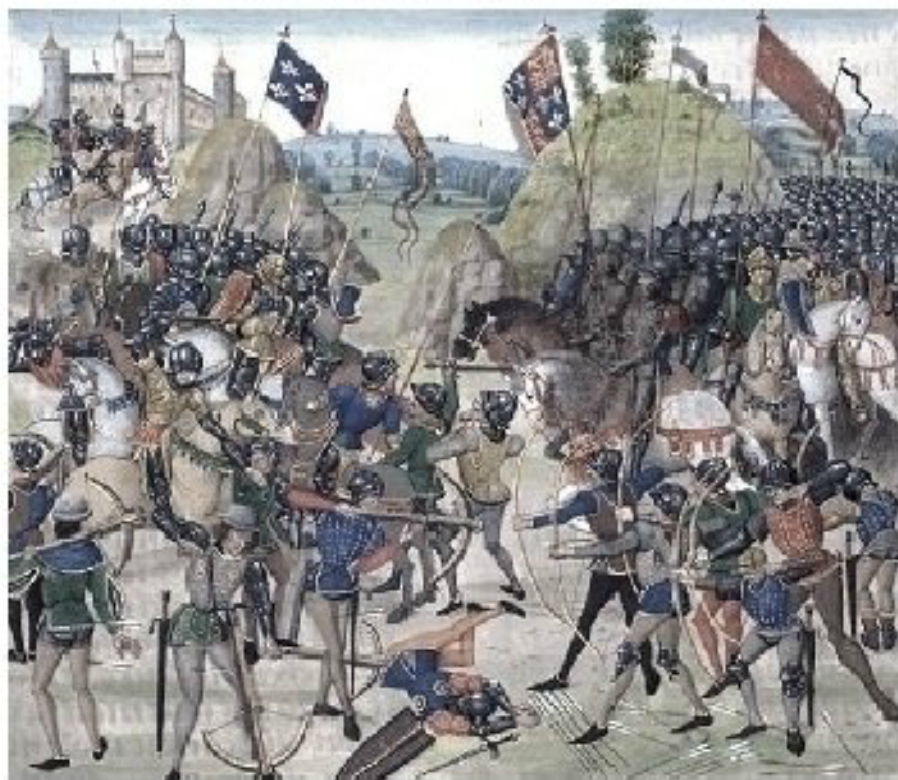


ORIGINAL EDITION DELTA

Fantasy Game Rules Supplement



BOOK OF WAR

BY DANIEL R. COLLINS

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With Special Thanks to Isabelle Garbani

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Foreword

In the beginning, there was the *Chainmail* medieval mass-combat miniatures rules. The "Fantasy Supplement" section spawned *Dungeons & Dragons*, with its so-called "Alternative Combat System" for man-to-man engagements. Of course, the D&D system exploded in popularity, becoming far more popular and well-known than the original game (in fact, synonymous with RPGs as a whole); and so later, the need to return the favor became apparent. We received offerings such as Gygax's *Swords & Spells* (based firmly on D&D, but frankly not very fun to play) and Doug Niles' *Battlesystem* (fun to play, but based on a system quite different from D&D).

I've always yearned for a mass-combat game that, on a statistical basis, faithfully replicated the results of classic D&D combat. In other words, I wanted a system that could quickly resolve combat between several hundred bandits or orcs, and know that the result was (probabilistically speaking) the same as if we'd played out individual D&D combat for the whole. I knew that none of the prior products actually fit the bill.

All of us have our careers and lives shaped by certain early experiences. To confess, nothing was so fundamental in building my own personality, my thinking-speaking-writing style, as *Dungeons & Dragons*. Similarly, most math professionals have their career arcs shaped by some fundamental problem with which they become entangled. I might go so far as to say that the path that led me to an advanced degree in mathematics & statistics started years earlier, thinking about D&D, and the ways in which representations of mass combat may or may not be compatible with that game's core assumptions.

I've found the game that I'm presenting here to be, at long last, satisfying in that regard. Three principal goals have been pursued: (1) To create a system that faithfully extrapolates standard D&D combat results on a mass scale. (2) To cultivate a game which can stand on its own as fun, entertaining, and elegant. (3) To realistically simulate actual historical medieval warfare, wherever possible. In addition, I also wanted to avoid the need for any paper record-keeping during play.

When the work was started, I expected these goals to frequently be at odds with each other, requiring many points of compromise. However, I've found that actually to not be the case, and I've been happy to find that mostly, each of these goals support and reinforce the others. Insofar as the original game shared the same goals, it made the way that much easier.

One thing that the original RPG and wargame designers did not have was the copious computing power which we have all around us now. Many statistical analyses have been done to confirm that the core simulation is sound, and billions of simulated runs of the game have been made to help balance and price the units found herein. I'm enormously grateful to find myself in a position where I feel that I can contribute something special to our tradition of "fantastic medieval wargames".

Core Rules

This section lays out the most fundamental rules regarding scale, movement, and combat. Depending on your needs, this section alone may suffice to play out battles between fairly large numbers of men and monsters in D&D.

1. Scale

The scales used for personnel, distance, and time are shown to the right. Standard infantry bases are assumed to be 3/4" (20mm) square, cavalry are 1×2" (25×50mm). For justification on this scale, see the "Design Notes" at the end of this book.

System Scale	
1 figure = 10 men	
1 inch = 20 feet	
1 turn = 30 seconds	

2. Movement

Every turn, figures can advance forward the number of inches indicated by their "Move" rating (MV; same as in D&D). For men on foot, this can be found on the adjacent table. Animals and monsters also use their standard game movement.

Gear	Move
Light	12
Medium	9
Heavy	6

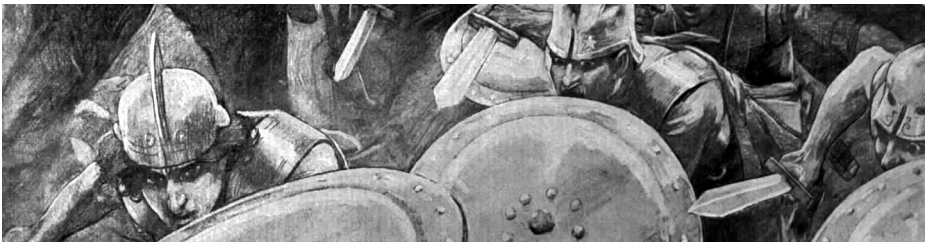
3. Combat

Each figure in contact with the enemy rolls one 6-sided die on their turn to attack. Any die at least equal to the target's "Armor Hit" value (AH; see table to the right) indicates a hit. For normal men, each hit removes one figure.

Armor	Hit
None	3
Leather	4
Chain	5
Plate	6

Monsters with multiple "Hit Dice" (HD; same as D&D) take that number of hits before having a figure eliminated (track partial damage with a spare die). Also, for every 3 HD, they receive a +1 bonus to their attack rolls.

In general, any attack modifiers from D&D can be converted to these rules by dividing by 3 and rounding down. It's most convenient if you subtract modifiers from the target number to hit, and roll the attack dice all at once; then each die greater than or equal to the adjusted target value indicates one hit.



Basic Rules

These rules present a system for playing out basic historical battles in harmony with the D&D game. Normal men only are used here; fantasy types will come later.

1. Sequence of Play

Initially, units are selected for each player. Initiative is rolled by 2d6 for each player (high roller acts first in each stage of setup; re-roll any ties). Terrain is set up on the playing surface, units are placed in formation, and then the first turn begins.

Each player's turn generally consists of 3 phases. The phases are: (1) movement of forces, (2) attacks against enemy units with missile fire or melee, and (3) morale checks for any units that lose figures during the turn. All actions in a given phase must be declared in advance, prior to any measurement or resolution. (Note: Some exceptions to this turn sequence exist: see pikemen & horse archers.)

2. Unit Selection

Before the game can be played, each side must assemble its available forces. This can be done by selecting figures on a cost-value basis, or it can be the result of larger campaign developments. Historical unit types are shown below.

Unit	Cost	MV	AH	HD	Notes
Light Infantry	4	12	4	1	Leather, spear/sword/axe
Med. Infantry	5	9	5	1	Chain, spear/sword/axe
Heavy Infantry	9	6	6	1	Plate, sword/axe
Pikemen	5	12	4	1	Leather, pike
Archers	7	12	4	1	Leather, shortbow
Longbowmen	10	12	4	1	Leather, longbow
Crossbowmen	5	12	4	1	Leather, light crossbow
Hvy Crossbows	8	9	5	1	Chain, heavy crossbow
Light Cavalry	9	24	4	2	Leather, sword
Med. Cavalry	12	18	5	2	Chain, lance/sword
Heavy Cavalry	18	12	6	2	Plate, lance/sword/axe
Horse Archers	13	24	4	2	Leather, composite bow

Key:

Cost: Expense in units of 10 gp per figure per month.

MV: Movement in inches (same as D&D).

AH: Armor Hit value (number on d6 required to hit).

HD: Hit Dice (hits-to-kill; same as D&D).

Cavalry: Mounted troops gain extra movement, hit dice, and attacks. Cavalry make double attacks per turn in open terrain (2 dice per figure; one each for men & horses). However, in any non-open terrain, move costs are doubled and attacks are at the standard 1 die per figure. (See more below on terrain.)

Pikemen: Footmen with long pikes have a special defensive advantage: when an enemy first makes contact from the front, the pikes get an immediate free attack. This attack is at double dice in a single rank, or quadruple dice in multiple ranks; with an attack bonus of +1 vs. infantry, +2 vs. cavalry. The enemy checks morale immediately, and if failed, gets no attack. Pikes lose this benefit in any non-open terrain, or when routed. Pikes can also attack enemies up to 1" away, without making direct contact.

Archers: Troops with missile weapons, of course, can launch attacks at a great distance. Missiles can be launched at one unit, up to 45 degrees to the left or right. The rate-of-fire (ROF) in the table to the right indicates how many attack dice are rolled for each figure if they are motionless. With up to a half-move they can fire at half-dice; with more than a half move, fire is prohibited. Also shown is the missile range in inches; attacks are normal up to half range, but are -1 to hit at greater distances.

Missile	ROF	Range
Sling	1	12
Shortbow	2	15
Composite bow	2	18
Longbow	2	21
Light crossbow	1	18
Heavy crossbow	1	24

Generally, archers can fire up to 3 figure ranks deep. If any unit is between the archers and their target, then "indirect fire" is required, at -1 to hit. Archers positioned on higher elevation avoid these limitations. Intervening terrain of 10' or more height (like woods, hills, and gulleys) prevents fire. Check line-of-sight if a dispute arises, but remember that miniature heights are not to ground scale.

Distance is measured from furthest attacker to nearest defender. If any other units are within 3" of the target figure, then split attack dice evenly between all such units (whether allies or enemies; attacker decides odd dice). Archers cannot fire when in melee range with the enemy, but they fight normally with secondary hand weapons (1 die per figure in melee).

Horse Archers: Bow-armed horsemen gain two key advantages. First, their arc of fire may be 180 degrees to the left-hand side. Second, if they make up to a half-move and a half-dice shot, then at the very end of the turn they may take another, additional half-move (that is, full move with fire at the midpoint; absolutely no melee allowed in this situation). Otherwise they act as other archers, or light cavalry when in melee.



3. Terrain

If the location of battle is not otherwise known, then players take turns rolling on the table to the right. Each player gets a number of rolls equal to one-quarter of the playing area in square feet. Terrain is indicated with one-sheet paper tiles (8½×11 inches) or similar representations. Pieces are placed as desired by each player, but an open area must be kept on each side for army setup.

2d6	Terrain	Move
2	Gulley	Up/2
3	Rough	1/2
4-5	Hill	Up/2
6-7	Open	1/1
8-9	Woods	1/2
10	Marsh	1/3
11	Stream	1/4
12	Pond	None

The right-hand column indicates movement rates; for example, in rough, each 1" traveled costs 2" (or 4" for cavalry). Hills and gulleys will have 10' elevation contours marked, and cost an extra 2" per step upwards. Open terrain requires no tile; streams can be represented by a 1 or 2" wide strip across the playing surface. Ponds are impassable to normal units.

4. Formation

At the beginning of the game, each player assembles their forces into units. Troops must be grouped into units of at least 3 figures, all of the same type (exception: when a player has fewer than that number of a given type). Armies are placed in order of initiative, on opposing sides of the table, as determined previously.

Generally, units should be kept in rectangular formations, with all figures facing the same direction. The width in figures across the front is called the number of "files"; the length from front-to-back is the number of "ranks". The back rank only may have a reduced number of figures. Any figures lost in combat are removed from the back rank; tip them over on the table until completion of the morale phase (see below).

The figures of one unit should be kept in base-to-base contact with each other, and separate from other allied units. A long unit can be bent along its major axis (for example: while marching in a long column), but must otherwise remain connected. Units cannot be split up or joined together. They cannot pass through other units.

Changing Formation: If a unit wishes to re-structure its formation during play, then it can do so by spending an entire turn without moving (assuming it is not in contact with the enemy). The center-front of the unit remains fixed, but otherwise the controlling player can re-position the figures with whatever ranks and files are desired.

Changing Face: A unit can face to the left, right, or rear by paying 1/2 of its move allowance (ignoring terrain effects). This turns all of the figures of the unit in place, facing the new direction. Cavalry and other long figures may be turned in 2-wide pairs, so as to maintain the same overall space on the board.

Hedgehog: A unit can pay a 1/2 move to face all of its outermost figures away from the center. In this state, every side counts as the "front", and half of the figures can shoot missiles at any given target. However, the unit cannot move again until all figures are faced in one direction. A unit needs at least 2×2 files and ranks to show this facing.

Turning (Wheeling): A unit may turn (or "wheel") by rotating 90 degrees around an outside front corner, with movement expense equal to its files; e.g., 3 figures wide pays 3" movement (a 45 degree wheel costs half as much). For an extremely long unit, this movement is technically only for the first rank; as the front row moves forward, any following ranks can advance and wheel in the same place for free.

On Contact: Figures that move in contact with the enemy must stop immediately. The respective units should be lined up in base-to-base contact squarely as much as possible. Movement sideways-scraping an enemy is never allowed. Units wishing to disengage from an enemy must almost always make an "about face" move first, and can then move normally thereafter. This includes being within 1" of a pike front.

Wrapping Movement: If a very wide unit contacts a smaller unit, then it may choose to "wrap" around the sides – that is, wheel each of its sides inward (cost as given above). After initial contact, a unit with multiple ranks may pay 1/2 move to expand 1 file and wrap on each side; or a full move to expand 3 files and wrap on each side. After combat ends, a unit can move forward and square itself for free as long as no figures are facing exactly opposite the movement; otherwise re-forming costs a 1/2 move.

Rear Attacks: Melee attacks against the rear of a unit are at +1 to hit.

5. Morale

At the end of any turn in which a unit loses figures, that unit must make a morale check. Morale is checked by rolling 2d6 and adding the unit type's HD, plus its "rate of loss" for the turn. For "rate of loss" (or R/L) take the figures remaining in the unit, divide by the number lost in the current turn, and round down. If the sum total is 10 or more then morale is good; otherwise the unit routs.

Routed Units: A routed unit should have a marker placed next to it indicating its status. It will perform an about-face, if needed, and flee away from all enemies at its full movement rate per turn (maximize distance from all enemies). At the end of a turn in which it avoids any loss, a unit may attempt another Morale check to recover from the routed status (R/L = 0). If a unit flees off the playing surface, then it is lost.

A routed unit that cannot flee is allowed to act normally, with a -1 to its attack rolls; however, if it fails another Morale check, then it is destroyed. If a routed unit runs into another friendly unit, then the second unit must also make an immediate Morale check or likewise about-face and flee (use the size of the routed unit as the number "lost").



Advanced Rules

This section builds upon the Basic Rules by including the various fantasy creatures, heroes, and wizards that are fundamental features of D&D game campaigns.

1. Conversions

One of the guiding principles of this ruleset is to make converting any creature type from D&D as simple as possible. Many of the most notable types are presented further below, with appropriate costs. Here are the primary guidelines for such conversions:

Movement Values and Hit Dice are the same as presented in the D&D rules (and recall that all large creatures gain +1 to hit per 3 HD, as per the Core Rules). Armor Hit values can be converted by looking at the table in the Core Rules section and correlating AC to equivalent leather, chain, or plate types (or alternately, see Optional Rules: Exact Armor). Ranges for missile attacks are also as per D&D.

Cavalry units are given the movement rate of the mount and an effective bonus to hit dice. For naturally aggressive mounts (those that press the attack even without a rider), add the rider and the mount's HD. For non-aggressive mounts (like horses), take the lesser of either double the rider's HD, or the sum of rider & mount's HD. Attack levels must be tracked separately for rider & mount. We assume that rider & mount have approximately the same AC (within 3 points or so).

Monsters with extra attacks gain an equivalent number of dice when attacking. Likewise, creatures that do 2 or more dice of damage (say, giants) score that number of hits with each successful attack, but this is limited by the target's HD. For example, a 2-dice attack against a 1-HD target scores just 1 hit; that is, a normal man can't be squashed more than once by a giant's melee attack.

Magic area attacks are given a damage rating for the number of hits they inflict per figure (same as D&D damage dice; for example, a *wand of fireballs* has damage 6). The defender can reduce this amount by 1d3 hits per figure affected (representing various saving throw results; note that most such attacks eliminate normal men regardless). Again, this damage is capped by the target figure's HD.

Generally, only abilities that give at least a +3 bonus in D&D are considered for conversions. Do not allow re-conversions in light of lesser powers after a game begins. Other special abilities will be noted after the specific fantasy unit types that follow.

2. Fantasy Units

Lawful Units: Basic

Unit	Cost	MV	AH	HD	Notes
Halfling, Lt. Infantry	5	12	4	1	Hide in woods
Halfling, Slingers	7	12	4	1	Hide in woods, slings (+1 to hit)
Elf, Lt. Infantry	5	12	4	1	Hide in woods
Elf, Med. Infantry	6	9	5	1	Hide in woods
Elf, Archers	9	12	4	1	Hide in woods, shortbows
Dwarf, Med. Infantry	6	9	5	1	Dodge giants
Dwarf, Hvy Crossbows	10	9	5	1	Dodge giants, heavy crossbows
Dwarf, Cranequiniars	15	12	5	2	Mule mounts, light crossbows

Hide in Woods: Halflings and elves can be secretly setup in any woods tile. The controlling player makes a note as to location, and then waits to place them at the start of a later turn. If enemies move into that location, then they are placed immediately.

Dodge Giants: Dwarves have this ability. They receive a +1 AH adjustment against attacks from big monsters such as ogres, trolls, and giants.

Lawful Units: Elite

Troops shown below are all 3rd-level serjeant-types (Swordsmen):

Unit	Cost	MV	AH	HD	Notes
Halfling, Elite Slingers	16	12	4	3	Leather, slings (+1), hide in woods
Elf, Elite Archers	30	12	5	3	Elfin chain, longbows, <i>invisibility</i>
Dwarf, Elite Infantry	40	9	6	3	Dwarven plate, axes, dodge giants
Men, Elite Cavalry	90	12	6	6	Heavy horse, plate, lance/sword, 2 attacks (1d6+1 each)

Invisibility: Elves with the *invisibility* spell function as hiding in woods (see above), but the hidden location can be anywhere (excluding the enemy setup zone).



Chaotic Units: Basic

Unit	Cost	MV	AH	HD	Notes
Goblin, Lt. Infantry	3	9	4	1	Light-weakness
Goblin, Archers	6	9	4	1	Light-weakness, shortbows
Goblin, Wolf Riders	10	12	4	3	Light-weakness, 2 attacks (1d6)
Orc, Lt. Infantry	3	12	4	1	Light-weakness
Orc, Med. Infantry	4	9	5	1	Light-weakness
Orc, Archers	6	12	4	1	Light-weakness, shortbows
Gnoll, Med. Infantry	8	9	5	2	(No modifiers)
Gnoll, Longbowmen	14	9	5	2	Longbows

Light Weakness: Orcs and goblins suffer a -1 penalty to morale checks when fighting in full daylight. (In effect at all times unless the Optional Rule: Weather is used.)

Chaotic Units: Elite

Figures below are still at 1:10 scale, and thus represent a whole band of bugbears, ogres, trolls, etc. Powerful individual monsters are dealt with under "Heroes".

Unit	Cost	MV	AH	HD	Notes
Bugbears	12	9	5	3	(No modifiers)
Ogres	18	9	5	4	Great strength
Trolls	75	12	5	6	Regenerate, fearless, 2 attacks
Giants (Hill)	55	12	5	8	Throw stones, damage 2

Great Strength: Ogres score 1½ points of damage per hit; add 50% to any hits and round down (only against targets with more than 1 HD, of course).

Regenerate: Trolls remove hits at a rate of 1 per figure engaged in combat, accounted during their own morale phase. Fire or acid hits prevent regeneration.

Throw Stones: Giants can hurl large rocks as a standard missile attack: range 20", rate-of-fire 1, damage 2 per attack.



3. Heroes

The term "Hero" refers to any special, high-level creature represented by an individual figure on the tabletop. This can include a fighting-man warlord, a fully-grown dragon, an advanced giant-type, and so forth. Creatures should have at least 10 HD to appear as a hero figure at this scale, and characters are assumed to have several bonuses from magic, weapons, and abilities.

Figures: A special identifying figure should be used for each hero. This figure may act either solo or embedded in a larger, normal unit (man-types only; large monsters cannot be embedded within a normal unit).

Movement: Heroes use their standard D&D move scores (in inches). When acting solo, they have free facing and are not charged with wheeling, about-face, etc. Otherwise, they should match the speed of the unit in which they are embedded.

Armor: Use the table in the Core Rules to find the hero's AH value; characters with negative ACs are given AH 7. In addition, heroes embedded in a larger unit are effectively immune to non-hero attacks (both melee and missile); acting solo, heroes can be meleed by only 1 normal figure at +1 to hit (due to rear attacks from being surrounded), or missile attacks as usual. Finally, some creatures will be unhittable due to the need for magic weapons (such as elementals, lycanthropes, undead, etc.)

Hits: Compute a hero's HD rating by taking their D&D Hit Dice and dividing by 10 (rounding down); usually this results in just 1 HD. (More precisely, you can divide hit points by the average of 10 hit dice, e.g., 35 for six-sided dice.) Also note that heroes will never check morale.

Attacks: For high-level heroes, the most salient single factor in mass combat is simply their attack rate per round. (At this level, one almost always hits any normal creature automatically, and does at least one full HD damage; therefore, factors such as armor and attack level become irrelevant.) Consider the character's D&D attack rate and see the adjacent table; the result is the number the hero needs to roll on a 6-sided die to score one figure hit. This ignores target AH.

Atks/Rnd	To-Hit
1	5
2	3
3+	1

Magic: Heroes caught in a magic area attack may take 1 hit. They get a saving throw of one die; if the result equals or exceeds half the damage rating (round down), then the hero does not take the hit.

Entourage: The individual hero takes up only a small fraction of the space indicated by their miniature figure. Therefore, they may include an attached "entourage" of the same basic type, i.e., the equivalent of a normal 10-man figure in the same space (note this with a flag or marker on the hero figure). Both the hero and entourage attack and defend in their own, standard fashion; and the hero counts as embedded as long as the entourage remains.

Sample Hero Figures

Hero	Cost	MV	AH	HD	Atk	Dam	Notes
Knight Renown	40	12	7	1	1	2	Magic sword, lance, horse
Knight Commander	60	12	7	2	1	3	Magic sword, lance, horse
Barbarian Lord	30	12	6	1	3	3	Magic sword, longbow
Barbarian King	55	12	7	2	3	3	Magic sword, longbow
Dragon, Adult Blue	40	24	6	1	3	2	Flying, breathe lightning
Dragon, Adult Red	45	24	6	1	3	2	Flying, breathe fire
Dragon, Adult Gold	50	24	6	1	3	2	Flying, breathe fire & gas
Giant, Frost	10	12	5	1	5	2	Throw stones, cold-immune
Giant, Fire	12	12	5	1	5	3	Throw stones, fire-immune
Giant, Storm	20	15	5	1	5	4	Weather, lightning-immune

Key:

Atk: Number needed on d6 for the hero to attack (based on D&D attacks/round).

Dam: Damage in hits per successful attack (based on D&D damage dice).

Knights: High-level fighter-types include Knights Renown (Ftr10) and Knight Commanders (Ftr15). They have magic weapons, magic plate armor and shield, and high physical ability scores. Each rides a barded, heavy warhorse (9" move if unhorsed).

Barbarians: Chieftains of barbarian tribes are represented here by multiclassed Fighter/Thieves, such as Lords (Ftr12/Thf8) and Kings (Ftr16/T12). They carry magic weapons, wear magic chain mail and shield, and have very high ability scores. Bow attacks hit on 5 or better for 1 damage (no move allowed). Barbarians are unmounted by default.

Dragons: Dragons fly at the indicated rate, and ignore all terrain modifiers (9" move if grounded). Breath counts as a magic area attack against one figure in contact, usable 3 times per day, for either 9, 10, or 11 damage (respectively for blue, red, and gold dragons). They can breathe once and attack normally on the same turn.

Giants: Advanced giant-types have various energy immunities, and also throw stones (range 20", hit on 6, damage 2; no move; ignore range penalty). Storm giants have the additional power to *control weather* over the entire battlefield, changing natural conditions by one step (see Optional Rules: Weather for effects).

Special Combat: For a variety of reasons, it's recommended that opposing heroes be brought into contact and have the battle played out in regular D&D man-to-man rules, with 1 turn cycle = 3 D&D rounds (alternate attacks). If this is not done, then heroes should get an extra "dying blow" when eliminated in melee by an enemy hero. Heroes with an entourage can decline special combat, if they so choose.

4. Wizards

When we speak of "Wizards" we mean (obviously) a Hero-type that uses a variety of magic spells. For simplicity here, we refer to Wizards as being ranked from 1 to 6 (i.e., level 11-16), and we deal only with the top-level spells (i.e., 6th) which affect the battlefield itself in a direct and significant fashion. Wizards act as Heroes in all ways mentioned in the previous section.

Basic Abilities: We assume that any Wizard has a number of low-level spells active or available on the battlefield. Each has a magic *shield* (AH 6+), a *protection from evil* ward (cannot be hit by enchanted monsters, etc.), and can *detect invisible* (see any hidden or invisible creatures within 12"). All have at least one of *invisibility*, *flying*, or *polymorph*, so they can escape from the battlefield whenever they wish.

Magic Wands: Wizards are further assumed to have either a *wand of fireballs* or *lightning bolts*. This gives the Wizard a magic area attack that affects one figure, with range 24", damage 6, and firing 2/turn (or 1 with up to a half-move; blocked by woods and hills). Roll one die for accuracy: 1-2, 1" short; 3-4, on target; 5-6, 1" long. Assume that wands have sufficient charges to last the length of a normal game.

Greater Spells: Wizards above the 1st rank can prepare a number of "greater spells" (6th-level) equal to one less than their rank number; e.g., a 4th-rank Wizard has 3 greater spells. The Wizard can cast one of these spells per turn, standing motionless to do so. All effects commence on the Wizard's attack phase. Choose from this list:

- **Antimagic Shell** (Range: Personal, Duration: 12 turns). This makes the Wizard and entourage immune to all spells, magic, and enchanted creatures. It blocks the Wizard's own magic, but may be dismissed at any time.
- **Control Weather** (Range: Two miles, Duration: 1 day). This spell allows the Wizard to change local weather conditions by one category step on his or her turn. See Optional Rules: Weather for more details.
- **Death Spell** (Range: 12 inches, Duration: Instantaneous). This spell inflicts 4 hits damage, plus 1/3 caster ranks, to a single unit in range. It only affects mass targets up to 8HD (no Heroes). There is no save.
- **Disintegrate** (Range: 12 inches, Duration: Instantaneous). This spell has a 2-in-6 chance to eliminate any single Hero figure (save on 3+). It can also create a 1/2" gap in a castle wall or the like.
- **Lower Water** (Range: 24 inches, Duration: 12 turns). This spell drains away water in one terrain feature. It makes one marsh, stream, or pond tile passable at normal movement (as open terrain) for the duration.
- **Move Earth** (Range: 24 inches, Duration: 6 turns). This spell can move any single terrain feature 6" per turn (caster must remain motionless to concentrate). Units are caught up and moved with the feature in question.

Targeting Spells: As usual, targets for all spells should be declared prior to measurement. If the desired target is out of range, then the spell manifests at the limit of its range in that direction, affecting any figures or terrain there. When in "special combat", the wizard can only target an opponent in direct contact.

Converting Spells: Of course, you're free to use the full arsenal of D&D spells in your game, although some adjudication must be made for each. Ignore the "basic abilities" above if you're tracking every individual spell in a caster's list. Again for simplicity, use the following general principles:

- Range: Use inches as per D&D.
- Duration: Use turns as per D&D.
- Area: Divide D&D area by 3 in each dimension.
- Damage: Use number of dice as per D&D.

Sample Wizard Figure

Wizard	Cost	MV	AH	HD	Atk	Dam	Notes
Wizard Rank 1	80	12	7	1	6	1	Spells, wand, ring, etc.

Wizards: As mentioned previously, this indicates a wizard of 11th level, with numerous active defenses and a *wand of fireballs* or *lightning bolts* (choose at unit selection). The wizard also has high ability scores, a *ring of protection +2*, a *dagger +2*, and possibly other minor magic items as well (ignored for the purposes of this game).

Extra Spells: Increase cost by 10 per rank above 1st, i.e., for each "greater spell" added. Also, if you permit abilities beyond those shown in these rules, then the cost should be further increased. Exception: Spells usable only in "special combat", against opposing heroes in contact, should not increase cost.



Optional Rules

This section presents options and variants that may be added in modular fashion, or in their entirety, to give added depth to the standard game.

1. Weather

If you wish to use random weather, then immediately after terrain is placed, roll on the table below. The magic *control weather* effect can change weather by one step per turn, but in no event can it be more than a single step away from the natural conditions (and multiple spells will not improve on these limits).

2d6	Weather	Effect
2-7	Sunny	Orcs/goblins at -1 morale
8-9	Cloudy	(No effect)
10-11	Rainy	Missiles at -1 to hit
12	Stormy	No missiles, move cost x2, cavalry attack 1 die/figure

2. Darkness

Creatures who are forced to fight in darkness (underground, at night, etc.), without the special ability of infravision, suffer several penalties. They move at 1/2 speed, can't fire missiles, and suffer -1 to melee and morale checks.

Infravision: Note that all fantasy types (not men or halflings) have this ability. Creatures from the underworld can always fight normally, even in total darkness.

3. Morale Modifiers

The following modifiers to morale checks are recommended.

Alignment: Lawful troops should receive +1 and Chaotic troops -1 to morale checks. Normal men are generally assumed to be Neutral (no modifier).

Cohesion: If one side is entirely composed of a single unit type, then it receives a +1 morale bonus to reflect increased unit cohesion and *esprit de corps*.

Extra Ranks: Units gain +1 morale for each rank after the first. This cannot exceed the number of files, or +3 in any case. The last rank counts only if it has at least half as many figures as the first. This bonus is lost if attacked in the flank or rear.

Leadership: A unit with an attached Hero figure in the front rank receives +1 morale.

4. Exact Armor

In the Core Rules section, a simple table was given, translating from type of armor to specific "Armor Hit" (AH) values. A more exacting table is given to the right (in about 3-point increments).

If you opt to use this chart, then the cost for any unit type where it makes a difference must be increased. For example, footmen in "leather & shield" (properly AH 5) should be identified and priced as per "medium infantry".

Alternatively, if your system uses "ascending AC" (e.g., chain mail is AC 15), then AH can be approximated by dividing AC by 3 (round down).

Armor	AC	AH
No Armor -1	10	3
No Armor	9	4
Shield Only	8	4
Leather Armor	7	4
Leather & Shield	6	5
Chain Mail	5	5
Chain & Shield	4	5
Plate Armor	3	6
Plate & Shield	2	6
Plate & Shield +1	1	6
Plate & Shield +2	0	6
Plate & Shield +3	-1	7

5. Alternate Scales

Some decisions about time and distance scale have been necessary in regards to the underlying game, in light of the fact that different editions of D&D use different values for these parameters. If you disagree with the assumptions made herein, then you may wish to alter the gameplay to best fit your preferences.

Long Range: If the ranges for missiles & magic from D&D were converted with complete fidelity, then technically they should be 50% longer than they appear here. (The decision to effectively use only short and medium ranges was made for the sake of quick conversions and ease-of-play). If you wish to allow long-range missile fire, then implement a third category, which is half again the maximum range shown, and apply a -2 modifier to hit at that distance. For instance: Heavy crossbows would have short range of 12", medium range of 24", and long range of 36". However, most of the time this won't make any difference, as any armor type above leather will be effectively unhittable at long range.

Large Areas: Another fundamental assumption we make is that man-to-man combat is played out at a scale of 1" = 5 feet. This mainly affects how we interpret spell areas given in inches; if your preference is to interpret man-to-man scale as 1" = 10 feet, then it would be more accurate to divide spell (and dragon breath) areas by just 2, thereby increasing the effect. For example, a *fireball* would be 2" in diameter, and thus affect up to 2 cavalry, or 4 infantry figures. Obviously, this radically increases the power of Wizard figures (and would imply a commensurate increase in their cost)!

Short Turns: Yet another way to increase the precision of the underlying game simulation would be to reduce the length of the standard turn. For example, you could say that 1 turn = 15 seconds, and thus halve all movement and attacks during the turn (archers stand to fire). Or, you could use 1 turn = 10 seconds, taking one-third of the normal movement and attack dice numbers. At this point, every turn would represent the same action as in one round of D&D.

6. Castles & Ships

Castle and ship models can be constructed at the scale indicated herein (1"=20 feet), which has been specially chosen so that realistic structures are of useful size on the tabletop, and miniature figures will conveniently fit on top of them. (Note that buildings in scale with miniature figure height are *not* compatible!)

In any kind of enclosed space, the following basic rule modifications are made. (1) The minimum unit size of 3 figures is waived; (2) allied figures may pass through each other; and (3) facing and morale are ignored (i.e., morale is always good). Attackers outside of an enclosure are treated normally until one or more break in, at which point figures may split off and act independently (with the foregoing advantages).

Walls: Defenders protected by a battlement (including the forecastle or aftcastle of a ship) gain +1 AH versus missile attacks. A single figure can defend a 3" long span, and gets double melee attacks upon any attackers in contact with the base of the wall (via dropped rocks, spears, oil, etc.). Attackers using ladders must roll 5+ to escalate over a defended wall as a full move (add HD attack bonus), and then fight normally.

Towers: Defenders inside a tower are immune to external attacks (allow 1 mass figure per standard tower), and can shoot missiles out normally (assuming arrow slits). Attackers can batter down any accessible standard doors on a roll of 4+ as part of normal movement (add HD attack bonus), and then melee those inside normally. This roll must be re-checked each time a hostile figure tries to enter a defended tower.

Ships: For naval combat with fast-sailing ships, we recommend use of the "Short Turns" option above, so that listed ship movement, melee, and ranged attacks are all halved (for example, bows fire 1 die/figure each turn). Allow a 45 degree turn for every 6" rowed, or 10" sailed (round to taste).

If a simple escalate does not take a fortification, then longer-term strategies such as siege engines, sapping, and/or mining may be necessary. However, such methods are beyond the scope of these rules in terms of both time and scale. We hope at some point in the future to present a set of rules specialized for such long-term sieges.



7. Cost Considerations

The "Costs" shown for figures throughout these rules include wages, support, and upkeep (actual salary paid will be about half that shown). These costs are in units of 10 gold pieces per figure per month – and by "gold piece", we mean something like an English "Noble", 1/3 of a pound sterling in value. While the costs have been play-balanced for the *Book of War* game by means of computer simulations, they've also been kept in scale with both historical sources (for example, see the online "Medieval Sourcebook"), and the D&D rulebooks (for example: see OD&D Vol-3, p. 23).

For a one-off game, the simplest thing to do is purchase units on a per-figure basis (e.g., a "200-point game" allows the purchase of 40 medium infantry figures, etc.). However, for a campaign game, players should multiply the costs shown by 10, again multiply by the number of months in service (we recommend a 3-month minimum "campaign season"), and then pay that amount in gold.

Note that while the D&D men-at-arms wages are historically fairly accurate, most *other* costs in the game are massively inflated. If you use the standard D&D money system, then it's recommended that you multiply army costs by yet another factor of 10, in order to match the rest of the game's hyper-inflated economy. Or, you could leave men-at-arms costs as written and divide *all other values* in the D&D game by 10 (equivalent to switching gold to silver units, i.e., the "silver standard", as used by some players).

One other idea: You may wish to alter the minimum unit size to be a function of total point cost, so as to keep the number of separate units on the table at a reasonable level. For example, a minimum unit cost of 15 per 100 points in the army guarantees that no player will ever have more than 6 units in play.

8. Recovery

When a figure is removed from the table, this represents all 10 individual creatures being reduced to zero hit points or less. Depending on which edition of D&D you're using, this may or may not indicate actual death for all creatures involved. Under more generous systems, then perhaps 50% of the vanquished will be able to stabilize and recover. This number will be pushed lower if the victor spends time finishing off downed men, or if the losses were due to high-damage attack forms (e.g., giants, *fireball*), which tend to immediately kill more creatures. Horses from cavalry units may be recovered at a much higher rate, since we assume that attacks are targeted against riders whenever possible. If appropriate, it is suggested that Heroes be given a saving throw versus death to avoid total destruction.

9. Disputes

Finally, in any game of this nature, judgment calls will be required at many times on the parts of the players. First, it is recommended that you play with mature competitors, who are willing to negotiate such points in a friendly and cooperative fashion. Second, if agreement on a point simply cannot be reached, then pick some simple resolution method: flip a coin, roll a die, use rock-paper-scissors, etc.

Design Notes

The primary goal here was to find a convenient tabletop mechanic that matched the probabilities of basic D&D combat played *en masse*. The first requirement was to decide on the figure size. As noted in the first section, we assume that miniatures in play have standard infantry bases 3/4" (20mm) square, and cavalry bases 1×2" (25×50mm), in accordance with several other games. We further stipulate that 1 figure = 10 men, arrayed in 2 ranks, 5 men across (and hence 5 attacks per round are made when opposing lines meet in melee combat).

It then turns out that over 3 rounds of standard D&D combat, the chances to eliminate a whole enemy figure closely match the numbers in the "Armor Hit" chart in the Core Rules (leather = 4, chain = 5, plate = 6). We therefore base our whole combat system on this simple observation: 1 turn = 3 rounds of normal D&D. Assuming that 1 D&D round = 10 seconds (as per Holmes, et. al.), then we have 1 turn = 30 seconds here.

Some reasonable assumptions about man-size give us our distance scale. Say that each man takes up 3 feet of space across in formation. Then looking at a standard infantry base, we get a distance scale of 1 inch = 20 feet (3 feet/man width × 5 men wide/figure × 1 figure/(3/4 inch) = 20 feet/inch). Fortunately, this is nearly the same as the multiplier applied for our time scale (time ×3 above, distance ×4 here if base 1 inch = 5 feet as seen in later D&D, etc.), so it's basically correct to use the same movement rates in inches as in D&D, without any need for conversion.

Finally, there is yet another compelling reason in favor of the 1 inch = 20 feet distance scale, in that it supports the use of ships and castles at the same scale. A larger increment (say, 1" = 30 feet) would cause realistic ships, towers, gatehouses, and so forth, to be so small that our standard miniature figures wouldn't actually fit on top of them. The system presented here, in contrast, has been used in conjunction with naval and castle models with great success.

Level demographics follow by-the-book D&D; units are composed of normal men or 1st-level fighters by default. Generally, each squad (figure) of 10 men has a sergeant (2nd-3rd level), every troop of 50 has a lieutenant (4th-5th level), and every company of 100 men or more has a captain (6th-7th level or so). These individuals are not significant enough to change a unit's fighting chances by themselves. However, army commanders can be assumed to be at least name level (10th+), and therefore will appear on the tabletop as individual "Hero" figures, as discussed previously.

We also plan to present a series of more comprehensive design notes online. Be sure to visit us at www.oedgames.com!

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BOOK OF WAR: BASIC AID CARD

Unit	Cost	MV	AH	HD	Notes
Light Infantry	4	12	4	1	Leather, spear/sword/axe
Med. Infantry	5	9	5	1	Chain, spear/sword/axe
Heavy Infantry	9	6	6	1	Plate, sword/axe
Pikemen	5	12	4	1	Leather, pike
Archers	7	12	4	1	Leather, shortbow
Longbowmen	10	12	4	1	Leather, longbow
Crossbowmen	5	12	4	1	Leather, light crossbow
Hvy Crossbows	8	9	5	1	Chain, heavy crossbow
Light Cavalry	9	24	4	2	Leather, sword
Med. Cavalry	12	18	5	2	Chain, lance/sword
Heavy Cavalry	18	12	6	2	Plate, lance/sword/axe
Horse Archers	13	24	4	2	Leather, composite bow

Missile	ROF	Range
Sling	1	12
Shortbow	2	15
Composite bow	2	18
Longbow	2	21
Light crossbow	1	18
Heavy crossbow	1	24

2d6	Terrain	Move
2	Gulley	Up/2
3	Rough	1/2
4-5	Hill	Up/2
6-7	Open	1/1
8-9	Woods	1/2
10	Marsh	1/3
11	Stream	1/4
12	Pond	None

Cavalry & pikes lose extra attacks in non-open terrain.

Cavalry take double move penalties in any non-open terrain.

Archers stand motionless for full fire; shots over half-range are at -1.

