

AXIONS

AUTARCH'S QUARTERLY SUPPLEMENT FOR THE ADVENTURER CONQUEROR KING SYSTEM

He who has the gold, makes the rules...

Strongholds and Domains	3
Separating Land and Lordship	
Senatus Consultum Ultimum	
Wandering into War	
Of Coins and Commerce	
The Economics of Peasant Families	
Flocks and Herds and Silver and Gold	
	50

ADVENTURER CONQUEROR KING SYSTEM™

ZIONS

Axioms Issue 3 ©2016 Autarch™ LLC. Adventurer Conqueror King System © 2011-2015 Autarch LLC. Domains at War © 2013-2015 Autarch LLC. The Auran Empire™ and all proper names, dialogue, plots, storylines, locations, and characters relating thereto are copyright 2011-2015 by Alexander Macris and used by Autarch LLC under license. Some artwork is copyright 2012 William McAusland and used with permission. Some artwork is copyright 2015-2016 Michael Syrigos and used under license. Some artwork is copyright 2012-2016 and used under license. This material is protected under the copyright laws of the United States of America. Any reproduction or unauthorized use of the material or artwork contained herein is prohibited without the written permission of the copyright owners. Autarch™, Adventurer Conqueror King™, Adventurer Conqueror King System™, ™, Domains at War™, and Guns of War™ are trademarks of Autarch™ LLC. This product is a work of fiction. Any similarity to actual people, organizations, places, or events is purely coincidental.





CREDITS

Design: Alexander Macris

Contributors: Charles Myers

Artists: Justin Jernandez

V SHane

Bradley K. McDevitt Michael Syrigos

Layout Artist: Richard Iorio II

Patron Deity: Charles Myers

Emperors: Brandon Jeffrey

> Binder Jarrod Maistros Fredrick Liner

Florian Hübner Kings:

Daniel Stack Herbert Nowell Stephen Terry Daniel Granstrand steven dolges Curtis Anderson Scott Tooker

Richard P Spainhour

Daniel Bell Bryan Steelman Bobloblah Wesley Marshal Aryxymaraki Jason Blalock

Conquerors: John Newquist

Ben Proor Eric Maloof Omer Golan-Joel Matthew Skail Jon Stevens

David Johnston Ben Feehan Jason Hobbs Maeyanie Nathan Birch Beedo

Lloyd Rasmussen Chris Blauwkamp Michael Morrison

Ivar Hardrada Miquel Zapico Jake Parker Libri Simon Stroud

Martin Nesbakken Martin Nichol Peter McNamara Kelly Roberge David Sullivan James Hughes Karl Miller Simon Forster Patrick Slauson James Kerr Matt Walsh

Adventurers: Nathaniel Bennett

Candice Bailey Dan Wood Daniel Elwell Cody Cheeser Jacob DeCourcey Phillip Joshua Bailey Gordon Cranford Anthony Ragan Rahshaad Benjamin John Davis Conrad Betts

Michael Taylor Reece Nelson Mikko Simonen georgekapp Andrew Gil Carlos de la Cruz Morales Nigel Ray Steven D Warble Gustavo Iglesias J.Barker Sean Keefe Mark Daymude Andrew Byers Matt Maranda Jonathan Nichol Mark Rober Michael De Rosa Michael Hengeli Alan

Chad Ricardo Dorda Torben van Hees Lee DeBoer Fabio Milito Pagliara Shane D Richard Rohlin Samuel Gaines Will Triumph Chris Heath John-Matthew DeFoggi

STRONGHOLDS AND DOMAINS

A REVISED APPROACH TO DOMAINS FOR FASTER, EASIER PLAY

This article presents a set of revised rules intended to replace the Strongholds and Domains section found in , Chapter 6, p. 125-134. The new rules retain the concrete, bottom-up approach that characterizes , and remain compatible with 's existing assumptions on demographics, agricultural productivity, population density, and other economic issues, but they eliminate the recursive nature of income calculation, eliminate any percentage-based calculations for domain revenue and expenses, allow for domains of any size, allow for noncontiguous domains, and allow for easy expansion with new "modules" of rules. Several such modules appear as separate articles in this issue of Axioms.

ACQUIRING THE DOMAIN

An adventurer begins the process of becoming a ruler by first acquiring an area of land, known as a domain. Domains can vary considerably in size. A very small **domain** is a 2-square mile area of land (one 1.5-mile hex on a local map). A typical domain is a 32-square mile area of land (one 6-mile hex on a regional map, or sixteen contiguous 1.5-mile hexes on a local map). A very large domain, fit for a king, is 500 square miles (one 24-mile hex on a continental map, or sixteen contiguous 6-mile hexes on a regional map). The area of land making up a domain is called its **territory**. A domain's territory is often contiguous, but it may be noncontiguous if desired. While there are no restrictions on a domain's size or shape, large and noncontiguous domains are harder to control, as explained below.

Territorial Control			
Ruler Level	Controllable Domain Territory (6-mile Hexes)		
0	0		
1	1/ ₁₆ *		
2	1/4*		
3	1/2*		
4	1/2*		
5	1		
6	2		
7	3		
8	4		
9	6		
10	7		
11	8		
12	9		
13	10		
14	12		
*One, four, or eight 1.5-mile hexes			

Domains are classified as either **civilized**, **borderlands**, or **wilderness**. A newly-established domain is civilized if all of its territory is within 48 miles of a city or large town. A newly-established domain is borderlands if all of its territory is within 72 miles of a city or large town. All other newly-established domains are wilderness. (Domains may upgrade their classification over time through population growth.) Explorers may only build strongholds

in borderlands or wilderness domains. Elven fastnesses and dwarven vaults may only be built in wilderness areas, or civilized or borderlands areas of their race.

If an adventurer is securing a civilized domain, the adventurer will need to get a land grant from the local ruler (usually in exchange for a pledge of fealty). If the character simply wishes to buy civilized land, he will find it very expensive; an acre of good land costs about 50gp, so a 1-mile domain containing 640 acres would cost 32,000gp and a 32-square mile hex containing 19,200 acres would cost 1,216,000gp. (There's a reason land was synonymous with wealth throughout human history). For this reason, most adventurers will secure unclaimed borderland or wilderness domains. This requires entering the area with other adventurers or mercenaries, and dealing with any lairs and wandering monsters present there. The larger the domain, the more challenging to clear it and control it.

As each 6-mile hex of a domain's territory is secured, roll 3d3. The total rolled should be noted as that **hex's land** revenue in gp per peasant family per month. Not all land is equally valuable. High land revenue means the domain is rich in farm produce, timber, furs, stone, or even minerals. Low land revenue represents barren, infertile soil with limited natural resources. The Judge and player can determine the exact reason for the land's value (or lack thereof) based on the roll. For a simpler approach, Judges may apply the same land value to all 6-mile hexes within a single 24-mile hex, or (for maximum simplicity) treat all land values as 6. Future supplements will provide more detailed mechanics for determining and improving land value based on terrain and technology.

TERRITORIAL CONTROL

Larger domains are harder to control – not only do they demand more managerial skill, their sprawling size invites local unrest, invasion, and rebellion. Only powerful leaders are able to keep the peace over huge territories. The Territorial Control table shows the extent of territory (in 6-mile hexes) that a domain ruler can safely control based on his level. If the domain's territory exceeds this size, the domain will suffer a penalty to its base morale of -1 per additional 6-mile hex (round fractional hexes up) of territory. See **Keeping the Peace** for an explanation of domain morale.

If a domain's territory includes any noncontiguous hexes, each noncontiguous hex of territory count as 2 hexes for purposes of domain control. If a domain's territory is so scattered as to make it impossible to discern which parts of its territory are contiguous and noncontiguous, then the hex or cluster of hexes containing the domain's largest stronghold is considered to be contiguous.

Because of the difficulty of controlling large domains, rulers frequently establish **realms** consisting of numerous smaller domains each controlled by a subordinate loyal to the realm's ruler. See **Realms** and **Vassals** for more details.

ESTABLISHING THE STRONGHOLD

The adventurer must now secure his domain by establishing a stronghold on its territory. If there is an existing structure that's suitable for use as a stronghold on the domain, this structure can be claimed by the adventure as his stronghold. This structure might be a castle granted with the land, or a tunnel complex cleared of its prior inhabitants in the process of securing the domain, and so on. Normally, however, the adventurer will need to construct his own stronghold to secure his new territory. The player should design a plan for the stronghold and calculate the costs based on the prices listed in .

Minimum Stronghold Value					
Classification	Per 1.5-mi hex	Per 6-mi. hex	Per 24-mi. hex		
Civilized	1,000gp	15,000gp	240,000gp		
Borderlands	1,500gp	22,500gp	360,000gp		
Wilderness	2.000ap	32.000ap	512.000ap		

Small domains in civilized realms can be secured with a stone home or tower, but large tracts of wilderness territory can only be secured with a formidable stronghold. The Minimum Stronghold Value table shows the minimum value required to secure each 1.5-mile hex, 6-mile hex, and 24-mile hex in a domain based on its classification. A stronghold of insufficient value will make the domain harder to control. See **Keeping the Peace**, below.

NONCONTIGUOUS DOMAINS & STRONGHOLDS

Most domains are established with contiguous territory, such that a single stronghold can easily secure the entire domain. If a domain is established in a noncontiguous area of land, then either (a) the stronghold must be large enough to secure all the noncontiguous hexes in between the domain's territories, or (b) additional strongholds must be established to secure the noncontiguous territory.

EXAMPLE: Quintus has established a borderlands domain consisting of four 6-mile hexes. Three of the hexes are clustered contiguously, while the fourth lies a distance of 18 miles (3 6-mile hexes) away. Quintus's domain will count as $[3 + (2 \times 1)]$ 5 hexes for purposes of territorial control. His stronghold must be of sufficient value to secure seven 6-mile hexes – the three contiguous hexes, the noncontiguous hex, and the three hexes in between. Therefore its value must be $(22,500 \times 7)$ 157,500gp or more.

ATTRACTING PEASANTS AND FOLLOWERS

Domain Population			
Hex Classification Starting Peasant Families			
Civilized	8d6 x 10 per 6-mile hex		
Borderlands	3d6 x 10 per 6-mile hex		
Wilderness	1d4+1 x 10 per 6-mile hex		

While the adventurer's stronghold is under construction, the domain around his stronghold will slowly become settled by the workers and their families. In addition, peasants and laborers seeking the adventurer's protection will settle near the stronghold. These peasant families become permanent inhabitants of the adventurer's domain. The number of peasant families that will inhabit the domain when the stronghold is complete is determined on the Domain Population table. Roll for each hex of the domain's territory. Each peasant family is assumed to have an average of 5 peasants. Families will be of the same race as the adventurer, e.g. elven fastnesses are settled by elven peasants.

Once the stronghold is of sufficient value to secure the domain's territory, the peasant families will begin generating income for the character, and begin to incur costs (see Collecting Revenue and

Paying Expenses below). At this point the adventurer has become a ruler. Until then, the domain will not generate money, nor grow.

The character's followers will also begin arriving during stronghold construction. One half of the character's followers (rounded up) will arrive when the stronghold is halfway completed. An additional one quarter of the character's followers (rounded up) will have arrived by the time the stronghold is finished. The remainder of the followers will arrive within the first month following the completion of the stronghold. Use the Followers Type and Equipment by Class table, found in and Player's Companion, to determine the arms and equipment of the arriving followers.

GROWING THE DOMAIN

If a ruler is fortunate, birth and immigration may increase the population of a domain. If he is unlucky, fire, disease, and emigration will decrease it. Each month, a ruler makes two die rolls of 1d10 per 1,000 families in the domain (rounded up). These rolls will determine the change in his domain's population. The first roll determines the increase in the domain's number of peasant families, and the second roll determines the decrease in the domain's number of peasant families. Any die that rolls a 10 should be rolled again, with the new result added to the total (repeating the process if a subsequent 10 is rolled).

EXAMPLE: Marcus's domain has a population of 1,200 peasant families. He will make two die rolls of 2d10. Marcus first rolls 2d10 for increase and gets a 3 and an 8. His domain gains 11 peasant families. He then rolls 2d10 for decrease and gets a 10 and a 7. Since one of the dice rolled a "10", he must roll that die again and add it to the total. This roll results in another 10! Marcus has to roll yet again, this time getting a 4. His total is 10+7+10+4, or 31. Marcus's domain loses 31 peasant families. Having gained 11 and lost 31, Marcus's domain ends up down 20 peasant families.

A ruler can increase the population of his domain by making **agricultural investments** into the area. For every 1000gp spent on investments in a month, the domain will attract 1d10 new peasant families.

Population (families)	Increase	Population (Families)	Increase
1-100	+5d20	301-400	+3d10
101-200	+5d10	401-500	+2d10
201-300	+4d10	500+	+1d10

Adventurers who are rising in power and fame will attract additional peasants to move to their domains. Provided a character actively adventures at least once per month and keeps his domain secure from threats, his domain's population will grow by a random amount each month, determined by the number of families already present.

Elven domains always increase in population as if they were two population categories larger. Dwarven domains increase in population as if they were one population category larger.

EXAMPLE: An elven domain of 1-100 peasant families increases in population as if it were 201-300 peasant families in population, at 4d10 per month.

Note that if a domain ruler is not actively adventuring, does not make agricultural investments, and does not have very high domain morale, the gain and loss in population each month will tend to equalize and domain population will be flat.

LIMITS OF GROWTH

The classification and territory of a domain determine its maximum population. A wilderness domain cannot exceed 8 peasant families per 1.5-mile hex of territory, or 125 families per 6-mile hex. A borderlands domain cannot exceed 15 families per 1.5-mile hex of territory, or 250 families per 6-mile hex. A civilized domain cannot exceed 50 families per 1.5-mile hex of territory, or 780 families per 6-mile hex.

To grow his domain, a ruler may secure additional territory or he may establish an urban settlement (see the Villages, Towns, and Cities rules below) in its existing territory. If a wilderness domain ever reaches a total population of 1,000 peasant families and 250 urban families or more, it immediately upgrades into a borderlands domain. If a borderlands domain ever reaches a total population of 2,000 peasant families and 500 urban families or more, it immediately upgrades into a civilized domain.

COLLECTING REVENUE

Each month, a ruler collects revenue from each peasant family in

his domain. There are four sources of revenue: land revenue, service revenue, tax revenue, and tribute. The first three types of revenue are generated by the domain's peasant families, while the last is only generated if the ruler

Source	Monthly Revenue
Land	3-9gp ∕ family
Services	4gp∕ family
Taxes	2gp/ family
Tribute	Varies

has one or more vassal domains (described below).

Land: As noted under Securing the Domain (above), land revenue derives from labor on the domain's lands. It includes wheat, barley, and other grains; cheese, milk, meat, bee honey, and other animal products; and clay, stone, coal, and metals. The average domain produces 6gp of land revenue per peasant, but not all land is equally valuable. Each hex of the domain's land revenue will have been determined with a roll of 3d3 when the domain was first secured – this value is the monthly land revenue per peasant family in that hex.

EXAMPLE: Marcus has secured a 6-mile hex domain in the wilderness across the Mirmen River. He rolls 3d3 to determine what his land revenue will be. He rolled a 3, 2, 3, for a total of 8. Each peasant family that settles there will generate 8gp of land revenue per month. The Judge determines the land is so valuable because of an abundance of timber and fur.

Services: Services revenue derives from the services of skilled tradesmen, such as baking, carpentry, lumbering, milling, and smithing. Most of these services are provided by freemen who offer a portion of their labor to the ruler in exchange for the right to practice their trade on his domain. Monthly service revenue is 4gp per family.

Tax: Tax revenue is coin paid directly to the ruler by his peasants. The ruler of a domain has the right to collect fees upon marriage, inheritance, birth and death, harvest, and other occasions; to levy fines and fees for administering justice; to charge tolls for the roads; to charge a duty on merchants in his markets; and to levy a rent and tax on those working the land. The sum of these constitutes the domain's

monthly tax revenue of 2gp per family. Tax revenue can be increased above this amount, but doing so damages the peasant's loyalty. Lower taxes, on the other hand, can improve the domain's morale.

Tribute: Tribute is revenue received from vassal domains controlled by the ruler but managed on his behalf by henchmen. Tribute is generally 3gp per family in the vassal domain. See Realms and Vassals, below.

PAYING EXPENSES

After collecting revenue, a ruler must pay certain expenses in order to maintain his domain.

Classification	Garrison Cost
Civilized	2gp / family
Borderlands	3gp/ family
Wilderness	4gp/ family

Garrison: In order to maintain the security of

his domain, a ruler must have a large enough garrison of troops. Depending on the classification of the domain, this can cost 2-4gp per family per month. The ruler should specify the exact make-up of the garrison, hiring an appropriate number of mercenaries (see, Chapter 3, Equipment, for details on mercenaries).

The gold piece value of a cleric's or bladedancer's followers can be applied against the garrison cost of their domain, even though the cleric or bladedancer does not actually have to pay their faithful followers for their services. Likewise, the gold piece value of a trained and equipped militia can also be applied against the garrison cost of a domain, even if the militia is not called up. (See D@W: Campaigns for details on training and equipping militia.)

Liturgies: A ruler will be expected to pay for ceremonial games, sporting events, religious feasts, country festivals, and public works that please and impress the domain's peasant families. The cost of liturgies is 1gp per peasant family. If this tradition is not honored, the

Source	Monthly Expense
Garrison	2-4gp/family
Liturgies	1gp ∕ family
Tithes	1gp ∕ family
Tribute	3gp ∕ family

loyalty of the population to the ruler will be reduced.

Tithes: A ruler must pay a tithe of 1gp per peasant family to the church of the domain's dominant religion. If the domain ruler is a bladedancer or cleric, the domain's dominant religion is the ruler's. Otherwise, the domain's dominant religion is the prevailing religion of the region (Judge's discretion). If the tithe is not paid, the loyalty of the population to the ruler will be reduced, and the ruler may be declared a heretic or excommunicated by the church. The domain ruler may change the domain's religion, but doing so causes substantial penalties to domain morale. See Keeping the Peace, below.

Tribute: If a ruler holds a domain within the realm of a superior lord, he will have to pay a tribute to his liege of 3gp per family in his domain. A ruler who fails to pay tribute risks retribution from his lord. See Realms and Vassals, below.

Domain	Revenue per Family	Costs per Family
Wilderness	Land (3-9gp) + Service (4gp) + Tax (2gp)	Garrison (4gp) + Liturgies (1gp) + Tithes (1gp) (6gp total; 9gp with tribute)
Borderlands	Land (3-9gp) + Service (4gp) + Tax (2gp)	Garrison (3gp) + Liturgies (1gp) + Tithes (1gp) (5gp total; 8gp with tribute)
Civilized	Land (3-9gp) + Service (4gp) + Tax (2gp)	Garrison (2gp) + Liturgies (1gp) + Tithes (1gp) (4gp total; 7gp with tribute)

DOMAIN INCOME

Domain income is the difference between domain revenue and domain expenses. For independent realms, domain income calculations are easily calculated on a per-family basis. Domains that are part of a larger realm will have tribute income as well. Domain income determines an adventurer's campaign XP (see).

REALMS AND VASSALS

Through conquest, expansion, or politics, a ruler may find himself in control of a domain that is too large to safely control. At any time, a ruler may divide the territory of an existing domain into one or more smaller domains, each with its own territory and families. A ruler may also establish new domains by acquiring land and constructing strongholds, or conquer a new domain, or be granted a new domain in a treaty. However the situation comes about, a group of domains under the control of one ruler are collectively called a realm. However, a ruler can only directly rule one domain, known as his personal domain. Other domains in the realm are considered vassal domains, and must be assigned to a henchman, called a vassal, to rule.

Each month, a ruler will collect tribute from his vassals (if any) and pay tribute to his lord (if he has one). The ruler will receive tribute of 3gp per family in his vassal's domains. The ruler must pay tribute of 3gp per family in his domain to his own lord.

Since the number of henchmen any character may employ is limited to between 1 and 7 (depending on his Charisma), rulers may end up with more territory under their control than can be managed even by assigning one domain to each of their henchmen. In this case, multiple vassal domains can be assigned to trusted henchmen, who then themselves have to sub-assign vassal domains to their own henchmen. A group of domains ruled by a vassal is called a vassal realm. A ruler may himself be a sub-vassal to another ruler that he has sworn fealty to (usually the lord who granted him the land to build his domain). Rulers do not receive tribute from sub-vassals, nor pay tribute to their lord's lord.

EXAMPLE: Quintus rules a realm of thirteen domains. He has six henchmen. He manages one domain directly, and assigns two vassal domains to each of his six henchmen. Each of his six henchmen thus has a vassal realm of two domains. Each manages one of their domains directly, and sub-assigns the other as a vassal domain to his own henchman. Quintus will receive tribute from his vassals, but not from their sub-vassals. The sub-vassals pay their tribute to their own lord (Quintus' vassals).

FAVORS AND DUTIES

In addition to paying tribute to his lord (as described above), a vassal ruler must roll once per month on the Favors and Duties table to see what favors are granted or asked by his lord. These events can serve the Judge as the basis for adventures for the player character. Adventurers with vassals may choose to offer favors and demand duties to their own vassals, either in response to favors and duties they receive, or independently.

During any month, each vassal can be safely asked to perform one ongoing duty, plus an additional ongoing duty for each ongoing favor given. If an adventurer demands duties in excess of this total, the vassal's loyalty must be checked on the Henchman Loyalty table for each extra duty. Except for a marriage, an irrevocable favor only offsets a duty during the month it is first given (such gifts are quickly taken for granted...) A marriage counts as a favor for as long as the marriage lasts. Charters of monopoly count as one favor, even if granted to cover multiple types of merchandise.

Roll (2d6)	Favor / Duty
2	Build Additional Stronghold: The
3	Call to Arms: The
4	Call to Council: The
5	Tax Demanded: The lor
6	Loan Demanded: The lord demands a loan of
7	Previous duty/favor revoked: The
8	Festival: The lord celebrates a wedding, birth, military victory, or other event by holding a festival in all of the
9	Gift: The lord gives
10	Charter of Monopoly: The
11	Grant of Title: The
12	Grant of Land: The

EXAMPLE: Marcus demands that his henchman Cadom Wynn pay a special tax of 1gp per each of his 500 peasant families (one duty). No roll on the Henchman Loyalty table is required. The next month, Marcus maintains the tax (one duty), and calls Cadom to arms (a second duty). To avoid a roll on the Henchman Loyalty table, he offers Cadom his niece in marriage (an irrevocable favor). The next month he maintains both the tax and the call to arms, but offers no favors. Cadom must roll on the Henchman Loyalty table.

NON-HENCHMAN VASSALS

Rather than assigning multiple vassal domains to a henchmen who then has to sub-assign the vassal domain to his own henchmen, a ruler may assign vassal domains to non-henchmen. These may be NPC adventurers, mercenary commanders, specialists, etc.

Non-henchmen rulers have a base loyalty of -2 instead of o. If the non-henchman vassal's domain is outside the range of trade of his ruler's largest urban settlement, a non-henchman's base loyalty is -4. (See , p. 233 for details on range of trade.)

During any month, a non-henchman vassal can only be safely asked to perform one duty for each favor given (there is no "free" duty, as there is with a henchman). If the ruler demands duties in excess of this total, the non-henchman vassal's loyalty must be checked on the Henchman Loyalty table for each extra duty.

TITLES OF NOBILITY

Adventurers and other domain rulers may claim or be awarded a title of nobility. If the adventurer secures his domain within an existing realm, his title will be awarded based on the heraldry of that realm. The more domains the adventurer controls (including assigned and

Titles of Nobility							
Personal Domain (families)	Number of Domains Ruled	Overall Realm (families)	Common	Auran	Argollëan	Somirean	Jutlandic
12,500	5,461-55,987	1.5M - 11.6M+	Emperor	Tarkaun	Ard-rí	Maharaja	High King
12,500	1,365-9,331	364K - 2,000K	King	Exarch	Rí-ruirech	Raja	King
7,500	341-1,555	87K – 322K	Prince	Prefect	Rí	Deshmukh	Prince
1,500	85-259	20,000 - 52,000	Duke	Palatine	Diuc	Zammin	Duke
780	21-43	4,600 - 8,500	Count	Legate	Iarla	Mansab	Jarl
320	5-7	960 - 1,280	Marquis	Tribune	Ard-tiarna	Sardar	Reeve
160	1	160	Baron	Castellan	Tiarna	Jagir	Thane

sub-assigned vassal domains), the higher the title he will hold. An adventurer who establishes a new realm can claim any title he wishes, of course, but other realms will not necessarily treat him as such.

Three factors determine a ruler's title – the size of his personal domain, the number of vassal domains he has, and the overall size of the realm he rules. The Titles of Nobility table shows the common titles of nobility used based on these criteria. A common title is provided for each tier, plus titles used by cultures within the Auran Empire campaign setting.

KEEPING THE PEACE

All domains have a morale score which represent their populations' trust and faith in their ruler. Domains begin with a morale score

of o plus or minus their ruler's Charisma adjustment and the domain's territorial control modifier. This is known as the domain's **base morale score**. Base morale score only changes if the ruler's Charisma adjustment or territorial control modifier changes. However, the domain's **current morale score** may differ from its base morale score depending on the ruler's decisions. A domain's current morale scores

Morale Score	Morale Level
-4	Rebellious
-3	Defiant
-2	Turbulent
-1	Demoralized
0	Apathetic
+1	Loyal
+2	Dedicated
+3	Steadfast
+4	Stalwart

affects its functioning as described below.

Rebellious means that the domain is revolting against their ruler. There is no population growth, and an extra 4d10 families per thousand are lost to illness, casualties, and emigration each month. Tax, land, and service income drop to zero. Conscripts and militia cannot be levied. The able-bodied men (one per peasant family) become bandits, and begin to attack officials, trade caravans, troops, and travelers in the domain. If these bandits are slain, the population of the domain is reduced accordingly. For every 200 peasant families in the domain, there is a cumulative 10% chance of a village hero (4th -7th level fighter) emerging to challenge the character's rule. All rolls on the Vagaries tables are at -20.

Defiant means that the domain's inhabitants have become violently unhappy with their ruler. This unhappiness manifests in banditry, tax evasion, and disloyalty. An extra 3d10 families per thousand are lost to illness, casualties, and emigration each month. Tax, land and service income is reduced to half. Conscripts and militia cannot be levied. One able-bodied man per two peasant families becomes a bandit, as above. All rolls on the Vagaries tables are at -10.

Turbulent means that the domain is in a state of dissatisfaction and unrest. An extra 2d10 families per thousand are lost to illness, casualties, and emigration each month. Tax, land, and service income

is reduced by one quarter (rounded down). Conscripts and militia cannot be levied. One able-bodied man per five peasant families becomes as a bandit, as above. All rolls on the Vagaries tables are at -5.

Demoralized means that the domain's populace sees their ruler as worse than average. An extra 1d10 families per thousand are lost to illness, casualties, and immigration each month. Conscripts and militia levied from the domain suffer a -1 decrease to their morale scores.

Apathetic means that the domain's populace sees their ruler as just another petty noble. They work the land, pay their taxes, and do their duty, but have no special love for their ruler. Conscripts and militia levied from the domain suffer a -1 decrease to their morale scores.

Loyal means that the domain's ruler is respected and popular with his subjects. Spies and thieves operating against the domain suffer a -1 penalty to their proficiency throws (see Hijinks, below). The population grows by an extra 1d10 families per thousand each month.

Dedicated means that the domain's populace has been inspired to strong loyalist sentiment by their ruler. Spies and thieves operating against the domain suffer a -2 penalty to their proficiency throws. The population grows by an extra 2d10 families per thousand each month. All rolls on the Vagaries tables are at +5.

Steadfast means that the domain's inhabitants hail their ruler as great leader deserving of strident support. The population grows by an extra 3d10 families per thousand each month. Spies and thieves operating against the domain suffer a -3 penalty to their proficiency throws. Service income is increased by 1gp per peasant family. All rolls on the Vagaries tables are at +10. Conscripts and militia levied from the domain gain a +1 bonus to their morale scores.

Stalwart means that the domain's populace acclaims their ruler as a beloved and righteous sovereign. The population grows by an extra 4d10 families per thousand each month. Spies and thieves operating against the domain suffer a -4 penalty to their proficiency throws. Land and service income are increased by 1gp per peasant family each. Conscripts and militia levied from the domain gain a +1 bonus to their morale scores. All rolls on the Vagaries tables are at +20.

Every month, the Judge will roll 2d6 on the Domain Morale table, applying any relevant adjustments to the roll, to determine whether the domain's morale has changed as a result of recent events. Round penalties up; round bonuses down.

Domain Morale		
Adjusted Die Roll	Result	
2-	Morale reduced by 2 (min -4)	
3-5	Morale reduced by 1 (min -4)	
6-8	Morale shifts by 1 towards base	
9-11	Morale increased by 1 (max +4)	
12+	Morale increased by 2 (max +4)	

Monthly Events	Morale Roll Adjustment
Territorial control modifier	Varies
Insufficient stronghold	-2/-3/-4*
Insufficient garrison	-2/-3/-4*
Half or more of garrison	-1
All of garrison	-2
Half or more of garrison repressing domain	+1#
All of garrison repressing domain	+2#
Additional troops repressing domain	+1#/gp above
Ruler is of different alignment	-2
Liturgy expense above 1gp/family	-1/gp above
Liturgy expense below 1gp/family	+1/gp below
Taxes above 2gp/family	-1/gp above
Taxes	+1/gp below
Tithes not paid last season	-2
New religion introduced last season	-4

^{*}Penalty doubled if the domain is invaded, occupied, or pillaged

EXAMPLE: Marcus, a 9th level fighter, is ruler of a borderlands domain of 6 hexes. Marcus has CHA 13, so his domain has a +1 to its base morale. As a 9th level character he can manage a 6-hex domain without penalty. Therefore his domain has a base morale score of +1 (Loyal). But after accidentally donning a helm of alignment change, Marcus becomes chaotic (-2) and starts running his domain with an iron fist. He pays no liturgies (-1), and raises taxes from 2gp to 4gp per peasant (-2). At the end of the month, he makes a domain morale roll of 2d6-5+1 for his domain's loyalty and scores a 2. That means his domain morale drops by 2 points, from +1 to -1. His domain has become Demoralized, as his peasants lose their confidence in their ruler. If he continues in his tyrannical ways, Marcus may find that the tighter he grips, the more peasants slip away...

STRONGHOLDS, GARRISONS, AND MORALE

As indicated on the Domain Morale Roll Adjustments above, a domain's morale is reduced if its stronghold or garrison is insufficient. An **insufficient** stronghold is one whose value is too low to secure the territory of the domain. An insufficient garrison is one that costs less than the required 2gp-4gp per family. A domain with an insufficient garrison or stronghold suffers a -2 penalty to morale rolls if civilized, a -3 penalty to morale rolls if borderlands, and a -4 penalty to morale rolls if wilderness. The penalties from an insufficient stronghold and insufficient garrison stack. A domain gains no benefit from the presence of a larger-than-required stronghold or garrison (idle soldiers are a peasant's curse).

Even if a sufficient garrison exists, a domain's morale is decreased during any month when the garrison is **deployed** on a military campaign outside the domain. A garrison might be deployed on a military campaign by its ruler, or because it has been called up by the ruler's lord (see D@W: Campaigns, Vassal Troops section). The penalties from an insufficient garrison and a deployed garrison do not stack – if there are too few troops to defend the domain, sending them away is moot.

If a domain is invaded, occupied, or pillaged by an enemy army (see D@W Campaigns, Invading, Conquering, Occupying, and Pillaging Domains), the penalties to a domain's morale from an insufficient stronghold, insufficient garrison, and/or deployed garrison are doubled.

EXAMPLE: Marcus' domain has 1,200 families with a garrison cost of 2,400gp per month. Marcus' garrison consists of 40 heavy cavalry (60gp/month x 60 = 2,400gp). When Marcus receives a call to arms from his lord, he sends 20 heavy cavalry to join his lord in fighting in a distant realm. Since he has deployed half his garrison, Marcus's domain suffers a -1 penalty on that month's domain morale roll. The next month, beastmen begin raiding Marcus's domain. Because the domain has been invaded, the penalty to Marcus's domain from the deployment is doubled to -2. Marcus petitions his lord to allow him to bring his forces home.

Rather than deploy its garrison on a military campaign outside the domain, a ruler may deploy some or all of the garrison to repress the peasantry. However, a militia cannot be deployed to repress the peasantry. A domain gains a +1 bonus to morale rolls if half the garrison is repressing the peasants, a +2 bonus if the entire garrison is repressing the peasants, and an additional +1 bonus per gp per month per family of troops repressing the domain. However, a repressed domain's current morale score can never be higher than -1 (Demoralized).

EXAMPLE: Marcus has recently become Chaotic and his domain has become Demoralized (current morale score -1). Not wanting his domain to slip into chaos, Marcus decides to deploy his entire garrison of 40 heavy cavalry, plus an additional 20 heavy cavalry mercenaries, to repress the domain. The domain's morale roll is modified by +2 because the entire garrison is repressing the peasants, plus another +1 because $(20 \times 60gp = 1,200gp / 1,200gp$ families) 1 gp / family of additional troops are also repressing. He continues to be charismatic (+1) but Chaotic (-2), pays no liturgies (-1) and charges high taxes (-2). At the end of the month, he makes a domain morale roll of 2d6+1+3-5 for his domain's loyalty; the natural result is a 7, for a modified result of 6. That means his domain's current morale score shifts one point towards its base morale score of +1. However, the domain morale of a repressed domain cannot improve past -1, so instead of increasing to 0, it stays at -1. He's still better off though - Had Marcus not deployed his troops to repress the peasants, his die roll would have had a modified result of 3, and his domain's current morale score would have dropped by one point, from -1 to -2.

[#] Current morale score cannot exceed -1 when repressed

VILLAGES, TOWNS, AND CITIES

When a domain reaches its limit of growth, its ruler will normally secure an additional area of land to permit the population to grow. Instead of (or in addition to) doing so, he may choose to found an urban settlement within his domain. To found an **urban settlement**, a ruler must make an initial investment of 10,000gp and then move between 75 to 249 peasant families from his domain into the urban settlement.

Total Investment (gp)	Maximum Population (families)
10,000	249
25,000	624
75,000	2,499
200,000	4,999
625,000	19,999
2,500,000	100,000

Once established, an urban settlement functions much like a separate domain, except that the ruler can directly manage both his domain and the urban settlement within the domain. A ruler cannot directly manage a domain and an urban settlement located in a different domain, however.

GROWING THE SETTLEMENT

As with a domain, the ruler will make two die rolls of 1d10 per 1,000 families in the urban settlement each month to determine the change in the settlement's population. If a character actively adventures at least once per month and keeps his urban settlement secure from threats, the settlement's population will grow by an additional amount each month from immigration, using the Domain Population Growth table.

Unlike domains, the limits of an urban settlement's growth are not based the available land. Instead, the limits are based on the extent of urban investment. Initially, the urban settlement is limited to less than 250 families. When the Total Investment shown on the table below is reached, the urban settlement expands to accommodate a greater maximum.

Settlement Population (families)	Urban Revenue (gp/ family	Market Class
75-249	7	Class VI
250-624	7.5	Class V
626-2,499	7.5	Class IV
2,500-4,999	7.5	Class III
5,000-19,999	8	Class II
20,000-100,000	8.5	Class I

By spending more gold pieces on roads, aqueducts, sewers, marketplaces, walls, and other infrastructure, a ruler can increase the maximum population size of the urban settlement. In addition to increasing the maximum population, **urban investment** also attracts new residents. For every 1,000gp spent on investments in a month, the settlement will attract 1d10 new urban families.

COLLECTING REVENUE

Each month, a ruler will collect revenue from each urban family in his domain. Urban families pay urban revenue, representing tolls, duties, tariffs, rent, and other fees paid by the residents and itinerants to the ruler. Urban revenue begins at 7gp per family per month and increases with the size of the settlement. Rulers may also profit from

taking advantage of the urban settlement as a market. Each urban settlement has a market class based on its size. See for more details on markets.

Settlement expenses are similar to domain expenses. Each month, the ruler must pay a garrison cost of 2gp per urban family, a liturgies expense of 1gp per urban family, a tithe of 0.75gp per urban family, and (if part of a realm), a tribute of 3gp per urban family.

Paying Expenses			
Expense	Monthly Cost		
Garrison	2gp/family		
Liturgies	1		
Tithes	0.75		
Tribute	3gp/family		

The Villages, Towns, and Cities table, below, shows the average monthly income, after expenses, of urban settlements of various sizes. This table can be used to quickly determine the value of an urban settlement located within a domain.

KEEPING THE PEACE

Like domains, settlements have a morale score which represent its population's trust and faith in their ruler. A newly-established urban settlement begins with the base and current morale score of the domain within which it was founded. Settlement morale is checked every month on the Domain Morale table. A settlement's current morale score may vary over time from the morale of the domain it is within.

For purposes of applying morale effects to settlements, treat all modifications to revenue as if they applied to urban revenue. For example, land and service income are increased by 1gp per peasant family each in a Stalwart domain. This translates to a 2gp increase to urban revenue in a Stalwart settlement (e.g., 1gp from land and 1gp from service, applied to urban income as a total of 2gp per family).

Villages,	Towns, and Cities			
Urban Settlement (families)	Monthly	Market		
Hamlets (74-)	Ogp	Class VI*		
Small Village (75-99)	18-24gp	Class VI		
Village (100-159)	25-39gp	Class VI		
Village (160-249)	40-6	Class VI		
Large village (250-449)	1	Class V		
Small town (450-624)	338	Class V		
Large town (625-1,249)	469	Class IV		
Small city (1,250-2,499)	938-874	Class IV		
City (2,500-4,999)	1,875	Class III		
Large city (5,000-9,999)	5,000	Class II		
Large city (10,000-14,999)	10,0	Class II		
Large city (15,000-19,999)	1	Class II		
Metropolis (20,000-39,999)	30	Class I		
Metropolis (40,000+)	60	Class I		
*Class VI market at domain's stronghold only				

DISSOLUTION OF AN URBAN SETTLEMENT

Urban settlements depend on a large population to support the necessary division of labor necessary. If fewer than 75 urban families are ever present in a settlement, the urban settlement dissolves into the hamlets of the peasantry and become peasant families. Remove the urban settlement and replace the urban families with peasant families in the nearby hexes.

SEPARATING LAND AND LORDSHIP

RULES FOR DOMAINS OF GOVERNORS AND LANDOWNERS

By default, assumes a feudal structure in which private property ownership and public governance are unified, e.g. the ruler is a literal land-lord. This was the de jure state of affairs during the Middle Ages, and it was the de facto state for much of recorded history. It is also the simplest model of rulership for a game to simulate. Judges simulating particular types of governments or periods of history may, however, wish to separate land ownership from governance. For game purposes, we will define a landowner as an owner of land within a domain he does not rule, and a governor as the ruler of a domain who does not own the land he rules. The domain the governor controls we will call a bureaucratic domain. Conversely, we will define a landed lord as a ruler who is both governor and landowner; the domain he controls we will call a feudal domain.

REVENUE AND EXPENSES

Revenue and expenses in a bureaucratic domain are allocated between the landowner and the governor as follows.

- The landowner collects the domain's land revenue and service revenue. The governor collects the domain's tax revenue and tribute revenue, as well as all of its urban settlement's revenue.
- The landowner pays the domain's liturgy, tithe, and tribute expenses. The governor pays the domain's garrison expenses and all of its urban settlement expenses.

EXAMPLE: A domain consists of 2,000 peasant families generating 12,000gp in monthly land revenue, 8,000gp in monthly service revenue, and 4,000gp in monthly tax revenue. The domain has an urban settlement with 200 urban families generating 1,500gp in urban revenue. The domain has four vassal domains, each paying 2,100gp in tribute (8,200gp total). Its total revenue is 33,700gp. The domain has garrison expenses of 4,000gp, liturgies of 2,000gp, tithes of 2,000gp, and tribute of 6,000gp. The settlement has garrison expenses of 400gp, liturgies of 200gp, tithes of 150gp, and tribute of 600gp. Its total costs are 15,350gp. Domain income is (33,700 – 15,350) 18,350gp.

Rulership over the domain is split between Tavic Tyros, its landowner, and Marcus Ambador, its governor. Tavic Tyros collects the domain's land revenue (12,000gp) and service revenue (8,000gp), for a total of 20,000gp. He pays the domain's liturgy (2,000gp), tithe (2,000gp), and tribute expenses (6,000gp), for a total of 10,000gp. His domain income is (20,000-10,000) 10,000gp per month.

Marcus Ambador collects the domain's tax revenue (4,000gp) and its tribute revenue (8,200gp), as well as all of the urban revenue (1,500gp), for a total of 13,700gp. He pays the domain's garrison expense (4,000gp) and all of the settlement expenses (1,350gp), for a total of 5,350gp. Governor Ambador's domain income is (13,700gp – 5,350gp) 8,350gp per month.

TAX RATE

If the governor raises the tax rate, the landowner may decide to pay the tax or pass the tax on to the peasantry. If the former, the landowner's domain revenue is decreased. If the latter, domain morale is decreased by the increase in taxes. NPC landowners will pass the tax on to the peasantry.

EXAMPLE: Ambador raises the tax rate from 2gp per family to 3gp per family, increasing his domain revenue by 2,000gp. Tyros must either pay the increased tax from his share of domain revenue, decreasing his domain income by 2,000gp; or must pass the tax on to the peasants, which will impose a -1 penalty on domain morale rolls.

MULTIPLE LANDOWNERS

A governor may rule a bureaucratic domain with two or more landowners. In this case, each landowner receives only a proportion of the overall landowner share of the domain's revenue, expenses, and income. The proportion should be determined by the Judge based on each landowner's holdings.

EXAMPLE: Upon his death, Tavic Tyros grants his lands to his two sons, Uric and Viktor. Uric, the elder, receives three-quarters of the lands, while Viktor receives one-quarter of the lands. Assuming no other changes to the domain, Uric will have a net monthly income of $(10,000 \times 3/4)$ 7,500gp and Viktor will have a net monthly income of $(10,000 \times 1/4)$ 2,500gp.

LANDOWNING GOVERNORS

A governor can be a landowner in his own bureaucratic domain and would have domain revenues, expenses, and income equal to his percentage of the landowner domain income plus the governor's portion of the domain income.

EXAMPLE: Uric sells his parcels of land to governor Ambador. Ambador now has a net monthly income of 7,500gp (from land ownership) and 8,350gp (from governance) for a total of 15,850gp. Viktor has a net monthly income of 2,500gp. If Ambador manages to acquire Viktor's parcels of lands as well, his net monthly income would be (15,850gp + 2,500gp) 18,350gp. At that point Ambador would effectively be a landed lord.

FREEHOLDS AND CITY-STATES

The peasant families who work the land may actually own the land of the domain. Such a domain may be called a freehold or democracy. If at least one-third of the domain's land is owned by its peasants, the domain morale score gains a +1 bonus. If at least two-thirds of the domain's land is owned by its peasant families, the domain morale score gains a +2 bonus.

EXAMPLE: Imagine that Tavic had divided all his land equally among the peasants who worked for him. This would have resulted in 2,000 landowners, each with a net income of 5gp. A typical peasant family has an income of about 4gp per month from its labor, and this wage income (which is implicitly already factored out of domain income) would stack with their domain income as landowners. Tavic's generosity would create a domain of prosperous middle-class freeholders earing about 9gp per month (see The Economics of Peasant Households in Axioms III for more details). The domain's morale score gains a +2 bonus.

It is also possible for land to be held (in various combinations) by some or all of the urban families in the domain's settlement. The peasant families would then represent sharecroppers or tenants of the wealthy urban property-owners. If at least one-third of the domain's land is owned by its urban families, the urban settlement's morale score gains a +1 bonus. If at least two-thirds of the domain's land is owned by its urban families, the urban settlement's morale score gains a +2 bonus.

EXAMPLE: Imagine that Tavic had divided all his land equally among the 200 urban families in his settlement. This would have resulted in 200 landowners, each with a net income of 50gp. Since there are 2,000 peasant families, each urban family would own land worked by 10 peasant families; at 30 acres per family that is around 300 acres.

BECOMING A GOVERNOR OR LANDOWNER

Any character can become a landowner by acquiring property and hiring laborers (or buying slaves) to work on the land. Property might be acquired by purchases, theft, conquest, inheritance, or any other means.

A character can become a governor in a variety of ways, depending on the setting and campaign. Governors might be holders of hereditary offices, conquerors who have chosen to leave the prior landowners in possession of their land, officials elected by the landowners, magistrates appointed by an urban council, delegates of the realm's ruler, or new rulers who have purposefully established bureaucratic domains.

ESTABLISHING NEW REALMS

An adventurer who secures land to establish a domain may transfer ownership of the land as desired. An adventurer who grants one-third of the land to incoming peasant families will receive double the number of starting peasants. An adventurer who grants two-thirds of the land to his peasant families will receive triple the number of starting peasants.

AUTHORITY OF GOVERNORS

Unless the Judge determines otherwise, the governor is the ruler of the domain. Domain morale is based on the governor's Charisma and proficiencies. The authority to set the domain's tax rate, hire and manage the garrison, command any military activities, and make any other decisions is vested in the governor. However, investment expenditure can be made by either or both the landowner and the governor out of their respective share of the net income.

SENATORIAL REALMS

Many bureaucratic realms are also senatorial realms, in which the landowners hold positions as senators. A governor with a senate must consult the senate before making key decisions such as going to war or raising taxes. See Senatus Consultum Ultimum in Axioms III for details on senatorial realms.

CAMPAIGN XP FOR GOVERNORS & LANDOWNERS

Regardless of his actual percentage of the domain's income, the governor earns full XP it (e.g. from the total of its land, service, tax, and tribute revenue, less its garrison, liturgies, tithes, and tributes). The landowner does not earn any campaign XP as his role is strictly passive.

EXAMPLE: Since the domain's income is 18,350gp per month, Marcus Ambador would receive 18,350 XP per month, less his GP Threshold. If Marcus is 10th level, with a GP Threshold of 18,000gp, he would receive 350 XP per month.

SENATORIAL REALMS

If the bureaucratic realm is also a senatorial realm, and the landowners are actively influencing government policy, they may share in the campaign XP. To calculate landowner XP in a bureaucratic senatorial realm, follow these steps each month:

- 1. Calculate the **available XP** by subtracting the ruler's GP Threshold from the domain's monthly income.
- 2. Allocate half of the available XP to the ruler.
- Divide the remaining half of the available XP among the landowners according to their percentage of the land owned.
 The landowners do not subtract their own GP Threshold.

EXAMPLE: Tavic has divided all his land equally among the 200 urban families in his settlement. Governor Marcus Ambador has established a senate with 200 seats for the families. Marcus is 10th level, with a GP Threshold of 18,000gp. Domain income is 18,350gp. The available XP is (18,350 – 18,000) 350 XP, of which Marcus receives 50% (175 XP). The other 175 XP is split between the 200 senators, who receive (175/200) 1 XP each.

If Marcus were 9th level, with a GP Threshold of 12,000gp, then the available XP would be (18,000 – 12,000) 6,000 XP. Marcus would receive 3,000 XP and each of the 200 senators would receive 15 XP. Yes, the senate has a perverse incentive to have a weak ruler!

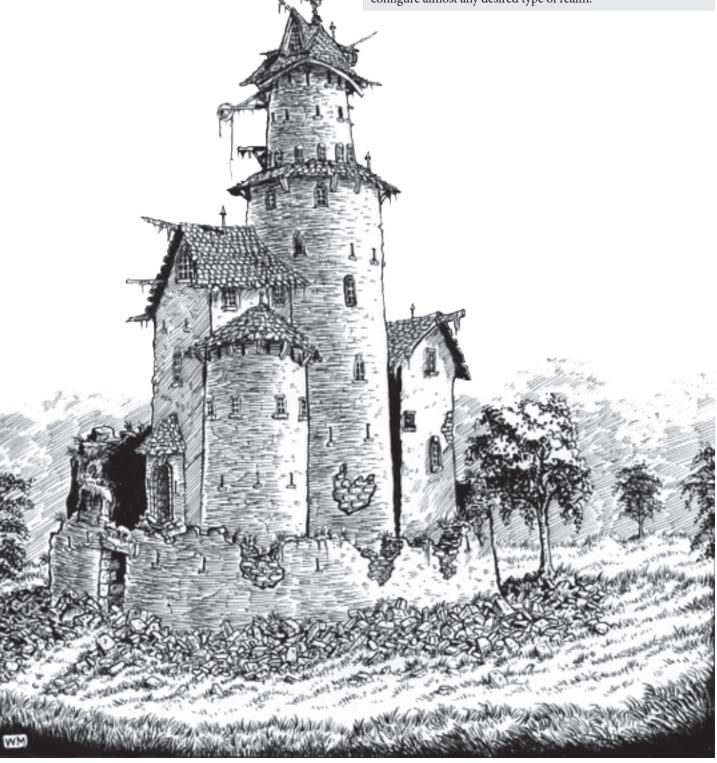
NOTE: Separating land and lordship has interesting implications for gameplay. The most obvious implication is that governors will tend to earn less income than landed lords who are both governors and landowners. However, in the context of a game world, governors are likely to be drawn from the landowning families; even if a governor doesn't own the land he governs, it is entirely likely that he owns land elsewhere. E.g. the governor of Spain might have extensive land in Gaul, while the governor of Gaul has land in Libya, and the governor of Libya has land in Spain. The net income of governors and landed lords is thus likely to be the same.

However, governors are more likely to exploit than cultivate their domains. Governors are incentivized to raise the tax rate higher than standard rulers, as higher taxes accrue to his benefit, while the losses from low morale are split. Landowners are incentivized to spend the minimum on liturgies, as the gains from high morale are split, while the costs are entirely borne by them. Because gains from agricultural investment are shared across landowner and governor, while costs of agricultural investment are born by one or the other, such domains will tend to see less land investment (unless the two rulers are cooperative). However, gains from urban investment will accrue entirely to the governor, who receives all of the urban revenue. Overall then, governor's domains will tend to be more heavily taxed and be more urbanized than typical domains.

Some historical realms began as city-states or small republics, with elected governors appointed over landowners, then slowly transitioned to a feudal system of landed lords instead. Usually this transition began when governors of new or provincial regions were granted the use of lands within their distant territories for their upkeep. (Often these lands were seized from conquered peoples.) This weakened the former ruling class, encouraged the governors to defend their assigned territories, and reduced the tax burden on the state. Such lands theoretically belonged to the office rather than to the man holding the office. Over time, however, such offices tended to become hereditary, and the lands associated with the office did as well. Eventually feudal systems emerged.

With the above in mind, the core rules of remain entirely workable as a simulation of a realm of governors and landowners. In most circumstances, most governors will have sufficient lands of their own to make as much as they would if they were landed lords, and much of that land could be in areas they govern. Thus a Judge can safely treat the landowner and governor as one with little mechanical impact on the realm's revenue, income, army, etc., reserving more complex nuanced structures only for those domains where the political arrangements are likely to impact gameplay.

Between these rules and the previously-published rules for senatorial realms, Judges should now have the means necessary to configure almost any desired type of realm.



SENATUS CONSULTUM ULTIMUM

WHEN THE SENATE SPEAKS, THE RULER MUST LISTEN!

Whether it be the Athenian Council of 500, the Senate of Rome, the Great Council of the Serene Republic of Venice, or the Parliament of England, many of history's greatest realms have been advised or ruled by deliberative bodies drawn from the aristocratic classes. In these bodies are referred to as **senates**, and a realm with a senate is called a **senatorial realm**. Senatorial realms have certain advantages over other types of realms, but suffer certain disadvantages as well. Adventurers may be elected to rule senatorial realms, or may establish senatorial realms in order to secure the advantages a senate offers.

BENEFITS OF A SENATE

A senatorial realm gains the following advantages:

- Each domain in the realm gains a permanent +1 bonus to its base morale score. Realms with senates tend to inspire more patriotism and have more stability.
- Non-henchman assigned to rule vassal domains have a base morale of o instead of -2. A senatorial realm commands loyalty to its senate even if not every member of the government is personally loyal to the current ruler.
- The first extra duty demanded (e.g. build additional stronghold, call to arms, tax demanded, or loan demanded) each month does not trigger a Henchman loyalty check, provide the demand is approved by the Senate.
- Levying militia from the realm does not reduce the morale of the realm, provided the levy is approved by the senate. Senatorial realms often pride themselves on their citizensoldiers.

RESTRICTIONS OF A SENATE

A senatorial realm has the following restrictions:

- The ruler must consult the senate before invading another realm
- The ruler must consult the senate before demanding a duty from any vassals.
- The ruler must consult the senate when appointing a new character to manage a vassal domain.

Particular senatorial realms may have different restrictions, but these are typical of all. See **Consulting the Senate**, below, for the applicable rules.

If a ruler does not consult the senate when required to do so, or enacts a policy that the senate voted against, then the realm is in **dispute** and temporarily loses all of the benefits of being a senatorial realm. See **Disputes with the Senate**, below.

ESTABLISHING A SENATORIAL REALM

A senatorial realm can be established in one of two ways.

1. The ruler of an existing realm can establish a senate to advise him. In this case, the ruler will continue to rule his realm, subject to the restrictions imposed by the new senate.

2. Several independent rulers can merge their realms together into one larger realm, establishing a senate as the new realm's governing body. In this case, the first action of the new senate will be to appoint a character as the new senatorial realm's ruler. The new ruler will manage the realm subject to the restrictions of the senate. Realms where the ruler is chosen by the senate are often referred to as **republics** and their rulers bear titles such as consul, prime minister, or doge.

Rules for construction of senates are provided below.

CONSTRUCTING A SENATE

The following guidelines are offered to help Judges establish senates for NPC realms.

- Determine the size of the senate. This could range from as few as a dozen to over 2,000 senatorial seats. Larger realms typically have larger senates.
- 2. Determine the **requirements of office**. Requirements might be a minimum level of experience, a title, a wealth threshold, or a property holding. Write down a few sentences about how senators are selected and what powers they hold.
- 3. Determine the number of leading senators in the senate. (Leading senators are named NPCs with whom the adventurers interact. Other senators are called minor senators.) For each leading senator, the Judge should generate the following characteristics: alignment; class; level; Intelligence, Wisdom, and Charisma; and proficiencies.
- Assign each leading senator 1d3 policy objectives which
 he aims to achieve while in office. A list of random policy
 objectives is provided below.
- 5. Assign each leading senator an **influence value**, which is the number of votes that the senator controls. If the number of votes controlled by all leading senators is less than the number of senatorial seats, the remaining votes are held by **independent minor senators**. If the number of votes controlled is greater than the number of senatorial seats, reduce the number of leading senators, starting with the least influential.
- 6. Group leading senators with compatible policy objectives together to create political factions. Historically, a common configuration has been two opposed factions, such as the Optimates and Populares; the Blues and Greens; the Royalists and Parliamentarians. Judges who prefer more complexity can, of course, have additional factions. Write down a few sentences about the platform of each faction.
- 7. Total up to the influence of the leading senators in each faction. If one faction has a majority of influence, it is the **ruling faction**. Otherwise, the faction with the most influence is the **leading faction**.

13

Realm Population	Minimum Size	Maximum Size
Less than 4,600	4 seats	15 seats
4,600 - 52,000	4 seats	50 seats
53,000 - 363,000	16 seats	225 seats
364,000 - 1,499,000	51 seats	1,500 seats
1,500,001 or more	225 seats	6,000 seats

Size of the Senate: The size of a senate is measured in **senatorial seats**. A senate must be large enough to attend to the business of the realm, but not so large that it becomes dysfunctional. The Size of the Senate table, to the right, shows the minimum and maximum size, based on the number of families populating the realm.

Senatorial Seats	Minimum Senator Level	Leading Senators	Influence per Senator
4-15	Ruler's Level -1	1d4	2d3 votes
16-50	Ruler's Level -3	2d6	2d6 votes
51 – 225	Ruler's Level -5	2d6+3	2d6x3 votes
226-1,500	Ruler's Level -7	3d6+2	2d10x5 votes
1,501 or more	Ruler's Level -9	4d6+1	2d10x20 votes

The larger a senate, the easier it is to qualify for, and the harder it is for a small number of senators to dominate it. The Senate Characteristics table summarizes these factors.

EXAMPLE: The Auran Empire has a population of 4.3 million families. Its senate must have between 225 and 6,000 seats. The Judge decides it has a senate of 600 seats. The Empire is ruled by a 14th level ruler, so the minimum senator level will be (14-7) 7, and there will be 3d6+2 leading senators. Rolling 3d6+2, the Judge gets a total of 11, so there are 11 leading senators. He rolls 2d8 for the number of votes controlled by each senator, getting 35, 45, 55, 20, 75, 60, 10, 75, 40, 85, and 50 votes, for a total of 550 votes. 50 votes are held by independent minor senators.

Requirements of Office: By cross-referencing the level of the realm ruler with the size of the senate, the Judge can determine the minimum level to hold the office of senator. The Judge can use level of experience as the requirement for senator if desired. However, a character's level of experience is a game mechanic of which the inhabitants of the game world are only indirectly aware; a better option is to impose a requirement such as title, net worth, land owned, or families governed. The Requirements of Office has recommendations for each level, from which the Judge should select a few criteria. The Bribe column is used to determine the cost to bribe a senator (see below).

Required Level	Required Title	Required Net Worth	Required Land	Required Families	Bribe (+1/+2/+3)
3	Baron	5,000gp	5 1.5m hexes	40 families	5gp/35gp/150gp
4	Baron	10,000gp	7 1.5m hexes	80 families	10gp/70gp/300gp
5	Baron	20,000gp	12 1.5m hexes	160 families	20gp/150gp/600gp
6	Marquis	38,000gp	1 6m hex	285 families	38gp/75gp/1,150gp
7	Count	75,000gp	2 6m hexes	550 families	75gp/525gp/2,275gp
8	Count	150,000gp	3 6m hexes	1,200 families	150gp/1,050gp/4,500gp
9	Duke	350,000gp	4 6m hexes	2,650 families	350gp/2,450gp/10,000gp
10	Duke	500,000gp	5 6m hexes	3,750 families	500gp/3,500gp/15,000gp
11+	Prince	1,125,000gp	10 6m hexes	8,500 families	1,125gp/7,875gp/35,000gp

EXAMPLE: As a 600-seat body under a 14th level ruler, the Auran senate is open to 7th level characters and above. The Judge decides that in the game world, the senate is open to characters who hold the title of Legate (count) or above and manage realms with at least 550 families.

Die Roll	Policy Objective
1	Establish overland trade routes
2	Establish maritime trade routes
3	Increase size of army
4	Decrease size of army
5	Increase size of navy
6	Decrease size of navy
7	Replace realm ruler with new ruler
8	Preserve current realm ruler
9	Conquer neighboring realm
10	Make peace with neighboring realm
11	Build strongholds on border with neighboring realm
12	Decrease taxes on peasants in realm
13	Increase taxes on peasants in realm
14	Eliminate slavery in realm (institute, if none)
15	Re-distribute land from nobility to peasants
16	Support existing faith of the realm
17	Introduce new faith to the realm
18	Increase size of urban settlements in personal realm
19	Increase territory and population of personal realm
20	Gain monopolies over merchandise in personal realm

Policy Objectives: The Policy Objectives table can be used to randomly determine goals for the leading senators. Re-roll conflicting results. The Judge should interpret the policy objectives in light of the his campaign.

EXAMPLE: Senator Ulrand Valerian is being assigned 1d3 policy objectives. The Judge rolls for 3 policy goals and gets an 11, 15, and 16. He interprets these goals in light of Valerian's position as a highly Lawful traditionalist serving as a legate on the borderlands. Valerian has a policy objective of strengthening the border forts along the Krysivor River because he fears the coming beastman invasion. He wants to re-distribute land from the nobility to the peasants in the civilized areas because he believes the Empire can only recover if it returns to its foundation of independent citizenfarmers. He wants to spread the faith of the realm because he believes that the Chthonic gods are subverting the Empire, its laws, and its patriotism.

A senator's influence and policy objectives are secret until revealed in play.

Senates Established by Adventurers: An adventurer who establishes a senate only performs step 1 (determine the size of the senate) and step 2 (determine the requirements for office). He can then appoint qualified senators as desired. Normally these will be the adventurer's friends, henchman, and vassals, and/or henchman of the same. A ruler who establishes a senate begins with very strong influence over it. For the first 1d6 months after the senate is established, all its senators will vote for the ruler's policies.

Politics is unpredictable, however, and yesterday's trusted right-hand man can be tomorrow's rival. 1d6 months after the adventurer has established his senate, the Judge should randomly determine how many leading senators emerge as influential within the senate. The Judge should then select leading senators from among the NPCs appointed by the adventurer, giving more weight to NPCs that have high INT, WIS, CHA, class level, and relevant proficiencies such as Command, Diplomacy, Leadership, Military Strategy, Mystic Aura. The Judge should then choose or roll for policy objectives and influence for the senate's new leaders, and create political factions guided by these results.

CONSULTING THE SENATE

	Senate Voting	
Adjusted Die Roll	Result	
2-	Votes Against and Condemns	
3-5	Votes Against	
6-8	Votes With Current Trend	
9-11	Vote For	
12+	Votes For and Endorses	

When a ruler seeks the senate's support for a policy, he must consult the senate. When a ruler consults the senate, the Judge should roll 2d6 on the Senate Voting table for each leading senator to see if the senator votes for or against the ruler's policy. A senator that is charmed will always vote however the character who has charmed him directs.

Condition	Voting Roll Adjustment
Ruler's current Domain Morale score	+ Domain Morale score
Ruler does not have Diplomacy	-2
Ruler has Mystic Aura	+2
Ruler is Lawful and never been implicated in bribery, etc.	+1
Senator is henchman of ruler, or of ruler's henchman	+5
Senator and ruler are in same political faction	+1
Senator and ruler are in opposed political factions	-2
Other senator from same faction has endorsed ruler	+1 per endorsement
Other senator from same faction has condemned ruler	-1 per condemnation
Ruler's proposed policy helps senator's policy objective	+1 per objective
Ruler's proposed policy hinders senator's policy objective	-2 per objective
Senator has been bribed by ruler	+1/+2/+3
Senator has been bribed by ruler's rivals	-1/-2/-3
Senator has been intimidated or seduced by ruler	+2
Senator previously but no longer charmed, intimidated or seduced by ruler	-5
Senator has been intimidated or seduced by ruler's rivals	-2
Senator previously but no longer charmed,	+2
Senator owes ruler for prior favor	+1 per favor
One-third or more of realm's military loyal to ruler	+1
All of realm's military loyal to ruler	+2

A result of "Votes Against and Condemns Petition" means that the senator votes against the petition while giving a rousing condemnation of the petition and the petitioner, which will influence future votes by members of his faction. A result of "Votes Against Petition" means the senator votes against the petition but does not urge others to do so.

A result of "Votes with Current Trend" means the senator votes for the petition if more votes have so far been cast for the petition, and votes against the petition if more votes have so far been cast against the petition. If no votes have been cast for or against yet, the senator abstains.

A result of "Votes For Petition" means the senator votes for the petition but does not urge others to do so. Finally, a result of "Votes For and Endorses Petition" means that the senator votes for the petition and gives an inspiring speech supporting the petition and petitioner which will influence future votes by members of his faction.

Conduct voting rolls in order starting with the most influential senator and continue until a majority of the senators have voted either in favor or against the ruler's policy. Remember that a leading senator's vote carries a number of votes equal to the senator's influence. (These other, less influential senators are assumed to vote "off camera").

VOTING ROLL ADJUSTMENTS

To reflect circumstances that may affect the senator's vote, apply the Voting Roll adjustments shown, based on the ruler, the senator voting, and the policy being discussed.

Political Factions: A ruler may choose to align himself with a political faction in the senate. Doing so earns him a +1 bonus to the voting rolls of all senators of the same faction but a -2 penalty to the voting rolls of all senators in opposed factions.

Bribery: Rulers may bribe senators prior to a vote in order to ensure a more favorable outcome. Any character can bribe, but characters without Bribery proficiency must pay double the listed amount and cannot exceed a bonus of +2. On a voting roll result of 2, a bribed senator will reveal that the ruler bribed him. At the Judge's discretion, a ruler's rivals may bribe senators to vote against the ruler.

Intimidation: Rulers may intimidate senators prior to the vote in order to ensure a more favorable outcome. The character must have the Intimidation proficiency, be in a position to implicitly or explicitly threaten the senator, and grossly outrank or outnumber him. However, if a senator who was previously intimidated by the ruler is able to escape his dominance, a -5 penalty applies instead of a +2 bonus. On a voting roll result of 2, an intimidated senator will reveal that the ruler intimidated him. At the Judge's discretion, a ruler's rivals may intimidate senators to vote against the ruler.

Seduction: Petitioners may seduce senators who are potentially attracted to them. The character must have Seduction proficiency and be in a position to entice or allure the senator. However, if a senator was previously seduced by a petitioner and thereafter not well-treated, a -5 penalty applies instead of a +2 bonus. On a voting roll result of 2, a seduced senator will reveal that the ruler seduced him. At the Judge's discretion, a ruler's rivals may seduce senators to vote against the ruler.

Military Loyalty: Divisions of troops that are led by the ruler, or by the ruler's henchmen, count as personally loyal to the ruler. Divisions of troops led by non-henchmen or mercenary commanders do not.

VOTING ROLLS BY FACTION

If the adventurers have not spent time building relationships with the leading senators, then the Judge can resolve a senate consultation by rolling once for each political faction instead of for each leading senator. Follow the rules above, but only apply voting roll adjustments which are applicable to the ruler and the faction as a whole.

DISPUTES WITH THE SENATE

If a ruler does not consult the senate when required to do so, or enacts a policy that the senate voted against, then the realm is in dispute. A realm in **dispute** temporarily loses all of the benefits of being a senatorial realm. The benefits are restored if the ruler successfully regains the approval of the senate.

In order to regain the approval of the senate, the ruler must consult the senate with a policy proposal to retroactively approve of his recent action(s). The Judge should roll on the Senate Voting table for each leading senator to see if the senator votes for or against the ruler. If a majority of the senators vote for the ruler, then the dispute ends. If the majority of the senators vote against the ruler, the dispute continues, and any senator who voted against the ruler gains the policy objective "replace realm ruler with new ruler." The ruler may try to regain the approval of the senate repeatedly if desired but doing so will become harder and harder as more senators become committed to ending his reign.

If the ruler cannot or does not want to regain the approval of the senate, he may simply abandon senatorial government, either formally (dissolving the senate) or informally (ignoring it). In either case, abandoning senatorial government has the following effects:

- The realm permanently loses all of the benefits of being a senatorial realm.
- The ruler's personal domain must immediately make a domain morale roll at a -2 penalty.
- If any of the ruler's henchmen are senators, they must immediately make loyalty rolls at a -2 penalty.
- If any of the ruler's vassals are not henchmen, they must immediately make loyalty rolls at a -2 penalty. This penalty is in addition to the base -2 morale of non-vassal henchmen.
- Any influential senators with the policy objective "replace realm with new ruler" will become Hostile, and work against the ruler to the extent possible, using methods such as assassination, ritual magic, war, etc.

Assuming the ruler survives the turmoil that ensues, he may thereafter rule his realm without a senate. He may establish a new senate after 2d6 months, if desired.

HIJINKS

Rulers with access to ruffians can use hijinks to gather intelligence on, and influence over, the senate. The following hijinks are particularly useful when dealing with senatorial politics:

Assassination: Perpetrators can be assigned to assassinate senators. Both leading and minor senators can be assassinated. If a leading senator is assassinated, half of the minor senators he controls become independent and the other half are allocated pro rata to members of his political faction (if none, then all of the votes he controls become independent). A new leading senator will emerge in 1d6 months. If a minor senator is assassinated, it reduces the influence of the leading senator who controlled him. Minor senators are always the minimum level for the senate.

Carousing: Perpetrators can be told to seek out political rumors. If successful, the perpetrator learns one of the following pieces of information (roll 1d4):

- 1. The current influence of a random leading senator.
- 2. The policy objectives of a random leading senator.
- The general itinerary of a random leading senator's upcoming month. This information provides a +2 bonus to Assassination hijinks that month.
- 4. Compromising information worth 3d12x5gp per level with which a leading senator could be blackmailed. Blackmail can

be resolved with Intimidation or Bribery proficiency (the "bribe" is not revealing the information).

Slandering (new): Perpetrators can spread lies and rumors about a leading senator, reducing his influence. For slandering to succeed, the perpetrator must make a successful Hear Noise throw. There is a -1 penalty on the proficiency throw per each level the perpetrator is lower than the victim. If the throw is successful, the targeted senator loses control of one minor senator per level of the perpetrator. If the proficiency throw fails by 14 or more or is an unmodified 1, the perpetrator has been caught. If caught, determine the charges with a 1d6 roll: outrage (1-3), sedition (4-5), or treason (6).

Spying: Perpetrators can be assigned to spy on a specific leading senator. If successful, the perpetrator will learn 2d12x100gp per level worth of compromising information with which to blackmail the senator. In addition, the spy will learn one piece of information about the senator (roll 1d4):

- 1. The current influence of the leading senator and 1d3 members of his political faction.
- 2. The policy objectives of the leading senator and 1d3 members of his political faction.
- 3. The senator's current attitude towards the ruler (roll 2d6 and tell the player the number. This number will be the die roll on the senator's next voting roll).
- 4. The general itinerary of a random leading senator's upcoming month. This information provides a +2 bonus to Assassination hijinks that month.

GAINING INFLUENCE

Adventurers who are rulers or senators themselves might seek to gain influence over independent minor senators. An independent minor senator will vote as directed by the adventurer if any of the following applies:

- The minor senator has been charmed by the adventurer.
- The minor senator is a henchman of the adventurer.
- The minor senator has received gifts his month from the adventurer sufficient to provide a +3 bonus on reaction rolls from a bribe.
- The minor senator has Friendly reactions with the adventurer and has received gifts this month from the adventurer sufficient to provide a +1 bonus to reaction rolls from a bribe.

If two or more characters provide gifts (or bribes) to the same minor senator in

POLITICS IS JUST WAR CONTINUED BY OTHER MEANS

This system is purposefully open to terrible amounts of skullduggery. It empowers and encourages the adventurers and their opponents to bribe, intimidate, seduce, or charm senators; assassinate or kidnap senators so they cannot vote; defame and blackmail their political opponents; and generally do all of the awful and ruthless things that historical politicians have done. It is up to the Judge to determine how much of the campaign should be set aside for "politicking". Bribery, intimidation, etc. can be extensively role-played or resolved quickly with die rolls, depending on the interests of the Judge and players.

16 Hijinks

WANDERING INTO WAR

A SYSTEM OF DOMAIN ENCOUNTERS TO KEEP RULERS ON THEIR GUARD

The Adventurer Conqueror System provides elaborate mechanics for resolving random encounters with wandering monsters, even including a system for populating an empty dungeon with monsters wandering into it. What it does not provide is a system by which Judges can generate and resolve incursions by wandering monsters into player- or NPC-run domains during the course of play. This article provides that much-need system! It requires that the Judge have access to and Domains at War: Campaigns.

DOMAIN ENCOUNTERS

Periodically, domains may suffer incursions from wandering monsters, known as **domain encounters**. Wilderness domains face the most danger from domain encounters, while civilized domains face little risk.

Classification	Frequency	Terrain	Wilderness Encounter Column
Civilized	Monthly	Settled terrain	Inhabited*
Borderlands	Weekly	By terrain	By terrain**
Wilderness	Daily	By terrain	By terrain

^{*}Use City if a Class III or better market exists in hex.

The Domain Encounters by Classification table shows the frequency of encounter throws by classification. It also shows the terrain type used on the Domain Encounter Frequency by Territory Size and Terrain table (below), and the column used on the Wilderness Encounters by Terrain table in , p. 224 if an encounter results.

Domain Encounter Frequency by Territory Size and Terrain								
Size of Territory	Die	City, Grass, Scrub, Settled	Aerial, Hills, Woods	Barren, Desert, Jungle, Mountians, Swamp				
1 hex	1d100	100+	99+	98+				
2 hexes	1d100	99+	97+	95+				
3 hexes	1d100	98+	95+	92+				
4-6 hexes	1d20	20+	19+	18+				
7-8 hexes	1d12	12+	11+	10+				
9-10 hexes	1d10	10+	9+	8+				
11-13 hexes	1d8	8+	7+	6+				
14-16 hexes	1d6	6+	5+	4+				

EXAMPLE: A Civilized domain located in Hills terrain suffers one encounter throw per month, but treats the terrain as Settled; any encounters are resolved on the Inhabited column of the Wilderness Encounters by Terrain table. A Wilderness domain located in Woods terrain suffers one encounter throw per day; and any encounters are resolved on the Woods of the Wilderness Encounters by Terrain table.

The Domain Encounter Frequency by Territory Size and Terrain table shows the die roll and target value for domain encounter throws.

The size of the territory (in 6-mile hexes) dictates the die used in the encounter throw. The territory size, cross-referenced against the predominant terrain of the domain's territory, determines the target value of the throw.

EXAMPLE: A 24-mile Woods hex is classified Wilderness. If the entire hex were one domain of 16 6-mile hexes, it would suffer one encounter throw per day of 1d6 v. a target value of 5+. Assume it actually consists of 4 domains, ruled by Andor, Balbus, Cerwyn, and Decimus. Andor's domain has a territory of 8 hexes; Balbus, 5 hexes; Cerwyn, 2 hexes; and Decimus, 1 hex. Andor's domain suffers one daily encounter throw of 1d12 v. a target value of 11+. Balbus's domain suffers one daily encounter throw v. a target value of 19+. Cerwyn's domain suffers one daily encounter throw of 1d100 v. a target value of 97+. Decimus's domain suffers one daily encounter throw v. a target value of 99. Note that the expected number of encounters for the entire hex is .33 per day (2/6). The expected number of encounters for the individual domains is virtually the same: 0.167 (Andor) + 0.1 (Balbus) + 0.04 (Cerwyn) + 0.02 (Decimus), or 0.327. You're welcome!

Rather than make an encounter throw every game day, game week, or game month, the Judge can instead assume that encounters regularly occur at a periodic frequency based on the domain territory, classification and terrain.

To determine the length of time between encounters, consult the Periodic Domain Encounter Frequency table and cross-reference the domain's territory size and terrain and roll the listed dice. The time period will be months, weeks, or days for civilized, borderlands, or wilderness domains.

EXAMPLE: A Wilderness domain of 7 6-mile Woods hexes (encounter throw 5+ on 1d6) will suffer from wandering monsters every 2d6-1 days, averaging 6 days between encounters. A Civilized domain of 10 6-mile Settled hexes (encounter throw 6+ on 1d6) will suffer from wandering monsters every 2d10-1 months, averaging 10 months between encounters.

DANGEROUS BORDERS

Isolated domains face more wandering encounters than those with neighbors. If there's only one little village around, that's the village the orcs will raid. A similar problem occurs to border fronts and frontier towns. It does little good to be adjacent to large, civilized domains if civilization is behind you. Therefore, a domain with dangerous borders counts as having a larger territory for purposes of encounter throws.

The accompanying illustration shows four possible territorial configurations of dangerous borders. In each configuration, the territory of the domain is represented with a tower icon; the territory secured by neighboring domains or impassable terrain is light grey; and the territory remaining unsecured is dark grey. The isolated domain is surrounded by unsecure territory on all sides. In the spearhead configuration, the domain has unsecured territory to its front and flanks, and secure territory to its rear. In the flank configuration, the domain has unsecured territory to its front and

17

^{**}Use Inhabited if all adjacent hexes are either Civilized or Borderlands.



one flank, and secure territory to its other flank and rear. Finally, in the line configuration, the domain has unsecured territory to its front, but its flanks and rear are secured by neighbors or terrain.

The Judge should use this illustration and his own judgment of the regional geography to asses if an adventurer or NPC's domain has dangerous borders, and if so whether it should be considered to be in an **isolated**, **spearhead**, **flank**, or line position. The Judge should then consult the Effective Domain Territory with Dangerous Borders table below, cross-referencing the domain's territory size with its configuration to determine its effective territory size for encounter throws.

These rules make the location of a domain a decision of great long-term importance! A domain with a broad river, impassable cliffs or sturdy neighbors is far easier to defend.

EXAMPLE: Decimus' Wilderness domain (1 6-mile Woods hex) has land secure and settled to its rear, while its flanks and front are unsecured wilderness. It is in spearhead configuration. Cross-referencing the "1 hex" row with the "Spearhead" column, the Judge finds that Decimus's domain has an effective territory of 8 6-mile hexes. Consulting the Domain Encounter Frequency table (above), the Judge sees that Decimus's domain will suffers one daily encounter throw of 1d12 v. a target value of 11+.



Effective Domain Territory With Dangerous Borders								
Domain Territory	Isolated	Spearhead	Flank	Line				
1 hex	16 hexes	8 hexes	6 hexes	4 hexes				
2 hexes	16 hexes	10 hexes	7 hexes	4 hexes				
3 hexes	16 hexes	12 hexes	9 hexes	5 hexes				
4-6 hexes	16 hexes	14 hexes	10 hexes	6 hexes				
7-8 hexes	16 hexes	16 hexes	12 hexes	8 hexes				
9-10 hexes	16 hexes	16 hexes	14 hexes	9 hexes				
11-13 hexes	16 hexes	16 hexes	16 hexes	10 hexes				
14-16 hexes	16 hexes	16 hexes	16 hexes	11 hexes				

EFFECT OF STRONGHOLDS, GARRISONS, AND DUNGEONS ON DOMAIN ENCOUNTERS

By default, the rules assume that each domain is secured by a stronghold and garrison of sufficient size. If a civilized or borderlands domain has an insufficient garrison and/or stronghold, it is treated as if it were one classification worse for purposes of encounter throws. (E.g. a civilized domain is treated as a borderlands domain.)

A wilderness domain with an insufficient garrison and/or stronghold is treated as if its borders were one level more dangerous than they are for purposes of encounter throws. (E.g. a domain in a flank configuration is treated as in a spearhead configuration.)

An already-isolated wilderness domain with an insufficient garrison and/or stronghold suffers one encounter throw of 1d6 every day for every 6-mile hex. (It is essentially just wilderness!)

EXAMPLE: Decimus goes bankrupt due to the machinations of the thieves' guild, and can no longer pay his garrison. His wilderness domain is now treated as if its borders were one level worse than they are. Since his domain is ordinarily in spearhead configuration, it is treated as being in isolated configuration. Cross-referencing the "1 hex" row with the "Isolated" column, the Judge finds that Decimus's domain now has an effective territory of 16 6-mile hexes – ugh! Consulting the Domain Encounter Frequency table (above), the Judge sees that Decimus's domain will suffers one daily encounter throw of 1d6 v. a target value of 5+.

If a domain includes one or more unoccupied or partly occupied dungeons, wandering monsters may permanently settle there, as explained in Populating a Dungeon, in p. 141. This is useful for arcane experimentation, but peasants do not enjoy living near monsters.

To determine the morale impact of a dungeon on nearby domains, total the experience point value of the monsters in the dungeon and divide that total by the number of families in the domain's territory (round to the nearest whole number). The quotient represents the penalty to the domain's base morale.

EXAMPLE: Quintus' domain has 1,100 peasant families. It also is home to a sinister dungeon with a cyclops (2,400xp), 6 ogres (1,290xp), and 60 orcs (600xp), for 4,290xp total. 4,290xp/1,100 families is 3.9, rounded to 4, so Quintus' domain suffers a -4 penalty to its domain morale.

If a domain suffers a morale penalty from monsters in its dungeon(s), then any domains neighboring the dungeon's domain treat the territory as being unsecured land for purposes of dangerous borders. This represents the risk of monsters wandering from the dungeon into their lands.

EXAMPLE: Quintus's domain is on the southwestern flank of along line of Auran strongholds. To the northeast is the fort of Türos Drav. Normally, Türos Drav would be in a line configuration, but since Quintus's domain has a morale penalty from monsters, it counts as unsecured wilderness. Türos Drav therefore is treated as in a flank configuration.

A domain with a dungeon may increase the size of its garrison in order to reduce or eliminate the penalty imposed on domain morale by the dungeon. The penalty is reduced by 1 point for gp per family increase in garrison expenditure. Additional expenditures thereafter do not improve morale, but might help deal with the encounters themselves (see **Resolving Domain Encounters**, below).

EXAMPLE: Quintus' domain is suffering a -4 penalty to domain morale because of the presence of monsters. If he increases his garrison expenditure by 4gp per family, he can eliminate the penalty. Being a stingy archmage, Quintus opts to only spend an extra 3gp per family (3,300gp). This alleviates 3 points of the penalty, so his base domain morale is only decreased by 1.

RESOLVING DOMAIN ENCOUNTERS

Not every wandering monster enters a domain with intent to raid and pillage. Some may be exploring, migrating, or trading, while even those with violent intent may retreat if they do not find any weak prey or undefended villages. Conversely, not every violent encounter requires the domain's ruler to sally forth. A typical domain's garrison is more than capable of dealing with incursions by wolves, kobolds, or owlbears. That's what garrisons are for!

DOMAIN ENCOUNTER GENERATION

When a domain encounter throw results in an encounter, the following steps should be followed:

- Roll 1d8 on the appropriate column of the Wilderness Encounters by Terrain table in and consult the resulting subtable.
- 2. Roll 1d12 on the resulting sub-table to determine the type of creature encountered.
- Find the encountered creature's entry in the Monster chapter and roll against its % In Lair to determine whether the creature is lingering or migrating (see below).
- 4. Roll the appropriate number encountered for the creature to determine how many are present.

Lingering or Migrating: Wandering monsters are, by definition, not encountered in their lair. However, they may decide to make a lair in the domain. Any wandering monsters that arrive have a percentage chance of lingering in the domain equal to their % In Lair entry. Monsters are twice as likely to linger if treasure is available in an unoccupied or partly-occupied dungeon (see Populating a Dungeon, p. 141. Otherwise, the monsters are migrating, Whether the monsters are migrating or lingering changes how the monsters behave (see below).

Number Encountered: If the monster is migrating, use the number encountered for a wandering wilderness encounter. If the monster is lingering, roll again against its % In Lair. If the result is again equal to or less than its % In Lair, use the number encountered for a wilderness lair. Otherwise, use the number encountered for a wandering wilderness encounter.

Treasure Type: Monsters entering a domain do not normally have any treasure of their own. However, if the monsters are a huge migration (see above) or arriving for mercantilist purposes (see below), they will have treasure according to their treasure type.

RECONNAISSANCE ROLLS FOR DOMAIN ENCOUNTERS

When a domain encounter occurs, the Judge should make a reconnaissance roll for the domain ruler as well as the monsters to determine what intelligence they have about each other. For purposes of reconnaissance, assume the garrison is in the domain's stronghold if the ruler has not made other arrangements. The Judge should use his judgment to determine the initial location of the wandering monsters based on the geography, roads, strongholds, and settlements in the region. See Reconnaissance and Intelligence, D@W: Campaigns, p. 58.

It is possible that a domain ruler may not be aware of a domain encounter until the enemy begins pillaging his domain or arrives at his stronghold! Given sufficiently poor reconnaissance, it is even possible for monsters to settle into a domain and impose morale penalties while an oblivious ruler remains unaware of the cause of the problem.

REACTION ROLLS FOR DOMAIN ENCOUNTERS

When a domain encounter occurs, a reaction roll should be made to determine the attitude of the monsters. The Judge rolls 2d6, applies any relevant adjustments to the roll, and consults the Domain Encounter Reaction table below. Note that the rulers of the domain do not know the reaction result until they discover it in play.

Hostile means that the monsters have come to wreak havoc. If the domain's garrison is deployed against them, they will always fight. If the garrison remains in the stronghold, the monsters will assault or besiege the domain's stronghold if (a) their BR is more than twice that of the garrison and (b) they possess the intelligence and means to do so. Otherwise the monsters will immediately begin pillaging the domain. If the monsters are lingering, they will remain in the domain until defeated or until they have pillaged it to the ground. (If a dungeon is available, they will lair therein.) If the monsters are migrating, they will depart after pillaging the domain once. Allowing a domain to be pillaged has disastrous consequences on its population, stronghold value, and domain morale – see Pillaging Domains, D@W: Campaigns, p. 64. If the monsters settle in the domain, it may effect the domain's base morale score (see above).

	Domain Encounter
Adjusted Die Roll	Sapient
2-	Hostile, pillage
3-5	Unfriendly, opportunistic
6-8	Neutral, exploratory
9-11	Mercantilist, trade
12+	Friendly, help

Unfriendly means that the monsters intend violence, but can be deterred. If the domain's garrison is deployed against them, they will only fight if their BR equals or exceeds that of the garrison; otherwise they will be driven off (either out of the hex or, if lingering, into an available dungeon). If the domain's garrison is not deployed against them, they will immediately begin pillaging the domain. If the monsters are lingering, they will continue pillaging until driven off or defeated, or until they have pillaged it to the ground. If a dungeon is available, they will then lair therein. If the monsters are migrating, they will depart after pillaging the domain once. Allowing a domain to be pillaged has disastrous consequences on its population, stronghold value, and domain morale – see Pillaging Domains, D@W: Campaigns, p. 64. If the monsters settle in the domain, it may effect the domain's base morale score (see above).

Circumstances	Morale Roll Adjustment						
Domain's current morale score	+ current morale score						
Lawful domain encountering lawful monsters	+2						
Lawful or neutral domain encountering chaotic monsters	-2*						
Chaotic domain encountering lawful monsters -2*							
*Doubled if monsters' BR is greater than garrison's BR.							

Neutral means that the monsters are migrating through the domain for reasons of their own – exploration, scouting, hunting, foraging, etc. If the domain's garrison is deployed against them, they will become unfriendly (as above). If the domain's garrison is not deployed against them, they will attempt to either find a place to settle (if lingering) or exit peacefully after 1d4 weeks (if migrating). Peasants tend to be xenophobic and distrustful, so if the domain ruler does not deploy

the garrison against the monsters, the domain suffers a -1 penalty to its next domain morale roll. If the monsters settle in the domain, it may effect the domain's base morale score (see above). Re-roll settled neutral monster's reactions if the domain's morale score changes.

Mercantilist means that the monsters have come with commercial motivations. If the domain's garrison is deployed against them, they will become unfriendly (as above). Otherwise they will travel towards the domain's urban settlement or stronghold to seek out opportunities for trade. Mercantilist monsters will carry treasure according to their treasure type; the Judge may substitute an equivalent value of merchandise for trade if desired. Mercantilist monsters without treasure might be offering mercenary services (Judge's discretion).

Friendly means that the monsters actively wish to assist the domain. If the domain's garrison is deployed against them, they will become **unfriendly** (as above). Otherwise they will travel towards the domain's urban settlement or stronghold to offer their assistance. If the domain has been invaded by monsters or enemy troops, the friendly monsters may attack the invaders and/or assist the garrison in dealing with them. Friendly monsters can be offered positions as mercenaries or henchmen with a +2 bonus (see below).

Encounters between Monsters and Adventurers: The reactions of monsters to individual adventurers that they interact with should be handled with individual reaction rolls as per , p. 99. However, apply a -2 penalty if the monsters are hostile to the domain, a -1 penalty if unfriendly, a +1 bonus if mercantilist, and a +2 bonus if friendly.

Encounters with Animals: Encounters with monsters of animal intelligence are limited to results of Neutral or below unless the domain is an elven fastness. Pillaging by animals represents att on livestock, carrying off of young, etc.

Encounters with Mindless Monsters: Encounters with mindless monsters such as constructs and vermin are limited to results of Neutral or below. Pillaging by mindless monsters represents instinctual or programmed activities.

Pillaging by Monsters: The rules for pillaging in D@W: Campaigns assume pillaging by large numbers of men. Powerful monsters can pillage with much greater effectiveness. For every 2 points of platoon-scale BR, the monsters count as 120 men for pillaging purposes.

MILITARY CAMPAIGNS FOR DOMAIN ENCOUNTERS

According to *D@W: Campaigns*, p. 54, the arrival of hostile or unfriendly wandering monsters or the deployment of a garrison would begin a military campaign. However, most domain encounters do not need to be handled using those detailed mechanics. Typically, the BR of wandering monsters is considerably less than the BR of the garrison, and the monsters will be quickly driven off.

When the threat posed by the monsters is interesting, the Judge may run the domain encounter as a D@W military campaign. In this case, hostile monsters have a strategic stance of offensive, while unfriendly monsters have a strategic stance of either offensive (if their BR exceeds that of the garrison) or evasive (if attempting to retreat).

MASS COMBAT FOR DOMAIN ENCOUNTERS

We recommend that the Judge use the mass combat mechanics presented in D@W: Campaigns to resolve violent domain encounters. These mechanics allow for the garrison to confront the monsters without the adventurers, while still affording the opportunity for adventurers to influence the outcome through heroic forays.

If the Judge has decided to run the military campaign in detail, the results of that campaign will determine where, how, and when the garrison confronts the wandering monsters. Otherwise, combat between domain garrisons and wandering monsters occurs as follows:

- Hostile monsters facing a garrison in its stronghold assault the stronghold if the monster's BR is more than twice that of the garrison and they possess the intelligence and means to do so. (Otherwise they simply pillage the domain.)
- 2. Hostile monsters facing a deployed garrison always fight a pitched battle against the garrison.
- Unfriendly monsters facing a deployed garrison fight a pitched battle against the garrison if the monster's BR is equal to or greater than that of the garrison. (Otherwise they are driven off.)
- 4. A garrison pursuing monsters into a dungeon assaults the dungeon.

Because the number of monsters encountered is usually between a dozen and a hundred, platoon scale should be used for the assaults and battles, with units of 30 man-sized infantry or 15 large creatures or cavalry. Be sure to organize the garrison at platoon scale, too. (Remember that platoon-scale BR is four times higher per individual creature than company-scale BR.)

EXAMPLE: A wilderness domain of 225 families has a garrison expenditure of 900gp per month, with which it retains 60 heavy infantry (720gp per month) and 30 light infantry (180gp per month). At platoon scale, this equals 2 heavy infantry platoons (BR 2.0 each) and 1 heavy infantry platoon (BR 1.0). The garrison's total BR is 5.0. This is more than enough to deal with most threats. Unfortunately, a bad encounter throw results in the arrival of an entire wilderness lair of orcs. The reaction roll is unfriendly. The Judge decides to use the average encounter: 6 platoons of 30 orcs, each with a BR of 1.0, for a total BR of 6.0. Since the orcs are unfriendly, and their BR is greater than the garrison's BR, the orcs will fight if the garrison is deployed against them.

The tables below present the Battle Rating of various creatures organized into platoon-scale units for average-sized wandering and lair wilderness encounters. Some encounter sizes have been adjusted slightly for ease of play.



Beastmen & Humanoids	Individual BR	Platoons	Platoon BR	Platoons	Platoon BR	Notes
Bugbear	0.050	1 of 12	2.5	3 of 24	5.0	Leaders available for heroic forays
Centaur	0.189	1 of 10	7.5	2 of 10	7.5	Leaders available for heroic forays
Dwarf	0.021	1 of 25	2.0	5 of 25	2.0	Leaders available for heroic forays
Elf	0.033	1 of 15	2.0	5 of 15	2.0	Leaders available for heroic forays
Faerie, Pixie	0.086	1 of 25	8.5	1 of 25	8.5	Recon modifiers: magic
Faerie, Sprite	0.011	1 of 10	0.5	1 of 10	0.5	Recon modifiers: aerial observation
Gnoll	0.025	1 of 10	1.0	3 of 20	2.0	Leaders available for heroic forays
Gnome	0.015	1 of 25	1.5	5 of 25	1.5	Leaders available for heroic forays
Goblin	0.004	1 of 30	0.5	6 of 30	0.5	Leaders available for heroic forays
Halfling	0.006	1 of 25	0.5	6 of 25	0.5	Leaders available for heroic forays
Hobgoblin	0.017	1 of 15	1.0	3 of 30	2.0	Leaders available for heroic forays
Kobold	0.003	1 of 30	0.5	6 of 30	0.5	Leaders available for heroic forays
Lizardman	0.036	1 of 25	3.5	5 of 25	3.5	Leaders available for heroic forays
Merman	0.005	1 of 12	0.25	5 of 24	0.5	Leaders available for heroic forays
Men	Varies	Varies	Varies	Varies	Varies	See Men sub-table
Minotaur	0.077	1 of 5	1.5	1 of 5	1.5	Leaders available for heroic forays
Morlock	0.003	1 of 30	0.5	1 of 30	0.5	Leaders available for heroic forays
Neanderthal	0.005	1 of 6	0.25	1 of 30	1.25	Leaders available for heroic forays
Nymph, Dryad	0.042	1 of 1	0	1 of 4	0.5	Recon modifier: magic camouflage
Nymph, Naiad	0.023	1 of 1	0	1 of 20	2.0	Cannot be attacked by land-based units
Ogre	0.077	1 of 6	2.0	2 of 12	4.0	Leaders available for heroic forays
Orc	0.008	1 of 30	1.0	6 of 30	1.0	Leaders available for heroic forays
Troglodyte	0.029	1 of 25	3.0	5 of 25	3.0	Leaders available for heroic forays



Men	Individual BR	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Berserkers	0.014	1 of 15	1.0	1 of 15	1.0	Leaders available for heroic forays
Brigands (bowmen)	0.013	1 of 10 +	0.5	3 of 30 +	1.5	Leaders available for heroic forays
Bergands (med. cavalry)	0.093	1 of 10	3.5	6 of 15	5.5	Recon modifiers: cavalry units
Merchants	0.025	2 of 25	2.5	2 of 25	2.5	Leaders available for heroic forays
Nomads (med. cavalry)	0.082	1 of 15	5.0	7 of 15	5.0	Leaders available for heroic forays
Nomands (horse archers)	0.082	1 of 15	5.0	7 of 15	5.0	Recon modifiers: cavalry units
Pirates (swordsmen)	0.006	4 of 20 +	0.5	4 of 20 +	0.5	Leaders available for heroic forays
Pirates (bowmen)	0.013	2 of 30	1.5	2 of 30	1.5	

Animals	Individual BR	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Ape, White	0.034	1 of 4	0.5	1 of 4	0.5	
Baboon, Rock	0.014	1 of 18	1.0	1 of 18	1.0	
Bat, Giant	0.094	1 of 5	2.0	1 of 5	2.0	Recon modifier: aerial observation
Bear, Black	0.010	1 of 2	0.0	1 of 2	0.0	
Bear, Cave	0.032	1 of 2	0.25	1 of 2	0.25	
Bear, Grizzly	0.019	1 of 2	0.25	1 of 2	0.25	
Boar, Giant	0.02	1 of 3	0.25	1 of 3	0.25	
Boar, Ordinary	0.010	1 of 4	0.25	N/A	N/A	
Camel	0.002	1 of 5	0.0	N/A	N/A	Recon modifier: cavalry unit
Cat, Lion	0.035	1 of 2	0.25	1 of 4	0.5	
Cat, Mountain Lion	0.017	1 of 3	0.25	1 of 3	0.25	
Cat, Panther	0.052	1 of 3	0.5	1 of 3	0.5	
Cat, Saber-Tooth	0.107	1 of 2	1.0	1 of 2	1.0	
Cat, Tiger	0.050	1 of 1	0.25	1 of 2	0.5	
Crocodile, Giant	0.095	1 of 2	1.0	N/A	N/A	
Crocodile, Large	0.020	1 of 3	0.25	N/A	N/A	
Crocodile, Ordinary	0.003	1 of 5	0.0	N/A	N/A	
Dog, Hunting	0.002	1 of 10	0.0	1 of 10	0.0	
Dog, War	0.008	1 of 5	0.25	1 of 5	0.25	
Elephant	0.0	3 of 3	0.5	N/A	N/A	
Fish, Giant Catfish	0.062	1 of 2	0.5	N/A	N/A	Cannot be attacked by land-based units
Fish, Giant Piranha	0.015	1 of 4	0.25	N/A	N/A	Cannot be attacked by land-based units
Fish, Giant Rockfish	0.011	1 of 5	0.25	N/A	N/A	Cannot be attacked by land-based units

Animals	Individual BR	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Fish, Giant Sturgeon	0.	1 of 1	0.50	N/A	N/A	Cannot be attacked by land-based units
Hawk, Giant	0.639	1 of 2	5.0	1 of 2	5.0	Recon modifier: aerial observation
Hawk, Ordinary	0.005	1 of 4	0.0	1 of 4	0.0	Recon modifier: aerial observation
Herd Animal, 1HD	0.001	1 of 18	0.0	N/A	N/A	
Herd Animal, 2HD	0.003	1 of 18	0.25	N/A	N/A	
Herd Animal, 3HD	0.005	1 of 18	0.25	N/A	N/A	
Herd Animal, 4HD	0.010	2 of 9	0.25	N/A	N/A	
Horse, Heavy	(0.005)	4 of 15	0.25	N/A	N/A	
Horse, Light	0.002	4 of 15	0.25	N/A	N/A	
Horse, Medium	0.005	4 of 15	0.25	N/A		
Lizard, Giant Draco	0.041	1 of 3	0.5	1 of 3	0.5	
Lizard, Giant Gecko	0.013	1 of 5	0.25	1 of 5	0.25	
Lizard, Giant Horned	0.054	1 of 2	0.5	1 of 4	1.0	Recon modifier: magical camouflage
Lizard, Giant Tuatara	0.028	1 of 2	0.25	1 of 2	0.25	
Mastodon	0.151	2 of 5	1.0	N/A	N/A	
Octopus, Giant	0.010	1 of 1	0.0	N/A	N/A	Cannot be attacked by land-based units
Pteranodon	0.195	1 of 3	2.5	N/A	N/A	Recon modifier: aerial observation
Pterodactyl	0.005	1 of 5	0.0	N/A	N/A	Recon modifier: aerial observation
Rhinoceros	0.019	1 of 7	0.5	N/A	N/A	
Shark, Bull	0.013	1 of 10	0.5	N/A	N/A	Cannot be attacked by land-based units
Shark, Great White	0.082	1 of 3	1.0	N/A	N/A	Cannot be attacked by land-based units
Shark,	0.034	1 of 7	1.0	N/A	N/A	Cannot be attacked by land-based units
Snake, Giant Python	0.016	1 of 2	0.0	N/A	N/A	
Snake, Giant Rattler	0.015	1 of 3	0.25	N/A	N/A	

Animals	Individual BR	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Snake, Pit Viper	0.006	1 of 3	0.0	N/A	N/A	
Snake, Sea Snake	0.006	1 of 5	0.0	N/A	N/A	Cannot be attacked by land-based units
Snake, Spitting Cobra	0.005	1 of 3	0.0	N/A	N/A	
Squid, Giant	0.018	1 of 3	0.25	N/A	N/A	Cannot be attacked by land-based units
Stegosaurus	0.023	1 of 3	0.25	N/A	N/A	
Titanothere	0.033	1 of 4	0.5	N/A	N/A	
Toad, Giant	0.002	1 of 3	0.0	N/A	N/A	
Triceratops	0.044	1 of 3	0.5	N/A	N/A	
Tyrannosaurus Rex	0.235	1 of 1	1.0	N/A	N/A	
Varmint, Giant Ferret	0.006	1 of 5	0.0	1 of 5	0.0	
Varmint, Giant Rat	0.000	1 of 18	0.0	1 of 18	0.0	
Varmint, Giant Shrew	0.009	1 of 5	0.25	1 of 5	0.25	
Varmint, Giant Weasel	0.013	1 of 4	0.25	1 of 4	0.25	
Whale, Killer	0.044	1 of 3	0.5	N/A	N/A	Cannot be attacked by land-based units
Whale, Narwhal	0.054	1 of 2	0.5	N/A	N/A	Cannot be attacked by land-based units
Whale, Sperm	0.155	1 of 1	1.0	N/A	N/A	Cannot be attacked by land-based units
Wolf	0.006	1 of 10	0.25	1 of 10	0.25	
Wolf, Dire	0.019	1 of 6	0.5	1 of 6	0.5	

V!	Indicate I DD	Distance	Distance DD	Distance (Lais)	Distance DD	Makes
Vermin	Individual BR	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Ankheg	0.052	1 of 5	1.0	1 of 5	1.0	
Ant, Giant	0.064	1 of 14	3.5	1 of 14	3.5	
Bee, Giant	0.012	1 of 18	1.0	1 of 18	1.0	Recon modifier: aerial observation
Beetle, Gt. Bombardier	0.010	1 of 7	0.25	1 of 7	0.25	
Beetle, Giant Fire	0.010	1 of 7	0.25	1 of 7	0.25	
Beetle, Giant Tiger	0.057	1 of 4	1.0	1 of 4	1.0	
Caecilian	0.004	1 of 2	0.0	N/A	N/A	Recon modifier: magical camouflage (burrowing)
Carcass Scavenger	0.040	1 of 3	0.5	N/A	N/A	
Centipede, Giant	0.001	1 of 13	0.0	1 of 13	0.0	
Crab, Giant	0.017	1 of 4	0.25	1 of 4	0.25	
Fly, Giant Carnivorous	0.0	1 of 10	1.0	1 of 10	1.0	Recon modifier: aerial observation
Purple Worm	0.069	1 of 2	0.5	1 of 2	0.5	Recon modifier: magical camouflage (burrowing)
Rhagodessa	0.0	1 of 3	0.5	1 of 3	0.5	
Scorpion, Giant	0.1	1 of 4	2.0	1 of 4	2.0	
Spider, Black Widow	0.052	1 of 2	0.5	1 of 2	0.5	
Spider, Crab	0.03	1 of 3	0.5	1 of 3	0.5	Recon modifier: magical camouflage
Spider, Tarantula	0.078	1 of 2	0.5	1 of 2	0.5	

Fantastic Creatures	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Basilisk	0.637	3 of 1	2.5	3 of 1	2.5	
Blink Dog	0.359	7 of 1	1.5	7 of 1	1.5	
Chimera	1.539	2 of 1	6	2 of 1	6	Recon modifier: aerial observation
Cockatrice	0.	1 of 4	3.5	1 of 4	3.5	
Demon Boar	0.779	2 of 1	3.0	2 of 1	3.0	
Doppelganger	0.573	2 of 2	4.5	2 of 2	4.5	
Dragon Turtle	5.384	1 of 1	21.5	1 of 1	21.5	
Dragon, Huge Venerable	18.762	1 of 1	75	1 of 1	75	Recon modifier: aerial observation
Dragon, Venerable	14.968	1 of 1	60	1 of 1	60	Recon modifier: aerial observation
Dragon, Ancient	12.842	1 of 1	52	1 of 1	52	Recon modifier: aerial observation
Dragon, Very Old	11.849	1 of 1	47	1 of 1	47	Recon modifier: aerial observation
Dragon, Old	8.047	1 of 1	32	1 of 1	32	Recon modifier: aerial observation
Dragon, Mature Adult	5.930	2 of 1	24	2 of 1	24	Recon modifier: aerial observation
Dragon, Adult	4.931	2 of 1	20	2 of 1	20	Recon modifier: aerial observation
Dragon, Juvenile	2.749	3 of 1	11	3 of 1	11	Recon modifier: aerial observation
Dragon, Young	2.057	3 of 1	8	3 of 1	8	Recon modifier: aerial observation
Dragon, Very Young	1.490	3 of 1	6	3 of 1	6	Recon modifier: aerial observation
Dragon, Spawn	0.755	4 of 1	3	4 of 1	3	Recon modifier: aerial observation
Gorgon	1.2	2 of 1	5	2 of 1	5	
Griffon	1.124	4 of 2	9	4 of 2	9	Recon modifier: aerial observation
Harpy	0.655	2 of 2	5	2 of 2	5	Recon modifier: aerial observation

Fantastic Creatures	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Hellhound, Greater	0.216	2 of 3	2.5	2 of 3	2.5	Recon modifier: magical
Hellhound, Lesser	0.	2 of 3	1	2 of 3	1	Recon modifier: magical
Hippogriff	0.724	2 of 4	11.5	2 of 4	11.5	Recon modifier: aerial observation
Hydra, 12 Head	0.206	1 of 1	1.0	1 of 1	1.0	
Hydra, 11 Head	0.177	1 of 1	1.0	1 of 1	1.0	
Hydra, 10 Head	0.141	1 of 1	0.5	1 of 1	0.5	
Hydra, 9 Head	0.112	1 of 1	0.5	1 of 1	0.5	
Hydra, 8 Head	0.086	1 of 1	0.33	1 of 1	0.33	
Hydra, 7 Head	0.065	1 of 1	0.25	1 of 1	0.25	
Hydra, 6 Head	0.047	1 of 1	0.25	1 of 1	0.25	
Hydra, 5 Head	0.032	1 of 1	0.0	1 of 1	0.0	
Lamia	1.733	1 of 1	7.0	1 of 1	7.0	Recon modifier: magical camouflage (illusions)
_ammasu	1.832	5 of 1	7.5	5 of 1	7.5	
Lycanthrope, Werebear	0.380	3 of 1	1.5	3 of 1	1.5	
Lycanthrope,	0.211	2 of 3	2.5	2 of 3	2.5	
Lycanthrope,	0.133	2 of 4	2.0	2 of 4	2.0	
Lycanthrope,	0.283	1 of 2	2.5	1 of 2	2.5	
Lycanthrope, Werewolf	0.183	3 of 2	1.5	3 of 2	1.5	
Manticore	2.	2 of 1	9.5	2 of 1	9.5	Recon modifier: aerial observation
Medusa	0.598	2 of 1	2.5	2 of 1	2.5	
Owl Bear	0.046	1 of 3	0.5	1 of 3	0.5	
Pegasus	0.845	2 of 3	10.0	2 of 3	10.0	Recon modifier: aerial observation
Phase Tiger	0.	1 of 3	2.0	1 of 3	2.0	
Remorhaz	0.219	1 of 4	3.5	2 of 4	3.5	
Roc, Giant	20.530	1 of 1	82.0	1 of 1	82.0	Recon modifier: aerial observation
Roc, Large	5.802	5 of 1	23.0	5 of 1	23.0	Recon modifier: aerial observation
Roc, Small	2.023	6 of 1	8.0	6 of 1	8.0	Recon modifier: aerial observation
Rust Monster	0.107	1 of 2	1.0	1 of 2	1.0	
Sea Serpent	0.020	1 of 6	0.5	1 of 6	0.5	Cannot be attacked by land-based units



Fantastic Creatures	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Shadow	0.29	1 of 6	7.0	1 of 6	7.0	Recon modifier: magical camouflage
Skittering Maw	0.1	1 of 3	2.0	1 of 3	2.0	
Stirge	0.00	1 of 15	0.25	1 of 15	0.25	
Throghrin	0.236	1 of 5	5.0	1 of 5	5.0	
Treant	1.131	1 of 2	9.0	1 of 2	9.0	Recon modifier: magical camouflage (if in forest)
Unicorn	1.143	2 of 2	9.0	2 of 2	9.0	
Wyvern	1.497	3 of 1	6.0	3 of 1	6.0	Recon modifier: aerial observation

Constructs	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Gargoyle	0.211	1 of 5	4.0	1 of 5	4.0	Recon modifier: aerial observation
Golem, Amber	0.214	1 of 1	1.0	N/A	N/A	Recon modifier: magical
Golem, Bone	0.305	1 of 1	1.0	N/A	N/A	
Golem, Bronze	1.834	1 of 1	7.5	N/A	N/A	
Golem, Wood	0.009	1 of 1	0.0	N/A	N/A	
Statue, Animated Crystal	0.031	1 of 4	0.5	N/A	N/A	
Statue, Animated Iron	0.036	1 of 3	0.5	N/A	N/A	
Statue, Animated Stone	0.109	1 of 2	1.0	N/A	N/A	

Giants	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Cyclops	0.533	2 of 1	2.0	2 of 1	2.0	
Ettin	0.430	2 of 1	2.0	2 of 1	2.0	
Giant, Hill	0.284	5 of 1	1.0	5 of 1	1.0	
Giant, Stone	0.	3 of 1	1.5	3 of 1	1.5	
Giant, Frost	0.529	2 of 1	2.0	3 of 1	2.0	
Giant, Fire	0.817	2 of 1	3.0	2 of 1	3.0	
Giant, Cloud	1.103	2 of 1	4.5	2 of 1	4.5	
Giant, Storm	1.971	2 of 1	8.0	2 of 1	8.0	
Troll	0.367	1 of 4	6.0	6 of 4	6.0	Leaders available for heroic forays

Summoned	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Djinni	3.256	1 of 1	13.0	N/A	N/A	Recon modifier: aerial observation
Efreeti	6.039	1 of 1	24.0	N/A	N/A	Recon modifier: aerial observation
Invisible Stalker	0.613	1 of 1	2.5	N/A	N/A	Recon modifier: aerial observation, magical camouflage
Salamander, Flame	0.930	5 of 1	4.0			
Salamander, Frost	1.529	2 of 1	6.0			

Undead	Individual	Platoons	Platoon BR	Platoons (Lair)	Platoon BR	Notes
Ghoul	0.2	3 of 3	3.5	3 of 3	3.5	
Mummy	1.037	6 of 1	4.0	6 of 1	4.0	
Skeleton	0.00	1 of 18	0.5	1 of 18	0.5	
Spectre	2.143	5 of 1	8.5	5 of 1	8.5	Recon modifier: aerial observation
Vampire	3.450	3 of 1	14.0	3 of 1	14.0	Recon modifier: aerial observation, magical camouflage
Wight	0.3	2 of 2	2.5	2 of 2	2.5	
Wraith	0	2 of 2	5.0	2 of 2	5.0	Recon modifier: aerial observation
Zombie	0.0	1 of 14	0.5	1 of 14	0.5	



OF COINS AND COMMERCE

COMMENTS AND CONTEXT ON THE ECONOMY OF THE ADVENTURER CONQUEROR KING SYSTEM

The economy of is built from a small number of assumptions, the most crucial of which are (1) that an unskilled laborer earns around 1sp per day of work; (2) that a typical farm yields one quarter of grain per acre; (3) that one quarter of grain sells for 4gp; and (4) that risky investments will yield a rate of return of 3% per month.

The first three assumptions are grounded in history, and a more elaborate explanation of them can be found elsewhere in Axioms Issue III. They set the foundation for the wages and costs of everything else in the setting. Mankind's caloric needs and unskilled labor productivity did not vary much within the timeframe concerns itself, and so by adjusting for land productivity we could normalize a variety of historical prices for the game.

The fourth assumption actually emerged from the other three assumptions of the system; it wasn't initially designed in. We have previously referred to it as "the secret ratio" of 1:33 (as 1 divided by 33 yields .03 or 3%). The first place the secret ratio appeared was in the average rate of return on gold invested per month in support of mercantile activities, which is 3%. But then it started appearing everywhere.

This ratio became very useful as it allowed us to work out the approximate "capital" of individuals with known income, or conversely, the approximate income of individuals with a known amount of capital. (Note that capital is loosely defined here -- a fighter who has spent thousands of gold carousing while bragging of his exploits has essentially "invested" in his reputation. We assumed for the sake of simplicity that coin, equipment, training, carousing, etc. all have an equal rate of return). Using the secret ratio, we can conclude that:

- A peasant, earning 3gp per month, probably has (3x33) 99gp in capital. This is probably seed, farming implements, and perhaps some domestic animals.
- An alchemist, earning 75gp per month, probably has (75x33) 2,475gp in capital lab equipment, books, chemical mixtures, potions, and coin.
- The emperor of a massive domain, with an income of 360,000gp per month, has capital of around 11,880,000gp.
- A warrior (2nd level fighter) with 1,500gp invested in equipment, training, and so on, would expect to earn 45gp per month (1500/33).

About 80% of experience points in are derived from gold, so it was easy to determine the capital of an NPC by multiplying his XP by 80%. That in turn enabled us to calculate the amount of money the character would expect to earn per month. This solved the age-old problem of "how much does it cost to hire an NPC of such-and-such level". Even better, since we knew the average income of various ranks of nobility, it also showed how the wages of characters of various levels compared against that of nobility. At 9th level a character's income from his skills suggested he should be earning as much as an earl or count - which, in turn, suggests that a 9th level warlord who has built

a stronghold and carved out a domain can safely style himself as an earl or count.

Some reviewers who have encountered the secret ratio find the notion of a 3% per month interest rate absurd. But it wasn't absurd historically – in fact, it wasn't even uncommon. In some times and places, it was the default. For example:

- The average 1-year rate of profit on agricultural product during the 13th-14th centuries in England was 22.3% for wheat, 29.3% for barley, and 22.4% for oats ("Markets and Economic Growth: The Grain Market of Medieval England", Greg Clark, Department of Economics UC Davis).
- In Old Babylonia, the interest rate on agricultural loans was 33 1/3%. ("How Interest Rates Were Set, 2500 BC 1000 AD," Michael Hudson, Journal of the Economic and Social History of the Orient 43, Spring 2000).
- Mortgage lenders in pre-modern France typically required interest of 20-30% of the value of their loan and merchants paid as much as 5-8 % interest per week for working capital (An Essay on Economic Theory, Richard Cantillon).
- The rate of return on the silver trade between Rome and India during the Hellenistic era was 100%! (The Middle Ages Revisited, Alexander Del Mar).

Such exorbitant rates of profit and interest seem unbelievable to students of modern economics. How could such rates of profit and interest be sustained? Because of all these factors:

- Economic rents on land. Landlords had a monopoly on land and legal rights to force the workers to work the land. Labor was not a free market.
- Economic rents on commerce. Guild monopolies were common, as were royal charters.
- Grossly inefficient markets. Inefficient markets allow for higher rates of return than efficient markets, which arbitrage away high profits.
- Very short time preferences. When life is nasty, brutish, and short, there's little incentive to save. That means that interest rates must be very high or actors will simply consume.
- Low capital accumulation. Revenues were consumed rather than capitalized, leading to high rates of profit but low rates of long-term growth.

From these four assumptions we erected the edifice of 's economic system. The rest of this article fills in various gaps in the system that might arise in play.



COINAGE

How much coin is there in a domain, realm, or world? In , the amount of coinage in circulation in a realm will equal 24gp per peasant family, consisting of the commonly-used coins reflecting their typical exchange rate. E.g. the 24gp of value will actually consist of 8gp, 8osp, and 8oocp.

EXAMPLE: A realm of 5,000,000 peasant families has $(5,000,000 \times 24)$ 120,000,000gp worth of coins circulating. These consist of 40,000,000gp; 400,000,000sp; and 4,000,000,000cp. At 100 coins per pound, the tonnage in circulation is 200 tons of gold, 2000 tons of silver, and 12,500 tons of copper.

A character's capital or net worth in is typically equal to 33 times monthly earnings. A typical peasant farm produces 16.25gp per month (shared between ruler and peasants), suggesting net worth of about 536gp is associated with the farm. The 24gp in circulation associated with that farm therefore reflects only about 5% of the farm's net worth. Put another way, the vast majority of wealth in is in land, livestock, tools, etc.

NOTE: How do these rules stack up to history? The Persian Empire had a population of 7 million families, so our rules would predict 168,000,000gp worth of coins – about 56 million gold, 560 million silver, and 5.6 billion copper. We know the Persian Empire conquered by Alexander the Great had a store of precious metals worth 200,000 silver talents, divided between 10,000 gold talents and 100,000 silver talents. That works out to $(60\text{lbs/talent} \times 100\text{ coins/lbs.} \times 10,000)$ 60,000,000gp and 600,000,000sp. Spot on!

Meanwhile the 2nd Century AD Roman Empire had a population of about 8 million families, so our rules would predict 192,000,000gp worth of coins – about 64 million gold, 640 million silver, and 6.4 billion copper. We know that the Roman Empire had an annual product of about 10 tons of gold, 200 tons of silver, and 15,000 tons of copper, that allowed it to accumulate vast stores of metal – as much as 500 tons of gold, 10,000 tons of silver, and 750,000 tons of copper. That is enough for 100 million gold, 2 billion silver, and 150 billion copper coins. Of course, some of the silver and most of the copper was used for ornaments or tools, but the Romans certainly had ample metal for the coinage we predict.

Finally, the economist Richard Cantillon assessed the typical coinage in circulation of a pre-industrial economy as equal to around one-ninth the product of the land. In a peasant family produces 16.25gp per month or 195gp per year, suggesting 21.6gp of coinage in circulation. We selected 24gp per family so that each family would have sufficient coinage to pay their taxes (2gp per month) annually in coin.

Should the Judge wish to create a venerable dragon that has accumulated all of the coin of an entire kingdom, he now can do so! Such a treasure will be greatly in excess of the paltry hoards presented in the Treasure Types.

COMMISSIONS

These rules replace those found in . A character in an urban settlement can commission equipment. If the volume of equipment normally available in the market is one or more, then 10 times the normal amount available by market class can be commissioned. If the volume of equipment normally available is less than one (e.g., there is just a percentage chance of one item being present), then multiply the

percentage chance by 10 to get the percentage chance that one item can be commissioned. (If the result is greater than 100%, then one item can be commissioned per 100%.)

The commissioned equipment is not available until the commission is complete. Building and vehicle commissions are completed at a rate of 1 day per 500gp value. Animal commissions are completed at a rate of 1 day per 1gp value (or the rules in Lairs & Encounters may be used to assess training time required). Other equipment commissions are completed at a rate of 1 day per 5gp value. If more than one item is commissioned, the work is performed simultaneously.

EXAMPLE: Marcus is in Arganos, a city of 4,000 families (Class III market). He wants to buy a war galley (60,000gp), 75 swords (10gp each), and 200 flasks of oil (3sp each). A Class III market has 260 units of any equipment priced 1gp or less, so he finds the 200 flasks of oil without problem. A Class III market has only 15 units of any equipment priced 10gp or less, so only 15 swords are available. There is only a 2% chance of a 60,000gp war galley being available, and the Judge rolls a 42; Marcus cannot find that type of ship in Arganos this month. Marcus decides he'd like to commission the town's armorers to forge more swords, and commission a shipwright to build a war galley. The Judge determines that Marcus can commission up to (15 x 5) 75 swords, which will be ready in (10gp/5gp) 2 days. For the war galley, the Judge multiplies the chance of availability by 10, so there is a 20% chance that a war galley can be commissioned in Arganos this month. The Judge rolls a 17 on 1d100, so a shipwright is available. It will take 120 days for the war galley to be finished (60,000gp / 500gp per day).

Class I markets: In large Class I markets, a character can commission more than ten times the normal amount available, up to (urban families /2,000).

EXAMPLE: If Marcus were in Aura, a city of 100,000 families, he could commission up to (100,000 / 2,000) 50 times the normal amount available.

CONSUMPTION OF URBAN FAMILIES

The average income of a peasant family is between 4 and 6gp per month (see The Economics of Peasant Families in Axioms III). In comparison, the average income of an urban family is between 25 and 75gp per month, or about five to ten times higher. However, this does not mean that most urban families are wealthy. The average is skewed by wealthy urban elites, such as bankers, lawyers, magistrates, master craftsmen, and merchants. The median income of an urban family is only 6 to 12gp per month. The median urban income is greater than that of the peasantry, but of course offset by higher costs.

LAND PRICE

In , we note that "if the character simply wishes to buy civilized land, he will find it very expensive; an acre of good land costs about 50gp." This leaves several questions unanswered: (1) what is "good" land? (2) how much does "bad" land cost per acre? (3) does the price vary for borderlands and wilderness domains?

For game purposes, the two determinants of cost per acre are the land value (gp/month per peasant family) and the classification (civilized, borderlands, or wilderness). The former determines the land's productivity and the latter determines how much it costs to protect it, and what risk it faces of domain encounters. The table below provides a cost per acre for land of various classifications and land values.

Coinage 29

NOTE: To understand how these values were derived requires a slight diversion into the circular flow of an agricultural economy. Assume a simple domain with 80 peasant families, 20 urban families, and 1 ruler. If each peasant family produces 16.25gp of farm goods and consumes 4.25gp of farm goods, that leaves 12gp of farm goods unconsumed, which pass to the local ruler (960gp total). The ruler could reasonably spend 50% of his income on farm goods (including grain, meat, cheese, beer, wine, oil, honey, firewood, horse fodder, etc.) but the remaining 50% (480gp) will be spent on finer goods only available from the artisans and craftsmen of urban settlements. To get money for this, he sells the farm goods to the urban settlers for 480gp, then buys 480gp of urban goods from them. The urban families, in turn, are only spending 50% of their income on farm goods, so they must have a collective income of 960gp (2 x 480gp), with the other 480gp of income coming from the sale of their own urban goods to each other. (E.g., the candlemaker buys cloth from the clothier, who buys candles from the candlemaker.) The urban families therefore produce on average (960gp/20) 48gp each.

But these variables can easily change depending on agricultural productivity, consumption pattern, and population distribution. Given the same agricultural productivity and consumption pattern, an increase in urban population means a decrease in per-capita urban income, and vice versa. In a realm where 30% of the population is urban, urban income would drop to 28gp per month, with large numbers of "urban plebs" living in the cities. If only 10% of the population is urban, but half of consumption is urban, urban income would increase to 96gp per month.

Given the same agricultural productivity and population distribution, an increase in consumption of urban goods means an increase in per-capita urban income, and vice versa. For instance, if the nobility spends 55% of its income on urban goods, and the peasants spend 35% of its income on urban goods, then the urban families will have $2 \times [(960 \times .55) + (80 \times 4.25 \times .35)]$ 1,296gp in income, or around 65gp each. But if a manorial system develops in which the countryside is largely self-sufficient, then the nobility might spend as little as 35% of its income on farm goods and the peasantry spend nothing at all; in this case the urban families will have 2 x (960 x .35) 672gp in income, or around 33gp each.

Likewise, given the same population distribution and consumption pattern, an increase in agricultural productivity means an increase in urban income, and vice versa. For instance, if the peasant families produce 20gp of farm goods each, and consume 4.25gp of farm goods and 4gp of urban goods, then the urban families will have $2 \times [(960 \times .5) + (80 \times 4)]$ 1,600gp in come, or 80gp each.

All of these trends would interact with each other. If a realm's central government becomes weak and power decentralizes into landed nobility, this will tend to lead towards more self-sufficient manors that purchase fewer urban goods. That will decrease the income of the urban families, which will lead to some families fleeing the cities for the countryside, until a new equilibrium arises. Or, if a realm's agricultural productivity becomes so high that all of its agricultural needs are satiated, then the peasantry will abandon the country and move to the city, which in turn will drive down urban income. We will leave such calculations to future developers of our industrial-age Proletariat, Revolutionary, Dictator expansion....

Classification and Land Value	Cost per Acre	Monthly Return
Civilized, land value 9	71gp	0.5%
Civilized, land value 8	64gp	0.5%
Civilized, land value 7	57gp	0.5%
Civilized, land value 6	50gp	0.5%
Civilized, land value 5	43gp	0.5%
Civilized, land value 4	36gp	0.5%
Civilized, land value 3	29gp	0.5%
Borderlands, land value 9	24gp	1%
Borderlands, land value 8	21gp	1%
Borderlands, land value 7	18gp	1%
Borderlands, land value 6	15gp	1%
Borderlands, land value 5	12gp	1%
Borderlands, land value 4	9gp	1%
Borderlands, land value 3	6gp	1%
Wilderness, land value 9	3gp*	3%
Wilderness, land value 8	2gp*	3%
Wilderness, land value 7	1gp*	3%
Wilderness, land value 6 or less	0gp**	3%

^{*}If owned. Unclaimed wilderness has no cost.

MERCANTILE VENTURES

In , the market class of an urban settlement exclusively determines the toll charged to enter the market, the number of merchants and shippers interested in transactions, and the number of passengers interested in booking passage. However, the city magistrates ought to charge a higher toll to the commander of a six-ship fleet than to an itinerant peddler with a single wagon. Conversely, more of the city's traders ought to be interested in doing business with a mighty merchant-captain than a lowly peddler. To reflect these various circumstances, each market class is assigned a baseline merchant cargo, ranging from 640 stones to 60,000 stones.

Market Class	Baseline Cargo	Standard Fleet *	Standard Caravan **	Standard Toll	Standard Passengers	Standard Merch./ Shippers	Loads Each
T	60,000 st	6 small ships	80 large wagons	4d8x10gp	2d4+1	2d6+2	6d8
II	10,000 st	1 small ship	20 large wagons	4d10+10gp	2d4	2d4+1	4d6
III	5,000 st	8 sailing boats	10 large wagons	4d6+2gp	1d4	2d4	3d4
IV	2,500 st	4 sailing boats	5 large wagons	2d6+1gp	1d4-1	1d4	2d4
V	960	2 sailing boats	3 small	2d3g	1d3-1	1d4-1	1d4
VI	320	1	1 small	4d4s	1d2-1	1d3-1	1d2

^{**}If owned, low-value Wilderness Land purchase might cost a few silvers or coppers per acre (Judge's discretion)

^{* 1} large ship = 3 small ships = 50 sailing boats = 100 river boats. 1 small ship = 16 sailing boats = 25 river boats.

**1 large wagon = 2 small wagons = 3 large carts = 4 small carts. 1 small cart = 2 heavy horses = 3 camels = 4 mules = 10 donkeys.

When a character (or party of characters) enters a market, the Judge should determine the party's market impact based on the number of boats, ships, wagons, carts, and pack animals they have entered the market with. The character or party's **market impact** is equal to the total capacity of its ships and wagons divided by the market's baseline merchant cargo, rounded down.

The toll charged, number of passengers, number of merchants, and number of shipping contracts for the market are **multiplied** by the character or party's market impact. The Market Impact table shows the baseline merchant cargo for each market class, along with the toll charged, number of passengers interested in transit, number of merchants interested in transactions, and number of shippers interested in contracts when the market impact is 1. (For convenience, the table also shows the number of loads each merchant or shipper will transact in, but these values are not increased by market impact.)

EXAMPLE: Zenobia arrives at Alakyrum at the head of a caravan of 2,000 camels. Camels have a maximum load of 60 st, so her cargo capacity is 120,000 st. Alakyrum is a Class I market, so its baseline merchant cargo is 60,000 st. Zenobia has a market impact of (120,000 / 60,000) 2. She will pay a toll of 4d8x20gp, and be able to transact with 4d4+2 passengers, 4d6+4 merchants, and 4d6+4 shippers. Each merchant or shipper will have 6d8 loads.

Maximum Impact: If the characters are entering a Class II market or smaller, their maximum market impact is 10 –the market simply cannot service a fleet or caravan any bigger. The maximum market impact permitted in a Class I market, however, is equal to its urban families / 2,000.

EXAMPLE: En route from Alakyrum, Zenobia arrives at a small village at a nameless oasis. The village is a Class VI market with a baseline merchant cargo of 640 st. With a cargo capacity of 120,000 st, Zenobia's market impact would be (120,000 / 640) 188. She's in a Class VI market, so she treats her market impact as 10.

Standard Fleets and Caravans: Judges can quickly approximate the party's market impact by comparing their fleet or caravan to the vessels and vehicles listed in the Standard Fleet and Standard Caravan columns of the table. This avoids having to calculate the cargo capacity manually, though it's less precise.

EXAMPLE: Marcus, Quintus, and Viktir arrive at Arganos with a fleet of 3 small ships. Arganos is a Class III market, so it has a standard fleet of 8 sailing boats. 1 small ship counts as 16 sailing boats, so the party's market impact is $(3 \times 16 / 8)$ 6. The party will pay a toll of (4d6+2)x6 gp, and be able to transact with 12d4 passengers, 12d4+6 merchants, and 12d4 shippers. Each merchant or shipper will have 4d6 loads.

Parties: A group of characters arriving together can decide when entering the market whether to do so as a party or to enter separately. Their market impact is determined accordingly. However, when a party of characters enter the market separately, the maximum market impact is equal to 10 divided by the number of characters.

EXAMPLE: Marcus, Quintus, and Viktir could have chosen to enter Arganos separately, with 1 small ship each. Each of them would then have had a market impact of $(1 \times 16 / 8) 2$.

No Market Impact: If a character's market impact is o, he can still transact in the market. However, he treats the market as being of

the next lower market class. If his market impact is still o, reduce the market class again, repeating this procedure until the character's market impact is at least 1. A character can always trade in a Class VI market as if he had market impact 1.

EXAMPLE: In a tragically bad game of dice, Viktir loses a lot of his wealth. He is forced to reduce his fleet to 2 sailing boats. When he next enters Arganos, he treats it as if it were a Class V market.

Mercantile Networks: Whenever venturers engage in mercantile ventures in a market they have previously visited, they may either treat the market as if it were one market class larger than its actual size or they may take a +1 bonus to market impact, whichever is more useful.

MERCANTILE INVESTMENTS

Rather than consume or hoard their wealth, characters can invest some or all of it in the hopes of earning returns on the investment. For simplicity, mercantile investments are categorized into three types – establishing businesses, funding commercial expeditions, and lending money – as well as five levels of risk – safe, cautious, balanced, risky, and perilous. The type of investment determines what sort of vagaries may occur, while the level of risk determines the base rate of return per month and influences the vagaries.

LEVELS OF RISK

Safe investments prioritize the protection of capital above all else. Safe investments include loaning money to chartered banks and investing in licensed guilds with local monopolies. They have a base rate of return of 0.25% per month.

Cautious investments seek a steady return with limited risk to capital, such as investing in civilized farms, investing in large, established businesses, and loaning money to large private landowners. They have a base rate of return of 0.5% per month.

Balanced investments seek a balance between return and risk, such as investing in border farms, funding short-distance mercantile ventures, and loaning money to stable realms. They have a base rate of return of 1% per month.

Risky investments aim for high returns, but may incur substantial losses in some years. Risky investments include investing in wilderness farms, funding long-distance mercantile ventures, loaning money to unstable or warring realms, and investing money in small businesses. They have a base rate of return of 3% per month on average.

Perilous investments offer very high returns at exceptional risk, such as funding adventuring expeditions, funding private military campaigns, and investing in criminal syndicates. Perilous investments have a base rate of return of 9% per month or more – but most perilous ventures will be bankrupt within a year.

MAKING AN INVESTMENT

To make an investment, a character allocates 1gp or more, and chooses the investment's type (business establishment, commercial expedition, or money lending) and level of risk (safe, cautious, balanced, risky, or perilous). The character must be in a market in order to make an investment. There is no minimum investment, but there is a maximum investment per month determined by the market class. The adjoining table below the maximum mercantile investment permitted each month in a market. (If desired, the Judge can limit agricultural and urban investments to these values as well.)

Market Class	Max Investment / Month
I	100,000gp*
II	25,000gp
III	10,000gp
IV	5,000gp
V	2,000gp
VI	1,000gp
*Per 20,000 families	

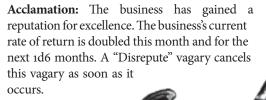
Once an Investment is made, the Judge will roll idioo on the Vagaries of Investment table each month and apply its results. Unless noted otherwise by the vagary, the character will then receive a return on his investment, equal to the current value of his investment multiplied by its current rate of return. (Both the value of the investment and the rate of return may vary over time.) Returns are not automatically compounded, although characters may choose to re-invest profits into the same or a new investment when they re-enter a market. Characters do not earn XP from mercantile investments.

LIQUIDATING AN INVESTMENT

Characters can liquidate an investment to recover their capital. A safe investment can be liquidated immediately. It takes one month to liquidate a cautious investment, two months to liquidate a balanced investment, three months to liquidate a risky investment, and 1d6+3 months to liquidate a perilous investment. During that time, the character continues to earn a return and risk vagaries. It is possible to be wiped out by a bad vagary while trying to liquidate!

VAGARIES OF INVESTMENT

For each investment each month the Judge will roll 1d100 on the Vagaries of Investment table, cross-referencing the die roll, the level of risk, and the type of investment to determine the result affecting the character's investment.



Annihilation: The expedition has been utterly destroyed. The character earns no return this month, and his investment is completely lost. 1d4 survivors report that the cause of the annihilation is (roll 1d8): 1 – mysterious, 2 – a rival expedition, 3 – a natural disaster, 4 – a group of monsters, 5 – an enemy army, 6 – brigands or pirates, 7 – betrayal from within, 8 – betrayal from trading partners.

Bailout: The debtor needs more funds. The character is asked to invest additional sums equal to the value of his investment multiplied by the percentage shown. If the character provides the bailout, he collects his return based on the new value. If he does not, he can take a "Writedown" vagary or seize the debtor's assets in repayment. Seizing the debtor's assets reduces the current value of the character's investment by 2d6x5% and liquidates the investment.

EXAMPLE: The Zaharan ruinguard Moruvai has taken up predatory lending. He has made a perilous money-lending investment valued at 20,000gp with a base rate of return of 9% per month. The Judge rolls a "Bailout 25%" vagary. Moruvai may either lend another 4,000gp, accept a Writedown of 2d10% of his investment, or seize the debtor's assets, losing 2d6x5% of his investment and liquidating it.

Banking Fee: The character is able to secure an additional fee from the debtor. The return on the character's investment is increased this month by 50%. The fee is (roll 1d6) 1 – origination fee, 2 – late payment fee, 3 – legal expense, 4 – certification, 5 – appraisal, 6 – prepayment penalty.

Bankruptcy: The business goes bust. The character earns no return this month, and his investment is completely lost. The reason for the bankruptcy is (roll 1d10): 1 – mysterious, 2 – casualty, 3 – theft, 4 – loss of key personnel, 5 - corruption, 6 – competition, 7 – government interference, 8-10 bad judgment.

Brigandage/Piracy: The expedition has become the target of an organized company of brigands or fleet of pirates. The expedition's current rate of return is reduced by 33% for the next 1d6 months. The enemy will consist of NPC brigands or pirates with wages equal to ½ the losses they are causing. Despite their predatory nature, the brigands keep worse things at bay, so slaying them increases risk by one level (e.g. from Cautious to Balanced) for 1d6 months unless the PC takes steps to address it (Judge's discretion). A "Protector" vagary cancels this vagary as soon as it occurs.

		1d	100 Roll by R	isk				
	Safe	Cautious	Balanced	Risky	Perilous	Business Establishment	Commercial Exppedition	Money Lending
ĺ	-	-	01 -	02 -	05 -	Bankruptcy	Annihilation	Default
	-	01 -	02-03	03-07	06-10	Calamity	Delay	Deferment
	01 -	02-03	04-06	08-12	11-15	Fee	Decimation	Writedown
	02-03	04-06	07-10	13-17	16-20	Disrepute	Rival	Bailout 50%
	04-05	07-10	11-15	18-22	21-25	Racket	Brigandage/Piracy	Bailout 25%
	07-10	11-15	16-20	23-27	26-30	Return -200%	Return -200%	Bailout 5%
	11-15	16-20	21-25	28-32	31-35	Return -150%	Return -150%	3 Month Extension
	16-25	21-28	26-32	33-37	36-40	Return -100%	Return -100%	2 Month Extension
	26-40	29-40	33-42	38-42	41-45	Return -50%	Return -50%	1 Month Extension
	41-60	41-60	43-58	43-58	46-55	Return	Return	Return
	61-75	61-72	59-68	59-63	56-50	Return +50%	Return +50%	Return
	76-85	73-80	69-75	64-68	61-65	Return +100%	Return +100%	Return
	86-90	81-85	76-80	69-73	66-70	Return +150%	Return +150%	Banking Fee +50%
	91-94	86-90	81-85	74-78	71-75	Return +200%	Return +200%	Collateral 5%
	95-97	91-94	86-90	79-83	76-80	Patron	Protector	Collateral 10%
ĺ	98-99	95-97	91-94	84-88	81-85	Acclamation	Monopoly	Collateral 20%
	100 +	98-99	95-97	89-93	86-90	Windfall +2d10%	Discovery +2d10%	Principal
	-	100 +	98-99	94-98	91-95	Windfall +2d6x5%	Discovery +2d6x5%	Repayment
ı	-	-	100 +	99 +	96+	Windfall +100%	Discovery +100%	Maturation

Calamity: A calamity has wrecked the business's storefront and/or inventory. The character earns no return this month, and the value of his investment is reduced by 2d6x5%. The calamity is (roll 1d6) 1 – arson, 2 – vandalism, 3 – burglary, 4 – riot, 5 - accidental fire, 6 – flood.

Collateral: The debtor deposits collateral worth 5% - 20% of the investment value with the character. In the event that the character loses any investment value in the future due to a "Default," "Deferment," "Bailout," or "Writedown" vagary, the character may seize the collateral to make up for the loss. The character may also apply the value of collateral towards a bailout. The collateral is (roll 1d6) 1 – common merchandise, 2 – precious merchandise, 3 – gems, 4 – jewelry, 5 – silver, 6 – gold.

Decimation: The expedition has been decimated. The character earns no return this month, and the value of his investment is reduced by 2d10%. The cause of the casualties is (roll 1d8): 1 - mysterious, 2 - a rival expedition, 3 - a natural disaster, 4 - a group of monsters, 5 - an enemy army, 6 - brigands or pirates, 7 - betrayal from within, 8 - betrayal from trading partners.

Default: The debtor defaults and has no assets; the value of the loan must be written off completely. The character earns no return this month, and his investment is completely lost. The reason for the default is (roll 1d10): 1 – mysterious, 2 – casualty, 3 – theft, 4 – loss of key personnel, 5 - corruption, 6 – competition, 7 – debt jubilee, 8-10 bad judgment.

Deferment: The debtor is unable to make payments and has asked to defer payment on his loan. If the character agrees, he earns no return this month or for the next 1d6 months. Do not roll vagaries during this time. If the character refuses, he may seize the debtor's assets in repayment. The current value of his investment is reduced by 2d6x5% and then the investment is liquidated.

Delay: The expedition has been gotten lost, become imprisoned, had its inventory impounded, or otherwise held up. The character earns no return this month. If the expedition attempts to escape or push

ahead, reduce the value of its investment by 2d6x5%. Otherwise, the character earns no return for the next 1d6 months, during which time no vagaries occur. The cause of the delay is (roll 1d8): 1 – mysterious, 2 – lost in wilderness/at sea, 3 – halted by inclement weather, 4 – held up at customs, 5 – imprisoned by government, 6 – captured by brigands or pirates, 7 – inventory impounded, 8 - internal crisis.

Discovery: The expedition has unearthed something of great worth. The current value of the character's investment is increased by the percentage shown ($2d_{10}\%$, $2d_{6x_{5}\%}$, or 100%), or the discovery may lead to an adventure (Judge's discretion). The discovery is (roll $1d_{6}$) 1 - a treasure map, 2 - buried treasure, 3 - a hidden urban settlement, 4 - a new trade route, 5 - the confirmation of a legend, 6 - a place of power.

Disrepute: The character's business has fallen into disrepute due to slander by the competition, shady business practices, or just bad luck. The business's rate of return is halved this month and for the next 1d6 months. This vagary can be cumulative in its impact, halving the rate of return each time it occurs. An "Acclamation" or "Patron" vagary cancels this vagary as soon as it occurs.

Extension: The debtor is unable to make his payment this month and asks for an extension. If the character agrees, the amount will be paid in 1, 2, or 3 months, as noted. If the character refuses, he may seize the debtor's assets in repayment. The current value of his investment is reduced by 2d6x5% and then the investment is liquidated.

Fee: The business suffers a burdensome fee equal to 2d10% of the value of its investment. The fee is (roll 1d6) 1 – tariff, 2 – fine/penalty, 3 – legal expense, 4 – liturgy, 5 – licensing fee, 6 –bribery / extortion by magistrates. If the business is in a domain ruled by the party, this vagary can be ignored if desired.

Maturation: The debtor's creditworthiness has substantially improved. All future rolls on the Vagaries of Investment table are made as if the investment were one level less risky.

Monopoly: The expedition has gained a monopoly over its services. The monopoly is both local and temporary, but the expedition's current rate of return is doubled this month and for the next 1d6 months. A "Rival" vagary cancels this vagary as soon as it occurs.

Patron: The business has secured the patronage of a powerful or important customer. If the business is suffering from a "Disrepute" or "Racket" vagary, those are immediately cancelled. For the next 1d6 months, the business's rate of return is increased by 33% due to the patron's generous contribution and referrals. If an adventurer openly owns the business, the patron may be interested in the adventurer in some way (Judge's discretion). The patron is (roll 1d10) 1 – magistrate, 2 – senator, 3 – merchant, 4 – master craftsman, 5 – specialist, 6 – fighter, 7 – thief, 8 – mage, 9 – cleric, 10 – unusual (Judge's choice).

Principal: The value of the investment has increased due to changes in the market. After collecting this month's return, the character may immediately increase the current value of his investment by 2d10% and liquidate the investment if desired. If the character does not liquidate the investment, however, the value is not increased.

Protector: The expedition has garnered the protection of a powerful and authoritative figure in the region. If the expedition is suffering from a "Brigandage/Piracy" vagary, it is immediately cancelled. For the next 1d6 months, the expedition can ignore any "Annihilation," "Delay," "Decimation," or "Brigandage/Piracy" vagaries it suffers. If an adventurer openly owns the expedition, the protector may be interested in the adventurer in some way (Judge's discretion). The protector is (roll 1d10) 1 – a ruler, 2 – a military commander, 3 – a notorious brigand or buccaneer, 4 – a famous adventurer, 5 – a powerful monster, 6 – unusual (Judge's choice).

Racket: The business has become the target of an organized criminal protection racket. The business's current rate of return is reduced by 33% for as long as the racket continues. The racketeers will consist of NPC ruffians with wages equal to ½ the losses they are causing. Slaying the racketeers earns the ire of the local syndicate and increases risk by one level (e.g. from Cautious to Balanced) for 1d6 months unless the PC takes steps to address it (Judge's discretion). If the local syndicate is under the party's control, this vagary represents a rival

syndicate trying to take a cut of the action. A "Patron" vagary cancels this vagary as soon as it occurs.

Repayment: The debtor has come into funds and is able to repay any late payments that may have resulted from an "Extension" vagary. In addition, if payment is currently being deferred due to a "Deferment" vagary, that vagary is cancelled.

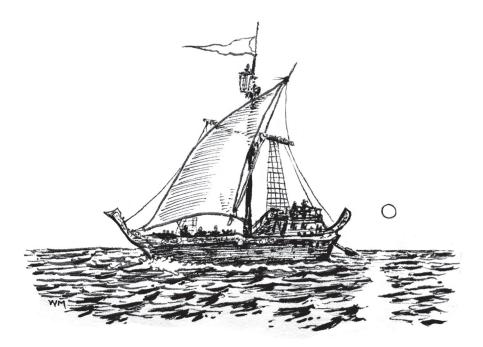
Return (+/-%:): The investment yields a return. If no modifier is listed, the return is equal to the current rate of return; there is no other vagary. If modified by a positive number, the return is increased by the relative percentage shown this month. If modified by a negative number, the return is decreased by the number shown this month, possibly yielding a negative return (loss). Losses can be paid by the character or deducted from the investment value.

EXAMPLE: A risky investment with a current rate of return of 3% will yield -3% on "Return – 200%", 0% on "Return –100%", 4.5% on "Return +50%" and 9% on "Return +200%".

Rival: The expedition is facing competition from a cut-throat rival that will stop at nothing to bring them ruin. The expedition's rate of return is halved this month and for the next 1d6 months. This vagary can be cumulative in its impact, halving the rate of return each time it occurs. A "Monopoly" vagary cancels this vagary as soon as it occurs.

Windfall (%): An unexpected windfall yields fiscal rewards. The current value of the character's investment is increased by the percentage shown (2d10%, 2d6x5%, or 100%). The windfall is (roll 1d6) 1 – an inheritance, 2 – a property appreciation, 3 – a business innovation, 4 – the failure of a competitor, 5 – a valuable endorsement, 6 – of mysterious origin.

Writedown: Market conditions are such that the character will never be able to recoup the full value of his loan completely. The character earns no return this month, and the value of his investment is reduced by 2d6x5%.



THE ECONOMICS OF PEASANT FAMILIES

WHAT DOES LIFE HOLD FOR THOSE WHO TILL THE LAND?

By default, assumes an agrarian economy where peasants generate revenue by laboring on the domain's lands, producing wheat, barley, and other grains; milk, meat, wool, and other animal products; and various ancillary domestic goods such as ale, timber, clothing, and furniture. From the lord's perspective, this is collected in the form of land value, service value, and tax value, typically totaling 12gp per family per month. But what's going on at the level of the peasant family?

PRODUCTION

A typical peasant family manages 30 acres, with 20 acres farmed and 10 acres fallow each year. Each year, each of the 20 farmed acres is seeded with 2 bushels of grain. Each farmed acre then yields 10 bushels of grain. 2 bushels must be set aside for next year's seed, so the result is a 4:1 yield of (10-2) 8 bushels per acre, or 1 quarter per acre. Therefore, 20 acres yields 160 bushels or 20 quarters of grain. A quarter of grain costs 4gp in . Therefore, the peasant's farmland produces (20 acres x 1 quarter/acre x 4gp/quarter) 80gp per year.

Finally, the family manages 1 ox, 3 cows, 1 pig, and 32 sheep. Each ox and cow requires 1.33 acres of pasture. The pig requires no acreage, as it is fed from fallen nuts and farm refuse. One sheep may graze in each ox or cow's acreage; the other sheep require 0.167 acres of pasture each. The peasant family therefore requires $[(1 \times 1.33) + (3 \times 1.32) + (32-4) \times 0.167)]$ 10 acres of pasture for its livestock – the same 10 acres it leaves fallow each year.

The ox is used to plough the field, and its value is already represented by the yields noted above. The 3 cows produce 10.41gp of revenue each. The pig produces 1.14gp of revenue. The 32 sheep produce 1.58gp of revenue each. Total revenue for the field is therefore $[(3 \times 10.41) + (1 \times 1.14) + (32 \times 1.58) 82.93gp$. For ease, we round to 83gp.

Across its members, a peasant family has 500 days of labor available. The family first attends to its crops and animals, then its garden, and thereafter performs unskilled labor for other purposes.

The labor of farming can be divided into plowing, reaping, harvesting, and threshing. Plowing an acre takes 1.1 days of labor, or 22 days for 20 acres. Reaping an acre requires 1.5 days, or 30 days for 20 acres. Harvesting an acre requires 1.4 days, or 28 days for 20 acres. Threshing 4 bushels requires 1 day, or 40 days for 160 bushels. In total, farming 20 acres requires (22 + 30 + 28 + 40) 120 days of labor, or about 6 days per acre.

The labor of animal husbandry is dependent on the livestock. Each cow requires 5 days of labor annually. Each pig requires 3 days of labor annually. Each sheep requires 1.33 days of labor annually. A farm with 3 cows, 1 pig, and 32 sheep uses $[(3 \times 5) + (1 \times 3) + (32 \times 1.33)]$ 60.56 days of labor, or about 6 days per acre.

The peasant family therefore has [500 - (120 + 60)] 320 days of labor available after tending to crops and animals. Unskilled labor is worth 1sp per day, so this yields an additional 32gp for the household.

The total value produced is 80gp from crops, 83gp from livestock, and 32gp from other labor, for a total of 195gp per year. With 12 months

per year, the peasant family produces 16.25gp of crops, milk, wool, meat, and goods per month.

CONSUMPTION

is agnostic with regard to whether any individual peasant family is an owner, renter, or serf of its land. The economic system simply assumes that most of a peasant family's production is extracted by landlords and tax collectors in some manner, such that the family is able to maintain only a subsistence lifestyle.

A peasant family requires a minimum of 11,000 calories per day, with 10,000 from bread and 1,000 from meat. A one-pound loaf of bread provides 1,000 calories per day. A bushel of wheat produces 72 one-pound loaves of bread. As each bushel costs (4gp/quarter / 8 bushels/ quarter) 0.5gp, each loaf of bread costs 0.69cp. Therefore each family needs (7 x 0.69) 4.83cp per day for bread. 1,000 calories of beef, pork, or milk costs 4cp, so each family spent another 4cp per day. In total, the family needs 8.83cp per day, or 264.9cp per month, or 2.65gp.

Historically the cost of food represented at least 60% of total costs for a peasant household. Using this as a baseline, we can calculate that total subsistence consumption could not exceed 2.65gp/o.6, or 4.41gp per month. We shall set the value at 4.25gp per month. The peasant family consumes (4.25gp-2.65gp) 1.6gp of goods other than food per month. In total it consumes (4.25gp/month x 12 months/year) 51gp per year.

If the family produces 16.25gp per month, and subsists on 4.25gp per month, then the monthly surplus remaining for landlords and tax collectors is 12gp. In , this is represented with the tax, service, and land values generated by each peasant family, which average 12gp per month for average land (land value 6gp). About 75% of the peasant's production is thus claimed by the ruler.

Note that if the family were to abandon its farm to work as unskilled labor, it would have a full 500 days of labor available. The wages of unskilled labor are 1sp per day, so the family might hope to earn 500sp per year, that is, 50gp per year or 4.16gp per month. Thus, even assuming full employment, a laborer family is worse off than a peasant family.

In most cases, the peasant family will enjoy an even higher standard of living, as the local lord returns a portion of his taxes and rents in the form of seasonal festivals. Since the ruler spends 5gp per family per festival, that works out to $(5gp/festival \times 1 festival/season \times 1 season/3 months)$ 1.67gp per month returned to the family. The peasant family thus may consume as much as 5.92gp per month.

Production 35

FLOCKS AND HERDS AND SILVER AND GOLD

CALCULATING THE RETURNS FROM LIVESTOCK IN

Calculating revenue from livestock is complicated by the fact that livestock are born, reproduce, and die. To address this dynamic, we developed the concept of an equilibrium herd. The **equilibrium herd** is a set of animals of sufficient size to maintain its numbers year over year while producing milk, meat, wool, and other goods at a stable level. By using an equilibrium herd, average revenue per animal can be calculated as the revenue produced by the equilibrium herd divided by the number of animals in the herd. Using an equilibrium also enables us to assess the return on investment in livestock, to see how it compares to implied return on investment in of 3% per month (for more on the implied return on investment in , see Of Coins and Commerce in this issue).

Child-aged livestock have been priced at 50% of adult price, while adolescent livestock are at full price. Baby, child, and adolescent livestock have pelts and meat worth 25%, 50%, and 75% of the value of adult livestock, but adolescent males are treated as adult females due to dimorphism. Pasture is priced at 15gp per acre (arable farmland is 50gp per acre).

CATTLE

An equilibrium herd consists of 16 cattle, including 8 adult cows, 2 heifers (adolescent female cows), 2 bullocks (adolescent male cows), 2 bull calves (child male cows), and 2 cow calves (child female cows). The adult cows have access to a bull (not included in the herd). Every year, the following occurs:

- Each head of cattle receives 5 days of labor costing 1sp per day, for a total of (16 x 5 x .1) 8gp.
- Each of the 16 heads of cattle grazes on 1.33 acres of pasture, for a total of 21.28 acres.
- Each of the 8 milk-cows has a 70% annual chance of giving birth to a calf, which has a 70% chance of surviving to midyear. Therefore there are (8 x .7 x .7) 4 calves by mid-year, of which 2 are bull calves and 2 are cow calves.
- 6 of the milk cows produce 125 gallons of milk each. The 2 oldest milk cows and the 2 heifers produce 112.5 gallons of milk each. Total milk production is [(6 x 125) + (4 x 112.5)] 1,200 gallons. Milk is worth 1sp per gallon, so the herd produces 120gp worth of milk.
- The 2 oldest milk cows and the 2 bullocks* are slaughtered for beef and leather. Each produces 250lbs of beef valued at 4cp per pound, or 10gp, for 40gp worth of meat total. Each produces 25lbs of leather valued at 6.6cp per pound, or 1.65gp, for 6.6gp worth of leather total.
- The 2 heifers develop into milk-cows.
- The 2 bull calves develops into bullocks.
- The 2 cow calves develop into heifers.

At year's end, the herd has returned to its equilibrium of 8 milk-cows, 2 heifers, 2 bullocks, 2 bull calves, and 2 cow calves. Total production is (120gp + 40gp +6.6) 166.6gp and total cost is 8gp, for profit of

158.6gp. On average, revenue per head of cattle is (166.6/16) 10.41gp and labor cost is (8/16) 0.5gp.

Return on Investment: Purchasing 8 milk-cows, 2 heifers, 2 bull calves, and 2 cow calves costs $[(8 \times 10) + (2 \times 10) + (2 \times 5) + (2 \times 5)]$ 120gp. Pasture can be purchased at 15gp per acre, so purchasing 21.28 acres of pasture costs 319.2gp. Total investment is therefore 439.2gp, rounded to 440gp. According to secret ratio, that should yield 13.33gp per month or 160gp per year profit. At 158.6gp per year, cattle herding yields 99% of the value predicted by the secret ratio.

Caloric Return on Acreage: A gallon of cow milk has 2,400 calories and a pound of beef has 1,000 calories. Caloric production is therefore (1,200 x 2,400) 2,880,000 calories of milk and (250 x 4 x 1000) 1,000,000 calories of beef, or 3,880,000 calories. This takes 21.28 acres of pasture. In contrast, 21.28 acres of farmland will produce 21.28 quarters of wheat. Each quarter of wheat consists of 8 bushels, each of which produces 72 loaves of bread worth 1,000-calories each. Therefore a similar acreage of farmland will produce (21.28 quarters x 8 bushel/quarter x 72 loaves/bushel x 1000 calories/loaf) 12,257,280 calories. Raising cattle is only about 30% as efficient in producing calories as farming.

Terrain: Cattle can only be reared in Clear, Grass, Scrub, Woods, and Hills terrain. They cannot be reared in Mountains, Barrens, Desert, Swamp, or Jungle terrain.

Mixed Grazing: For each cattle grazed on a farm, one goat or sheep may be grazed in the same acreage. Each species eats the grasses, shrubs, and bushes it prefers, increasing the efficiency of the pasturage.

GOATS

An equilibrium flock consists of 16 goats, including 8 doe, 2 yearling doe, 2 yearling bucks, 2 doe kids, and 2 buck kids. All the does have access to an uncastrated buck. Every year, the following occurs:

- Each goat requires 5 days of labor costing 1sp per day, for a total of (16 x 5 x .1) 8gp.
- Each of the 16 goat requires 0.167 acres of pasture to graze on, for a total of 2.67 acres.
- Each of the 8 doe has a 70% annual chance of giving birth to a kid, which has a 70% chance of surviving to mid-year. Therefore there are (8 x .7 x .7) 4 kids born, of which 2 are doe kids and 2 are buck kids.
- Each of the 16 goats produces 0.5lbs of fleece worth 5sp per lbs, or 2.5sp per fleece, for a total of (16 x .25) 4gp.
- 6 of the doe produce 22.5 gallons of milk each. The 2 oldest doe and the 2 yearling doe produce 20 gallons of milk each. Total milk production is [(6 x 22.5) + (4 x 20)] 215 gallons. Milk is worth 1sp per gallon, so the herd produces 21.5gp worth of milk.
- The 2 oldest does and the 2 yearling bucks are slaughtered for chevon and leather. Each produces 33lbs of chevon valued at 3cp per pound, or 1gp, for 4gp worth of meat total. Each

36 Cattle

produces 3.3lbs of leather valued at 6.6cp per pound, or The 2 oldest ewes and the 2 yearling rams are slaughtered for mutton and leather. Each produces 25lbs of mutton valued

- The 2 yearling does develop into does.
- The 2 buck kids develops into yearling bucks.
- The 2 doe kids develop into yearling doe.

At year's end, the flock has returned to its equilibrium of 8 doe, 2 yearling doe, 2 yearling bucks, 2 doe kids, and 2 buck kids. Total production is (4 + 21.5 + 4 + 0.88) 30.38gp and total cost is 8gp, for profit of 22.38gp. On average, revenue per goat is (30.38/16) 1.90gp and labor cost is (8/16) 0.5gp.

Return on Investment: Purchasing 8 doe, 2 yearling doe, 2 doe kids, and 2 buck kids cost costs [$(8 \times 2) + (2 \times 2) + (2 \times 1) + (2 \times 1)$] 24gp. Pasture can be purchased at 15gp per acre, so purchasing 2.67 acres of pasture costs 40gp. Total investment is therefore (24 + 40) 64gp. According to the secret ratio, that should yield 1.93gp per month or 23.27gp per year profit. At 22.38gp per year, goat herding yields 96% of the value predicted by the secret ratio. Goats have a lower return than sheep or cattle, but a higher return than pigs.

Caloric Return on Acreage: A gallon of goat's milk has 2,250 calories and a pound of chevon has 650 calories. Caloric production is therefore (240 x 2,250) 540,000 calories of milk and (4 x 33 x 650) 85,800 calories of chevon, or 625,800 calories, over 4 acres. In contrast, 4 acres of farmland will (4 quarters x 8 bushel/quarter x 72 loaves/bushel x 1000 calories/loaf) 2,304,000 calories, or 3.68 times as much. Raising goats is only 27% as efficient in producing calories as farming. They are less calorically efficient than pigs or cattle, but more calorically efficient than sheep.

Terrain: Goats can be reared in Clear, Grass, Scrub, Woods, Mountains, Hills, or Barrens terrain. They cannot be reared in Swamp, Jungle, or Desert terrain.

Mixed Grazing: For each cattle grazed on a farm, one goat or sheep may be grazed in the same acreage. Each species eats the grasses, shrubs, and bushes it prefers, increasing the efficiency of the pasturage.

SHEEP

An equilibrium flock consists of 16 sheep, including 8 ewes, 2 yearling ewes, 2 yearling rams, 2 ewe lambs, and 2 ram lambs. All the ewes have access to an uncastrated ram. Every year, the following occurs:

- Each sheep requires 1.33 days of labor costing 1sp per day, for a total of (16 x 1.33 x .1) 2.13gp.
- Each of the 16 sheep requires 0.167 acres of pasture to graze on, for a total of 2.67 acres.
- Each of the 8 ewes has a 70% annual chance of giving birth to a lamb, which has a 70% chance of surviving to mid-year. Therefore there are (8 x .7 x .7) 4 lambs born, of which 2 are ewe lambs and 2 are ram lambs.
- Each of the 16 sheep produces an average of 1.6lbs of fleece, worth 5sp per lbs, or 7.5sp per fleece, for a total of (16 x .75) 12gp.
- 6 of the ewes produce 9 gallons of milk each. The 2 oldest ewes and the 2 yearling ewes produce 8 gallons of milk each. Total milk production is $[(6 \times 9) + (4 \times 8)]$ 86 gallons. Milk is worth 1sp per gallon, so the herd produces 8.6gp worth of milk.

- The 2 oldest ewes and the 2 yearling rams are slaughtered for mutton and leather. Each produces 25lbs of mutton valued at 4cp per pound, or 1gp, for 4gp worth of meat total. Each produces 2.5lbs of leather valued at 6.6cp per pound, or 0.165gp, for 0.6gcp worth of leather total.
 - The 2 yearling ewes develop into ewes.
 - The 2 ram lambs develops into yearling rams.
 - The 2 ewe lambs develop into yearling ewes.

At year's end, the flock has returned to its equilibrium of 8 ewes, 2 yearling ewes, 2 yearling rams, 2 ewe lambs, and 2 ram lambs. Total production is (12 + 8.6 + 4 + 0.6) 25.2gp and total cost is 2.13gp, for profit of 23.07gp. On average, revenue per sheep is (25.2/16) 1.58gp and labor cost is (2.13/16) 0.13gp.

Return on Investment: Purchasing 8 ewes, 2 yearling ewes, 2 ewe lambs, and 2 ram lambs cost costs [$(8 \times 2) + (2 \times 2) + (2 \times 1) + (2 \times 1)$] 24gp. Pasture can be purchased at 15gp per acre, so purchasing 2.67 acres of pasture costs 40gp. Total investment is therefore 64gp. According to the secret ratio, that should yield 1.93gp per month or 23.16gp per year profit. At 23.07gp per year, sheep herding yields 99.6% of the value predicted by the secret ratio. Sheep have the highest return on investment of any livestock.

However, over 45% of a sheep's revenue is derived from its wool. Annual consumption of wool was historically around one pound per person in pre-modern times. Since each sheep produces more than a pound of wool annually, a farmer with more than a half-dozen sheep must be producing wool for sale. Sheep herding will therefore only truly realize its value when a well-developed wool export market exists. Moreover, sheep herding is quite inefficient as a means of producing calories. Therefore, even if an export market exists, land must be widely available relative to the size of the populace in order for enough to be available as pasture for sheep. The most well-known historical confluence of these requirements is England in the centuries after the Black Death.

Caloric Return on Acreage: A gallon of sheep's milk has 2,400 calories and a pound of mutton has 1,000 calories. Caloric production is therefore (96 x 2,400) 230,400 calories of milk and (4 x 33 x 1,000) 132,000 calories of mutton, or 362,400 calories. This takes 2.67 acres of pasture. In contrast, 2.67 acres of farmland will produce (2.67 quarters x 8 bushel/quarter x 72 loaves/bushel x 1000 calories/loaf) 1,537,920 calories, or 4.24 times as much. Raising sheep is only 24% as efficient in producing calories as farming.

Terrain: Sheep can be reared in Clear, Grass, Scrub, Woods, Mountains, and Hills terrain. They cannot be reared in Swamp, Barren, Desert, or Jungle terrain.

Mixed Grazing: For each cattle grazed on a farm, one goat or sheep may be grazed in the same acreage. Each species eats the grasses, shrubs, and bushes it prefers, increasing the efficiency of the pasturage.

Sheep 37

SWINE

An equilibrium herd consists of 11 swine, including 1 sow, 5 pigs, and 5 piglets. The sow has access to a boar. Every year, the following occurs:

- Each swine requires 3 days of labor costing 1sp per day, for a total of (11 x 3 x .1) 3.3gp.
- Each swine requires 0.1 acres of pasture to graze on, for a total of 1.1 acres.
- The sow gives birth to a litter of 6 piglets, of which 5 survive to mid-year.
- The 5 pigs are slaughtered for pork. Each produces 83lbs of pork valued at 3cp per pound, or 2.5gp, for 12.5gp worth of meat total.
- The 5 piglets develop into pigs.

Total production is 12.5gp worth of meat and total cost is 3.3gp, for a profit of 9.2gp. On average, revenue per pig is (12.5/11) 1.14gp and labor cost is (3.3/11) 0.3gp.

Return on Investment: Purchasing a sow and 5 piglets costs $[3 + (5 \times 1.5)]$ 10.5gp. Pasture can be purchased at 15gp per acre, so purchasing 1.1 acres costs 16.5gp. Total investment is therefore 27gp. According to the secret ratio, that should yield 0.82gp per month or 9.82gp per year profit. At 9.2gp per year, swine herding yields 94% of the value predicted by the secret ratio. Swine have the lowest return on investment of any livestock.

Caloric Return on Acreage: A pound of pork has 650 calories. Caloric production is therefore (5 x 83 x 650) 269,750 calories over 1.1 acres. 1.1 acres of farmland will produce 1.1 quarters of wheat, yielding (1.1 quarters x 8 bushels/quarter x 72 loaves/bushel x 1000 calories/loaf) 633,600 calories, or 2.34 times as much. Raising swine is 42% as efficient in producing calories as farming. Swine are thus the most calorically-efficient livestock. Since a single pig requires no acreage, the easiest way for peasants to introduce meat into their diet is by pig farming.

Terrain: Swine can be reared in Clear, Grass, Scrub, Woods, Hills, Swamp, and Jungle terrain. They cannot be reared in Mountain, Barren, or Desert terrain.

Pannage: To represent the practice of allowing peasant-owned swine to feed on fallen acorns and nuts in nearby woodlands, each peasant family may rear a single swine without allocating acreage per family.

Note: Note that in Lairs & Encounters, meat is valued at 0.3gp per stone, or 30cp per 15lbs, or 2cp per pound. However, in , preserved meat costs 200gp per 80 stone. Therefore each stone of preserved meat costs 2.5gp. A stone on the mercantile tables typically represents 15lbs., so each pound of preserved meat costs 0.17gp or 17cp – a huge disparity from the cost in L&E! However, preserved meat such as jerky weights 30% of fresh weight, so each pound of preserved meat really represents 3.33lbs of fresh meat. Fresh meat therefore cannot cost more than (17/3.33) 5.1cp per pound. The labor and materials used in the preservation process have to cost something!

Historically, meat has been estimated at 5 to 6 ½ times as expensive as wheat on a caloric basis. Since a 1,000-calorie loaf of bread costs 0.69cp, we should expect a 1,000-calorie serving of meat to cost 3.45cp to 4.49cp. Mutton and beef have about 1,000 calories per pound, so they should cost about 3.45cp to 4.49cp. Chevon and pork have about 650 calories per pound, so they should cost 2.25cp to 2.93cp per pound.

In these rules, we assume that beef and mutton costs 4cp per pound, chevon and pork costs 3cp per pound, and other meat costs 2cp per pound.



Open Game License

DESIGNATION OF PRODUCT IDENTITY

The names Autarch™, Adventurer Conqueror King™, Adventurer Conqueror King System™, ™, Auran Empire™, and Sinister Stone of Sakkara™ when used in any context, are product identity. All artwork, logos, maps, and presentation are product identity.

DESIGNATION OF OPEN GAME CONTENT

All game mechanics and rules are open game content, with the exception of text and terms defined above as product identity.

OPEN GAME LICENSE Version 1.0a

The following text is the property of Wizards of the Coast, Inc. and is Copyright 2000 Wizards of the Coast, Inc. ("Wizards"). All Rights Reserved.

- 1. Definitions: (a)"Contributors" means the copyright and/or trademark owners who have contributed Open Game Content; (b)"Derivative Material" means copyrighted material including derivative works and translations (including into other computer languages), potation, modification, correction, addition, extension, upgrade, improvement, compilation, abridgment or other form in which an existing work may be recast, transformed or adapted; (c) "Distribute" means to reproduce, license, rent, lease, sell, broadcast, publicly display, transmit or otherwise distribute; (d)"Open Game Content" means the game mechanic and includes the methods, procedures, processes and routines to the extent such content does not embody the Product Identity and is an enhancement over the prior art and any additional content clearly identified as Open Game Content by the Contributor, and means any work covered by this License, including translations and derivative works under copyright law, but specifically excludes Product Identity. (e) "Product Identity" means product and product line names, logos and identifying marks including trade dress; artifacts; creatures characters; stories, storylines, plots, thematic elements, dialogue, incidents, language, artwork, symbols, designs, depictions, likenesses, formats, poses, concepts, themes and graphic, photographic and other visual or audio representations; names and descriptions of characters, spells, enchantments, personalities, teams, personas, likenesses and special abilities; places, locations, environments, creatures, equipment, magical or supernatural abilities or effects, logos, symbols, or graphic designs; and any other trademark or registered trademark clearly identified as Product identity by the owner of the Product Identity, and which specifically excludes the Open Game Content; (f) "Trademark" means the logos, names, mark, sign, motto, designs that are used by a Contributor to identify itself or its products or the associated products contributed to the Open Game License by the Contributor (g) "Use", "Used" or "Using" means to use, Distribute, copy, edit, format, modify, translate and otherwise create Derivative Material of Open Game Content. (h) "You" or "Your" means the licensee in terms of this agreement.
- 2. The License: This License applies to any Open Game Content that contains a notice indicating that the Open Game Content may only be Used under and in terms of this License. You must affix such a notice to any Open Game Content that you Use. No terms may be added to or subtracted from this License except as described by the License itself. No other terms or conditions may be applied to any Open Game Content distributed using this License.

- 3.Offer and Acceptance: By Using the Open Game Content You indicate Your acceptance of the terms of this License.
- 4. Grant and Consideration: In consideration for agreeing to use this License, the Contributors grant You a perpetual, worldwide, royalty free, non-exclusive license with the exact terms of this License to Use, the Open Game Content.
- 5.Representation of Authority to Contribute: If You are contributing original material as Open Game Content, You represent that Your Contributions are Your original creation and/or You have sufficient rights to grant the rights conveyed by this License.
- 6.Notice of License Copyright: You must update the COPYRIGHT NOTICE portion of this License to include the exact text of the COPYRIGHT NOTICE of any Open Game Content You are copying, modifying or distributing, and You must add the title, the copyright date, and the copyright holder's name to the COPYRIGHT NOTICE of any original Open Game Content you Distribute.
- 7. Use of Product Identity: You agree not to Use any Product Identity, including as an indication as to compatibility, except as expressly licensed in another, independent Agreement with the owner of each element of that Product Identity. You agree not to indicate compatibility or co-adaptability with any Trademark or Registered Trademark in conjunction with a work containing Open Game Content except as expressly licensed in another, independent Agreement with the owner of such Trademark or Registered Trademark. The use of any Product Identity in Open Game Content does not constitute a challenge to the ownership of that Product Identity. The owner of any Product Identity used in Open Game Content shall retain all rights, title and interest in and to that Product Identity.
- 8. Identification: If you distribute Open Game Content You must clearly indicate which portions of the work that you are distributing are Open Game Content.
- 9. Updating the License: Wizards or its designated Agents may publish updated versions of this License. You may use any authorized version of this License to copy, modify and distribute any Open Game Content originally distributed under any version of this License.
- 10 Copy of this License: You MUST include a copy of this License with every copy of the Open Game Content You Distribute.
- 11. Use of Contributor Credits: You may not market or advertise the Open Game Content using the name of any Contributor unless You have written permission from the Contributor to do so.
- 12 Inability to Comply: If it is impossible for You to comply with any of the terms of this License with respect to some or all of the Open Game Content due to statute, judicial order, or governmental regulation then You may not Use any Open Game Material so affected.
- 13 Termination: This License will terminate automatically if You fail to comply with all terms herein and fail to cure such breach within 30 days of becoming aware of the breach. All sublicenses shall survive the termination of this License.
- 14 Reformation: If any provision of this License is held to be unenforceable, such provision shall be reformed only to the extent necessary to make it enforceable.

15 COPYRIGHT NOTICE

Open Game License v 1.0 Copyright 2000, Wizards of the Coast, Inc.

System Reference Document Copyright 2000, Wizards of the Coast, Inc.; Authors Jonathon Tweet, Monte Cook, Skip Williams, based on original material by E. Gary Gygax and Dave Arneson.

System Reference Document Copyright 2000-2003, Wizards of the Coast, Inc.; Authors Jonathan Tweet, Monte Cook, Skip Williams, Rich Baker, Andy Collins, David Noonan, Rich Redman, Bruce R. Cordell, John D. Rateliff, Thomas Reid, James Wyatt, based on original material by E. Gary Gygax and Dave Arneson.

Modern System Reference Document Copyright 2002-2004, Wizards of the Coast, Inc.; Authors Bill Slavicsek, Jeff Grubb, Rich Redman, Charles Ryan, Eric Cagle, David Noonan, Stan!, Christopher Perkins, Rodney Thompson, and JD Wiker, based on material by Jonathan Tweet, Monte Cook, Skip Williams, Richard Baker, Peter Adkison, Bruce R. Cordell, John Tynes, Andy Collins, and JD Wiker.

Adventurer Conqueror King Copyright 2011, Autarch™ LLC; Authors Alexander Macris, Tavis Allison, Greg Tito, and Ryan Browning.

Basic Fantasy Role-Playing Game Copyright 2006-2008, Chris Gonnerman.

Castles & Crusades: Players Handbook Copyright 2004, Troll Lord Games; Authors Davis Chenault and Mac Golden.

Castles & Crusades: Monsters Product Support Copyright 2005, Troll Lord Games.

Labyrinth Lord [™] Copyright 2007-2009, Daniel Proctor; Author Daniel Proctor.

Labyrinth Lord™ Advanced Edition Companion Copyright 2010, Daniel Proctor; Author Daniel Proctor.

END OF LICENSE

Copyright 2012-2016 Autarch LLC. Autarch[™], Adventurer Conqueror King[™], Adventurer Conqueror King System[™], and [™] are trademarks of Autarch Auran Empire[™] is a trademark of Alexander Macris.