counterparts to prey upon humans. In some cases, deliberately or inadvertently mimicking actions similar to those of its typical game spur the cat's predatory instinct to hunt. An attacking cougar wraps its jaws around the victim's throat and plunges its sharp teeth between the vertebrae and spinal cord to swiftly debilitate and kill its target. Humanoids who stand their ground and attempt to intimidate the shy beast with loud noises and thrown objects are more likely than not to convince the predator to find easier pickings elsewhere.

Bears, on the other hand, are opportunistic predators rather than deliberate stalkers. They possess the size and strength to bring down the biggest herbivores such as moose and elk, but they set their sights on weak, injured, and young animals over full-grown adults. In addition, they are not averse to devouring the scraps left behind by other predators or slaying rodents and other creatures considerably smaller than them. While they sport the anatomical and physiological features of carnivorous predators, these enormous mammals are actually omnivorous. In many respects, they are more akin to humanoid hunter-gatherers than active hunters. Bears devour honey, nuts, grasses, berries, and carrion with the same gusto as they consume fresh meat. However, they have an affinity for fish, particularly salmon, which is much fatter than their usual fare. Fortunately for humanoids, bears do not recognize people as prey; thus, they avoid them as best they can. Still, bears too large to climb trees and a mother bear with her cubs stand their ground and defend themselves in the face of danger. As in the case of other wild animals, bears that grow accustomed to humanoids no longer view them as a potential threat, increasing the potential for confrontation with the mammoth omnivores.

## Men and Monsters

The men and women who live off this hardscrabble land are as rugged as the terrain that they call home. The hills and mountains do not forgive poor judgment and careless errors. Those who flourish and thrive in this harsh landscape must possess an independent spirit not found in genteel folk. In many respects, the mountains themselves are no different than manmade walls. These massive barriers deter trespassers from entering and residents from escaping. In fact, the typical, sedentary humanoid resident never wanders more than a day's travel from home, so his contact with strangers and the world beyond his sheltered valley or mountain abode is extremely limited. As a result, adventurers and travelers who pass through their lands rouse suspicion and mistrust. The whole community takes a wait-and-see attitude toward newcomers. Outsiders are met with an unnerving blend of scrutiny and curiosity. In many cases, the settlement's inquisitive children are the first ones to approach unexpected visitors. They carefully analyze the person's every movement for some hint of their motivation, until something such as a shiny object or a toy breaks their concentration and captures their vivid imaginations.

Despite their generally xenophobic outlook and gruff exteriors, mountain people are folksy and genuinely friendly to those who gain their trust. Of course, gaining their trust takes time, patience, and a sincere, honest effort. Mountain residents always keep their guard up when dealing with strangers. They never let a smooth talker get the better of them without at least trying to probe their true motives, nor do they take kindly to braggarts and liars. However, there are many instances when violent outlaws, disgraced nobles, and runaway teenagers fled their pursuers and headed into this rugged terrain. Over time, they ultimately won over the affections of the community's residents who willingly risk their lives to protect the fugitive. There is an unwritten rule that mountain folk always protect one of their own from outsiders, regardless of what their fellow citizen did to warrant the attention of strangers.

Still, some renegades go it alone in this harsh landscape in order to escape the law or their personal demons. Those that choose such a

lifestyle dispense with pretenses. They either completely avoid detection or attack any creatures that cross paths with them. Naturally, they try to escape from obviously superior opposition and ambush those they consider to be inferior opponents. Self-proclaimed “lone wolves” are not as dangerous as organized groups who retreat into the mountains to ply their nefarious trades. It is not unusual for criminal organizations to take refuge in a secluded mountain hideaway to evade detection or safeguard their ill-gotten spoils. Likewise, deranged cultists and the ambitious followers of evil deities also venerate their dark masters and mistresses in mountain caves and on isolated, hard-to-reach mountaintops far from the eyes of innocent bystanders and disapproving busybodies alike. Unlike wary mountain residents, these people have no qualms about violence and abide by the philosophy of attack first and ask questions later. Despite their presence, men are not the greatest foes that mountain adventurers can encounter during their trek into the perilous peaks.

Numerous monsters including yetis, hobgoblins, and orcs also dwell in the hills and mountains, but giant humanoids are perhaps the most visible and dominant force in this environment. Trolls are the most prolific breeders and the most commonly encountered monsters in these areas. They frequently live in caves carved directly into the mountainside or in close proximity to cliffs, rock walls, and other imposing terrain features. However, these giants are not tied to one particular location and may stray several hundred miles from their crude abode in search of food. Trolls adapt well to all weather conditions, thanks in large part to their regenerative abilities. They prefer to inhabit icy and snowy mountainous regions that are not easily accessible to fire-wielding adventurers, but they are just as equally suited to life in the lower elevations and warm valleys. While they are not intelligent by conventional human standards, they are clever combatants who maximize their physiological advantages and the surrounding landscape. The wily monsters gladly fight their adversaries on the precipices of icy vertical surfaces, hidden crevasses, and steep slopes. In fact, they sometimes grapple foes and join them in a terrifying plunge down the mountain, knowing that their regenerative abilities are sure to save them from certain death.

Hill giants lead a similar lifestyle to their physically taller but weaker troll kin. The animalistic humanoids reproduce at staggering rates. They sow suffering and misery wherever they go as they roam the temperate hills looking for land able to produce enough meat and starchy vegetables to sustain their massive appetites. Explorers trekking through the hills can usually catch a whiff of a fetid, rank hill giant encampment long before they set eyes upon one of these filthy, oversized humanoids. The nomadic hill giants travel far and wide, but they never venture into warmer or colder climates unless an abundant and easily obtainable food source is in close proximity. Hill giants lay down roots for short stretches, raiding and pillaging neighboring settlements until they exhaust the area’s resources or the outraged residents pose a credible threat to the unwelcome marauders. The antagonistic monsters happily bully and butcher inferior foes, yet the self-centered brutes wildly scramble to save their precious skins when confronted by equal or superior opposition.

In comparison, the barbarous frost giants who lord over their frigid realms never back down from a fight, regardless of the odds against them. These evil humanoids preside over their icy domain from atop the windswept summits of snow-capped peaks. Other native denizens such as remorhaz, yetis, and even white dragons serve their frost giant masters as guardians for their lairs or as willing allies. Frost giants always dwell in cold mountainous regions and only descend to more temperate lower elevations to hunt game and capture humanoids that they later use as slave labor or for food. Raiding parties stray far from home until they return to their communities with their ill-gotten spoils, but by and large frost giants are sedentary beings who take up residence in snow cave complexes and abandoned ruins in remote mountain locales. There are some instances when the cunning predators ambushed mountain climbers on their quest to conquer the most challenging peaks.

While frost giants dominate glacial mountaintops, the more sophisticated cloud giants prefer milder temperatures. Unlike their preceding kin, cloud giants are equally divided between those who aid humanity and those who despise smaller humanoids. Giants falling into the former category assist nearby settlements in times of need and offer their counsel to the communities’ leaders and average citizens alike. Those who ascribe to the latter philosophy perceive their fellow humanoids as an exploitable

resource ripe for the taking, with people no different than bees producing honey for other creatures’ consumption. However, while a beekeeper lovingly tends to his colony, these cloud giants indiscriminately slay any creatures who oppose them or merely get in their way. When this occurs, only the mightiest adventurers stand any chance of repelling the evil humanoids’ incursion and saving the community.

Giants represent the greatest threat to mountaineers in terms of sheer numbers and raw power. Still, even these behemoths yield to the authority of the great dragons that reside within their heavily guarded and inaccessible strongholds. The brutish and temperamental white dragons wield authority over the coldest and loneliest mountaintops, while their cruel and twisted red dragon counterparts carve out expansive lairs within the sides of warm mountains and the stratovolcanoes that dot the landscape. They sometimes plot their machinations alongside fire giants tending the forges deep inside the fiery magma chambers. The noble and majestic silver dragons look down upon the kingdoms of men from the lofty heights of their temperate, mountain palaces, while their fanciful copper dragon brethren soar high above the grassy hills in search of mirth and adventure. Although the rewards are great, none but the bravest or the foolhardiest heroes dare tangle with these gargantuan reptiles inside their mountain strongholds.

While traveling through the mountains, the GM may use the following table to determine random encounters. To use the table, roll 1d1000 (3d10). Consult the table appropriate to the prevailing climate.

**Table 52: Random Mountains Encounters**

Creature	No. App.	Warm	Temperate	Cold
<b>Basilisk</b>	1–6	001–030	001–035	001–045
<b>Behir</b>	1–2	031–055	—	—
<b>Bear</b>	1–4	—	036–070	046–080
<b>Bugbear</b>	1–12	—	071–110	—
<b>Chimera</b>	1–12	—	111–120	—
<b>Cloud giant</b>	1–20	—	121–130	—
<b>Copper dragon</b>	1	056–060	—	—
<b>Cougar</b>	1–6	061–085	131–150	—
<b>Deer</b>	1–50	086–120	151–170	081–110
<b>Dire bear</b>	1–4	—	—	111–165
<b>Dire lion</b>	1–4	121–135	—	—
<b>Dire wolf</b>	1–8	—	171–180	166–190
<b>Dog</b>	1–6	136–160	181–200	191–215
<b>Eagle</b>	1–2	—	201–220	—
<b>Elk (Moose)</b>	1–50	—	221–250	216–250
<b>Fire giant</b>	1–30	161–180	—	—
<b>Frost giant</b>	1–12	—	—	251–290
<b>Gargoyle</b>	1–12	181–200	251–280	291–310
<b>Ghost</b>	1	201–230	281–310	311–330
<b>Ghoul</b>	1–12	231–270	311–340	331–365
<b>Giant elk</b>	1–12	—	341–370	366–390
<b>Gray ooze</b>	1	—	371–385	391–405
<b>Griffon</b>	1–10	—	386–410	—
<b>Hell hound</b>	1–12	271–300	—	—
<b>Hill giant</b>	1–30	301–365	411–450	—
<b>Ice golem</b>	1	—	—	406–420
<b>Lich</b>	1	366–375	451–460	421–440
<b>Llama<sup>a</sup></b>	1–8	376–400	461–480	441–450
<b>Manticore</b>	1–6	401–410	—	—

Creature	No. App.	Warm	Temperate	Cold
Mimic	1	411–430	481–495	451–460
Minotaur	1–4	431–470	496–510	461–470
Mummy	1–12	471–495	511–525	471–480
Ogre	1–16	—	526–560	481–520
Ogre mage	1–2	—	—	521–540
Orc	1–100	—	561–580	—
Phoenix	1	496–530	—	—
Rakshasa	1–12	531–560	581–600	541–560
Ram	1–6	561–610	601–630	561–590
Red dragon	1	611–620	—	—
Remorhaz	1	—	—	591–605
Roc	1	621–640	—	—
Shadow	1–12	641–690	631–660	606–640
Silver dragon	1	—	661–670	—
Skeleton	1–50	691–730	671–700	641–670
Specter	1–12	731–770	701–730	671–700
Sphinx	1–6	771–785	—	—
Spider	1–20	786–810	731–760	701–710
Troll	1–4	—	—	711–760
Vampire	1	811–830	761–780	761–770
Werebear	1–6	—	781–800	771–790
Werewolf	1–8	—	801–830	791–810
White dragon	1	—	—	811–820
Wight	1–12	831–870	831–860	821–835
Winter wolf	1–6	—	—	836–850
Wolf	1–12	—	861–900	851–910
Wraith	1–12	871–920	901–920	911–920
Wyvern	1–6	921–950	921–940	—
Yak <sup>b</sup>	1–8	—	941–960	921–945
Yeti	1–8	—	—	946–980
Zombie	1–50	951–000	961–000	981–000

<sup>a</sup> If the game system does not include game statistics for a llama, use those for a young or juvenile camel.

<sup>b</sup> If the game system does not include game statistics for a yak, use those for a similar bovine, such as a bison, while granting the yak some protection against cold.

## Weather

One word best summarizes mountain weather: unpredictable. Ominous gray clouds can roll over the mountaintop and transform a warm, sunny day into a dark and stormy afternoon in what seems like a literal blink of an eye. Mountain weather is notoriously temperamental for several reasons. Weather disturbances such as high winds and precipitation usually occur when warm, moist air masses collide with cooler, drier air masses. Over flat terrain, these air masses are more stable and generalized than over uneven mountainous landscape. The altitude and the land's features interact in such a way that they create their own localized weather patterns that affect small, isolated areas instead of a wide swath of ground. Therefore, while one mountain may be deluged by torrential rainfall, another peak just a couple of miles away remains bright and sunny.

Mountain explorers must be prepared for every possible contingency. In addition to contending with nature's fickle moods, adventurers must also endure the foreseeable weather conditions — bitter cold, high winds, downpours, blizzards, fog, and the incessant glare of the sun. Although not as unexpected as a sudden storm, these pervasive threats can be even more dangerous over the long haul in the mountains.

## Temperature

Extreme cold is inescapable at the highest elevations. Even for mountains located in tropical climates — such as Mount Kilimanjaro in Africa — temperatures routinely dip below the freezing point at altitudes of 15,000 feet and higher. They constantly remain below 0° F within the death zone and occasionally reach unimaginable lows approaching –100° F on the summit of Mount Everest.

As a general rule of thumb, air temperatures decrease by –1° F for every 328 feet of elevation (or –1° C for every 180 meters of elevation). To use this formula, the GM must determine the daily high and low temperatures in the surrounding low-lying areas. The GM can use tables from another source to compute the temperature in the surrounding area or real-world weather data to compute an approximate baseline temperature at a similar location and then apply it to the fantasy mountain range. Using Mount Kilimanjaro as an example, at the peak of summer, high temperatures reach 90° F and drop down to 65° F at night in the nearby town of Moshi roughly 2,800 feet above sea level. The GM may then use this weather data in lieu of the previously mentioned tables.

The following table computes the corresponding decrease in temperature based upon altitude. The GM subtracts the result from the daily high and low temperature from the corresponding baseline location at or near sea level.

**Table 53: Temperature Decrease in Degrees Fahrenheit Attributable to Altitude**

	5k ft.	10k ft.	15k ft.	20k ft.	25kft.	30k ft.
<b>01–10</b>	–2+3d4	–20+3d4	–40+3d4	–60+3d4	–80+3d6	–100+3d8
<b>11–20</b>	–4+3d4	–22+3d4	–42+3d4	–62+3d4	–82+3d6	–102+3d8
<b>21–30</b>	–6+3d4	–24+3d4	–44+3d4	–64+3d4	–84+3d6	–104+3d8
<b>31–40</b>	–8+3d4	–26+3d4	–46+3d4	–66+3d4	–86+3d6	–106+3d8
<b>41–50</b>	–10+3d4	–28+3d4	–48+3d4	–68+3d4	–88+3d6	–108+3d8
<b>51–60</b>	–12+3d4	–30+3d4	–50+3d4	–70+3d4	–90+3d6	–110+3d8
<b>61–70</b>	–14+3d4	–32+3d4	–52+3d4	–72+3d4	–92+3d6	–112+3d8
<b>71–80</b>	–16+3d4	–34+3d4	–54+3d4	–74+3d4	–94+3d6	–114+3d8
<b>81–90</b>	–18+3d4	–36+3d4	–56+3d4	–80+3d4	–96+3d6	–116+3d8
<b>91–00</b>	–20+3d4	–40+3d4	–58+3d4	–82+3d4	–98+3d6	–118+3d8

The GM may use a pro rata ratio to determine the temperature decrease for altitudes between two elevations presented in the table. Thus at 7,500 feet, the temperature decrease would be halfway between the temperature decrease at 5,000 feet and the temperature decrease at 10,000 feet. The GM uses the same percentile die roll for both altitudes, but he makes separate rolls to determine the deviation in temperature at both altitudes.

## Wind

Frigid temperatures and the lack of oxygen sap the strength and will of even the most determined mountain explorers, but neither of these hazards impedes a climber's progress more than wind. Despite the thinner air found at higher elevations, wind can literally block the path of an adventurer on his way to the elusive summit. Hurricane force winds are not unusual on mountaintops. In fact, there are recorded instances where the windspeed at a mountain observatory exceeded 200 mph, which is the equivalent of the most powerful Category 5 hurricanes ever recorded. These ferocious winds halt the traveler in his tracks, obscure visibility, severely damage unprotected skin, and intensify the effect of the bitter cold typically found near the summit.

There are several reasons why the winds are much stronger at higher elevations than in low-lying areas. Naturally, altitude plays an important role. The earth's gravitational pull and frictional drag are strongest at ground level. Gravity pulls air molecules toward the surface where they come into physical contact with landmasses. As they move across the terrain, they create friction much like a braking device slowing a moving vehicle. Gravity's strength weakens at higher altitudes, and no solid barriers inhibit the wind as it races across the skies. Without drag and friction, air travels faster.

Wind is a complex engine fueled by numerous atmospheric and geological forces. In simplest terms, wind originates from differences in air temperature and atmospheric pressure between adjacent air masses combined with the planet's rotation. Whereas reductions in air temperature can be roughly estimated using a formula tied into altitude, it is much more difficult to do the same with windspeed. For example, Mount Washington in New Hampshire is one of the windiest places on earth, with recorded windspeeds in excess of 200 mph. At a height of approximately 6,300 feet, its winds are significantly stronger than those found on mountains four times taller than it. Factors other than altitude predominantly account for the mountain's potent winds. A peak's proximity to frontal battlegrounds and the surrounding topographical features also play a significant role in ramping up the windspeeds. Unfortunately, it is impossible to create an accurate table that can apply these features to windspeed.

With these considerations in mind, the GM may use the following table as a rough gauge to decrease or increase windspeeds at different altitudes. As in the case of **Table 54**, the values that appear in this table are intended to be added to or subtracted from the baseline windspeed at a nearby location at or close to sea level.

**Table 54: Adjustment to Windspeed in MPH Based upon Altitude<sup>a</sup>**

	5k ft.	10k ft.	15k ft.	20k ft.	25kft.	30k ft.
<b>01–10</b>	–1d8	–1d4	+1d6	+3d6	+5d6	+7d8
<b>11–20</b>	–1d6	0	+1d8	+3d8	+5d8	+8d6
<b>21–30</b>	–1d4	+1d4	+2d6	+4d6	+6d6	+8d8
<b>31–40</b>	0	+1d6	+2d8	+4d8	+6d8	+9d6
<b>41–50</b>	+1d4	+1d8	+3d6	+5d6	+7d6	+9d8
<b>51–60</b>	+1d6	+2d6	+3d8	+5d8	+7d8	+10d6
<b>61–70</b>	+1d8	+2d8	+4d6	+6d6	+8d6	+10d8
<b>71–80</b>	+2d6	+3d6	+4d8	+6d8	+8d8	+11d6
<b>81–90</b>	+2d8	+3d8	+5d6	+7d6	+9d6	+11d8
<b>91–00</b>	+3d6	+4d6	+5d8	+7d8	+9d8	+12d6

<sup>a</sup> Increase the windspeed by +6d6 in the event of a storm.

In addition, the GM may halve, double or even triple these figures based upon location conditions. For instance, a mountaintop dwarfed by its neighbors may experience lower windspeeds than the tallest peak in a mountain chain along a frequent frontal barrier, as in the case of Mount Washington.

## Storms

While mountains are affected by general weather events passing through the region at large, local conditions may spawn a blinding snow squall or a violent thunderstorm with little warning. A driving rain shower or a heavy band of snow is a nuisance in most environments, but it can be a tremendous danger in mountainous areas susceptible to avalanches. Snow adds more weight to the existing snowpack, thus increasing the chances that the load becomes too heavy for the underlying snowpack to maintain its integrity. Likewise, rain increases the snowpack's load. Even worse, the water seeps into the snowpack, creating fissures and cracks that weaken its structural integrity. The first drop of rain or flake of snow prompts seasoned mountain travelers to abandon their climb and hurry toward safety somewhere outside of a potential avalanche's path.

As previously mentioned, predicting the weather in a mountainous area

is more akin to drawing straws than discerning any unassailable facts from studying the clouds, winds, and barometric pressure. As in the case of temperature and wind, the mountains are prone to experiencing the weather events that plague the surrounding area. At the GM's discretion, he may use weather tables presented in other sources to determine the current weather conditions in the area, if the surrounding environment is suitable for their use. However, the GM is encouraged to consult the table every 6 hours, instead of once per day, to simulate the local weather conditions in a mountainous region. Alternately, the GM may use the following universal table to determine the local conditions in the general area. As in the case of using the tables from the preceding sourcebooks, the GM is encouraged to consult this table once every 6 hours instead of once per day.

**Table 55: Chance of Precipitation Every 6 Hours**

Result	Spring	Summer	Autumn	Winter
<b>No Precipitation</b>	01 – 60%	01 – 50%	01 – 70%	01 – 65%
<b>Rain<sup>1</sup></b>	61 – 90%	51 – 80%	71 – 95%	66 – 90%
<b>Thunderstorm<sup>2</sup></b>	91– 00%	81 – 00%	96 – 00%	91 – 00%

<sup>1</sup> If the temperature is less than 32° F, the precipitation falls as snow.

<sup>2</sup> If the temperature is less than 32° F, the thunderstorm becomes a blizzard.

Of all the preceding weather events, thunderstorms pose the gravest danger to mountain adventurers. In addition to being most likely to trigger a devastating avalanche, the wild lightning bolts generated by the storm instantly char any unfortunate creature they strike. Mountain explorers are particularly susceptible to lightning strikes, especially at higher elevations. Without any trees, manmade structures, or other tall objects, a lone figure or a small group occupying an open area offers an enticing target for the mindless stroke of electricity. Furthermore, adequate shelter is hard to find at such altitudes. In fact, natural caves and mineshafts built into the mountainside channel electricity rather than protect against it.

## Lightning (Weather)

**Detection:** Hard Intelligence ability check or Moderate skill check pertaining to weather determines how far the lightning bolt is from current location

**Identification:** Obvious

**Avoidance:** Hard Dexterity-based saving throw partially reduces effects

**Escape:** Fleeing the area

**Dimensions:** Individual

**Effects:** Deadly

**Damage Type:** Electrical, fire, lightning

**Condition:** Stunned, unconscious

**Complication:** Electrical surge shuts down brain function and heart rhythm if the creature failed its Dexterity saving throw

**Cure/Remedy:** A successful Hard Constitution saving throw restarts the creature's normal brain and heart operations; creature attempts saving throw every minute until cured or dead

Every 30 seconds during a thunderstorm, a lightning bolt crashes to the ground 2d4–2 miles away in a random direction from the storm's center (treat a result of "0" as less than 1 mile). There is a 1% chance of lightning striking any character less than 1 mile from the bolt. This chance is reduced to 0.5% if the character finds shelter beneath a cluster of low trees sprinkled among taller trees, or curls up into a ball in a depression or other low-lying area. The chances of getting struck are doubled for creatures wearing metal armor or standing adjacent to materials that conduct electricity. The same increase applies to a character standing under a lone tree or within the entrance to a cave or mineshaft. The preceding modifiers stack with one another. A character able to find suitable shelter during the storm, such as inside of an interior room within a sturdy, non-flammable structure, effectively negates any chances of being struck by lightning.



## Fog

**Detection:** Easy Wisdom ability check or skill check pertaining to visual perception at range of 1 mile; obvious at range of one-half mile or less

**Identification:** Easy Intelligence ability check or skill check pertaining to nature or weather

**Avoidance:** None

**Escape:** Fleeing the area

**Dimensions:** Large-scale

**Effects:** Nuisance

**Damage Type:** None

**Condition:** Blinded

**Complication:** Fog obscures all vision, granting bonuses to creatures using skill checks pertaining to remaining unseen

**Cure/Remedy:** Natural or magically created strong winds may dissipate fog

When encountered at or near sea level, fog is a low-lying cloud created when the dew point — the temperature at which water vapor at constant barometric pressure condenses into liquid water at the same rate that it evaporates — is roughly equal to or slightly less than the ambient air temperature. Increases in altitude cause a rapid drop in air temperature, but a much slower decrease in the dew point. Eventually, the air temperature overtakes the dew point, which gives birth to clouds.

Numerous local environmental and geological factors contribute to cloud formation, making it impossible to create an accurate table that takes all these aspects into consideration. Still, as a general rule of thumb, fog accompanies all precipitation that occurs at elevations higher than 5,000 feet. If the GM or **Table 55** indicates that there is no precipitation at the present time, there is still a 5% chance per 5,000 feet of elevation that fog appears in the general vicinity.

## Snow Blindness/Sunburn/ Sunlight (Weather)

**Detection:** Obvious

**Identification:** Easy Intelligence ability check or skill check pertaining to nature, or weather

**Avoidance:** Easy Constitution-based saving throw; appropriate polar clothing partially reduces effects

**Escape:** Fleeing the affected area

**Dimensions:** Regional

**Effects:** Nuisance

**Damage Type:** Radiation

**Condition:** Blinded

**Complication:** None

**Cure/Remedy:** Curative skin treatments, first aid, removal from sunlight, or magical intervention

The sun's rays bring light and warmth to the world, but an invisible danger accompanies them — ultraviolet radiation. The ground absorbs some of this harmful radiation. However, the lack of shady vegetation and prolonged periods without significant cloud cover provide no respite from the sun's incessant rays. Ultraviolet radiation is particularly harmful to the body's largest organ — the skin. The damage is referred to as sunburn, and it is in fact a radiation burn rather than an injury caused by exposure to a heat source. This accounts for the fact that sunburn is just as likely to occur in subzero temperatures as it is on a balmy, tropical day. Of course, the difference between the two extremes lies in the fact that polar travelers usually wear significantly more clothing than an explorer traipsing through a sweltering desert. The same materials that protect his body from the cold also protect his skin from the sun's harmful rays.

Sunburned humanoids begin to feel its effects within 2d12 hours after exposure to the sun. The very sensitive eyes become more prone to UV damage at the poles for two reasons. Snow and ice are common features at higher elevations. Frozen water reflects a far-greater percentage of the sun's ultraviolet radiation back into the atmosphere than bare rock or earth, thus increasing the rays' intensity. Fewer ozone molecules are in the thin air at the poles to block the reflected radiation. If the character is not wearing any protective eyewear while traveling across surfaces covered by ice or snow, the creature's eyes and any exposed body parts are all sunburned on a failed saving throw. Creatures with light sensitivity suffer a penalty on their saving throw to avoid getting snow blindness.