

De Bellis Antiquitatis

Version 3.0



by Phil Barker and Sue Laflin-Barker

Quick play wargame rules with army lists for ancient and medieval battles

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DE BELLIS ANTIQUITATIS

Version 3.0

INTRODUCTION

De Bellis Antiquitatis (DBA) is an ancient and medieval period wargame played on a small board, using a minimal number of model figures and the simplest set of rules that can produce a historically and visually realistic and exciting game.

Its genesis was an experimental set for battles between Romans and Celts demonstrated by Phil at the 1988 Society of Ancients conference. This led to a more general two-page rule set called "De Bellis Societatis Antiquorum" used for a knock-out competition to be played in the small gaps between events at the 1989 conference. In 1990, its popularity produced pressure for a commercial version "De Bellis Antiquitatis" which extended the combat system, added a few extra troop types, and included fuller explanation of procedures and philosophy than had been possible in two pages; and incorporated set-up information and army lists for more than 300 ancient and medieval armies. It has proved one of the most influential wargames rule sets of recent times and is still played worldwide.

Like all our other rule sets, the order of the sections is that in which they are used. It starts with definitions, then army preparation, then terrain preparation, then the actual battle rules in the order in which they are usually needed.

Our original intent was to provide the simplest possible set of wargames rules that retain the feel and generalship requirements of ancient or medieval battle. The rule mechanisms were then entirely new. They started from the assumptions that the results of command decisions could be shown rather than the minutia of how orders were communicated and interpreted, that the proportions of different troops fielded were decided by availability within their culture and not cost-effectiveness against the current opponent, that differences between troops of the same class and era were relatively unimportant, and that most shooting regardless of theoretical weapon range was at very short distances. The resulting system is more subtle than may be immediately apparent, and is the fruit of much detailed development.

The general idea is that a wargame should look like and provide the tension of a real battle, that players should have only the information and command capabilities that a real general would have, that simplicity is a virtue, and that players should win by realistic tactics, not by bureaucratic manipulation of army composition or inherently slow analysis of the rules. The objective is the mind of your opponent and speed helps apply pressure.

The best way to learn to play is from a kindly experienced opponent. Failing that, put two simple armies down and play both sides until you are familiar with the concepts. You do not have to memorise everything in one go. An average player has memorised sufficient of the battle rules part way through his or her first game, but tactical skill, especially in the use of light troops, takes longer to develop, so pick an army you can still love even when it loses, then learn how it use it! The authors, with the help of a single translator, once taught a group of twenty non-English speakers to play DBA in 20 minutes, who then went on to play a small competition.

A game usually lasts less than an hour, so that a 6 round convention competition can be completed in one day and still leave plenty of time for visiting the trade stands. Since most battles end in outright victory, the organiser's work is minimised.

DBA version 3.0 is the result of a thorough revision process by a large panel that included DBA competition organisers and umpires on three continents and has been available for open testing on line. Some changes are only to improve clarity. Others eliminate geometrical ploys beloved of some gamesmen that have no historical basis. In particular, troops that would contact or shoot at each other in real life must now also do so in the game. Yet other changes improve historical balance by giving troops of the same type slightly different capability when they are depicted differing by basing or bow type.

Wargame rules often favour methodical safety-first generals, while in real war commanders with flair often out-perform them. A new method of measuring distances helps to simulate this by encouraging the use of a reserve to exploit opportunities more easily, making it harder to hide vulnerable troops out of reach at the rear; and is also more convenient.

The period covered has been extended up to 1520 to take in the early part of the Great Italian Wars and the Ottoman-Mamluk wars. The fully revised army lists include extra description to inspire beginners. Few lists necessitate changes to an existing army, but many have additional options that add to the richness of the game.

A more complex large army derivative "De Bellis Multitudinis" (DBM) produced in 1993 has been superseded since 2007 by "De Bellis Magistrorum Militum" (DBMM). There is a large overlap between the concepts of DBMM and those of DBA; so DBA can serve as a simpler introduction to DBMM (or to ancient wargaming in general) as well as a stand-alone game.

DESIGN PHILOSOPHY

The DBA command system appears arbitrary, but gives results very similar to those of more elaborate systems using written orders, transmission by messenger or signal and testing of interpretation on receipt. It also substitutes for the testing of troops' reaction to events and effectively simulates loss of cohesion in battle.

Wargamers pay more attention to weaponry than did real commanders. Surviving ancient manuals lump all foot skirmishers as pisolit whether armed with javelins, sling or bow, defining them by function rather than armament. We have applied the same principle throughout with no apparent loss of overall realism. Morale and training distinctions have also been discarded as linked with function. Thus, most knights are rash, all warbands are fierce but brittle, all skirmishers are timid.

Similarly, a real general did not know a unit's losses until next day, if then. However, he would be able to see if a body was advancing cheering, standing its ground, edging back looking over its shoulders or had broken in rout. We provide players with that information and that only. Victory as well as realism under these rules is most likely to be achieved by thinking of elements as bodies of real troops rather than playing pieces, and using them historically.

PLAYING EQUIPMENT AND REPRESENTATIONAL SCALES

CHOICE OF FIGURE AND MODEL SCALE

These rules can be used with any scale of figure or model, but two scales are usual. The larger uses a base width (BW) of 60mm with nominally 25mm (actually 20-28mm) figures. The smaller uses a 40mm base width with nominally 15mm (actually 10-20mm) figures. 15mm has been the most usual scale since it combined cheapness with convenience. The larger scale offers easier visibility for spectators and opportunity for more detailed painting and is gaining in popularity with the availability of cheaper plastic figures. Greater numbers of 6mm or 2mm figures can be substituted for either scale.

PLAYING AREA

The standard playing area, "the battlefield", is square; with sides 600mm/24" to 800mm/32" for the smaller scale and 900mm/36" to 1,200mm/48" square for the larger scale. Be warned that areas larger than the minimum are unnecessary and may encourage overly defensive play or result in longer or even unfinished games. It is usually assembled from separate terrain features placed on a flat base, but a single integral terrain block or grouped quarter-size blocks, may be provided instead by competition organisers; if so, they must avoid making the terrain too symmetrical or uniform.

ARMY SIZE AND TROOP REPRESENTATION

An army consists of 12 elements as specified in their army list, one of which includes its only general. Others can sometimes be replaced by elements of another army listed as allied (see p.31). The army must also have either a camp or a city and can have both (see p.7). These can be occupied by 1 of the 12 elements of its own army list, or by camp followers or city denizens additional to the 12.

An element consists of a thin rectangular base of card or similar material, to which is fixed figures (or the equivalent 6mm or 2mm blocks) typically representing 6 to 10 ranks of close-formed foot, 4 or 5 ranks of most mounted troops or of skirmishers, or a single rank of elephants, scythed chariots, artillery or wagons. It nearly always has the same size and number of figures as corresponding DBMM (and the obsolete DBM and WRG 7th) elements, but represents more men.

The number of men represented by a single element varies according to the size of army simulated, but is always at least twice that in DBMM. In the standard game, each element represents 1/12 of the army, whatever its size; but larger numbers of elements are used in the Big Battle and Giant Battle rule variants, to be found on pages 13-14.

Although each element base is depicted as a rigid rectangular block, this does not imply that the troops it represents are necessarily in such a block or do not vary their position.

GROUND SCALE AND DISTANCE MEASUREMENT

The unit of measurement is the width of an element base (a BW). For movement or maximum shooting range, this is roughly equivalent to 80 paces in real life. Distances are specified in the rules as multiples or halves of a base width. They can be measured on the table either with a selection of rods cut to length, or a with a strip of card or similar material 5 BW long marked at 1 BW intervals, which can also have other information on its reverse to serve as the equivalent of a reminder sheet. You will find that distances can often be estimated visually without measurement. A rectangle 1 BW x 1/2 BW with a vertical handle is also very useful for measuring gaps. "Within" means "at or closer than".

TIME SCALE

Play is in alternate bounds, simulating action and response. The real life time represented varies, since sometimes response was immediate, but sometimes both armies paused for reorganisation or rest. Averaged over the battle each bound represents about 15 minutes. Move distances were those needed rather than the maximum theoretically possible in the time.

DICE

Each player uses a single ordinary 1 to 6 dice, which should be used for the whole game for all purposes, unless changed at the request of the opponent. Dice with spots are more easily read across the table by an opponent than those with numbers.

TROOP DEFINITIONS

Troops are defined by battlefield behaviour instead of the usual formation, armour, weapons and morale classes. We distinguish only between troops whose fighting style differs sufficiently to need to be treated differently by either their general or their foe. Apparent anomalies caused by grouping together disparate troops can be rationalised since the disparity is compensated by other factors, such as ferocity or skill. These apparent anomalies are unobtrusive if the army fights opponents of its own era, and are minimised by further defining foot as either "Fast" or "Solid".

Mounted troop types are: Elephants, Knights, Cavalry, Light Horse, Scythed Chariots or Camelry.

Foot troop types are: Spears, Pikes, Blades, Auxilia, Bows, Psiloi, Warband, Hordes, Artillery or War Wagons.

Camp followers and city denizens are not included in the allowed total of 12 troop elements, but are extra elements of armed civilians of no specific troop type, but which if they sally count as "Solid" foot for movement and "Fast" foot for combat.

A few army lists permit some elements defined above as mounted to "dismount" i.e. be exchanged for a foot element, but these cannot later remount. Those listed as / or // can be deployed as either the mounted type or already dismounted as the foot type; those listed as // can also dismount during the game as a complete single element tactical move. A very few armies have mounted infantry (prefixed by "Mtd"). These are on larger bases with their mounts, but remain foot and differ in that in good going they have the same tactical move as knights and can move more than once per bound.

ELEPHANTS (El), of any breed or crew complement. These were used to charge massed foot, or to block mounted troops, whose frightened horses would often not close with them. Pikes fought them on nearly level terms, and they could be killed by artillery or showers of lighter missiles, or be distracted by psiloi. Maddened by combat, they would always pursue.

KNIGHTS, representing all those horsemen that charged at first instance without shooting, with the intention of breaking through and destroying enemy as much by weight and impetus as by their weapons; such as Macedonian companions, Sarmatians, Gothic horse, Norman or medieval knights, with 3 figures to a base (3Kn), Parthian and similar cataphracts in full armour on fully armoured horses trotting in tight formation, with 4 figures to a base (4Kn), and also un-scythed heavy chariots (HCh) with more than 2 animals (unless Libyans) or wheels or crew greater than 2 or armed with a lance. Massed bows could shoot them down as at Crecy, or steady spears or pikes stop them with a dense array of shields or weapon points, or sword or axemen kill horses in a standing melee. Other foot were likely to be ridden down. Knights could be confident of defeating ordinary heavy cavalry, but light skirmishing horsemen were a greater danger. These must sooner or later be charged rather than accept a constant drain of casualties. However, an over-rash pursuit risked being surrounded and shot down in detail. Knights were not well suited to dodging elephants or scythed chariots. A few armies such as Later Byzantines and the Teutonic Order used knights in deep wedges with the most heavily armoured in front and on the sides and lesser troops inside. These are depicted as double elements (6Kn) with figures based in two rows (see p. 5).

CAVALRY, representing the majority of ancient horsemen, primarily armed with javelins, bows or other missile weapons but combining these with sword or lance (Cv), and also light chariots (LCh) with 2 (or if Libyan 4) animals and 1-2 crew. They usually started combat with close range shooting, using rapid archery or circulating formations to concentrate a mass of missiles, but charged when that would serve better or to follow up an advantage. They could destroy or drive away psiloi or auxilia, ride down foot bows caught at a disadvantage, and force other foot to retire or even destroy them. Not as committed to the charge as knights, they could retire out of range of archery or to breathe their horses between missile attacks on pikes or spears. They were outmatched in hand-to-hand combat by knights, but, being more agile and having missile weapons, were in less danger from light horse, elephants or scythed chariots. A few armies such as the Byzantines used deep formations depicted as double elements (6Cv) with lancers in front and archers behind.

LIGHT HORSE, including all light horsemen (LH) or camel riders (LCm) who skirmished in dispersed swarms with javelin, bow or crossbow and would not charge unshaken enemy; such as Numidians, Huns, Parthian horse archers, Late Roman "Illyrians" or Equites Sagittarii, genitors or border staves. They typically fought by sending a constant stream of small parties to gallop past shooting several times at close range, then return to rest or change ponies while others took their turn. The boldness engendered by their near invulnerability, the point-blank range and their continuous rapid shooting made them as effective against most foot as much larger numbers of foot archers and more so than cavalry in formation and lacking their large numbers of spare mounts. They did not charge until fatigue, casualties or disorder made the enemy incapable of resisting. If charged, they evaded shooting behind them, ready to turn on an over-confident pursuer. They detested foot archers, who outshot and out ranged them, and artillery, who made their rally position unsafe. They were unlikely to destroy solid foot with good shields and/or armour unless these had an open flank, but could greatly hamper their movements. They were often used for wide flanking movements behind the enemy, operating semi-autonomously rather than under close control, so are permitted extra movement out of contact and are rarely affected by distance from the general. Armies with very large numbers of horse archers could form up very deep, increasing the frequency of exchange and the effect of shooting effect; but on a dusty confused battlefield this could make evading a charge risky.

SCYTHED CHARIOTS (Sch), with four horses and usually a single crewman, so with a high power/weight ratio, which, with no need to conserve the horses' energy, enabled them to charge straight ahead at a mad gallop into enemy formations early in a battle to disrupt or destroy them. Since they were usually wrecked in the process, the drivers often jumped out at the last moment, offering some hope to the target that the horses might swerve away from contact. They were mainly dangerous to those troops who offered a solid target and could not dodge easily, so were often countered by psiloi.

CAMELRY (Cm), including those camel-mounted warriors who charged to close quarters or used mass archery, but not those that only skirmished or infantry transported by camel. Their chief value was to disorder those mounted troops that depended on a charge into contact. They were vulnerable to missiles and to troops closing on foot.

SPEARS (Sp), representing all close formation infantry fighting with spears in a rigid shield wall; such as hoplites, Punic African foot, Byzantine skutatoi or Saxon fyrd. The mutual protection provided by their big shields, tight formation and row of spear points gave them great resisting power, so that two opposed bodies of spears might fence and shove for some time before one broke. Theban hoplites that formed very deep are depicted by double elements (8Sp). Steady spears could usually hold off horsemen, but psiloi or light skirmishing horse could force them to halt and present shields, and might surround and destroy an outflanked body. They are all classed as "Solid".

PIKES (Pk), including all close formation infantry who fought collectively with pikes or long spears wielded in both hands; such as Macedonians, Scots, Flemings or Swiss. Their longer weapons made pikemen even better than spearmen at holding off charging mounted troops. When fighting against foot, the combination of longer weapons and deep formations enabled them to roll over most opponents if they could keep moving forward; though the long shafts also made formation keeping more difficult, so that gaps resulting from terrain or the stress of combat could be exploited by blades or warband. Any prolonged lack of movement exposed them to flank attacks. Less effective shields made them more vulnerable than spears to bows and psiloi. They are all classed as "Solid", except for irregular hillmen with long spears used in both hands and mostly lacking shields (3Pk), such as Hittites, Koreans or North Welsh which are classed as "Fast".

BLADES (Bd), including all those close fighting infantry primarily skilled in fencing individually with swords or heavier cutting or cut and thrust weapons; such as Roman legionaries, huscarls, galloglaich, dismounted knights, halberdiers, billmen, clubmen or later samurai. They often had better armour or shields than other foot, weapons that could more readily defeat armour, and often added supplementary missile weapons or closed quickly to avoid missiles. They were less safe than spears or pikes against charging mounted troops, but were superior in hand-to-hand combat to any foot except pikes in deep formations. Blades are classed as "Solid", except for those more lightly equipped but faster moving (3Bd), such as Dacian falx-men, Roman lancieri or medieval Indian swordsmen, who are classed as "Fast", as are also Swiss halberdiers acting offensively in columns (6Bd), but not dismounted knights mounted 3 to a base to match mounted numbers. Generals operating from stationary command positions accompanied by staff and bodyguards (CP), or carried in litters surrounded by bodyguards (Lit), and standard-bearing command wagons with guards (CWg) of the Khazars and Italian city states are treated as "Solid" Blades except that they cannot move into contact with enemy.

AUXILIA (Ax), representing javelin-armed foot able to fight hand-to-hand but emphasising agility and flexibility rather than cohesion. Irregulars (often mountain peoples) such as Thracians, Armenians and Irish kerns are usually (3Ax) classed as "Fast". They were over-matched in open country by other close fighting foot and more vulnerable to cavalry than Spears, but useful to chase off or support psiloi, to take or hold difficult terrain, as a link between heavier foot and mounted troops or occasionally as a mobile reserve. Those that acquired better weapons or regular discipline such as Hellenistic thureophoroi, Iberian scutarii and Imperial Roman auxilia become (4Ax) classed as "Solid" and can counter Warband.

PSILOI (Ps), including all dispersed skirmishers on foot with javelin, sling, staff sling, bow, crossbow or hand gun. These fought in a loose swarm hanging around enemy foot, pestering it with a constant drizzle of aimed missiles at close range and running out of reach if charged. They rarely caused serious casualties, but were very useful to slow and hamper enemy movements, to protect the flanks of other troops, to seize, hold or dispute difficult terrain, to co-operate with cavalry, and to counter elephants or scythed chariots. Unsupported psiloi in the open were vulnerable to cavalry. Archers integral to units of close fighting foot are not classed as psiloi, but assumed to be included in their elements. Psiloi are all classed as "Fast".

BOWS (Bw, Lb or Cb), representing foot formed in bodies who shot at longer range than psiloi, often in volleys at command. Weapons that often penetrated armour at very short range, such as longbows (Lb) or crossbows (Cb), are differentiated by effect. Troops unhappy to stay and fight hand-to-hand (3Bw, 3Lb, 3Cb) are classed as "Fast", those that defended themselves with light spears, heavy swords or clubs and sometimes behind stakes or pavises (4Bw, 4Lb, 4Cb) are classed as "Solid"; as also are mixed units with several ranks of close-fighters (rather than a single rank of pavisers) in front of the shooters and depicted as double elements (8Bw, 8Lb, 8Cb) with close fighter figures in front and bowmen behind.

WARBAND (Wb), including all wild irregular foot that relied more on a ferocious impetuous charge than on mutual cohesion, individual skills or missiles; such as most Celts and Germans. Enemy foot that failed to withstand their impact were swept away, but they were sensitive to harassment by psiloi and to mounted attack. Those that charged most impetuously, moved most swiftly, were used to woods, but were brittle in defeat (3Wb), such as Britons or Galwegians are classed as "Fast". Those that kept a shield wall in adversity and fought it out toe-to-toe (4Wb) are classed as "Solid".

HORDES (Hd), representing unskilled and unenthusiastic foot levied from peasantry to bulk out numbers and perform the menial work of sieges and camps and typically huddling in dense masses whose inertia provides a kind of staying power allowing them to be classed as "Solid", if only by comparison (7Hd). Others (5Hd) such as rioters, street gangs, revolutionary mobs, religious fanatics and Aztec militia were more enthusiastic, so "Fast" but equally incompetent.

ARTILLERY (Art), whether tension, torsion, counterweight or gunpowder. This could annoy the enemy at long range, destroy war wagons or elephants and counter enemy artillery, but was relatively immobile once deployed, so is "Solid" foot.

WAR WAGONS (WWg), including Hussite mantletted wagons, mobile towers, and other wagons that fought mainly by shooting and could move during battle, but not laagered transport wagons. They are "Solid" because, except for mobile towers which can assault a city, fort or camp, they had great resisting power to blunt attack, but could not themselves charge. They were vulnerable to artillery. Since they could fight all-round, they count the first edge in contact as their front edge when in close combat (but not for moving along a road) and can choose any one edge each bound to shoot from. They could not shoot effectively on the move. In DBA they are usually depicted without draft animals, simulating the removal of these before combat, and so can be on square bases.

BASING YOUR FIGURES AND MODELS

All figures must be combined into elements of several figures, or an elephant, vehicle or artillery model, fixed to a thin rectangular base. Base width is critical and must not be changed. It is 60mm for the larger scale and 40mm for the smaller (see p.2). Players should keep as closely as possible to the minimum depths recommended below. Larger alternatives are to accommodate figures based for other rule sets or over-large figures.

Troop Type	DBA List Code	DBMM List Code	Base depths in mm for:		Figures or models per base	
			Larger figure scale	Smaller figure scale		
ELEPHANTS	EI	EL (S,O,I,X)	80	40	1 model	
KNIGHTS	3Kn	Kn (S,O,F,I)	40-45 (60*)	30 (40*)	3	
	4Kn	Kn (X)	40-45	30	4	
	6Kn	Kn (S)+(I) DB	80	60	6	
	HCh	Any Kn if Chariots	60 or 80	40	1 model	
CAVALRY	Cv	Cv (S,O,I)	40-45	30	3	
	6Cv	Cv (S,O,I) DB	80	60	6	
	LCh	Cv (S,O,I)	60 or 80	40	1 model	
LIGHT HORSE	LH	LH (S,O,F,I)	40-45	30	2	
	L.Cm	LH (I)	40-45	30	2	
SCYTHED CHARIOTS	SCh	Exp	60 or 80	40	1 model	
CAMELRY	Cm	Cm (S,O)	40-45	30	3	
MOUNTED INFANTRY	Mtd-X	Mtd	60-80	40-60	3-4 + mount	
SPEARS	All "Solid"	Sp	Sp (S,O,I)	20-30	15-20	4
		8Sp	2 elements of above	40	30	8
PIKES	"Solid"	4Pk	Pk (S,O,I,X)	20-30	15-20	4
	"Fast"	3Pk	Pk (F)	30	20	3
BLADES	"Solid"	4Bd	Bd (S,O,I)	20-30	15-20	4**
	"Fast"	3Bd	Bd (F,X)	30	20	3
	"Fast"	6Bd	Not used	60	40	6
AUXILIA	"Solid"	4Ax	Ax (S)	30	20	4
	"Fast"	3Ax	Ax (O,I)	30	20	3
BOWS	"Solid"	4Bw, Cb, Lb	Bw (S,O,I)	30	20	4
	"Fast"	3Bw, Cb, Lb	Bw (S,O,I)	30	20	3
	"Solid"	8Bw, Cb, Lb	Bw (X) DB	60	40	8
PSILOI	All "Fast"	Ps	Ps (S,O,I,X)	30	20	2
WARBAND	"Solid"	4Wb	Wb (S,O)	20-30	15-20	4
	"Fast"	3Wb	Wb (F)	30	20	3
HORDES	"Solid"	7Hd	Hd(O)	40-60	30-40	7-8
	"Fast"	5Hd	Hd (S,F)	40-60	30-40	5-6
ARTILLERY	Art	Art (S,O,F,I)	80	40	1 model	
WAR WAGONS	WWg	WWg (S, O, I)	60 or 120	40 or 80	1 model	
GENERAL	CP, Lit or CWg	Bge (S)	60 or 120	40 or 80	5-6	
Sallying denizens or camp followers			30	20	2-4	

* Macedonian companions and some Skythian nobles can be on a deeper base with the centre figure further forward representing an historical wedge formation.

** Knights that have dismounted as blades can be based with 3 figures as when mounted.

Where more than one basing option exists, this usually differentiates troops of the same type who fought slightly differently, such as those classed as "Fast" or "Solid" and/or those who used unusually deep formations. It also helps identify troops of different origins, which can be further distinguished by aligning figures representing regular troops evenly in a single level row, and using a mix of figures of differing type, pose and/or colour scheme placed more randomly for irregulars.

Mounted Infantry are based as 3-4 foot figures plus a vehicle, led mount or mounted figure. Depict camp followers and city denizens that sally outside their defences as armed civilians. The general's element must be recognisable by his figure, standard or conventional white charger, or rarely by being in a litter (Lit) or command wagon (CWg) or in a temporarily halted command position with staff and guards (CP).

Double elements required by army lists are based in two rows. 6Kn can have a row of 2 followed by a row of 4, or 3 interleaved ranks of 1, 2 and 3, with the centre 2 of the back row being the lighter type. 6Cv and 6Bd have two rows of 3. 8Sp have 2 ranks of 4. 8Bw have a row of 4 with pavis or shield plus spear followed by 4 with bow or crossbow. A double element is 1 element of the army's 12, but may count as 2 elements when lost. In partial compensation, it fights in close combat against most foot as if the rear element was providing rear support.

If your army is of individual 6mm figures, use twice as many figures and models as specified above. Basing of 6mm or 2mm blocks is complicated by them being cast with varying frontages. They must be cut and combined to look realistic, with irregulars and skirmishers often in small random groups. Use open formation blocks for light horse or psilo, loose for most knights, cavalry, auxilia, bowmen or warband, and close for cataphracts, spears, pikes and most blades.

BATTLEFIELD TERRAIN

Players must be able to provide a battlefield in case they become the defender. As generalship is definable as the skill with which generals adapt their troops' movements to those of the enemy and to the battlefield, varied and realistic terrain is essential for interesting battles. Since so little time is needed to paint DBA armies and the playing area is so small, players should invest time and ingenuity in making their terrain as visually attractive as their troops.

Unless a competition organiser provides preset terrain, the battlefield is produced by the defending player placing separate terrain features on a flat board or cloth representing flat GOOD GOING such as pasture, open fields, steppe grassland or smooth desert. The defender bisects the battlefield twice at right angles to its edge to produce 4 equal quarters and numbers these 1-4 clockwise from the left.

CHOOSING AND PLACING FEATURES

The types of feature that can be used depend on those of the terrain in which the defending army historically normally fought at home. The defending player chooses and places 1-2 compulsory and 2-3 optional features from those permitted. Those chosen must include BAD or ROUGH GOING (as defined below) or a River or Waterway, and cannot include more than 1 each of Waterway, River, Oasis, Gully or BUA, or 2 roads, or 3 each of any other feature type. Waterways must be placed first, then compulsory features, then others.

Each feature is diced for. A score of 1 to 4 directs that it must be placed within that quarter. A score of 5 directs that the quarter is chosen by the defender. A score of 6 directs that the quarter is chosen by the invader. Area features other than Plough or Gentle Hills must be placed entirely within that quarter. A lesser part of any Gentle Hill may, and all Plough and linear features must, extend into 1 only adjacent quarter. A feature that cannot be placed is discarded. There must be a gap of at least 1 BW between area features and between an area feature other than a BUA and any battlefield edge.

If terrain is:		Compulsory features are:	Optional features are:
ARABLE		1 BUA or 2 Plough.	River, Difficult Hills, Gentle Hills, Woods, extra Plough, Enclosures, Road, Waterway, Scrub, Boggy.
FOREST		1-2 Woods.	River, Marsh, Gentle Hills, extra Woods, BUA.
HILLY		1-2 Difficult Hills.	River, Woods, BUA, Road, extra Difficult Hills.
STEPPES		1-2 Gentle Hills.	River, Rocky, Scrub, 1 only Gully, BUA.
DRY		1-2 Rocky or Scrub	Dunes, Difficult Hills, Oasis, BUA
TROPICAL		1-2 Woods.	River, Marsh, 1 only Gully, BUA, Enclosures, Road, extra Woods.
LITTORAL		1 Waterway	Either Difficult Hills or Marsh, either Woods or Dunes, BUA, Road, River.

AREA TERRAIN FEATURES includes those listed below as BAD, ROUGH or GOOD GOING and also BUA (see p.7). Each must fit into a rectangle of which the length plus the width totals no more than 9 BW. Only 1 feature can have a length (maximum dimension) of less than 3 BW. Every feature must have both a length and a width (maximum dimension at a right angle to its length) of at least 1 BW. A Gully's length must be at least 3 times its width. The length of other features must not exceed twice their width. BUA and Plough can have straight edges; otherwise all features must be a natural shape with curved edges. A city or fort can be combined as 1 feature with a larger hill that is also permitted.

Difficult (steep and/or rocky, thickly scrubbed or wooded) Hills, Woods, Marsh and Gully are BAD GOING, which slows the movement of, and is an adverse close combat tactical factor for, some foot and all mounted and may hinder shooting (see p.10). Dunes and Oasis are BAD GOING except to elements of any type with camels. Rocky, Scrubby or Boggy flat ground, Enclosures (fields subdivided by stone walls, hedges, ditches or in Asia by paddy bunds) are ROUGH GOING, which reduces move distances but is not a tactical factor and does not affect shooting. Gentle Hills and playing surface other than terrain features are GOOD GOING. Plough is GOOD GOING but changes to ROUGH GOING if the game's first PIP score is 1, due to heavy rain or crops. An element only partly in GOOD GOING is treated as in the other going. All hills slope up to a centre line crest and give a close combat advantage if part of an element's front edge is upslope of all of its opponent.

LINEAR TERRAIN FEATURES include Waterways, Rivers and Roads.

A Waterway represents the sea, a lake edge or a river too wide and deep to be fordable and is impassable. It extends 1-4 BW inwards from an entire battlefield edge and half its length must extend no more than 3 BW in from that edge. It can be bordered by a beach or flood plain extending up to 2 BW further, which is GOOD GOING.

A River must run from one battlefield edge to a different battlefield edge or join a waterway. It cannot be wider than 1 BW or longer than 1½ times the distance between its ends. It can cross any feature except a Hill, Dunes, Oasis or BUA. It cannot start or go within 4 BW of any battlefield edge except the 2 edges it flows from and towards. A river can only be entered when attempting to cross it. For movement, a river is neither good nor other going; instead the elements crossing it are restricted by conditions that are constant along its whole length and for the whole game. These restrictions are discovered when the first attempt is made by any player to cross it off-road. See p. 9 CROSSING A RIVER. An element is defending the bank if it is entirely on land and its close combat opponent is at least partly in the water.

Roads can be paved or be earth tracks (best depicted as pale brown) created by frequent civilian traffic. They are depicted as less than a BW wide, elements moving along them with the centre of their front approximately in the middle of the road, rather than being confined between the road edges. A road must run from one battlefield edge towards the opposite battlefield edge, bending only minimally if desired to avoid terrain features. It cannot begin or end at a waterway edge, but crosses rivers by ford or bridge. It can end at a BUA on a waterway edge. It can only cross a city from city gate to city gate. A second road must cross or join the first. Movement by an element or group in column entirely along a road is in GOOD GOING and counts as straight ahead even when the road curves. Combat on it is in the going it is passing through.

BUILT-UP AREA (BUA)

If a BUA is chosen, it must be a city, fort, hamlet or edifice and will belong to the defender. These are placed like other area features, except that all of a city or fort must be within 6BW of each of 2 battlefield edges and can be on a hill. At the start of the game a city can and a fort must be garrisoned by 1 (non-allied) foot element, placed near its centre but representing defenders manning its perimeter. If the garrison is Artillery, its shooting effect is reduced because the artillery is distributed around the perimeter. Thereafter, any single foot element (except War Wagons) can move completely within an undefended city or fort and then garrison it. A garrison or other occupying element does not pursue defeated attackers as the result of an outcome move see p.12. Occupiers of a BUA beside any but a paltry river count as defending the bank against enemy elements assaulting it and still partly in that river. A city or fort on a hill includes the hill in its tactical factor so occupiers do not count as uphill nor do assaulters count as being in bad going. Such a city must incorporate an extra road (not counting as a separate terrain feature) from each gate to the nearest hill edge.

(a) A CITY has defensive walls, high economic and prestige value and a large population of denizens who will defend it if it has no garrison. It must be modelled with 1 or 2 gates, through which all elements entering or leaving must pass unless they are enemy assaulting it. A single friendly group or element can move through a city, even if it is garrisoned, by using 1 PIP (see p.8) per element to get from just outside the near gate to having the last element moving just outside the far gate.

DENIZENS of a city are armed civilians initially loyal to the defender, they are not a garrison. If a garrison vacates the city, the denizens continue to defend it. If the garrison is destroyed, they do not. When a garrison or denizens are destroyed in close combat, any one assaulting enemy element (except elephants or a mobile tower) occupies the city and sacks it until its player has a PIP score of 5 or 6. The sacking element can then either garrison the city if eligible to do so, or vacate it. Prior to that, the sacking element does not get a garrison tactical factor in close combat and cannot shoot or be shot at. Denizens sometimes sallied out to assist a relieving army, so this is allowed if the city does not contain a troop element and there are both enemy and friendly troop elements within 2 BW of the city. The denizens cannot themselves go more than 3 BW from it. Their fighting value in the open is minimal and the city is undefended in their absence. If the denizens of a city sally out or are destroyed and it is left unoccupied by the enemy or vacated, either side can move into or through it without combat. If denizens defending inside a city are destroyed by artillery the city surrenders and is not sacked. An appropriate enemy element immediately becomes a garrison on moving into it. If it is not occupied by the enemy or it is vacated; a puppet administration has been put in power and its denizens will defend the city for the enemy. Denizens of a surrendered city cannot sally, as the puppet administration is fully occupied holding down a doubtful populace. If a city has surrendered during the game or was captured earlier in a campaign and there is no enemy troop garrison or this has been destroyed by shooting, the player that originally owned the city can pay 5 PIPs at the start of any of its side's bounds for its denizens to revolt against and overthrow the puppet administration, resume their original loyalty and defend the city (treachery by an internal faction was the most common reason for a city's fall).

(b) A FORT (or castle) has permanent defences and a gate and must start the game garrisoned by a foot element. It has no economic value or prestige. It is left undefended if its garrison vacates it or is destroyed; and can then be moved into and garrisoned by any foot element (except War Wagons) of either side.

(c) A HAMLET (or township) is either a small inhabited area of scattered or grouped houses among small enclosed fields, or a larger village or town with denser housing, but no perimeter defences except fences to keep out animals. It has insignificant economic or defensive value and its inhabitants flee when troops approach. It functions only as ROUGH GOING.

(d) An EDIFICE is an isolated large building, such as an Amerindian or other pyramid, a pharos, a monastery, a temple or ruins. It has no economic value, denizens or defensive value. It is treated only as BAD GOING, except when it is used as a CAMP.

CAMPS

The camp is the logistical component of the army. It is optional if the army has a city or more than 2 War Wagons, compulsory if it does not. It must be in GOOD GOING (except Plough) on the rear edge of its side's deployment area or on a waterway or beach, and should have only temporary structures, except that an EDIFICE so positioned can be declared and act as a camp.

A camp must be at least 1 BW x ½ BW and fit into a rectangle the length plus width of which totals no more than 4 BW. Unless based on an edifice, a camp is depicted as an open space surrounded by an outer perimeter of simple earthwork and/or palisade, laagered wagons, a brush boma, a group of medieval tents with interlaced guy ropes, yurts with tethered ponies, kneeling camels or anything else appropriate to the army.

At the start of the game a camp can be occupied by either (a) 1 only non-allied troop element (except Elephants or Scythed chariots), which can subsequently vacate it and may be replaced by another such element, or (b) camp followers (represented either by a camp follower element that can move out of it but without being able to return, or fixed figures that cannot move out of it, but not both). If neither has been provided, it has been left undefended. A camp that has been entered by any enemy element either as a tactical or outcome move (see p.12) is immediately sacked and ceases to have any defensive or other value.

There are rare historical examples of camp followers leaving the camp to fight in the open but more realistically as a decoy or false reinforcement. This is therefore permitted, but will be of minimal combat value and leaves the camp undefended.

FIGHTING THE BATTLE

DEPLOYMENT

Each side dices and adds the aggression factor of its army list to the score, dicing again if the scores are equal. The side with the lower total is the defender, the other is the invader. The defender chooses and places terrain allowed to its army to create the battlefield. The invader then selects a base edge. If a road crosses the battlefield, one of the intersected sides must be chosen, otherwise any edge that is not opposite a waterway. The defender's base edge is that opposite the invader's edge.

Next, both sides place their camp, the defender first. Then the defender deploys its troop elements, one of which (if eligible) may be used to garrison a city or fort. Then the invader deploys its elements. All non-garrison troops must deploy at least 3 BW from the battlefield centre line and 1 BW from any enemy city or fort. Cavalry, Light Horse, Camelry, Mounted infantry and Auxilia or Psiloi must deploy at least 2 BW away from battlefield side edges and others at least 4 BW away.

If a waterway has been placed, either side can reserve 2-3 elements (whose army's home terrain is LITTORAL) to be deployed at the start of its first bound (before PIP dicing) as a single group anywhere along the waterway. At least 1 element of the group must touch the waterway. These elements cannot include Elephants, War Wagons or Artillery.

SEQUENCE OF PLAY

The defender takes first bound, then the two sides alternate bounds. During each player's bound:

- (1) The player dices for Player Initiative Points (PIPs) (representing the general's attention and ability to communicate).
- (2) The player uses these PIPs to make tactical moves.
- (3) Any Artillery, War Wagons or Bows elements of both sides that are eligible to do so, must shoot once each (in case of dispute in the order the moving player decides) and make or inflict outcome moves.
- (4) Any elements of both sides whose front edges are in suitable contact with enemy fight in close combat in the order the moving player decides and make or inflict outcome moves.

PLAYER INITIATIVE POINT DICING

The side starts its bound by dicing. The score is the number of Player Initiative Points (PIPs) that can be used for tactical moves this bound. Any unused PIPs are lost, not kept for future bounds.

In each bound, the first move of each single element or column uses 0 PIPs if it is entirely by road, moves until it contacts enemy or friends or moves its full tactical move distance, and does not reverse direction. Each other tactical move uses 1 PIP.

Except in the side's first bound, a move that uses a PIP uses up an extra PIP for each of the two following cases that apply:

- (a) If the moving element or group includes any Scythed Chariots not moving into contact with enemy, Elephants, Hordes, War Wagons, Artillery, denizens or camp followers, or is an element currently garrisoning a city, fort or camp.
- (b) If the moving element is not the general's element and either its general's element has been lost or is entirely in a BUA, camp, Wood, Oasis, Marsh or Gully or if the element or group to be moved starts more than command distance from its general.

Command distance is 20 BW if entirely Light Horse. Otherwise, it is 8 BW, but is reduced to 4 BW for troops entirely beyond the crest of any Hill, beyond a BUA or a camp, on a Difficult Hill, or in or beyond a Wood, Oasis or Dunes.

TACTICAL MOVES

A tactical move is a voluntary move that normally uses up PIPs and happens before shooting and close combat. It can be by a single element or a group of elements, but cannot include any element currently in close combat. It must not be confused with outcome moves (recoils, flees and pursuits), which are compulsory, do not use up PIPs and follow distant shooting or close combat. A legal tactical move cannot be taken back once the element has been placed unless the initial position was marked and the opponent consents. Such a marker must be removed before starting to move another element.

A tactical move by a single element can be in any direction, even diagonal or oblique, can pass through any gap its leading (not necessarily its front) edge can fit through and can end facing in any direction. It cannot be used by an element in close combat, which can break-off only by a recoil or flee outcome move. An element of Knights, Cavalry, Camelry or Light Horse that uses its move to dismount is exchanged (with its front edge in the same place) for the foot type, then moves in subsequent bounds as that foot. It cannot dismount while in any contact with enemy or in an enemy Threat Zone (TZ).

A group is a contiguous set of elements all facing in the same direction with each in both edge and corner-to-corner contact with another; or in at least corner-to-corner contact if part of a wheeling column. A column is a group only 1 element wide. A group can only move forwards. It moves as if entirely of the slowest type included. Each of its elements must move parallel to or follow the first to move, move the same distance, or wheel forward through the same angles with the group's entire front edge pivoting forward around a front corner. No other changes in frontage, direction or facing can be made, even if within a TZ, except to pivot, wheel and/or slide sideways to line up in an enemy TZ, or to conform in close combat.

Groups are temporary: if the whole of a group cannot move, some of its elements will probably be able to move as a smaller group or as separate single elements. Conversely, a group or single element can move to join other elements and make its next move as a group including these. Allied elements can only make a group move with elements of their contingent.

A group move by road, or across bad (not rough) going must be in or into a column unless entirely by Psiloi. A group move can include reducing frontage to form such a column for this or any other purpose. The leading element moves forward, then others successively join behind it, moving as if by single element moves. No element can end with its front edge further to its original rear. Elements that do not join the tail of the column that bound are no longer part of the same group. Once in the column, each element follows the leading element and wheels at the same places through the same angles.

TACTICAL MOVE DISTANCES

Movement is measured in a straight line, from the starting point of the furthest moving front corner of the single element or group to that corner's final position. Except that if the element is following a road or it deviates to avoid terrain, troops or TZ, the distance is measured along the path travelled. A move can be up to:

- 4 BW If Light Horse, Cavalry or Scythed Chariots and only in good going.
- 3 BW If Knights, Elephants, Camelry or any mounted infantry and only in good going, or if "Fast" foot in any going.
- 2 BW If "Solid" Auxilia or "Solid" Warband in any going, or if other "Solid" foot and only in good going.
- 1 BW If any troops other than "Fast" foot, Auxilia or Warband and in bad or rough going for any part of the move (except that Artillery and War Wagons cannot deploy or move at all off-road in bad going).
- 1 BW If the front edge of any single element or group is in a non-paltry river for part of the move.

SECOND OR SUBSEQUENT TACTICAL MOVES DURING THE SAME BOUND

Some elements or groups that have already moved this bound can make a second or subsequent tactical move if there are enough PIPs and only if this does not start or go within 1 BW of enemy unless while moving along a road and is entirely by:

- (a) Light Horse or mounted infantry; and making a second or third move that is entirely in good going.
- (b) Psiloi making a second move either in their side's first bound of the game, or if every element starts entirely in good going and ends at least partially in bad or rough going.
- (c) Troops moving along a road if making a second or subsequent move.

CROSSING A RIVER

Troops that enter a river must continue crossing at the same angle to its course as they enter, or divert by the minimum necessary to line up in close combat with an enemy element. The first element to try to cross a river off-road during the game must dice for its state, which then applies along its entire length for both sides for the whole game. A score of 1 or 2 indicates that the river is paltry, too shallow and easy banked to aid defence and can be passed through as if good going, 3 or 4 that it slows crossing and its banks aid defence, 5 or 6 that it slows crossing, its banks aid defence and that only single elements or elements in or forming column can cross it during the game, wider groups stopping at the near bank.

INTERPENETRATING TROOPS

If making a tactical move or fleeing, a mounted element can pass through friendly Psiloi or Psiloi pass through any friends, but in both cases only if there is sufficient clear space beyond and enough move to occupy it; and either (a) it starts at least partly directly in front and ends the move lined-up behind or (b) starts lined-up behind and ends lined-up in front.

Recoilers can pass through friends facing in exactly the same direction to a clear space immediately behind the first element met, but only if either (a) mounted troops recoiling into any friends except Pikes, Hordes or Elephants, (b) Blades recoiling into Blades or Spears, (c) Pikes or Bows recoiling into Blades, or (d) Psiloi recoiling into any friends except Psiloi.

Since the men represented by an element are not necessarily in a rigid permanent formation, one rear corner may pass through another element or an enemy TZ or a terrain feature while the element's front edge pivots or wheels, rearward men having notionally moved directly to their new positions.

THREAT ZONE

The area 1 BW deep in front of any edge of a War Wagon or the front edge of any other type of element, or the area within 1 BW of any point of a camp, city or garrisoned fort is its Threat Zone (TZ). An element or group which is at least partly within or whose front edge enters an enemy TZ or touches its far edge can move only: (a) to line up its front edge with one such enemy generating the TZ or (b) to advance into or towards contact with such an enemy or (c) if a single element, to move straight back to its own rear for the entire move. TZs do not affect outcome moves.

MOVING INTO CONTACT WITH ENEMY

The general principle is that troops that would contact in real life do so in the game so that moving a front edge into contact with enemy always results in combat. At the end of the bound's movement phase the contacting element or at least one element of a contacting group must be lined-up with an enemy element, either: (a) in full mutual front edge contact, (b) in full front edge to rear edge contact, or (c) in front edge to side edge contact with front corners in contact, or (d) with no enemy in contact to its front, but in overlap (see p.10). If this is not possible, the move does not happen. One party moves the minimum distance to so conform. Contactors conform using their tactical move, but an extra sideways slide of up to 1 BW is allowed if this is necessary to conform after contacting an enemy front edge. Elements contacted this bound by enemy or whose front edge is still in contact when combat ends automatically conform if necessary.

A single element contacting a single element conforms to it. A single element or group contacting a group conforms to that group. A single element contacted by a group conforms to it unless itself entirely in bad and/or rough going in which case the group conforms. If conforming to a front edge by contactors is prevented by part-element spacing between enemy or physically blocked by elements, terrain or a table edge, contacted elements or groups must either conform or fight as if in full contact and overlapped. Unless turning to face a flank or rear contact (see p.10), contacted elements conform at contact.

An element can move into edge contact with an enemy flank edge only if it starts entirely on the opposite side of a line prolonging that edge or if partly on the opposite sides of lines prolonging both flank and rear edges. It can move into contact with an enemy rear edge only if it starts entirely on the far side of a line prolonging that edge.

CP, Lit, CWg, Art or WWg cannot move into any contact with enemy, except that a WWg mobile tower can contact an enemy-held city, fort or camp. Other elements except Scythed Chariots can contact a city, fort or camp with their front edge.

TURNING TO FACE A FLANK OR REAR CONTACT

Immediately after the movement phase, elements contacted to flank or rear by an enemy front edge turn to face the first enemy element to contact them unless they are already in full front edge contact with another enemy element or providing rear support. Any existing contacts are adjusted by moving the elements forward, back or the minimum distance sideways to maintain contact. If an element so contacts the flanks of two enemy elements, both these turn to face it if the first must, the second moving to behind the first. On the rare occasions that a third element is contacted, it is pushed back (p.9) to make room for the others to turn. A War Wagons element counts the edge first contacted as its front edge, so does not turn. A second element contacting the same edge is treated as if overlapping the nearest flank. That edge of the War Wagon ceases to be treated as its front edge when the contact ceases.

DISTANT SHOOTING

Only Bows, Artillery and War Wagons can shoot. Maximum range is 5 BW if Artillery and 3 BW if Bows or War Wagons. Measure range between the closest points of the shooting edge and the target edge. The **Shooting Edge** is either (a) the front edge of a Bows or Artillery element, or (b) any 1 BW portion of the perimeter of a city, fort or camp that is garrisoned by the shooting element or of any edge of War Wagons. The **Target Edge** is either (a) all of, or any single 1/2 BW portion of, an element edge or (b) any 1/2 BW portion of the perimeter of a city, fort or camp. It must be entirely within 1 BW of directly in front of part of the shooting edge. Shooting is blocked if uncrossed lines joining the ends of the shooting and target edges have part of any element between them.

Shooting is not possible if either shooters or target are in close combat or providing rear support, but is possible to or from elements that are overlapping and not in close combat. Targets exposed by outcome moves can be shot at. Artillery can shoot only (a) in their own bound if they did not move, or (b) to shoot back at enemy artillery shooting at them during the enemy bound. Bows and War Wagons cannot shoot if they have moved more than 1BW this bound.

A hill's crest, a city or fort, or a 1/2 BW depth of difficult hills, woods, oasis, dunes, hamlet or edifice blocks shooting from and at an element base edge entirely beyond any of these. An element that is at least partly in a river or a marsh cannot shoot. An element entirely in a gully cannot shoot or be shot at. Bows and War Wagons must shoot at a target in their TZ. If there is none, they must shoot at a target that is shooting at them. If neither, they can choose any eligible target. Artillery can always choose its target in its own bound and can shoot through or over enemy Psiloi.

A second or third element shooting at the same target aids the shooting of the nearest by providing it with a tactical factor instead of being resolved separately. Any more elements shooting at that target this bound have no effect. If a shooter whose target does not shoot back is shot at by a third party, this is resolved first, then it shoots using the same dice score.

CLOSE COMBAT

In addition to hand-to-hand fighting, close combat includes all use of missiles by mounted troops or foot skirmishers or during a charge or melee. It occurs when an element moves into, or remains in, both front edge and front corner-to-corner contact with an enemy element or at least partial front edge contact with a city, fort or camp.

Combat to both front and to flank and/or rear or when overlapped or overlapping:

When an element is in close combat both to front and to flank or rear or in close combat to its front and overlapped, only it and the enemy element in front fight each other. Others only provide tactical factors. A flank or rear contact on an element providing rear support is treated as if on the supported element.

An element not in frontal close combat but in mutual right-to-right or left-to-left front corner contact with any enemy element except Psiloi or Scythed Chariots overlaps this; even if it is exposed by a frontal opponent having recoiled, fled or been destroyed that bound. Any enemies in any mutual flank edge contact overlap each other whether in close combat or not. An element can overlap 2 enemy elements on opposite flanks. Only 1 overlap or flank contact is counted per flank. An element in good going other than Light Horse or Cavalry and which did not move this bound and has any front corner less than 1 BW from a battlefield edge counts as overlapped on that corner unless this is in contact with a friendly element.

Close combat against a city, fort or camp:

Troops assaulting or defending these use their combat factor against foot and do not count overlaps or flank or rear support. A city, fort or camp can be in contact with the front edges of up to 3 assaulting elements. The defender fights each assaulting element separately in succession, in each combat counting others still in contact as a tactical factor. Combats cease when the defender is destroyed or all assaulting elements have fought. Elephants can assault a city or fort only at a gate.

RESOLVING SHOOTING OR CLOSE COMBAT

Whether in contact, shooting or only shot at, each player dices for their element, and adds its combat factor below and any rear support, flank support and tactical factors to the score:

	If against foot:	If against mounted:
ELEPHANTS	5	4
BLADES in close combat	5	3
SPEARS, BLADES if shot at or ARTILLERY unless in a city or fort	4	4
KNIGHTS, SCYTHED CHARIOTS, PIKES or WAR WAGONS	3	4
CAVALRY, CAMELRY or AUXILIA	3	3
WARBAND or HORDES	3	2
BOWS	2	4
ARTILLERY in a city or fort; or LIGHT HORSE or PSILOI	2	2
CAMP FOLLOWERS or CITY DENIZENS	2	0

Rear support factors:

These apply when elements have another friendly element of the same type lined-up directly behind them and facing the same direction, and both are in good going.

Pikes add +3 and Warband +1 when in frontal close combat against enemy foot other than Psiloi.

Pikes add +1 when in frontal close combat against Knights, Elephants or Scythed Chariots.

Light Horse add +1 when in frontal close combat against any troops.

Double elements (6Kn, 6Cv, 8Sp, 6Bd, 8Bw) not in a city, fort or camp add +1 when in frontal close combat against enemy foot and the double element is entirely in good going.

Flank support factors:

Some "Solid" elements add +1 when in frontal close combat in good going against enemy foot if at least one flank edge is in mutual side edge and mutual front corner contact with a friendly element. Spears add +1 if supported by Spears or "Solid" Blades. "Solid" Bows add +1 if supported by "Solid" Blades. "Fast" elements neither give nor receive flank support.

Tactical factors:

Add to or subtract from scores for each of the following tactical factors that applies:

- +4 If garrisoning a city or fort; and either in close combat or being shot at.
- +2 If camp followers or other foot defending their camp or denizens their city and either in close combat or shot at.
- +1 If the general's element; and either in close combat or being shot at.
- +1 If in close combat; and either uphill or defending any but a paltry river's bank off-road.
- 1 For each enemy element either overlapping or in front edge and front corner-to-front corner contact with flank or in full front edge contact with rear, or for each second or third enemy element aiding opposing element's shooting, or for each of up to 2 additional enemy elements also still assaulting a city, fort or camp.
- 2 If any troops but Auxilia, Bows, Warband or Psiloi and in close combat in bad (not rough) going.

COMBAT OUTCOME

An element whose total is equal to or less than that of its opponent may need to make an immediate outcome move, which depends on its own type and that of the opponent in close combat with its front edge or shooting at it. An element shooting without being shot at disregards an unfavourable outcome. A supporting element in close combat against an enemy element's flank or rear recoils if the friendly element in combat with that enemy's front recoils, flees or is destroyed.

If its total is equal to that of its opponent:

No effect if attacking or defending a city, fort or camp. If not:

Scythed Chariots	Destroyed.
Knights or Camelry	Destroyed in close combat by any Blades or any Bows that are Lb or Cb, recoiled in close combat by other "Solid" foot. 4Kn recoiled in close combat by 3Kn. Otherwise no effect.
Other mounted	Recoiled by "Solid" foot in close combat, otherwise no effect.
"Fast" foot	Recoiled by "Solid" foot in close combat with it or shooting at it, otherwise no effect.
"Solid" foot	Destroyed by foot if CP, CWg or Lit & in contact on 2 or more edges by enemy front edges, otherwise no effect.

If its total is less than that of its opponent but more than half:

Destroyed if sacking a city or if defenders of a city, fort or camp or denizens or camp followers that have sallied or mounted infantry in bad going. Recoil if in close combat against defenders of a city, fort or camp. No effect if CP, Lit or CWg.

Otherwise:

Elephants	Destroyed by Psiloi, Auxilia, Light Horse or by Artillery shooting. Flee from Elephants. Otherwise, recoil.
Scythed Chariots	Flee if shot at unless at least partly on their rear edge. If not, destroyed.
Knights	Destroyed by Elephants, Scythed Chariots, Camelry or Light Horse. If not, recoil.
Camelry	Destroyed by Scythed Chariots or if themselves in bad going. Flee from Elephants, If not, recoil.
Cavalry	Flee from Scythed Chariots, or if in bad going. If not, recoil.
Light Horse	Flee from Scythed Chariots, from Artillery shooting, or if in bad going. If not, recoil.
Spears, Pikes or Blades	Destroyed by Knights or Scythed Chariots if in good going or by Warband. If not, recoil.
Auxilia	Destroyed by Knights if in good going. If not, recoil.
Bows	Destroyed by any mounted. If not, recoil.
Psiloi	Destroyed by Knights, Cavalry or Camelry if in going the enemy count as good. If not, recoil.
Warband	Destroyed by Knights or Scythed Chariots if in good going. If not, recoil.
Hordes	Destroyed by Knights or Elephants if in good going, or by Warband. Recoil if shot at. If neither, no effect.
War Wagons	Destroyed by Artillery shooting or by Elephants. If not, no effect.
Artillery	Destroyed.

If its total is half or less than half that of its opponent:

Destroyed if defenders of a city, fort or camp. If not:

Cavalry	Flee from Pikes, Spears or Hordes if in good going, or Artillery in close combat. If not, destroyed.
Light Horse	Destroyed if in bad going, or by any mounted, Artillery shooting, Bows or Psiloi. If not, flee.
Psiloi	Destroyed by Knights, Cavalry, Camelry or Light Horse if in going the enemy count as good, or if in close combat against Auxilia, Bows or Psiloi. Recoil from Elephants or Scythed Chariots. If not, flee.
All others	Destroyed.

DESTROYED ELEMENTS

A destroyed element is removed. This represents an unacceptable number of its men being killed, disabled or made prisoner and the remaining survivors dispersing and quitting the battlefield individually, wagons and artillery having been smashed and abandoned by crews, elephants dead, fleeing in panic or captured, or denizens defending a city abandoning the walls. An element that has an enemy front edge in contact with its side or rear edge is destroyed by recoiling, being pushed back, fleeing or being in a column whose front element is destroyed.

RECOILING OR BEING PUSHED BACK

This represents troops falling back a short distance under enemy pressure or to make space for friends while continuing to maintain formation and facing. Recoiling or pushed back elements move straight back without turning. An element with a recoil outcome as a result of shooting which was at least partially at its rear edge turns to face its rear before recoiling.

A recoiling foot element always moves its own base depth or $\frac{1}{2}$ BW if this is less than its base depth.

A recoiling mounted element can choose either to move 1 BW or to move its own base depth if this is less than 1 BW.

If the recoiling element is Elephants, all friends or enemy met that are not in a BUA or camp are destroyed. Elephants recoiling from close combat against the defenders of a city or fort are destroyed. If 2 Elephant elements meet, both are destroyed. Surviving elephants finish their recoil. If the recoiling element is not Elephants, friends facing in the same direction can be interpenetrated if allowed (see p.9). If not, they are pushed back far enough to make room unless they are Elephants or War Wagons. Pushed back elements cannot interpenetrate or push back others.

A recoiling or pushed back element whose rear edge or rear corner meets terrain it cannot enter, a battlefield edge, friends it cannot pass through or push back, enemy or a city, fort or camp ends its move there. An element already in such contact with any of these cannot recoil and is destroyed instead.

FLEEING

This represents a panic individual rush to the rear. A fleeing element turns 180 degrees in place; and then moves straight forward without turning for its full tactical move distance for the going it starts in. It then stops until making a tactical move or conforming to further contact by enemy. If it contacts a side battlefield edge, it pivots and continues the move along that edge towards its rear battlefield edge. If any part of it crosses any other battlefield edge it is removed as lost.

It stops before completing its move and lines up if its front edge (or front corner only) contacts any of: (a) enemy (whom it will fight next bound), (b) friends it cannot pass through (as specified on p.9), (c) a city, fort or camp, (d) a waterway, or (e) for troops other than Psiloi or Light Horse, any bad going except marsh it is not already at least partly in.

It is destroyed if it starts with an enemy front edge in contact with its flank or rear edges, or if after turning it cannot move at all, or if it enters any river. If a friendly or enemy element prevents further movement by fleeing Elephants or Scythed Chariots, both elements are destroyed.

PURSUIT

This represents following up a retiring close combat opponent or panicked survivors of a destroyed element with the intention of continuing to kill them. An element in a city, fort or camp or in bad going (other than marsh or gully) or whose pursuit move would cross a battlefield edge or enter such bad going, does not pursue. Otherwise an element whose close combat opponents recoil, flee or are destroyed (and all elements in a column behind such an element) must immediately pursue, but only if:

- The defenders of a city, fort or camp are destroyed in close combat then one assaulting element immediately moves in.
- An element of Knights (other than 4Kn), Scythed Chariots, Elephants or Hordes pursues 1 BW straight ahead.
- An element that is of Pikes, Blades (but not CP, Lit or CWg) or Warband and that fought against any foot except Psiloi pursues $\frac{1}{2}$ BW straight ahead.

If a pursuing element's front edge contacts enemy or its front corner contacts an enemy front edge, they line up immediately as if contact was by a tactical move, but the resulting combat is resolved next bound.

LOST ELEMENTS

An element has been lost if it has been destroyed, or has recoiled, fled or been pushed back across a battlefield edge. Those that crossed a battlefield edge and destroyed camp followers or denizens are only lost for this battle and will reappear in the next turn of a campaign.

WINNING AND LOSING THE BATTLE

The first side that at the end of any bound has now lost a total of 4 elements not including Scythed Chariots, Hordes, camp followers or denizens or has also lost more such elements than the enemy, has lost the battle. The first double element lost counts as 2 elements lost. A general lost during the battle counts as 1 extra element lost. A camp that has been sacked by enemy counts as 1 element lost. A city occupied by enemy during the battle which has not been re-captured or been subject to a revolt counts as 2 elements lost if it was used without a camp or 1 if used with a camp.

Scythed Chariots do not count towards the lost total because while expensive to provide their loss is expected and discounted. Hordes do not count because other troops do not regard them as equals or of much importance. Camp followers and denizens do not count because they are self-replacing (there are usually plenty of hopeful new prospective inhabitants for a once prosperous city and of hungry peasants willing to adopt soldiers who will feed them).

EXTENDED OR MULTIPLE GAMES

MULTI-GAME TOURNAMENTS

Tournaments consist of several rounds of games, each usually played to a time limit, commonly of 60 minutes. Army composition and allies must be declared by the start of the first game and cannot be changed between games; except that an element listed as / or // can be deployed at the start of each game as either mounted or dismounted. Organisers of established tournaments usually have their own tried and tested scoring systems. If you are designing your own system, it needs to ensure that a single massive victory does not outweigh a more consistent string of successes, that wins are always more valuable than draws/unfinished games and players are not encouraged to get ahead in a game by a small margin then stall. A Swiss chess competition format enables players potentially travelling long distances to play in every round. Anachronistic pairings should be minimised by organisers giving priority to pairings between those armies with equal cumulative scores whose army lists specify each other as historical enemies. This principle can be taken further by each player bringing a historically opposed pair of armies and dicing for which player's pair is used, the other player then choosing which he commands; but at the cost of reducing variety. If it is important to eliminate draws (as in knock-out competitions) and neither side has achieved victory when the time limit is reached, one possible solution available to the organiser is to eliminate both players.

BIG BATTLE DBA

This is a variant enabling a single player on each side to use a larger army divided into commands and a larger playing area, but without the increased historical detail of DBMM. This differs from the standard version only as described below.

Each army consists of 36 elements. If it is from a single list, multiply the number of elements of each type allowed by the army list by 3. Each of the 3 generals controls a command of at least 6 elements chosen from those available. The army can instead include allied commands of the same year from lists with a different number or with the same number but a different letter, which are always full 12-element independent armies from those lists. Allied elements can only be in an allied command. If there is only 1 allied command, the remainder of the army is then restricted to its list multiplied by 2 instead of 3. If there are 2 allied commands, they must be from different lists and the remaining command is also a normal 12-element army from its own list. One non-allied general must be designated as Commander-in-Chief (C-in-C). The C-in-C and all ally-generals must be of a troop type specified by their list as general. Other generals can be any element of their list except Lit, CWg, CP, Hordes, Scythed Chariots or Artillery, but cannot ride an elephant unless the C-in-C could ride an elephant. The width of the battlefield is doubled, but the depth remains the same. The number of compulsory features is changed to 1-3 and the number of optional features is changed to 2-4. There still cannot be more than 1 each of Waterway, River, Oasis, Gully or BUA; or more than 2 Roads, or more than 3 features of the same type.

An allied command must be provided with its own camp; otherwise the whole army has 1 normal-size camp unless it has a City and chooses to use this instead. A camp can only be defended by an element of its own command or camp followers.

The defender places terrain as in standard DBA, except that a Waterway cannot be placed on a long side. The invader chooses a long side as his base edge, the defender takes that opposite. Either the defender deploys all commands, then the invader deploys all his (the quickest method; and note that the defender has first move); or the defender deploys 1 or more commands, then each in turn places a command. Each element not in a city, fort or camp must be deployed within 8 BW of the invader's general. A littoral landing must be by a full command provided by an army whose own home topography is LITTORAL; and all that command's elements must deploy within 1 BW of the Water Way.

One PIP dice is needed for each command. All a side's dice must be the same colour except that an allied command's dice must be a different colour and is always used for that command. The player must write down after terrain has been placed and base edges chosen which non-allied command will always be given the highest scoring dice, which the next highest scoring dice, and which the lowest scoring dice. He discloses this when he first dices for PIPs. Plough is rough if first bound PIP's total less than 8. A command's PIP's cease to be diced for when all its elements have been lost or left the battlefield.

Once in each game, the C-in-C's element can add +1 to its combat score after this has been calculated.

An element is lost if it is destroyed or crosses a battlefield edge, but not if only demoralised. The first double element lost by each command counts as 2 elements lost, and the loss of its general as an extra element lost. An allied command whose camp is sacked counts this as extra losses only to that command. Any other camp sacked or city currently controlled by the enemy counts as extra losses to each non-allied command.

A command that at the start of any of its bounds whose lost elements other than Scythed Chariots, Hordes, camp followers or denizens total a third of its original troop elements is permanently demoralised. During the remainder of the game it cannot make tactical moves, but it can use the same number of PIPs as for a move to turn and hold in place individual elements or to hold in place groups. Other elements not in close combat immediately flee directly towards the nearest point on the army's base edge, but making an initial turn if necessary. This is repeated at the start of each subsequent friendly bound, each element not held that bound or in close combat fleeing whether or not it fled before. Elements not in a city, fort or camp suffer a -2 tactical factor in close combat. A command that has lost half of all its original troop elements is removed.

An army whose cumulative total of lost elements at the end of any bound other than Scythed Chariots, camp followers or denizens is at least half its original troop elements or has 2 of its commands removed or demoralised; and that has also lost more such elements in that bound than the enemy has lost the battle.

GIANT DBA

Giant DBA is an extension of Big Battle DBA for games with several players on each side and/or re-fighting large historical battles. It differs only as described below.

A separate player controls each general (or more than 1 general). Each side's C-in-C must specify either that all generals dice independently for PIPs, or specify the order in which PIP dice are to be allocated among them according to their scores. Army size is increased to 12 elements x number of generals. The width of the battlefield is increased to 3 times that of standard DBA and the depth can optionally be increased by up to half. The number of compulsory features becomes 1-4 and the number of optional features becomes 3-6, not more than 4 of which can be the same type.

HISTORICAL REFIIGHTS

As Big Battle DBA or Giant DBA, except that the armies and terrain are based on those of the large historical battle.

The battlefield area must be scaled to the size of the area historically fought over. Terrain features are not chosen by the usual selection rules, but are chosen and placed by agreement to duplicate the terrain of the real battle.

Research the number of commands and troops actually used, then calculate the number of elements to be used according to the following ratios, representing the number that would occupy the same space as an element at the ground scale used. An element of mounted or foot warriors represents 500-600 foot other than horse, 1,000+ horse, or 250-300 horse or camel riders. Other elements each represent up to 25 elephants or 50 chariots, war wagons or artillery pieces.

CAMPAIGNS

Campaigns are considered by many to be the highest form of wargaming. At the very top end, they can have a very large number of postal or internet players moderated by an umpire through general and personalised news reports, (usually supported by a news sheet such as the "Shadizar Herald", "News of the Known World" or "Grape Vine" containing a potent mix of truth, exaggeration, rumour and player propaganda) to which each player responds with written orders; and include diplomacy, politics and economics which sometimes overwhelm the military aspects. Such campaigns place a great load on the umpire and the really good ones may continue for many years.

Alternatively they can be simple affairs at club level to provide an excuse for a series of battles at the same meeting in which each is partially dependent on the results of those before and so are not always between armies of identical strength. This section is mainly included for potential organisers of such.

The first requirement is a stylised map, ideally depicting an area historically involved. Each player controls a nation of several sub-territories. Movement is between provinces or (my preference) between nodes (usually major cities) of a transport network. Hex maps should never be used, because in real life there are few places from which it is possible to move a significant military force in 6 directions. You can nearly always move in 2 directions (forward or back), often in 3. A network node from which an army can move in more than 3 directions is strategically important. Moves differed in difficulty. In real life, a move across mountains was the most difficult. Opposed movement across a major river was less so, because of the problem in blocking all crossing points. Some terrain affected some armies more than others. For example, desert would not greatly affect an army from a Dry area, but would be very difficult for an Arable area army. Movement by sea was impossible in Winter, and risky in Spring and Autumn unless moving along a coast line. Moving an army took far more time than today and battles rarely followed in close succession. Even a month may be too short for a playing period, and a full three-month season is recommended.

In a one-day club campaign, a modified PIP system is ideal. Each player dices at the start of each season and can move any combination of armies and stages (of varying PIP cost) up to his total of PIPs. With several players, it is necessary to decide the order in which they move. I recommend that using a modified PIP system, with each player dicing at the start of each campaign year. The player with the highest PIP in the first season of each year moves first, then play continues clockwise for the rest of the year. To avoid fence sitting, we recommend that a player scoring 6 must either invade a neighbour or attack another player occupying the same territory.

A player that loses a battle immediately retires 1 move if it can. A drawn battle counts as a win to the defender, since he loses no territory.

At the end of a campaign year, armies go into winter quarters and start recruiting. Ideally, this should only partly replace losses and be tied to how much territory the defender has left or how many move stages the invader is from home.

DIAGRAMS

Figure 1a. The playing area:

The playing area is a square divided up into four equal quarters numbered clockwise from 1 to 4 starting at the defenders left. These quarters dictate where the terrain features are placed when diced for.

Any troops can be deployed in an area which extends out from the base edge to a line 3 BW (base widths) from the centre line and extending out to 4 BW from the battlefield edge.

Some troop types, Cavalry, Camelry, Light Horse, Auxilia or Psiloi, can also deploy in the cross-hatched area. This extends to 2 BWs from the battlefield edge.

No troops can deploy within 2 BW of the table side edge.

Note that these restrictions do not apply to garrisons of cities and forts, or those elements making a littoral landing.

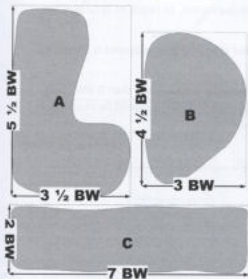
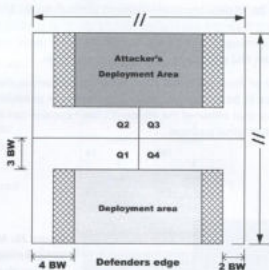


Figure 1b. Area terrain features:

Each area terrain feature, whatever its shape, must fit within a rectangle which has a length plus width equal to 9 BW or less. See examples A-C.

Terrain feature C is a gully, its length to width proportions must exceed 3:1. All other terrain features must exceed a length to width ratio of 2:1.

The minimum width of any terrain feature is 1 BW; thus the minimum length of a gully is 3 BW.

Figure 1c. Measuring area terrain features:

The proportions of a terrain feature are calculated by measuring the longest possible dimension across the feature. This is the length. The width is measured at right angles to the length.

Only one of the chosen terrain features can have its longest length less than 3 BW and it must comply with the minimum proportions of 2:1.



Figure 2a. Measuring single element tactical moves 1:

Measure from the starting position to the final position of the furthest moving front corner. The element can move in any direction and end the move facing any direction.

In each of these examples the double-headed arrow shows the distance to be measured. This is the maximum possible move distance that either of the element's front corners can end from its original position.

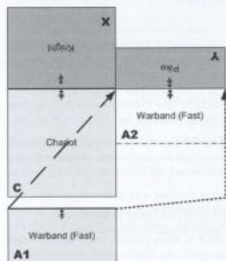


Figure 3a. Groups

Groups are made up of elements. These elements must all face in the same direction and must be in either full front or rear edge, and corner-to-corner contact, or side edge contact and front corner to front corner contact.

Auxilia elements A, B and C and Spear elements D and E comply with these requirements and so are in a group.

Auxilia elements F – I do not comply with these requirements, do not constitute as groups and are not part of the A-E group.

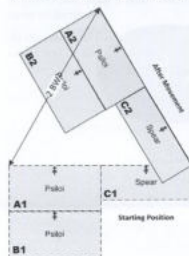


Figure 2b. Measuring single element tactical moves 2:

In Figure 2a, the elements move in straight lines. In this example, an element diverts from straight line movement to move around an enemy TZ and friendly element, Chariot C, for it to move into contact with Pike Y.

Warband A cannot interpenetrate Chariot C. So it cannot follow the straight line shown, or use this measurement, to reach its final position at A2.

The shortest path it must travel and the distance measured is shown by the dotted line.

It can be seen that the distance moved is a little more than 2 BW. So if Warband A had a movement allowance of 2 BW, it would be insufficient to make contact with Pike Y.

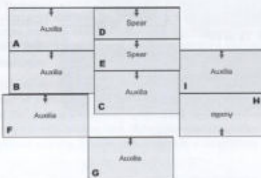


Figure 3b. Groups and moving as a group:

Psiloi elements A and B, with Spear C, are a group.

All the elements are facing the same direction and are lined up corner to corner.

The diagram shows how the group changes direction by wheeling around a front corner of the group. Movement is measured in a straight line from the starting position to the final position of the furthest moving corner. The group is restricted to the movement allowance of the slowest element in the group.

Note that the elements remain in the same relative position to each other and that no part of the group can move backwards.

Figure 4. Reducing frontage as a group move:

A group move can include a reduction in the frontage of the group. One front rank element of the group moves forward and other elements move to join in behind. Here, a group of Auxilia reduce their frontage into a single element wide column.

The dotted outlines of A1 – D1 show the starting position. Auxilia A has moved straight forward 2 BW to position A2. Note that it could have pivoted and moved off in a different direction. Auxilia C has followed on as part of the column. Elements B and D have moved as if they were making single element moves to join the tail of the column. Elements which are unable to join the column with a single element move are excluded from the group move.

Note that no element moved further than its permitted move distance and no leading edge of an element moved backwards.

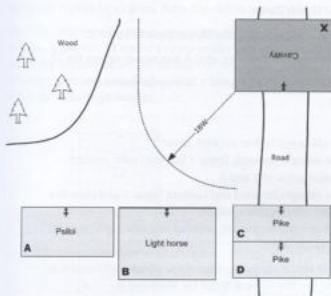
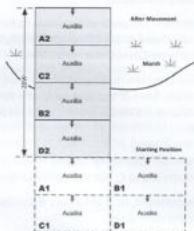


Figure 5. Second or subsequent moves:

In the army's first bound of the game, Psiloi can always make a 2nd move, regardless of the terrain, but it must keep more than 1 BW away from any enemy.

In subsequent bounds, Psiloi A can make a 2nd move if it ends the move in, or partially in, bad or rough going.

Light Horse B may make a 2nd or even a 3rd move if this is in good going but, like Psiloi, they must stay at least 1 BW away from the enemy throughout this move.

This rule also applies if element B was Mounted Infantry.

Pikes C and D are on a road. They, like all other troops may make a 2nd move along the road, even if it starts within 1 BW of any enemy and this move can end in contact with an enemy element.

Figure 6a. Interpenetration:

Knight A, can pass through Psiloi B because it is a mounted element.

Psiloi C can pass through Spear D because Psiloi can pass through any friends.

When passing through from back to front the element must start lined-up behind the friends and Knight A complies with this.

When passing through from front to back, part of the element must be in front of the friends and so Psiloi C can pass through Spear D.

The element must end the move on the far side of the interpenetrated friendly element and lined up with it as shown by the dotted lines. If there is insufficient clear space for the element, the interpenetration cannot happen.

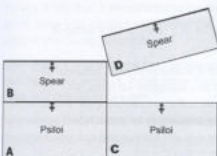
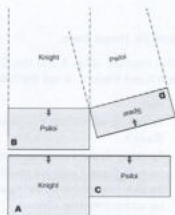


Figure 6b. Interpenetration:

Psiloi A cannot interpenetrate Spear B because the space immediately in front of Spear B is partially blocked by Spear D.

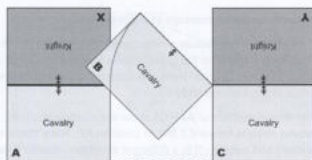
Psiloi C cannot interpenetrate Spear D because it is not directly behind the Spear element.

Note that if the spear elements were forced to recoil, Spear B would push back Psiloi A but Spear D would end its recoil move when it contacts the front edge of Psiloi C because they are not facing the same direction.

Figure 6c. Interpenetration:

So that an element can pivot when space to turn is limited, its rear corner is allowed to pass through friendly or enemy elements or enemy TZs without restriction.

This is because the men making up an element are not fixed in a rigid formation. Men of the rear ranks are assumed to move as individuals to avoid obstacles, and then return to their proper place.



In this example we have three Cavalry elements fighting two of Knights. Cavalry element B started the move in line with Cavalry elements A and C, but is shown half way through its move as it turns onto the flank of Knight Y.

During this movement, part of Cavalry B passes through part of the space occupied by both Cavalry A and Knight X, as indicated by the curved line

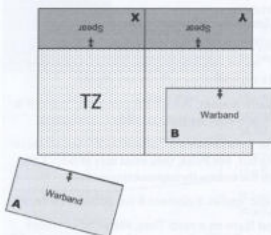


Figure 7a. Threat Zone:

Warband A is approaching the Threat Zone of Spear X.

It is free to move as it wishes until it touches or enters the TZ.

Warband B is in the TZ of Spear Y. It may do one of the following:-

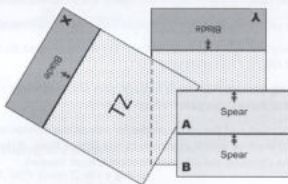
1. Halt
2. Slide sideways to line up with Spear Y
3. Move straight towards Spear Y but not make contact
4. A combination of 2 and 3
5. Move straight forward and contact Spear Y and then line up with a free sideways shift
6. Move straight backwards without any deviation up to its full tactical move

Note that if Warband A were to enter the TZ of Spear X, it could also pivot forward until it is parallel with and lined up opposite the front edge of Spear X. This would be in addition to the options listed for Warband B.

Figure 7b. Threat Zone:

In this example Spear A is in the Threat Zone of both Blade X and Blade Y. It has the following options:

1. Halt
2. To line up with Blade Y or pivot and line up with Blade X
3. To move straight towards and/or slide sideways line up with Blade Y without making contact
4. To slide/pivot (and move) towards Blade X and line up without making contact
5. To move into front edge contact with either Blade Y or Blade X



As drawn, Spear A may not move back out of the TZ as that movement, which must be in a straight back without deviation, is blocked by Spear B.

Note that the TZ of Blade Y is not blocked by Spear A and so the movement of Spear B is also restricted because of this TZ. The options for Spear B are to Halt, or to move straight backwards without any deviation up to its full tactical move. If Spear A was to move towards or into contact with Blade X and leave sufficient space, Spear B can move straight towards and/or slide sideways to line up with Blade Y without making contact, or to move into front edge contact with Blade Y.

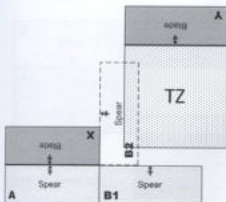


Figure 7c. Threat Zone:

Spear A is in close combat with Blade X and Spear B is in an overlap position. When calculating the combat between Spear A and Blade X, this overlap will give a minus tactical factor against Blade X.

This tactical advantage would be increased if Spear B was to move onto the flank of Blade X, as shown by the dotted position of Spear B2. This is not possible as this move by Spear B would enter the TZ of Blade Y and Spear B would be forced to comply with the restrictions listed in Figure 7A.

Figure 7d. Threat Zone:

This diagram shows the Threat Zone around a city or fortress. The same rule applies to a camp. Note the radius around the corners.

The TZ is measured from the outer edge of the wall, towers or gate houses. It extends all round a camp or city or a garrisoned fortress and is not dependent on the position or orientation of any camp follower, garrison or denizens within. These are assumed to be lining the walls or perimeter.

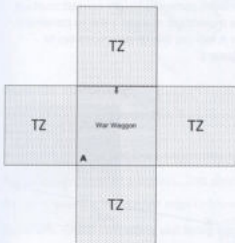
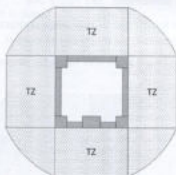


Figure 7e. Threat Zone:

This diagram shows the Threat Zone around a War Wagon.

The Threat Zone from a War Wagon extends from each of the four edges but does not extend all-round the element like the TZ surrounding a city, camp or fortress.

Figure 8. Moving into contact:

The Light Horse elements A – D can move into contact with Cavalry X as follows:

Light Horse A is not entirely outside the line extending from the flank of Cavalry X so it can only move into contact with the front edge of Cavalry X.

Light Horse B is touching the line prolonging the flank edge of Cavalry X but that is considered to be outside the line and so it could move into contact with either the flank edge or the front edge of the Cavalry element.

Light Horse C is across the lines prolonging the flank and the rear edges of Cavalry X. It can move into contact with the flank edge, but not the rear edge.

Light Horse D is starting its move behind the line prolonging the rear edge, but not outside the line prolonging the flank edge, of Cavalry X. Therefore, it can move into contact with the rear edge, not the flank edge.

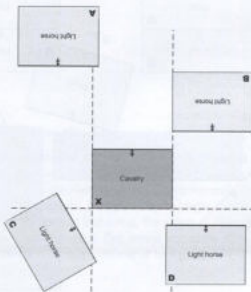


Figure 9a. Lining up in contact or opposite:

Blades A – C are in contact with Bow X and Blade D is in contact with Bow Y.

Blade A is in contact with the front edge of Bow X.

Blade B is in front edge to side edge contact and front corner contact with Bow X.

Blade C is lined up opposite Bow Y, and is in front corner contact with Bow X and so overlaps it.

Blade D is lined up in full front edge contact with the rear edge of Bow Y. Note that Bow Y will turn to face Blade D at the end of the movement. See figure 14a.

All elements in front edge or rear edge contact with the enemy are correctly lined up corner to corner.

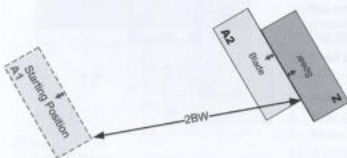
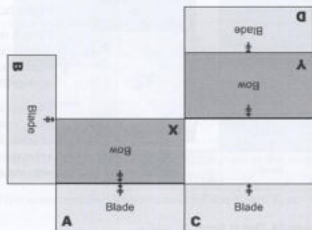


Figure 9b. Front edge contact:

Blade A has used its maximum tactical move to make front edge to front edge contact with Spear Z. As it is a single moving element, it must conform.

Elements that are in front edge to front edge contact but cannot achieve corner-to-corner contact must use free sideways movement of up to 1 BW to completely line up. Blade A will use this to slide sideways to conform to Spear Z.

Figure 9c. Rear edge contact:

Cavalry X has been contacted on its rear edge by Spear A.

Note how the starting position A1, indicated by the dotted outline, is behind a line prolonging the rear edge of Cavalry X and that Spear A must make full corner-to-corner rear edge contact within its normal tactical move distance. It does not get any extra free movement.

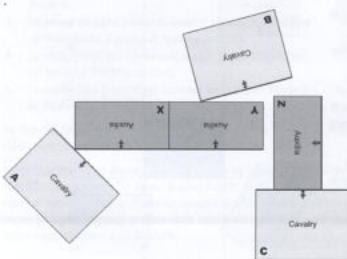
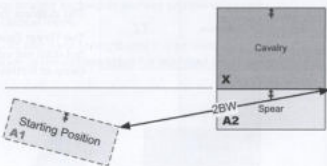


Figure 10. Contacts that are not allowed:

Auxilia elements X, Y and Z can apparently be contacted by three Cavalry elements. However, each Cavalry elements' maximum move distance has not been sufficient to move its front edge into contact with the enemy front edge, or to line up in front edge and front corner contact with the flank or rear edge of the enemy. Therefore, these contacts are not permitted and the move must be either cancelled or ended short, prior to contact.

Note that, although Cavalry C is in front edge contact with the flank of Auxilia Z, the free sideways shift to line up in front corner to front corner contact only applies when both front edges are in contact

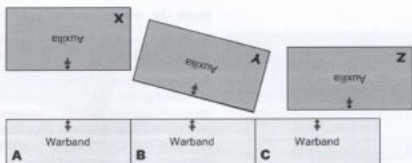


Figure 11. Lined up:

Auxilia elements X, Y and Z are in front of Warband A, B and C. Only Auxilia X is lined up.

Auxilia X is parallel to Warband A and the side edges of the two elements are in line.

Auxilia Y is not parallel and so is not lined up.

Auxilia Z is parallel with Warband C, but its side edges are not in line with the side edges of Warband C and so it is not lined up.

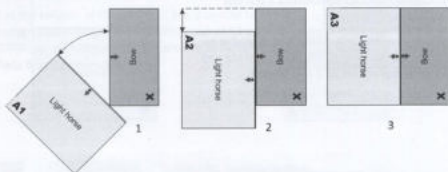


Figure 12a. Conforming:

Light Horse A has contacted Bow X on its front corner. The sequence of diagrams shows its movement as it conforms to Bow X.

A1 shows it pivoting into front edge contact. The distance moved during the pivot uses part of its tactical move allowance.

A2 shows it then sliding sideways. This slide is free because it is conforming to an enemy front edge.

A3 shows it ending in full front edge to front edge contact.

Figure 12b. Group contacting and lining up:

Pikes A and B have moved into contact with Spear X. The pikes are a group which has contacted a single element; therefore the single element must conform by sliding and lining up to the group as shown.

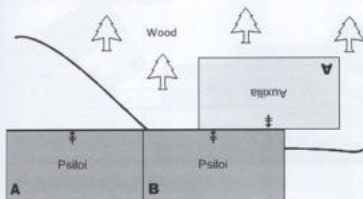
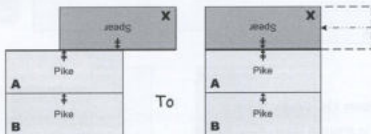


Figure 12c. Group contacting and lining up:

Psiloi A and B have moved into the wood and contacted Auxilia X. The Psiloi group has contacted a single element which would normally conform to the group. However, as the single Auxilia element is entirely in bad going, the group of Psiloi must conform to it. This would also apply if the Auxilia was in rough instead of bad going.

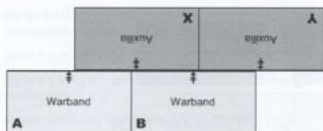


Figure 12d. Group contacting and lining up:

Warband A and B are a group which has moved into front edge contact with Auxilia X and Y which are also a group.

A group which contacts another group must conform to the contacted group. The free sideways movement is the minimum required to make front corner to front corner contact. Although Warband B has contacted both Auxilia X and Y and might prefer to line up with Auxilia Y, it and the remainder of its group must move the minimum distance and therefore must conform to Auxilia X.

Figure 13a. Unable to line up:

Blade A has contacted the front edge of Auxilia X and it should slide into front corner to front corner contact with Auxilia X but this movement is blocked by the Horde element.

Auxilia X either slides into full contact with Blade A or, if unable to conform for another reason or if preferred, it remains in place and fights Blade A in this position, but counts as if overlapped.

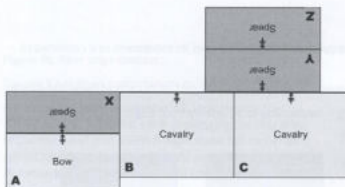
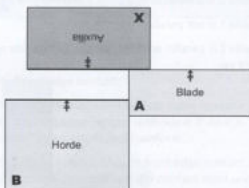


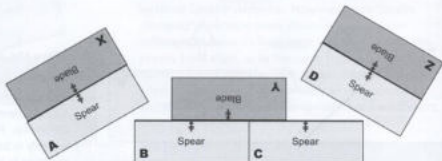
Figure 13b. Unable to line up:

Cavalry elements B and C have contacted Spears Y and Z. The cavalry group must line up with the Spear group and would normally slide to the left as that is the minimum distance to line up Cavalry C with Spear Y.

However, this move is blocked by Bow A and Spear X. Therefore the cavalry group must slide to the right until Cavalry B lines up with Spear Y.

Figure 13c. Unable to line up:

The group of Spears B and C have moved forward and contacted Blade Y. Blade Y is a single element, so it should conform to the contacting group but it is unable to conform to either element of the group due to lack of space. The Spear group is also unable to conform and so the Blade element remains in place and fights in close combat as if overlapped on both flanks. An element that is unable or unwilling to line up fights as if overlapped, a second element in contact also provides an overlap.



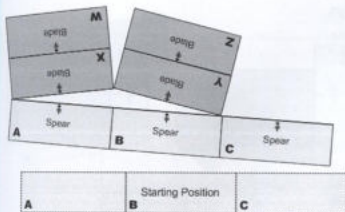


Figure 13e. Unable to line up:

Blade B has contacted the column of Pikes Y and Z but is unable to line up and conform to it. Therefore, the contacted group of Pike Y and Z conforms and lines up with Blade B, or can choose to remain in place and fight Blade B as if overlapped.

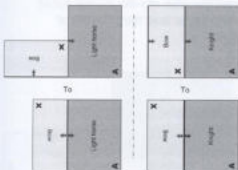


Figure 14a. Turning to face:

An Element contacted on its flank or rear edge, turns to face its opponent at the end of the movement phase.

Note that, if it is also in front edge contact with other enemy, it does not turn and the flank or rear contact instead causes an adverse combat factor.

Other elements that are blocking the turn are moved the minimum distance to allow the contacted elements to conform.

Figure 14b. Turning to face:

Cavalry element A has contacted one flank of each of the two elements, Pikes W and X, which are in a group. The leading element of the column, Pike W, turns and faces Cavalry A. Pike X turns with Pike W and lines up behind it as shown.

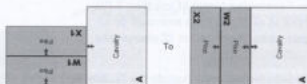


Figure 14c. Turning to face:

Cavalry element A has contacted the flank of three elements, Pikes W, X and Y, which are in column.

Only the two leading Pike elements turn to face Cavalry A. Pike Y does not turn but moves back the minimum distance needed to allow them to do so, as shown by Y2.

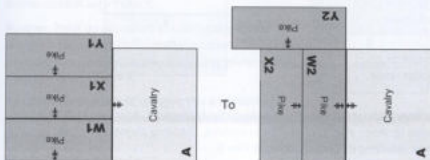


Figure 14d. Turning to face:

Spears Y and Z have been contacted on both flanks, first by Blade A and then by Blade B.

The two Spear elements turn and face Blade A because it was the first enemy element to make contact. Blade B now closes up into front edge to rear edge contact with Spear Z.

At the end of the movement phase, Spear Z has enemy in contact with only its rear edge and so it turns to face Blade B.

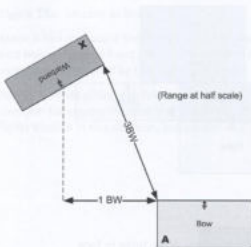
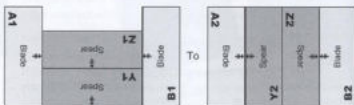


Figure 15a. Distant combat:

Shooting range is measured between the closest point of the shooting edge and the target.

There must be either a complete edge or half a base width of the target within 1 BW along a line extending the flank edge of the shooter.

Warband X is a target for Bow A. The closest part of the target is in range (within 3 BW) of the closest point of the shooting edge and half a base width of the target is within 1 BW of straight ahead of the shooting edge.

By extending the dotted line from the edge of a BW marker placed alongside the shooting element, it can be seen that $\frac{1}{2}$ BW of Warband X is available as a target.

Figure 15b. Distant combat:

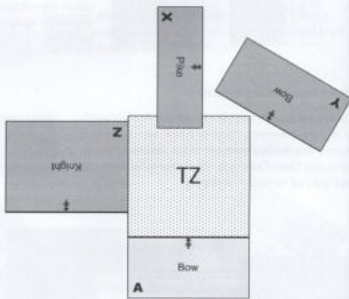
Bow A appears to have 3 possible targets to shoot at. All are within range and all are within 1 BW to either side of Bow A.

Although Pike X presents a target of less than $\frac{1}{2}$ BW, Bow A can shoot at all of one edge and must do so because targets within the shooter's TZ always take priority.

If Pike X was a little further away outside the TZ, Bow A would shoot at Bow Y because a target which shoots back takes priority over one that does not.

If Pike X was outside the TZ and Bow Y was facing in another direction and unable to shoot, Bow A could shoot at any of the three available targets.

Note that if a non-shooting element scores more in distant combat, the shooter ignores any combat result.



Third party shooting: In the above diagram Bow A shoots at Pike X but, before that is resolved, Bow Y must first shoot at Bow A as a third party shot. If Bow A is still able to shoot after this has been resolved. Shooting elements roll one dice each, so Bow A uses the same dice score when resolving its own shooting at Pike X.

This sequence is followed regardless of whose bound it is.

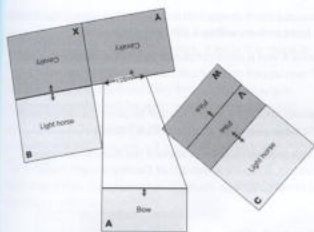


Figure 15c. Distant combat:

Although Bow A appears to have a number of potential targets, it cannot shoot at any of them.

Pike V cannot be shot at because it is in close combat. Pike W cannot be shot because it is providing rear support. Cavalry Y is overlapping a close combat and is a possible target.

However, from the corners of the shooting edge of Bow A, it must be possible to trace lines which intersect the target edge at least $\frac{1}{2}$ BW apart, without the lines crossing each other or intersecting another element.

As one of those lines crosses the corner of Pike W, Bow A cannot shoot at Cavalry Y.

Figure 16a. Close combat contact 1:

Although Bow Y can shoot at Warband A, there is no close combat between any of these elements because no element is in both front edge and front corner-to-corner contact with the enemy.

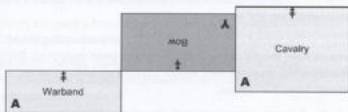


Figure 16b. Close combat contact 2:

Blade B is in close combat with Knight X. Both elements are in front edge and front corner contact with each other.

Blades A and C are in an overlap position, Blade A, because it is in flank to flank contact with Knight X and Blade C because it is in mutual left-to-left front corner contact with Knight X.

Blade D is in flank contact with Knight X.

An element's flank edge can only be overlapped or contacted by an enemy: not both. Blade C will not provide any tactical factor.

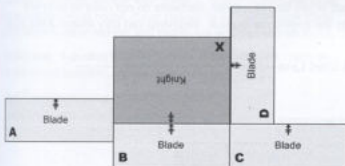
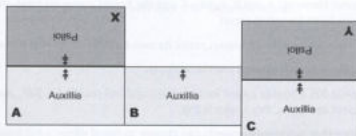


Figure 16c. Close combat contact 3:

Auxilia A is in close combat with Psiloi X. Auxilia B is apparently overlapping both Psiloi X and Y. Auxilia C is in close combat with Psiloi Y.

However, Psiloi do not count as overlapped unless they are in flank edge to flank edge contact. So Auxilia B will give a tactical factor disadvantage against Psiloi Y, but not against Psiloi X.

Note that Auxilia B would still give this disadvantage to Psiloi Y if B was in close combat with an enemy element.



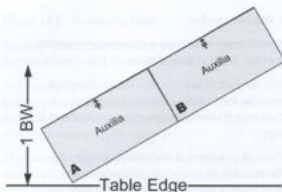


Figure 18. Close combat against a city, fort or camp:

Blade elements A, B and C are attacking a city which is defended by its Denizens. Note that it is not necessary to have an element for the Denizens and it is depicted here as a reminder.

Each of the Blade elements attack independently with support from friends which are still in contact with the city.

Combat in the bound continues until each of the assaulting Blade elements have fought or the defenders have been destroyed. Blade elements which have recoiled do not support assaults by other elements later that bound.

When the defenders are destroyed, the successful element will enter the city and remain there to sack and loot until sufficient PIPs are spent to stop the sacking. See page 7. However, Elephants and Mobile Towers cannot enter the city, so they should assault first and if they are successful, another assaulting element will enter instead.

Note that the maximum number of elements that can assault in one bound is three. Elements do not need to be in full front contact to assault a city, fortress or camp; as shown by the position of Blade B. Elephants can only assault a city at a gate and are destroyed if they recoil from an assault.

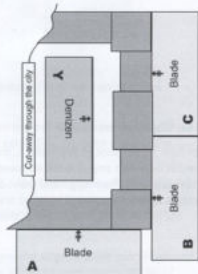


Figure 17. Phantom overlap:

Auxilia B has one front corner within 1 BW of the table edge. Auxilia A has two front corners within 1 BW of the table edge.

If both Auxilia A and B were contacted by enemy, Auxilia A would count as if overlapped on the front corner closest to the table edge only.

Auxilia B would not count as overlapped because the corner within 1 BW of the table edge is in contact with a friendly element.

Note that this overlap would not apply if the Auxilia had moved in the same bound, if Auxilia A was either Cavalry or Light Horse, or it was in bad or rough going.

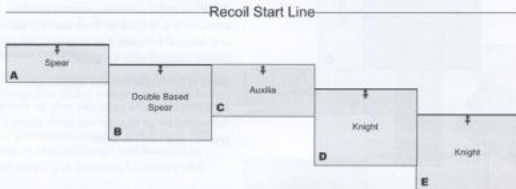


Figure 19a. Post combat - recoiling:

Spear Elements A and B, Auxilia C and the Knight elements have all been in distant or close combat with the enemy and have been forced to recoil.

A Foot element must always recoil its own base depth or half a base width ($\frac{1}{2}$ BW) if this is less than its base depth.

Spear A has recoiled its own base depth.

Spear B is a double based foot element and has recoiled $\frac{1}{2}$ BW. Auxilia C has recoiled its own base depth. Unlike the Spear elements, this is also $\frac{1}{2}$ BW.

Note that mounted elements can choose to recoil either a full base width (BW) or their own base depth if this is less than a base width.

Knight C has chosen to recoil its base depth.

Knight D has recoiled 1 Base Width which is the maximum distance for mounted elements.

Figure 19b. Post combat – recoiling:

Pike A has been forced to recoil from Blade X. It is unable to complete its recoil because it has met friends it cannot pass through or push back. Therefore, it ends the recoil in contact with Horde H.

Pike B is unable to push back the friends it is already in contact with and so will be destroyed if forced to recoil.

If Elephant E is forced to recoil, all elements it contacts (including friends) that are not in a BUA or camp are destroyed.

Note that if Pike D was another Elephant element, both Elephants would be destroyed.

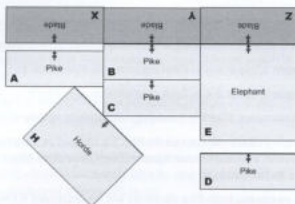


Figure 19c. Post combat – recoiling:

Auxilia A is in front edge-to-front edge close combat with Cavalry X. Psiloi B is in flank contact with Cavalry X and will provide a negative tactical factor against Cavalry X when X's combat against Auxilia A is resolved.

Cavalry X has an enemy element's front edge in contact with its flank. If Auxilia A wins the close combat, Cavalry X is destroyed.

If Cavalry X wins the close combat, Auxilia A is either recoiled or, if it was doubled, destroyed. If Auxilia A is either destroyed or recoiled, Psiloi B will recoil out of flank contact.

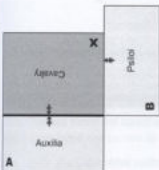


Figure 19d. Post combat – recoiling:

Bow A is in close combat with Spear Y. If Bow A loses the close combat and must recoil, it can choose to interpenetrate Blade B if there is room behind and end in the position shown as A2.

Otherwise, it pushes Blade B back to make sufficient room or, if this is not possible, partial room.

See Interpenetrating Troops on page 9.

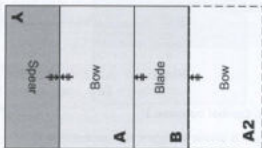


Figure 19e. Post combat – recoiling:

Bow A is shooting at Spear Y.

The shooting is directed at least partially on the rear edge of Spear Y. This can be checked by extending the rear edge as shown, to see if it intersects the shooting edge.

If Spear Y is forced to recoil, it must turn 180° before it moves.

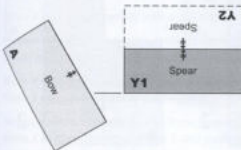


Figure 20a. Combat outcome 1:

Spear A is in front edge combat with Pike X.

In example 1, Spear B is in flank contact with Pike X and Y.

In example 2, Spear B is in flank contact with only Pike Y.

In both examples, Pike Y is providing rear support to Pike X.

In example 2, the flank contact on Pike Y is treated as if on Pike X and provides a combat factor against Pike X; therefore Pike Y will not turn to face Spear B.

In both examples, both Pike elements will be destroyed if Pike X is forced to recoil.

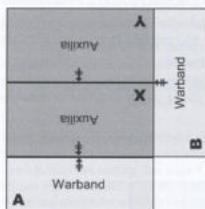
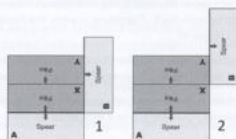


Figure 20b. Combat outcome 2:

Warband A is in close combat with Auxilia X.

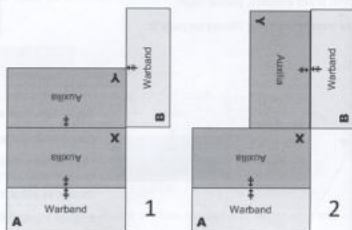
Auxilia Y is a second rank immediately behind Auxilia X but it is not a type which provides rear support.

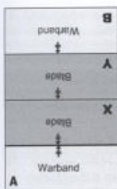
Warband B is in flank and front corner-to-corner contact with Auxilia X. The contact with Auxilia Y is incidental and is not a factor in the combat resolution. However, if Auxilia X is forced to recoil, both Auxilia elements will be destroyed as they both have an enemy element in front edge contact with their flank. In the same way, if Auxilia X is destroyed without being forced to recoil, Auxilia Y is also destroyed.

Figure 20c. Combat outcome 3:

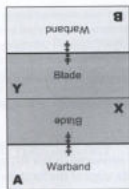
This situation is similar to Figure 20b, except that Warband B is in flank and front corner-to-corner contact with Auxilia Y.

Auxilia Y is not in rear support of Auxilia X and it must therefore turn to face Warband B, as shown in diagram 2. Auxilia X is then unable to recoil and will be destroyed if forced to do so by a recoil result. Warband A will then pursue into the flank of Auxilia Y and will help Warband B by providing a tactical factor against Auxilia Y. Warband A will also cause the destruction of Auxilia Y, if Auxilia Y is forced to recoil.





1



2

Figure 20d. Combat outcome 4:

In diagram 1, Warband A is in close combat with Blade X and Warband B has moved into rear edge contact with Blade Y.

As Blade Y is not providing rear support, it must turn and face Warband B, as shown in diagram 2.

This will prevent both Blade X and Blade Y from recoiling and, if one is destroyed, the other will have a pursuing Warband element in contact with its rear edge and so will also be destroyed if forced to recoil.

However, if the first combat forces the opposing Warband element to recoil, the pursuing Blade element will allow recoil room for its friend.

Figure 20e: Combat outcome 5:

This situation is similar to combat outcome 4 except that Warband elements X and Y have been contacted by Blades A and B.

The significant difference is that Warband Y provides rear support to Warband X, and therefore, does not turn to face the attack from Blade B.

The contact between Blade B and Warband Y is treated as if it is on Warband X so the only combat is between Blade A and Warband X. Warband Y will provide a positive rear support factor for Warband X, but Blade B will provide a negative tactical factor against Warband X for having an enemy in contact with its rear edge.

If Warband X is forced to recoil, both Warband elements are destroyed.

If Warband X wins the combat, Blade B will recoil and Warband Y will join X in pursuing because they are in column, leaving a gap between Y and B.

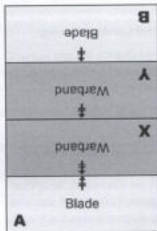


Figure 20f: Combat outcome 6:

Spear A is in close combat with a column of Blades.

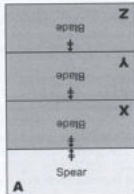
If Spear A wins the combat against Blade X, but does not double its score, it would normally force Blade X to recoil a base depth.

Blade X would either push Blade Y back as it recoils, or it would interpenetrate Blade Y and end in clear space beyond.

However, Blade Z prevents this from happening. There is insufficient room for Blade X to interpenetrate Blade Y and pushed back elements cannot push back or interpenetrate other elements.

Blade X is unable to recoil and is therefore destroyed instead.

Note that Blade Y is not pushed back and is therefore not affected by the destruction of Blade X.



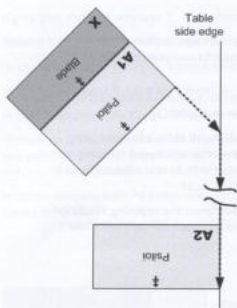


Figure 21a. Post combat - fleeing:

Psiloi A has been in Close Combat with Blade X and is forced to Flee.

The first part of the flee move is to turn 180° as shown in the position of Psiloi A1.

The fleeing element then moves a full tactical move in the direction it is now facing, as shown and measured by the dotted line. In this example, Psiloi A contacts a table side edge of the battlefield. Psiloi A then pivots until it is facing towards its own rear battlefield edge and then continues the flee move until it has moved, in total, a full tactical move. It will end the flee move facing the same direction as shown by the position of Psiloi A2. It can use PIPs to make a tactical move in its next bound.

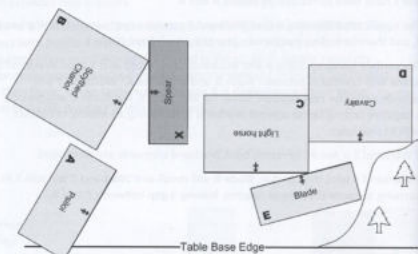
Figure 21b. Post Combat - fleeing:

Psiloi A, Scythed Chariot B, Light Horse C and Cavalry D have all been forced to flee from the enemy.

Part of Psiloi A has crossed its army's Table Base Edge and is lost.

Scythed Chariot B, forced to flee from shooting, has contacted enemy Spear X. Both elements are destroyed. Note that this would happen if Element B was also an Elephant or if Spear X was any friendly or enemy element.

Light Horse C has contacted a friendly element it cannot pass through and Cavalry D has contacted bad going. Both elements stop and end their flee move at that point.



ARMY LISTS

The armies listed represent typical or especially important (rather than all possible) historical armies of the nation covered. Each list provides sufficient flexibility to allow for historic variation or differences of interpretation, but not to allow armies to be tailored for specific opponents. Foreign mercenaries or subject races habitually used are included, but allied troops serving under their own generals are usually not, since provision is made for them as allied contingents in standard DBA or as a complete allied command in Big Battle DBA. The lists are a simplified version of the four army list books of DBMM and have the same numbers and titles. As well as defining the troops available to the army, each list also defines its home terrain, aggression factor, historical enemies and possible allies; and suggests especially good books for research or inspiration.

TROOP DEFINITIONS AND TERMINOLOGY

Each troop entry has the number of elements of that sort that can be used, the name, and the type code as defined on page 5.

"or" between 2 codes or prefix numbers directs that any mixture of those elements can be used.

"/" between 2 codes or prefix numbers directs that either can be used by all (not some of) those elements. If between a mounted and a foot type it directs that all, (not some of) the mounted type can be replaced by the foot type before deployment.

"/" between 2 codes means that an element deployed as mounted can be exchanged for the dismounted element during the game, but cannot then change back.

"and" or "+" between 2 entries directs that both must be used.

Piloi and foot that are listed as 3, 5 or 6 to a base are classed as "Fast" foot, others as "Solid" foot.

HOME TERRAIN

This is usually that of the army's heartland, but sometimes that of a border area where the invader's entry will be opposed.

AGGRESSION FACTOR

This is a number from 0 to 4, based on how likely the army was historically to invade another nation rather than fighting to defend its homeland. Opposing armies each add their aggression factor to the score of a dice, then compare totals to decide which army fights in home terrain.

HISTORICAL ENEMIES

This lists all the other armies against whom it is known to have fought. This enables competition organisers to pair historical opponents in an initial round or if accumulated scores are equal. Since a DBA army needs less than 50 figures, we hope that players will produce armies in opposing pairs or sets rather than make a habit of fighting unhistorical opponents.

ALLIED CONTINGENTS

An army may be allowed ally contingents from another listed army. If so, this is specified at the bottom of its own army list. The allies listed include only armies that fought on the same side in an historical battle and usually only if the allied army is of substantially different troop types or has a completely separate command structure. The advantage of using an allied contingent apart from it being necessary to represent an important historical battle is that it may provide specialist troops not otherwise available. The compensating disadvantage is that its elements cannot be moved as a group with elements of the main army or of another allied contingent so will probably be a serious PIP drain.

A single allied contingent consists of exactly 3 elements from its own army list. In the rare instances when more than one allied army provided allied contingents at the same battle, two allied contingents from different armies are allowed, each of exactly 2 elements. An allied contingent must include the general's element of its army (which does not function as a general) and at least 1 element from the entry with the largest number of elements. If the army has 2 troop types with that number allowed, the player chooses which to use. Any third element is the player's choice from elements yet unused. Allied elements are exchanged for the same number of elements from the main army's list, which cannot include its general.

SOURCES

The sources mentioned at the foot of the list notes are those that have in the past inspired the choice of an army or provide extra information on its composition or history. Original sources are usually very useful if allowance is made for bad translation or not being exactly contemporary. Eyewitness accounts are best. Historical novels can also be useful as the authors can bring an era to life and are often knowledgeable. For example, Alfred Duggan fought in Norway, rode horses cross-country, was widely travelled in the near east, studied Crusader castles and taught history and classics before he wrote his first novel "Knight with Armour" (the story of a put-upon rookie knight on the first Crusade); and Harry Sidebottom, the author of the "Ballista" series (based on third century Roman wars with the Sassanids) lectures in classical history at the University of Oxford.

Two especially useful publications for geographical relationships and the history of the rise and fall of states are "The New Penguin Atlas of Ancient History" and "The New Penguin Atlas of Medieval History" by Colin McEvedy and David Woodroffe. Another is "The Geographic Background of Greek & Roman History" by M. Cary. Websites such as Wikipedia are often useful for dates, persons and geography. Lastly, "Slingshot", the journal of the Society of Ancients, often includes articles on obscure armies; and past issues are available to Society members on disc from www.soa.org.uk.

SECTION ONE: THE CHARIOT PERIOD 3000 BC TO 500 BC

I/1 EARLY SUMERIAN 3000 BC - 2334 BC & THE "GREAT REVOLT" CIRCA 2250 BC

This list covers the earliest attested Sumerian armies until the accession of Sargon of Akkad and the creation of the first historical empire. At the start of the period, inter-city warfare was endemic and cities were surrounded by thick mud-brick walls and contained large palaces and temples. Wars were thought of as between the gods of the rival cities represented by their armies. Some proto-cuneiform texts list large bodies of archers under military officers. After 2800 BC, the bulk of Sumerian armies were close-order foot with long spears held in both hands and without shields, relying instead on thick capes of leather or felt studded with copper discs. The leather was often dyed red or green and the felt would be buff or off-white. From about 2500 BC, large body shields were carried; either by separate shield-bearers leaving the spearmen's hands free, or by the spearmen themselves. In battle, the spearmen were preceded by unshielded skirmishers using bows, slings or javelins. Household guards of the northern state of Kish used heavy broad-headed axes and so a Kish general's element can be Blade, Umma and Apishal used Martu mercenaries after 2500 BC. Four-wheeled battle cars drawn by four asses came into use about 2800 BC and are classed as HCh because of their lack of manoeuvrability. A few handier 1-man straddle cars (like a chariot but with legs astride a saddle) or flat-bed platform cars were sometimes used by generals or scouts. Animals were usually hybrids of domestic asses and the wild onager (which was larger but less tractable, having an awkward ability to kick sideways as powerfully as to the rear). Sumerian armies are depicted on the "Standard of Ur" in the British Museum and the "Stele of the Vultures" in the Louvre. The "Great Revolt" against Akkad entered mythology following Naram-Suen's victory in 9 epic battles in a single year. The army represents both the southern coalition under Lugal-Anne of Ur and the northern coalition under Iphkur-Kishi of Kish. The third rebel alliance appears under the Zagros Highlanders list. **References:** *Armies of the Ancient Near East N. Stillman & N. Tallis, Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Ur of the Chaldees* C.L. Wooley, *Cambridge Ancient History* Vol 1 Part 2.

I/1a Early Sumerian Army 3000-2800 BC: 1 x General (3Bd), 8 x archers (4Bw), 3 x skirmishers with bows, slings or javelins (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/1a, 1/4a, 1/5a, 1/6a. **Allies:** 1/4a or 1/5a or 1/6a.

I/1b Early Sumerian Army 2799-2334 BC: 1 x General on foot (4Pk or if Kish 3Bd) or in battle car (HCh) or straddle-car (LCh), 1 x battle car (HCh) or straddle-car (LCh) or archers (4Bw), 6 x spearmen (4Pk), 1 x spearmen (4Pk) or archers (4Bw), 2 x skirmishers with bows, slings or javelins (Ps), 1 x Martu Bedouin (3Ax) or skirmishers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/1b, 1/4a, 1/5a, 1/5b, 1/5b, 1/6a, 1/9, 1/11a. **Allies:** 1/4a or 1/5a or 1/5b or 1/6a or 1/9.

I/1c Great Sumerian Revolt Army 2250 BC: 1 x General in battle car (HCh) or straddle-car (LCh), 1 x battle car (HCh) or straddle-car (LCh), 4 x spearmen (4Pk), 2 x spearmen (4Pk) or archers (4Bw), 2 x skirmishers with bows, slings or javelins (Ps), 2 x levies and emergency reserves (7Hd) or skirmishers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/11a. **Allies:** 1/4a or 1/5a or 1/6a or 1/9 or 1/10.

I/2 EARLY EGYPTIAN 3000 BC - 1541 BC

This list covers the Egyptian armies of the Early Dynastic Period, the Old and Middle Kingdoms and the First and Second Intermediate Periods, before chariots had come into military use. Ancient Egypt was a long narrow country dominated by the Nile, with dense population and cultivation concentrated only along its flood plain and communications almost entirely on its waters. There are several sets of chronologies suggested for Egyptian History but there is general agreement on which Dynasties belong to the different periods. Thus we have the "Early Dynastic (Dynasties 1-2), the "Old Kingdom" (Dynasties 3-6) which built the great pyramids, the "First Intermediate Period" (Dynasties 7-10), then the Middle Kingdom (Dynasties 11-12) and finally the "Second Intermediate Period" (Dynasties 13-17), which includes the Hyksos kings of Dynasty 15. The highest and the lowest chronologies differ by about 30 years and those used here are those of Grimal, Baines & Malik. From about 1645 BC, the northern half of Egypt was occupied by the Hyksos (list 1/17) but the military system of the southern half probably remained unchanged until Kamose reformed the army and started driving the Hyksos out. Archers and close-combat troops usually formed up in separate bodies in the centre of the battle line with the lighter troops on the flanks. The army consisted of a core of hereditary archers, menfat and specialist skirmishers pairing a javelin thrower and a quiver carrier, supported by provincial conscripts under their local nobles and by foreign mercenaries. Menfat (often translated as "shock troops") were close fighters with axe and shield, sometimes including "spearmen of the residence" or specialist marines. Large boats were used for transport on the great waterway of the Nile. There were many civil wars, but the major external enemy were aggressive Nubian armies from beyond the cataracts to the south that made the Nile largely impassable to large boats at that point. Temples were often surrounded by strong fortifications, and during the Middle Kingdom, two large fortresses were built by the Egyptians just below the cataracts to hinder Nubian attacks. **References:** *Armies of the Ancient Near East N. Stillman & N. Tallis, Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol 1 Part 2, *Warfare in Ancient Egypt* B. McDermott, *Soldiers of the Pharaoh* N. Fida.

I/2a Early Egyptian Army 3000-1690 BC: 1 x General (4Bd or Lit), 4 x archers (4Bw), 2 x menfat (3Bd), 1 x javelinmen & quiver-carriers (Ps), 1 x Medjay or Nubians (3Bw or Ps), 2 x conscripts (7Hd), 1 x Bedouin slingers or Libyan javelinmen (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** 1/2a, 1/3, 1/6a, 1/7a, 1/9, 1/15.

I/2b Early Egyptian Army 1689-1541 BC: 1 x General (LCh), 4 x archers (4Bw), 2 x menfat (3Bd), 1 x javelinmen & quiver-carriers (Ps), 1 x Medjay or Nubians (3Bw or Ps), 2 x conscripts (7Hd), 1 x Bedouin slingers or Libyan javelinmen (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** 1/2b, 1/3, 1/17a, 1/17b.

1/3 NUBIAN 3000 BC - 1480 BC

This list covers Egypt's black neighbours south of the first Nile cataract until the conquest of Kush by the first three Pharaohs of the 18th Dynasty. Here south of the cataracts the Nile is classed as a river rather than a waterway; and Egyptian forts were established near the cataracts to prevent passage downstream to the north of Nubian raiders. Most Nubians wore only leather kilts, decorated their hair with clay and feather, but sometimes wore gold jewellery. Most fought with a simple stave bow, some with a small hide shield and club. Chiefs often wore cotton tunics and leopard skin cloaks. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol.1 Part 2.

1/3 Nubian Army: 1 x General (3Bw), 2 x club and shield warriors (3Wb), 8 x archers (Ps or 3Bw), 1 x javelinmen (Ps).
Terrain Type: Steppe. Aggression: 1. Enemies: 1/2a, 1/2b, 1/3, 1/7a, 1/22a. Allies: 1/2a.

1/4 ZAGROS & ANATOLIAN HIGHLAND 3000 BC - 950 BC

This list covers the early upland peoples from the Zagros mountains in modern Iran, including the Guti, Lullubi and from 1650 early Kassites, as well as the early Hurrian highland states of north-eastern Mesopotamia, the Anatolian highlanders such as Gasgans (also called Kashgans or Kaska). Generals and their bodyguards were armed with both composite bows and heavy axes. The Hurrians were first to introduce a true chariot drawn by horses instead of asses around 1780 BC. Most warriors had a short spear, but no shield. Guti and Lullubi were used to frighten children and the latter were said to have scorpion tails, possibly justifying a warband option! The "Great Revolt" option (1/4b) represents the alliance against Akkad organised by Gula-an, King of Gutium. The Gasgans were perennial foes of the Hittites and seem to have had two classes of warrior, an elite and a supplementary force. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol.1 Part 2.

1/4a Zagros and Anatolian Highland Army 3000-950 BC: 1 x General (3Bd or 3/4Bw), 6 x warriors (3Ax or 3Wb), 3 x archers (Ps), 1 x slingers (Ps), 1 x skirmishers with javelins or throwing sticks (Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: 1/1a, 1/1b, 1/4a, 1/5a, 1/5b, 1/9, 1/11a.

1/4b Guti "Great Revolt" Army 2250-2112 BC: 1 x General on straddle or platform car (LCh) or on foot (3Bd), 4 x warriors (3Ax/3Wb), 2 x Makkianites (3Bd or 3Ax) or Akkadian city militia (3/4Pk), 2 x Markhashians (3Bw) or Melukkhans (4Bw or 3Pk), 2 x archers (Ps), 1 x slingers or javelinmen (Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: 1/5b, 1/9, 1/11a, 1/11b. Allies: 1/5b or 1/9 or 1/11a.

1/4c Hurrian Army 1780-950 BC, or Early Kassite Army 1650-1595, or Nairi Army 1650-950 BC: 1 x General (LCh), 5 x warriors (3Ax), 5 x archers (Ps), 1 x archers, slingers or javelinmen (Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: 1/4c, 1/5c, 1/5d, 1/12, 1/15, 1/16, 1/19, 1/20a, 1/20b, 1/21a, 1/24a, 1/25a, 1/31a.

1/4d Gasgan Army 1650-950 BC: 1 x General in chariot (LCh) or on foot (3Wb), 3 x elite warriors (3Wb), 2 x common warriors (3Ax or 3Wb), 5 x archers (Ps), 1 x archers, slingers or javelinmen (Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: 1/16, 1/24a, 1/24b, 1/28, 1/31a.

1/5 EARLY SUSIANA & ELAM 3000 BC - 800 BC

This list covers the prehistoric proto-Elamite states east of Mesopotamia in modern Iran until around 2700 BC, the later states in that area of Elam and Anshan, and still further east the highland kingdoms of Markhashi, Awan and Aratta and the semi-nomadic cultures of Bactria and Margiana until around 800 BC. Early Susiana and Elam seem to have adopted many aspects of Mesopotamian civilization, but do not seem to have evolved into similar centralized states. Their warriors were predominantly archers. Elam remained a threat to its western neighbours when strong and a tempting area for conquest when weak. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol.1 Part 2.

1/5a Early Susiana or Elamite Army 3000-2601 BC: 1 x General (3Bw), 11 x archers (3Bw or Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/1a, 1/1b, 1/4a, 1/10. Allies: 1/4a.

1/5b Early Susiana or Elamite Army 2600-2101 BC: 1 x General on foot (3Bw or 3Bd) or in battle-car (HCh), 1 x retinue (3Bd or 3Pk), 2 x household (4Pk or 4Bw), 8 x archers (3Bw or Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/1b, 1/4a, 1/4b, 1/10, 1/11a, 1/11b. Allies: 1/4a.

1/5c Early Susiana or Elamite Army 2100-1401 BC: 1 x General on foot (4Bw or 3Bd) or on platform car (LCh), 1 x household (3Bd or 4Bw), 10 x archers (3Bw or Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/4c, 1/10, 1/11b, 1/12, 1/15, 1/19, 1/21a, 1/23a. Allies: 1/4c or (1/6a and/or 1/10) or 1/12 or 1/15.

1/5d Early Susiana or Elamite Army 1400-800 BC: 1 x General in 2-horse chariot (LCh), 2 x 2-horse chariots (LCh), 9 x archers (3Bw or Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/4c, 1/21a, 1/21b, 1/23a, 1/23b, 1/25a, 1/25b, 1/37a.

I/6 EARLY BEDOUIN 3000 BC - 312 BC

This list covers all the near-eastern desert or dry-steppe nomads prior to the widespread introduction of the ridden horse. It includes the Aamu, the Amurru (Martu or Amorites), early Aramaean nomadic immigrants to Babylonia from 2000 BC and users of camels, such as Midianites, Amalekites and early Arabs. The usual method of fighting was to shoot a few missiles and then charge. Some camel troops are shown by Assyrian reliefs fleeing with two archers on one camel. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/6a Early Bedouin Army 3000 BC to 1001 BC: 1 x General (3Wb or 3Ax), 6 x javelinmen (3Ax), 2 x archers (Ps or 3Bw), 3 x slingers (Ps).

Terrain Type: Dry. Aggression: 3. Enemies: 1/1a, 1/1b, 1/2a, 1/6a, 1/6b, 1/6c, 1/8a, 1/8b, 1/9, 1/11a, 1/11b, 1/12, 1/15, 1/17a, 1/17b, 1/20b, 1/21a, 1/21b, 1/22a, 1/25b, 1/29b, 1/31a, 1/31b, 1/34a, 1/34b, 1/34c, 1/38, 1/44a, 1/44b, 1/45, 1/46b, 1/51, 1/53, 1/60a, 1/60c. Allies: 1/9 or 1/11a or 1/11b or 1/12.

I/6b Midianite or Amalekite Army 1500-312 BC or early Arab Army 1000-312 BC: 1 x General (Cm), 4 x Camelry (Cm), 4 x javelinmen (3Ax), 1 x archers (Ps), 2 x slingers or javelinmen (Ps).

Terrain Type: Dry. Aggression: 3. Enemies: 1/6a, 1/6b, 1/6c, 1/8a, 1/8b, 1/8c, 1/19, 1/20a, 1/20b, 1/21a, 1/21b, 1/22a, 1/22b, 1/24a, 1/25a, 1/25b, 1/27, 1/29a, 1/29b, 1/31a, 1/31b, 1/34a, 1/34b, 1/34c, 1/38, 1/44a, 1/44b, 1/45, 1/46b, 1/51, 1/53, 1/60a, 1/60c.

I/6c Early Aramaean Army 2000-1101 BC: 1 x General with bodyguard (3Ax or 3Wb) or in 2-horse chariot (LCh), 1 x Camelry (Cm or Lcm), 5 x javelinmen (3Ax), 3 x slingers (Ps), 2 x archers (Ps).

Terrain Type: Dry. Aggression: 3. Enemies: 1/6a, 1/6b, 1/6c, 1/8b, 1/21a, 1/21b, 1/25a, 1/25b, 1/31a, 1/31b, 1/7, 1/12, 1/16a, 1/19a.

I/7 EARLY LIBYAN 3000 BC - 70 AD

This list covers all independent Libyan armies based beyond the western borders of Egypt until the conquest of the Garamantes by the Romans. Libyan armies are described as fighting by skirmishing, ambush and massed wave assaults. Initially they fought entirely on foot armed with javelins, throwing sticks and clubs but without shields. Towards the end of the New Kingdom, they acquired long thrusting swords and began to settle in Egypt. This threat was especially severe when combined with attacks by the Sea Peoples. By this time, the Libyans had split into two groups; the more traditional Libu and the modernist Meshwesh who used bow, sword and chariot. The earlier 2-horse chariots were replaced by 4-horse chariots with unarmoured horses and crew, but still classed as (LCh). The Libyans in Xerxes' Persian army in 480 BC wore goatskins and were armed only with fire-hardened wooden javelins. In 341 BC, troops in Carthaginian service who were probably Libyans were mistaken at a distance for hoplites, implying shield, spears and close formation. Diodorus, writing in the first century BC describes Libyans as armed only with 3 spears and a bag of stones. Strabo shortly after 23 AD says Moors and Libyans had round elephant-hide shields, big for foot and small for horsemen. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Armies of the Macedonian and Punic Wars* D. Head.

I/7a Early Libyan Army 3000-1251 BC: 1 x General (3Ax or 3Wb), 6 x warriors with javelins, throwing-sticks and clubs (3Ax/5Hd), 2 x archers (Ps or 3Bw), 3 x javelinmen (Ps).

Terrain Type: Dry. Aggression: 2. Enemies: 1/2a, 1/3, 1/17a, 1/17b, 1/22a.

I/7b Early Libyan Army 1250-666 BC: 1 x General in 2-horse chariot (LCh), 1 x 2-horse 2 crew chariot (LCh) or Sea Peoples mercenaries (4Bd), 2 x swordsmen (3Wb), 3 x warriors (3Ax or Ps), 3 x skirmishing javelinmen (Ps), 2 x archers (Ps).

Terrain Type: Dry. Aggression: 4. Enemies: 1/22a, 1/22b, 1/28, 1/35b, 1/46b. Allies: 1/28.

I/7c Early Libyan Army 665-476 BC: 1 x General in 4-horse chariot (LCh), 1 x 4-horse 2-crew chariot (LCh), 5 x warriors (3Wb or 3Ax, or if with large shields all Sp), 3 x skirmishing javelinmen (Ps), 2 x archers (Ps).

Terrain Type: Dry. Aggression: 1. Enemies: 1/46b, 1/52b, 1/53, 1/56a, 1/60a, 1/60c, 1/61a.

I/7d Early Libyan Army 475 BC-70 AD: 1 x General in 4-horse chariot (LCh) or on horseback (LH), 1 x 4-horse 2-crew chariot (LCh) or horsemen (LH), 5 x warriors (Sp or 3Ax), 3 x javelinmen (Ps), 2 x archers (Ps).

Terrain Type: Dry. Aggression: 1. Enemies: 1/56b, 1/7, 1/20a, 1/20b, 1/20c, 1/20d, 1/40, 1/49, 1/56.

I/8 MAKKAN, DILMUN, SABA, MA'IN & QATABAN 2800 BC - 312 BC

This list covers the armies of the resource-rich kingdoms of the eastern seaboard of Arabia (then known as Makkah), the maritime state of Dilmun and the agricultural kingdoms of the Yemen such as Saba (Sheba), Ma'in and Qataban. The typical weaponry before around 1800 BC consists of large, well-made copper swords supplemented with a variety of missile weapons and daggers. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/8a Makkah, Dilmun, Saba, Ma'in or Qataban Army 2800-1301 BC: 1 x General (3Bd), 1 x warriors (3Bd or 3Ax), 6 x warriors (3Ax), 4 x archers or javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/6a, 1/6b, 1/8a, 1/10, 1/11a. Allies: 1/21a.

I/8b Makkah Army 1300-312 BC: 1 x General (3Wb or from 1000 BC Cv), 5 x warriors (3Wb), 2 x warriors (3Wb or Cm), 2 x archers (3Bw), 2 x archers (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/6a, 1/6b, 1/6c, 1/8b, 1/8c, 1/60a, 1/60c.

I/8c Dilmun, Saba, Ma'in or Qataban Army 1300-312 BC: 1 x General (3Bd) or from 1000 BC (3Bd/Cv), 2 x warriors (Cm or 4Ax), 1 x men-at-arms (3Bd), 5 x warriors (3Ax), 3 x javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/6b, 1/8b, 1/8c. Allies: 1/6b or 1/8a.

I/9 EARLY SYRIAN 2700 BC - 2200 BC

This list represents the culturally Sumerian early Syrian states such as Mari and Ebla before they were over-run by the Amurru, and also Syrian subject allies of the Amurru 2200 BC to 1894 BC. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol.1 Part 2.

I/9 Early Syrian Army: 1 x General on 4-wheeled battle car (HCh) or on platform car (LCh) or on foot (3Bd), 2 x spearmen (4Pk), 4 x javelinmen (3Ax or Ps), 1 x archers (3Bw or Ps), 4 x skirmishing archers and slingers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/1b, 1/2a, 1/4a, 1/4b, 1/6a, 1/9, 1/11a. **Allies:** 1/1b or 1/6a.

I/10 MELUKHKHAN & PRE-VEDIC INDIAN 2700 BC - 1500 BC

The proto-Indo or Harappan civilisation of the Indus valley of western India was known to the Mesopotamians as "the land of Melukhkha", but their own name for themselves is not known. They provided sea-borne forces for the Great Revolt against Akkad and for the enemies of the Third Dynasty of Ur. The Indus civilisation collapsed around 1900 BC and was replaced by the less urbanised pre-Vedic culture which lasted until about 1500 BC. In his published account, Michael Jansen, one of the many excavators of their cities, says that they had no armies. However, numerous weapon finds include heavy spear heads, axes, dirks, arrowheads and baked clay slingshot, the latter especially associated with town defences. A rectangular shield is possibly represented on one seal. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin.

I/10 Melukhkhan or Pre-Vedic Indian Army: 1 x General (3Pk or Sp), 3 x spearmen (3Pk or Sp), 2 x archers (4Bw), 2 x archers (4Bw) or Kulli highlanders (3Ax), 4 x slingers (Ps).

Terrain Type: Littoral. **Aggression:** 0. **Enemies:** 1/5a, 1/5b, 1/5c, 1/8a, 1/10, 1/11a, 1/23a.

I/11 AKKADIAN 2334 BC-2193 BC & third DYNASTY OF UR 2112 BC-2004 BC

This list represents the armies of the dynasty founded by Sargon of Akkad, the famed Sharru-kin. Akkadian armies probably campaigned well beyond Mesopotamia and although the empire was racked by massive revolts, the army and its generals remained loyal until Mesopotamia was over-run by the Gutti and Lullubi around 2193 BC. This list also includes the "Sumerian Renaissance" armies of the Third Dynasty of Ur which drove out the Gutti and Lullubi and achieved a temporary stability. Lighter and handier Amorite shields now began replacing the tall rectangular shields pikemen often discarded in rough terrain, so some Pikes are reclassified as Spears. Normal deployment was vanguard, main body in two wings and rearguard, each with sacred standard. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin, *Cambridge Ancient History* Vol.1 Part 2.

I/11a Akkadian Army 2334-2193 BC: 1 x General on 4-wheeled battle car (HCh) or platform car (LCh) or on foot (3Bd), 6 x spearmen (3/4Pk), 1 x archers (4Bw), 3 x skirmishing archers or slingers or javelinmen (Ps), 1 x emergency reserve (7Hd) or Gutti, Lullubi or bedouin levies (3Ax).

Terrain Type: Arable. **Aggression:** 4. **Enemies:** 1/1b, 1/1c, 1/4a, 1/4b, 1/5b, 1/6a, 1/8a, 1/9, 1/10, 1/11a. **Allies:** 0-2 of 1/1b, 1/5b, 1/9.

I/11b Army of the Third Dynasty of Ur 2112-2004 BC: 1 x General on platform car (LCh) or on foot (3Bd), 6 x household spearmen (Sp or 3/4Pk), 2 x spearmen (Sp), 3 x skirmishing archers or slingers or javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/4b, 1/5b, 1/5c, 1/6a, 1/12. **Allies:** 1/6a.

I/12 SUMERIAN SUCCESSOR STATES 2028 BC - 1460 BC

This list covers the southern Mesopotamian successor kingdoms of the Isin-Larsa period following the decline of the Third Dynasty of Ur. These kingdoms include Eshnunna (2028-1762 BC), Larsa (2025-1762 BC), Isin (2017-1787 BC) and the "Dynasty of the Sealand" (1732-1460 BC) which was based on the unidentified city of "Urukug" in the marshes of Sumer. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East to 1600BC* W. J. Hamblin.

I/12 Sumerian Successor Army: 1 x General on 4-equid platform car (LCh) or on foot (3Bd/4Bw), 2 x household (3/4Pk), 4 x militia (4Pk), 1 x archers (4Bw), 1 x Zagros highlander or Amurru javelinmen (3Ax) or Elamite archers (3Bw), 3 x archers or slingers and javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/4c, 1/5c, 1/6a, 1/11b, 1/12, 1/15, 1/21a. **Allies:** 1/5c or 1/6a or 1/15.

I/13 HSIA & SHANG CHINESE 2000 BC - 1017 BC

The Shang were the first truly historical Chinese dynasty. Traditionally they replaced the earlier Hsia dynasty around 1763 BC, but archaeology suggests a considerable overlap. Close-fighting infantry were armed with a short one-handed "ko" (dagger-axe) or a five foot long spear. Chariots were drawn by 2 horses. Whether they had a crew of 3 (driver, archer and dagger-axe man) as under later dynasties, rather than 2, is not totally certain. **Reference:** *Ancient Chinese Armies* C. Peers.

I/13a Hsia and Shang Chinese Army 2000-1300 BC: 1 x General (4Bw or 3Bd), 5 x dagger-axe men (4Bd), 2 x spearmen (3Ax), 4 x archers (3Bw or Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** 1/13a, 1/14d, 1/14g. **Allies:** 1/14a.

I/13b Shang Chinese Army 1299-1017 BC: 1 x General in 2-horse 3-crew chariot (HCh) or 2-horse 2-crew chariot (LCh), 3 x dagger-axe men (4Bd), 2 x dagger-axe men (4Bd) or spearmen (3Ax or 4Ax), 1 x spearmen (3Ax) or convict/conscript slave foot (5Hd) or archers (Ps), 5 x archers (3Bw or 4Bw or Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** 1/13b, 1/14d, 1/14g, 1/32a. **Allies:** 1/14a and/or 1/32a.

I/14 EARLY NORTHERN BARBARIANS 2000 BC - 315 BC

This list covers the armies of the North European Bronze and early Iron Age; and also tribal border peoples of north China such as the Jung, Ti, (not the same nation as the Ti of list II/21), I, Ch'iang and others from the beginnings of Chinese history to the final defeat of the western Jung in 315 BC. The early Bronze-Age in Northern Europe is assumed to be a prosperous time of organised theocratic states who constructed vast religious monuments such as Stonehenge. Archaeology has demonstrated they were not as peaceful as once thought. The downfall of the theocracies was possibly due to climate change. It has been postulated that as their grip slipped the priest-kings relied for a time on Beaker culture mercenaries who added copper or bronze axes and daggers to the bow. They were replaced by warrior kings who constructed massive hillforts instead of monuments. Heavy-headed spears now became dominant and outnumbered swords 10-1, but were not used in formation. The richest warriors (8d) had bronze armour and some rode in chariots (LCh) or on horses (Cv). The Iron Age brought increased use of chariots and swords and near disappearance of the bow. The Chinese tribes were mostly infantry, but there is some slight evidence for chariots, and towards the end of the period the Jung and Ch'iang may have started riding ponies. In 706, a Northern Jung army defeated by the Chinese states of Ch'i and Cheng included "leather-coated warriors" (probably in the clumsy Chinese armour denoted by the same word). The I of the Huai valley were famous archers and so are allowed a higher proportion of bows. The Red Ti were a band of aristocratic warriors ruling over subjugated clansmen. **European references:** *Ancient Warfare* J. Carman & A. Harding (ed), *Slingshot* 203 & 210. **Chinese reference:** *Ancient Chinese Armies* C. Peers.

I/14a European Bronze Age Army 2000-1401 BC: 1 x General (3Bd), 9 x warriors (4Bw), 2 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 0. Enemies: I/14a.

I/14b European Bronze Age Army 1400-701 BC: 1 x General in 2-horse chariot (LCh) or on foot (4Bd), 2 x armoured warriors (4Bd), 1 x horseman (Cv) or armoured warriors (4Bd), 6 x warriors (3/4Ax), 2 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/14b, I/26a, I/26a, I/33a, I/33b.

I/14c European Iron Age Army 700-315 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on foot (4Wb), 1 x 2-horse 2-crew chariot (LCh), 1 x horseman (Cv) or warriors (3Wb), 8 x warriors (3Wb), 1 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/14c, I/47, II/11.

I/14d Chinese Border-tribes Army 2000-401 BC: 1 x General on foot (3/4Wb) or after 1300 BC in Chinese-style chariot (LCh) or HCh), 8 x warriors (3Wb), 3 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/13a, I/13b, I/32a, I/32c, I/43a, II/4a, II/4e. Allies: I/32a, I/32c.

I/14e Jung or Ch'iang Army 400-315 BC: 1 x General (Cv or LH or 4Wb), 2 x horse archers (LH) or leather-coated warriors (4Wb), 6 x warriors (3Wb), 3 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/43a, II/4c.

I/14f Red Ti Army 788-588 BC: 1 x General (4Wb), 4 x warriors (4Wb), 5 x subjects (7Hd), 2 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/32a, I/32c. Allies: I/32c.

I/14g I Army 2000-315 BC: 1 x General (3/4Wb), 4 x warriors (3Wb), 4 x archers (3Bw), 3 x archers or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/13a, I/13b, I/32a, I/32c.

I/15 LATER AMORITE 1894 BC - 1595 BC

This list covers the armies of the mature, urbanised Amorite Dynasties of Syria and Mesopotamia which developed out of the invading Amurru hordes (list I/6) and before the conquests of the Hittite king Mursilis I opened the way for Hurrian control of the area. They include Yamhad (Aleppo), Karkemish, Qatanum, Ebla, the 'Old Assyrian' empire of Shamshi-adad and his successors (1813-1755 BC), the First Dynasty of Babylon (1894-1595 BC), Mari (until its destruction in 1759 BC) and Aleppo (until its destruction in 1600 BC). Close formations and prodding with long spears had been replaced by rushing up to chop with axe or sickle-sword. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East* to 1600BC W. J. Hamblin.

I/15 Later Amorite Army: 1 x General on 4-equid platform car (LCh) or on foot (4Bw), 5 x retinue (3Bd), 2 x javelinmen (3/4Ax), 2 x archers or slingers (Ps), 2 x emergency reserves (7Hd) or nomadic levies (3Ax or Ps).
Terrain Type: Arable. Aggression: 3 if Assyrian or Babylonian, otherwise 2. Enemies: I/2a, I/4c, I/5c, I/6a, I/12, I/15, I/16, I/17a, I/19.

I/16 HITTITE OLD & MIDDLE KINGDOM 1680 BC - 1380 BC

This list covers the Hittite kingdom from its foundation by the semi-legendary Labarna (possibly around 1680 BC) until the accession of Suppiluliumas around 1380 BC. Proper 2-horse 2-crew chariots (LCh) were now in use. The bulk of the infantry were spearmen, some permanently embodied, others called up when needed. Records imply that most now had light shields. Traditionalists without shields are 3Pk. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Warfare in the Ancient Near East* to 1600BC W. J. Hamblin, *Slingshot* 182, 183, 184, 187, *Hittite Warrior* T. Bryce.

I/16 Old & Middle Kingdom Hittite Army: 1 x General (LCh), 1 x 2-horse 2-crew chariot (LCh) or spearmen (3Ax), 4 x standing army spearmen (3Pk or 4Ax), 3 x seasonal army spearmen (3Ax), 2 x skirmishers with javelins, bows or slings (Ps), 1 x conscript levy (7Hd) or skirmishers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/4c, I/4d, I/15, I/18, I/19. Allies: I/15 or I/19.

1/17 HYKSOS 1645 BC - 1537 BC

The Hyksos or "rulers of foreign lands" (probably Later Amorites from Syria) conquered the northern half of Egypt and established a dynasty of six rulers. The first one, Sheshy or Salatis became Pharaoh in 1644/5 BC, set up a new capital in Avaris and a new priesthood of the local god Seth. The sixth Pharaoh, Khamudy, was driven out by Ahmose around 1537 BC. Despite previous received opinion, it is now considered unlikely that massed chariots played a part in the Hyksos conquest of Egypt, although they became important in the later period as Hurrian influence spread. **Reference:** *Armies of the Ancient Near East*. N. Stillman & N. Tallis.

1/17a Early Hyksos Army 1645-1591 BC: 1 x General in 2-horse 2-crew chariot (LCh), 4 x retainers with sickle-sword or axe plus javelins (3Bd), 1 x javelinman (4Ax), 3 x Aamu bedouin warriors (3Ax) or Libyan skirmishers (Ps), 2 x Syrian, Aamu or Libyan skirmishers with javelins, slings or bows (Ps), 1 x Egyptian levies (7Hd) or skirmishers (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/2b, 1/6a, 1/7a, 1/15. Allies: 1/2b.

1/17b Later Hyksos Army 1590-1537 BC: 1 x General (LCh), 2 x 2-horse 2-crew chariots (LCh), 3 x retainers (3Bd), 2 x Aamu warriors (3Ax), 1 x Aamu or Libyan warriors (3Ax), 2 x archers or slingers (Ps), 1 x archers (Ps) or levies (7Hd).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/2b, 1/6a, 1/7a, 1/20b, 1/22a. Allies: 1/2b.

1/18 MINOAN & EARLY MYCENAEAN 1600 BC - 1250 BC

This list covers the period of the Aegean Palace civilization of Crete and Greece based on the centres of Knossos, Pylos and Mycenae. Charioteers in 2-horse chariots can be a mounted warrior in the very heavy and complete bronze plate Dendra panoply armed with a long spear (HCh) or lighter warriors in quilted armour armed with javelins or bow (LCh). That bows were used by Mycenaean charioteers, despite frequent statements to the contrary, is probable. However, although large numbers of arrows are listed in tablets found by archaeologists in the Knossos armoury, these are not closely associated with those listing chariots. Chariots either fought en masse in a front line (as recommended by the conservative Nestor in the Iliad) or were spaced in groups between the spearmen and on their flanks. Most spearmen carried figure-of-eight or tower shields and fought in close formation with long 2 handed spear, but at Pylos some used small round shields and short spears. One fresco shows Libyans with javelins, but these might be hunters. **Reference:** *Armies of the Ancient Near East*. N. Stillman & N. Tallis.

1/18 Minoan or Early Mycenaean Army: 1 x General (HCh), 3 x charioteers (HCh or LCh), 4 x spearmen (4Pk), 2 x spearmen (4Pk) or small-shield Pylans (4Ax), 1 x skirmishers with bow or sling (Ps), 1 x Libyans or other javelinmen (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/16, 1/18, 1/24a, 1/24b.

1/19 MITANNI 1595 BC - 1274 BC

After the fall of the Amorite dynasties and the withdrawal of their Hittite conquerors, Hurrian political control spread out into both Syria and northern Mesopotamia to establish a Mitannian empire, greatly aided by their recent adoption of massed chariotry techniques that made them temporarily unbeatable until their neighbours copied the techniques and slowly caught up. As well as the aristocratic "maryannu" armoured chariot bowmen who became the exemplars for all would-be rivals, the army included supporting infantry of varying status and efficiency including many bowmen. **Reference:** *Armies of the Ancient Near East*. N. Stillman & N. Tallis.

1/19 Mitanni Army: 1 x General in 2-horse 2-crew chariot (LCh), 5 x Maryannu 2-horse 2-crew chariots (LCh), 2 x spearmen (4/3Ax), 2 x archers (4Bw or Ps), 1 x Hapiru or Akhalamu Bedouin javelinmen (Ps), 1 x levy (7Hd).

Terrain Type: Arable. Aggression: 3. Enemies: 1/4c, 1/5c, 1/6b, 1/15, 1/16, 1/20b, 1/21a, 1/22a, 1/24a, 1/25a. Allies: 1/6a and/or (1/20b or 1/24a).

1/20 SYRO-CANAANITE OR UGARITIC 1595 BC - 1100 BC

This list covers the city-states of Canaan and Syria after the fall of the Amorite dynasties to the Hittites and the occupation of the resulting vacuum by petty rulers largely of Hurrian origin commanding chariot-riding maryannu. These city states were usually vassals of one of the great powers in the area, such as Mitanni, Egypt, Hittites or Assyria. Ugarit was one of these states, but came under Hittite influence and was an early adopter of the new heavy chariots with an extra crewman and sometimes an extra horse as a spare. It was destroyed by the Sea Peoples invasion that crippled the Hittites. **Reference:** *Armies of the Ancient Near East*. N. Stillman & N. Tallis.

1/20a Ugarit Army 1274-1176 BC: 1 x General in 3-horse 3-crew chariot (HCh), 3 x royal Maryannu in 2-horse 2-crew (LCh) or 2-horse 3-crew chariots (HCh), 1 x royal guard (4Bd), 2 x Hupshu spearmen (3Ax), 2 x Khepetj or 'Apiru spearmen (3Ax or 7Hd), 2 x Hupshu, Khepetj or 'Apiru archers (Ps), 1 x Bedouin javelinmen, archers or slingers (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/4c, 1/6b, 1/20b, 1/22b, 1/24b, 1/25a, 1/27, 1/28.

1/20b Other Syro-Canaanite Armies 1595-1100 BC: 1 x General in 2-horse 2-crew chariot (LCh), 3 x Maryannu 2-horse 2-crew chariots (LCh), 1 x royal guard (4Bw or 3Bd), 2 x Hupshu spearmen (3Ax), 2 x Khepetj or 'Apiru spearmen (3Ax or 7Hd), 2 x Hupshu, Khepetj or 'Apiru archers (Ps), 1 x Bedouin javelinmen, archers or slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/4c, 1/6a, 1/6b, 1/17b, 1/19, 1/20a, 1/20b, 1/21a, 1/22a, 1/22b, 1/24a, 1/24b, 1/25a, 1/27, 1/28, 1/29a. Allies: 1/19 or 1/22a or 1/22b.

I/21 KASSITE BABYLONIAN & LATER BABYLONIAN 1595 BC - 747 BC

This list covers the Babylonian empire in Mesopotamia controlled from the huge city of Babylon near modern Baghdad in Iraq: from the Kassite third dynasty's first occupation of Babylon until the accession in 746 BC of Nabu-nasir. Babylon's massive mud-brick walls were reported to be wide enough to drive a 4-horse chariot along the top. One of its temples inspired the Biblical account of the "Tower of Babel". However, the equally famous "Hanging Gardens of Babylon" cannot be traced and may actually have been at Nineveh in Assyria. Although occasionally sacked, Babylon remained an important regional capital for successive states until the time of Alexander, who intended to make it the capital of his empire, but died there instead. After the Hittites sacked Babylon, the Kassites took control from the Old Babylonian kingdom (list I/15). At this time, southern Babylonia was the independent kingdom of "Sealand" (list I/12), but this had been reconquered by about 1460 BC. The reunited Kassite kingdom of Babylonia was weakened by an unsuccessful invasion of Assyria and fell when Babylon was sacked by the Elamites in 1157 BC. Babylon regained its position under the second dynasty of Isin when Nebuchadnezzar I (1126-1105 BC) won a major victory over the Elamites, but declined in the later period and was unable to prevent a large scale Aramaean tribal immigration. **Reference:** *Armies of the Ancient Near East* N. Tallis & N. Tallis.

I/21a Kassite Babylonian Army 1595-890 BC: 1 x General in 2-horse 2-crew chariot (LCh), 3 x 2-horse 2-crew chariots (LCh), 3 x militia spearmen (3Ax), 3 x militia archers (Ps), 2 x archers or slingers (Ps) or Sutu or Hapiru mercenaries (3Ax).
Terrain Type: Arable. Aggression: 1. Enemies: 1/4c, 1/5c, 1/5d, 1/6a, 1/6b, 1/6c, 1/12, 1/19, 1/20b, 1/24a, 1/24b, 1/25a, 1/31a. Allies: 1/6c.

I/21b Later Babylonian Army 889-747 BC: 1 x General in 3 or 4-horse 3-crew chariot (HCh), 1 x 3 or 4-horse 3-crew chariot (HCh), 2 x 2-horse 2-crew chariot (LCh), 1 x cavalry (Cv), 3 x militia spearmen (3Ax), 3 x militia archers (Ps), 1 x archers or slingers (Ps) or Sutu or Hapiru mercenaries (3Ax).
Terrain Type: Arable. Aggression: 1. Enemies: 1/5d, 1/6a, 1/6b, 1/6c, 1/25b, 1/42. Allies: 1/6b or 1/6c or 1/25b.

I/22 NEW-KINGDOM EGYPTIAN 1543 BC - 1069 BC

This list starts with Kamose's rebellion against the Hyksos and ends with the death of Rameses XI, by which time the kingdom was in decline. New Kingdom armies added massed chariotry to the tactics of the Middle Kingdom armies. Famous generals of this period include the brilliant Thutmose III (1479-1425 BC), Rameses II (1279-1213 BC) whose "victory" at Kadesh over the Hittites was more than a little exaggerated, and Rameses III (1184-1153 BC) who beat off dangerous invasions by first the Libyans and later by Sea Peoples. Constructing a great monument depicting your victory is often better than actually having one. Surviving chariots have axle lengths from 1.98 to 2.36m. Chariots were crewed by a usually bronze-scale armoured archer and a lesser armoured or unarmoured driver who sometimes had a wooden shield. Some horse teams were also armoured in bronze or leather scale trappers, with scales in alternating rows of different colours. Horses were small, had hogged or cropped manes and are depicted as black, grey, bay and chestnut. Early New-Kingdom infantry are often shown running with an axe in the right hand, a spear in the left and a small shield slung behind one shoulder. Those depicted after 1200 BC had larger shields, wore body armour, probably formed more closely; and stood up to Sea Peoples who had defeated armies trusting more entirely in chariots. Libyan and Sherden mercenaries were recruited after 1200 BC, especially as guardsmen immune to local dynastic politics. **References:** *Armies of the Ancient Near East* N. Tallis & N. Tallis, *War in Ancient Egypt* A.J. Spalinger, *Fighting Pharaohs* R.B. Partridge, *Warfare in Ancient Egypt* B. McDermott.

I/22a New-Kingdom Egyptian Army 1543-1200 BC: 1 x General in 2-horse chariot (LCh), 3 x 2-horse 2-crew chariots (LCh), 3 x spearmen (3Bd), 3 x archers (4Bw), 1 x archers (4Bw) or heavy axe-men (4Bd), 1 x skirmishing archers or javelinmen (Ps).
Terrain Type: Littoral. Aggression: 2. Enemies: 1/3, 1/6a, 1/6b, 1/7a, 1/7b, 1/17b, 1/19, 1/20b, 1/24a, 1/24b, 1/27.

I/22b New Kingdom Egyptian Army 1199-1069 BC: 1 x General (LCh), 3 x 2-horse 2-crew chariots (LCh), 3 x spearmen (4Bd), 2 x archers (4Bw), 1 x Sherden (3/4Bd), 1 x Libyans (3Bw), 1 x Nubian archers or Syrian, Libyan or Bedouin javelinmen (Ps).
Terrain Type: Littoral. Aggression: 2. Enemies: 1/6b, 1/7b, 1/20a, 1/20b, 1/24b, 1/27, 1/28, 1/29a, 1/29b, 1/31a.

I/23 VEDIC INDIAN 1500 BC - 501 BC

This list covers Indian armies from the Aryan invasion of India from the north until the Persian conquest of the north-west and the establishment of the first Buddhist states. The main sources are the Sanskrit Vedas and the Mahabharata epic poem. Most chariots had 2 unarmoured horses and were crewed by a driver and an armoured noble archer. In the later period, the general might have a heavy chariot with a parasol, 4 horses and up to 4 crew. Elephants are described as having a crew of up to 12 men, most of whom must have fought on foot alongside. Other foot were mostly archers who clumped at the rear and tried to avoid hand-to-hand combat. **References:** *Armies of the Ancient Near East* N. Tallis & N. Tallis, *Armies of the Macedonian and Punic Wars* D. Head, *The Mahabharata* R.K. Narayan, *Ancient Indian Warfare* S.D. Singh.

I/23a Early Vedic Indian Army 1500-900 BC: 1 x General (LCh), 4 x heroic charioteers (LCh), 5 x archers (3Bw), 2 x followers (7Hd).
Terrain Type: Tropical. Aggression: 2. Enemies: 1/5c, 1/5d, 1/10, 1/23a.

I/23b Later Vedic Indian Army 899-501 BC: 1 x General (LCh or HCh), 1 x elephant (El) or charioteer (LCh), 4 x heroic charioteers (LCh), 5 x archers (3Bw), 1 x followers (7Hd).
Terrain Type: Tropical. Aggression: 2. Enemies: 1/5d, 1/23b, 1/25b, 1/43a, 1/43c, 1/60a, 1/60c.

1/24 HITTITE EMPIRE 1380 BC - 1180 BC

This list covers the Hittite empire of eastern Asia Minor from the accession of Suppiluliumas circa 1380 BC. Mitanni was acquired as a vassal state around 1348 BC and Syria around 1340 BC. The empire was crippled by the invasion of the Sea Peoples and then finished off by their old Gasgan enemies. At the battle of Kadesh in 1274 BC, the Hittite heavy 3-man chariots surprised the Egyptian and so were probably a recent innovation. They are depicted on Rameses II's triumphal reliefs of the battle as manned by shieldless driver, shieldless spearman and shield-bearer. Only the king's chariot is depicted with an archer or quiver, but earlier reliefs show these, so the reason for their absence is probably the routine Egyptian denigration of an opponent, though the use of the spears from chariots does seem to have been emphasised. The army also still had light Syrian and Anatolian chariots. Hittite infantry at Kadesh are depicted in deep rectangular blocks. Those depicted with long spears (often used two-handed) and sometimes shields and labelled as *teheru* "elite troops" are thought to be Hittites, those with short spear in one hand, sword in the other and no shield to be Syrian. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Slingshot* 120, 121, 122, 273, *Hittite Warrior* T. Bryce.

1/24a Early Hittite Imperial Army 1380-1275 BC: 1 x General in 2-horse 2-crew chariot (LCh), 3 x 2-horse 2-crew chariots (LCh), 4 x Hittite spearmen (3Pk), 2 x Anatolian or Syrian spearmen (3Ax), 1 x archers or slingers (Ps), 1 x vassals (7Hd or Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/4c, 1/4d, 1/6b, 1/18, 1/19, 1/20b, 1/21a, 1/22a, 1/24a, 1/25a. Allies: 1/19.

1/24b Later Hittite Imperial Army 1274-1180 BC: 1 x General in 2-horse 3-crew chariot (HCh), 1 x 2-horse 3-crew chariot (HCh), 2 x 2-horse 2-crew chariots (LCh), 4 x Hittite spearmen (3Pk), 2 x Anatolian or Syrian spearmen (3Ax), 1 x archers or slingers (Ps), 1 x vassals (7Hd or Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/4d, 1/18, 1/20a, 1/20b, 1/21a, 1/22a, 1/22b, 1/24b, 1/25a, 1/26a, 1/26b, 1/28.

1/25 MIDDLE-ASSYRIAN & EARLY NEO-ASSYRIAN 1365 BC - 745 BC

This list covers the pre-reform seasonal army of Assyria, strongly influenced by Hurri-Mitanni practice. The original capital of Assur was now becoming overshadowed by the cities of Nineveh and Nimrud, a little higher up the Tigris. The change from the light 2-crew chariot to the heavier 3-horse, 3-crew chariot occurred around 882 BC under Ashurnasirpal II. Pethalle are depicted as a pair of horsemen, an archer on the left and a companion on his right controlling both horses. Assyria may have survived the Sea Peoples invasions partly because they had tougher infantry than other chariot-based armies. Of these, the elite *ashsharritu* and the *huradu* were equipped with javelin/short spear, sword, wicker shield, helmet but no body armour and fought aggressively, so are classed as Blades. *Hupshu* or *sabe* peasant militia probably mostly lacked sword and helmet and the offensive ethos, so are Auxilia. Archers are assumed to be part of the close fighting elements. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

1/25a Middle Assyrian Army 1365-883 BC: 1 x General (LCh), 3 x 2-horse 2-crew chariots (LCh), 2 x *ashsharritu* or *huradu* (3Bd), 4 x *hupshu* or *sabe* (3/4Ax), 2 x archers (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: 1/4c, 1/5d, 1/6b, 1/6c, 1/19, 1/20a, 1/20b, 1/21a, 1/24a, 1/24b, 1/31a, 1/34a, 1/34b, 1/37a.

1/25b Early Neo-Assyrian Army 882-745 BC: 1 x General in 3-horse 3-crew chariot (HCh), 1 x 3-horse 3-crew chariots (HCh), 1 x 2-horse 2-crew chariots (LCh), 1 x 2-horse 2-crew chariots (LCh) or pethalle (LH), 2 x *ashsharritu* or *huradu* (3Bd), 4 x *hupshu* or *sabe* (3/4Ax), 1 x archers (Ps), 1 x levies (7Hd).

Terrain Type: Arable. Aggression: 4. Enemies: 1/5d, 1/6a, 1/6b, 1/6c, 1/21b, 1/23b, 1/31b, 1/34b, 1/34c, 1/35b, 1/37a, 1/37b, 1/38, 1/39a, 1/39b, 1/40, 1/41a, 1/42. Allies: 1/31b.

1/26 LATER MYCENAEAN & TROJAN WAR 1250 BC - 1190 BC

This list covers the later period of Mycenaean Greece and the semi-legendary Trojan War of about 1200 BC described by Homer, which is now thought to be a heavily-embroidered account of a war between the Achaean Greeks and the city of Troy/Ilium/Ilion which controlled trade access to the Black Sea and to reflect the military practice of this era. Ilium is taken to be the "Wilusa" of the Hittite records and an account of Hittite king Tudhaliya IV sending a Hittite army to aid Wilusa against an attack by Attarsiyas (Atreus?) ruler of the Ahhiyawa (Achaians?) may refer to the same war. Homer described the spearmen as pressing "shield against shield in their closed formation, bristling with shields and spears". Since he was composing much later during the period covered by list 1/30, some of his graphic descriptions may be coloured by contemporary practise, and in particular, charioteers dismounting to fight may be an anachronism. Where his charioteers do fight mounted, they sometimes thrust with spears, but usually throw javelins. In the Iliad, the Myrmidons are the ferocious but undisciplined followers of Achilles. The Pylians commanded by the arch-conservative Nestor are assumed here to use the old figure-of-eight shields and two-handed long spears. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Early Greek Warfare* P.A.L. Greenhalgh, *The Iliad* Homer, *The Attack on Troy* R. Castleden, *The Legend of Odysseus* P. Connolly, *The King in Splendour* G. Shipway (novel).

1/26a Achaian Army: 1 x General in chariot (LCh//4Bd), 3 x heroic charioteers (LCh//4Bd), 4 x spearmen (Sp), 2 x spearmen (Sp) or Pylians (4Pk), 1 x Myrmidons (4Wb) or javelinmen (Ps), 1 x javelinmen, archers or slingers (Ps).

Terrain Type: Littoral. Aggression: 3. Enemies: 1/14b, 1/24b, 1/26a, 1/26b, 1/28.

1/26b Trojan Army: 1 x General in chariot (LCh//4Bd), 3 x heroic charioteers (LCh//4Bd), 4 x spearmen (Sp), 1 x spearmen (Sp) or Luika (3Bd), 1 x archers (3Bw or Ps), 2 x javelinmen, archers or slingers (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/24b, 1/26a, 1/28. Allies: 1/24b.

I/27 EARLY HEBREW circa 1250 BC - 1000 BC

This list covers the Hebrew armies from the selection of Joshua as Judge until David's accession as King and is largely based on the Bible - which, unreliable as this may be as history, is often the only source available. Israel became a kingdom only under David's predecessor Saul, and even then was restricted to the highlands by inability to match the chariot-using Philistines of the coastal plains. The Simeonites and Ephraimites were described as "mighty men of valour" while the Benjaminites were archers or slingers. Gadites and Issacharites were skirmishers and scouts probably armed with javelins. The other tribes are best represented as auxilia. Picked men are those selected by Gideon, mercenaries those hired by Saul. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Battles of the Bible* C. Herzog & M. Gichon, *Battles of the Bible* M. Dougherty (et al), *The Military History of Ancient Israel* R. Gabriel, *The Bible as History* W. Keller, *Archaeological Study Bible* W. Kalliser (ed).

I/27 Early Hebrew Army: 1 x General (3/4Ax), 2 x Simeonites or Ephraimites (3Wb), 1 x Benjamite archers or slingers (3Bw or Ps), 2 x Gadite or Issacharian skirmishing javelinmen (Ps), 5 x other tribesmen (3Ax), 1 x picked men or retained mercenaries (4Ax) or other tribesmen (3Ax or Ps).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** 1/6b, 1/20a, 1/20b, 1/22a, 1/22b, 1/29a, 1/29b, 1/31a.

I/28 SEA PEOPLES 1208 BC - 1176 BC

During the 12th century BC, Anatolia, Egypt, Canaan and Syria all came under increasing pressure from raids by the "Sea Peoples", whose initial success encouraged larger scale invasions that looted and destroyed many cities and brought down several states. Their origin is uncertain, but current thinking suggests they combined contingents of many different origins (possibly under a single dominant leader whose prestige attracted participants from far afield); the Sherden from Sardinia, the Lukka from Lykia, the Peleest from Crete (who later became the Philistines), and the Shekesh from Sicily. The Ekweh may have been Achaeans and the Teresh may have come from northern Syria. The Denyen and Tjekker dressed like Peleest and may have been related while the Weshwesh are currently unclaimed. It was suggested by Drews in 1993 that the success of the Sea People was due to their infantry armed with a long cut and thrust sword, a pair of javelins, a strong but handy shield, helmet and body armour; who could both withstand the mainly light chariots that contemporary armies relied on, destroy their supporting infantry and successfully assault towns. Whether their few chariots were Egyptian in type as depicted in reliefs, or Asiatic types as their crew of 3 suggests, is uncertain. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *The End of the Bronze Age* R. Drews, *The Sea Peoples* N.K. Sandars.

I/28 Sea-Peoples' Army: 1 x General in 2-horse 2 or 3-crew chariot (LCh or HCh) or on foot (4Bd), 2 x armoured chieftains and retinue (4Bd), 6 x common warriors (3Bd), 3 x Shekesh or Teresh javelinmen (3Ax or Ps).

Terrain Type: Littoral. **Aggression:** 4. **Enemies:** 1/4d, 1/7b, 1/20a, 1/20b, 1/22b, 1/24b, 1/26a, 1/26b.

I/29 PHILISTINE 1166 BC - 600 BC

The Philistines, whose name derived from "Pelest" were descended from the Sea People settled (or allowed to remain) in Palestine by Rameses III after their defeat in Egypt. By around 1140 BC, they had gained independence from Egypt and were expanding along the coast. They became the most powerful local enemy of the Hebrews. Their five cities - Ashdod, Ashkelon, Ekron, Gath and Gaza - were each ruled by an independent prince, but they usually acted in consort and their council (the "sarney") could designate an overall commander. They gradually adopted Canaanite chariot tactics, but continued to field effective infantry; while generals normally riding in chariots (such as Goliath of Gath) could sometimes dismount to fight on foot to inspire the troops. Goliath was a very big man whose challenge to personal combat had a depressing effect on opponents, until it transpired that his gigantism made him bad at dodging slingstones. Some of the Philistine cities survived the Assyrian conquest as vassal states and provided garrisons in Egypt for the Assyrians. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Battles of the Bible* C. Herzog & M. Gichon.

I/29a Early Philistine Army 1166-1100 BC: 1 x General in 2-horse chariot (LCh) or on foot (4Bd), 1 x 2-horse 2-crew chariot (LCh), 6 x swordsmen (3Bd), 2 x javelinmen (3Ax), 2 x slingers or archers (Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** 1/6b, 1/20b, 1/22b, 1/27, 1/29a. **Allies:** 1/20b.

I/29b Later Philistine Army 1099-600 BC: 1 x General in chariot (LCh) or on foot (Sp), 3 x 2-horse 2-crew chariots (LCh), 4 x spear-men (Sp), 2 x javelinmen (3Ax), 2 x slingers or archers (Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** 1/6a, 1/6b, 1/22b, 1/27, 1/29b, 1/31a, 1/31b, 1/34a, 1/34b, 1/34c, 1/35a, 1/35b, 1/35c, 1/38, 1/45, 1/46b, 1/51, 1/53. **Allies:** 1/31a or 1/31b or 1/35a or 1/35b or 1/35c or 1/38 or 1/46b.

I/30 DARK-AGE & GEOMETRIC GREEK 1160 BC - 650 BC

This list covers the armies of Greece from the recovery after the break-up of the Mycenaean city states until the introduction of hoplite infantry. While chariots still appear in Geometric period art, there are few depictions of warriors fighting from them and they probably usually dismounted to fight. There are many depictions of shieldless warriors, probably with light body armour, riding horses. Foot are shown with javelins and clad in little more than a helmet. From 900 BC, the grave-goods change to include multiple spearheads as well as daggers or short swords, whereas previously they had contained either a spear or a sword. Illustrations of the period show warriors carrying the large dipylon shield and the poet Tyrtæus describes psiloi mingling with the shield-bearing heavier infantry. After 725 BC, the transition to hoplite equipment began and these "proto-hoplites" can be represented by mixing hoplite figures with others carrying the dipylon shields on the same bases. The full hoplite system of uniform standard of equipment and drill instituted by Pheidon of Argos and used by him to crush Sparta's 1/30 army in 669 BC is covered by list I/52. The change to true hoplites seems to have been completed by 650 BC. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Early Greek Warfare* P.A.L. Greenhalgh.

I/30a Greek Army 1160-901 BC: 1 x General in 2-horse chariot (LCh//3Bd), 1 x cavalry (Cv), 4 x warriors (3Bd), 4 x spearmen (3Ax), 2 x skirmishers with javelins or bows (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/30a, I/31a, I/35a.

I/30b Greek Army 900-725 BC: 1 x General in chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 7 x warriors (3Ax), 3 x skirmishers with javelins or bows (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/30b, I/31b, I/33b, I/35b, I/40.

I/30c Greek Army 724-650 BC: 1 x General (Cv), 1 x cavalry (Cv), 7 x warriors (Sp/4Ax), 3 x skirmishers with javelins or bows (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/30c, I/31b, I/33b, I/35b, I/35c, I/40, I/43a, I/48, I/50, I/52a.

I/31 NEO-HITTITE & LATER ARAMAEAN 1100 BC - 710 BC

This list covers the Aramaean and Neo-Hittite successor kingdoms of Syria and Kilikia, including Damascus, Hamath, Que, Sam'al, Taba, Kummuhu, Ataniya and Karkemish. Of these, Karkemish/Carchemish was one of the few truly Neo-Hittite states and its rulers appear to have been directly descended from the Hittite royal family. Though rich and powerful, these states fell one-by-one to the onslaught of Assyria and Urartu. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/31a Neo-Hittite or Later Aramaean Army 1100-901 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on foot (4Bw), 5 x militia spearmen (3Ax), 3 x militia archers (Ps), 3 x militia slingers (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/4c, I/4d, I/6a, I/6b, I/6c, I/21a, I/22b, I/25a, I/27, I/29b, I/30a, I/31a, I/34a, I/34b, I/35a.

I/31b Neo-Hittite or Later Aramaean Army 900-710 BC: 1 x General in 2-horse 2-crew chariot (LCh) or 2-3 horse 3-crew chariot (HCh), 1 x 2-horse 2-crew chariot (LCh), 1 x regular spearmen (4Ax or Sp), 4 x militia spearmen (3Ax), 2 x militia archers (Ps), 3 x militia slingers (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/6a, I/6b, I/6c, I/25b, I/29b, I/30b, I/30c, I/31b, I/34b, I/34c, I/35b, I/39a, I/39b, I/40. Allies: I/34b and/or I/35b.

I/32 WESTERN CHOU & "SPRING & AUTUMN" CHINESE 1100 BC - 480 BC

This list covers the Western Chou dynasty from its appearance, first as allies of the Shang and then as their rivals and supplanted, until 770 BC and after this the numerous independent states, commonly named after the 'Spring and Autumn Annals' of the state of Lu. The general and his nobles rode in 4-horse 3-crew chariots. Buried examples had a 2.96m axle, which was also roughly the width of the horse team. Close-fighting foot were initially armed with a short dagger-axe and shield or with short spear and shield. These were largely replaced after 700 BC by a long dagger-axe or spear intended as an anti-chariot weapon (3Pk). From 520 BC, armies were sometimes ordered to throw away their long weapons and charge with sword alone. The southern states of Wu and Yueh were in marshy coastal regions dominated by rivers and used fewer chariots. **Reference:** *Ancient Chinese Armies* C. Peers.

I/32a Western Chou Army 1100-701 BC: 1 x General (HCh), 1 x nobles (HCh), 1 x short dagger-axemen (4Bd or if "tiger guards" 3Bd), 3 x short dagger-axemen (4Bd), 2 x spearmen (3Ax), 3 x archers (3Bw), 1 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/13b, I/14d, I/14f, I/14g, I/32a. Allies: I/13b and/or I/14a.

I/32b Wu or Yueh Chinese Army 584-480 BC: 1 x General (HCh), 1 x nobles (HCh), 1 x picked troops with short dagger-axe or sword (3Bd), 4 x all long dagger-axemen (3Pk) or all swordsmen (3/4Bd), 2 x tribesmen (3Wb), 2 x archers (3/4Bw), 1 x archers (Ps) or desperate convicts (5Hd).
Terrain Type: Littoral. Aggression: 0. Enemies: I/32b, I/32c, I/49a.

I/32c Other Chinese Armies 700-480 BC: 1 x General (HCh), 3 x nobles (HCh), 1 x picked troops with short dagger-axe or sword (3Bd), 4 x all long dagger-axemen (3Pk) or all swordsmen (3/4Bd), 2 x archers (3/4Bw), 1 x archers (Ps).
Terrain Type: Arable. Aggression: 0. Enemies: I/14d, I/14f, I/14g, I/32b, I/32c, I/43a, I/49a. Allies: I/14a.

I/33 VILLANOVAN ITALIAN 1000 BC - 650 BC

This list covers the lowland Italian Iron-Age cultures before the rise of Etruscan and Greek influence. Defence originally rested entirely on a spearmen class with spear, sword and scutum (3Wb); then as social stratification increased around 800 BC adding helmet and bronze pectoral and replacing the wooden scutum with a round bronze-faced shield held by a central grip, and now supplemented by less prosperous unarmoured warriors with mostly headless but fire-hardened wooden javelins, light axe, dagger and scutum. **Reference:** *Greece and Rome at War* P. Connolly.

I/33a Early Villanovan Italian Army 1000-801 BC: 1 x General on horseback (Cv) or in 2-horse 2-crew chariot (LCh), 11 x spearmen (3Wb).
Terrain Type: Arable. Aggression: 1. Enemies: I/14b, I/33a, I/36a, I/36d.

I/33b Later Villanovan Italian Army 800-650 BC: 1 x General on horseback (Cv) or in 2-horse 2-crew chariot (LCh), 1 x cavalry (Cv), 5 x spearmen (4Wb), 4 x javelinmen (3Ax), 1 x mixed archers & slingers (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: I/14b, I/30b, I/30c, I/33b, I/36a, I/36d.

I/34 LATER HEBREW 1000 BC - 586 BC

This list covers the Hebrew states from the accession of David until their final destruction in 586 BC. After the death of Solomon around 925 BC, the kingdom split into the northern kingdom of Israel (capital successively Shechem, then Tirza, then Samaria), which fell to the Assyrians in 722 BC, and the southern kingdom of Judah (capital Jerusalem) which fell to the Babylonians in 586 BC. Gibborim "mighty men" were a hereditary warrior caste descended from David's elite guard armed with spear, javelin and shield and often wearing armour. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Battles of the Bible* C. Herzog & M. Gichon.

I/34a Later Hebrew Army 1000-969 BC: 1 x General in 2-horse 2-crew chariot (LCh), 1 x Gibborim (4Ax), 6 x tribesmen (3Ax), 1 x Philistine mercenaries (Sp) or tribesmen (3Ax), 3 x archers and slingers (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/6a, 1/6b, 1/25a, 1/25b, 1/29b, 1/31a, 1/31b, 1/38, 1/31a.

I/34b Later Hebrew Army 968-800 BC: 1 x General in 2-horse 2-crew chariot (LCh), 1 x 2-horse 2-crew chariot (LCh), 1 x 2-horse 2-crew chariot (LCh) or Gibborim (4Ax), 7 x tribesmen (3Ax), 2 x archers or slingers (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/6a, 1/6b, 1/25a, 1/25b, 1/29b, 1/31a, 1/31b, 1/38. Allies: 1/31b and/or 1/35b and/or 1/34b (Israel & Judah).

I/34c Later Hebrew Army 799-586 BC: 1 x General in 4-horse 3/4-crew chariot (HCh), 1 x 4-horse 3/4-crew chariot (HCh), 1 x Gibborim (4Ax), 7 x tribesmen (3Ax), 2 x archers or slingers (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/6a, 1/6b, 1/25b, 1/29b, 1/31b, 1/38, 1/44a, 1/44b, 1/45, 1/46b, 1/51, 1/53. Allies: 1/29b or 1/35 or 1/38 or 1/46a or 1/46b or 1/53.

I/35 CYPRIOT & PHOENICIAN 1000 BC - 332 BC

This list covers Cyprus until the end of Evagoras' revolt in 380 BC, Phoenician home armies until Alexander's conquest in 332 BC and Phoenician colonial armies until the rise of Carthage from around 550 BC. Cyprus was successively conquered by Mycenaeans, Sea Peoples, Dorian Greeks and Phoenicians. It was tributary successively to Assyria, Egypt and Persia. Evagoras of Salamis was nominally a satrap of Persia, but rebelled when suspected of excessive ambition and fought on for 12 years until political intrigues forced the Persians to compromise. Archaeology at Salamis found the only 4-horse war chariots yet discovered outside China. These each had 2 poles connecting with a single straight yoke. The axle was 2.7m long and the distance from the yoke to the rear of the wheels was 3.3m. Trials with reconstructed chariots show that the practical frontage of 2 and 4 horse chariots was about the same, since the critical dimension for a 90 degree turn is length and the 4 horse chariot was no wider than the length of chariot and team. The horses were buried in horse-hair crested metal chamfrons, breast-plates and an ox-hide frontal "apron". Cypriot spearmen are depicted in jerkin and helmet with a large round shield with pointed boss. Cavalry were similar but lacked shields. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Slingshot* 261.

I/35a Cypriot or Phoenician Army 1000-901 BC: 1 x General in 2-horse 2-crew chariot (LCh), 1 x 2-horse 2-crew chariot (LCh), 6 x spearmen (4Ax), 4 x archers, slingers or javelinmen (Ps).

Terrain Type: Littoral. Aggression: 0. Enemies: 1/29b, 1/30a, 1/31a, 1/35a, 1/36b.

I/35b Cypriot or Phoenician Army 900-666 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x 4-horse 3-crew chariot (HCh), 1 x cavalry (Cv), 6 x spearmen (4Ax), 3 x archers, slingers or javelinmen (Ps).

Terrain Type: Littoral. Aggression: 0. Enemies: 1/7b, 1/25b, 1/29b, 1/30b, 1/30c, 1/31b, 1/36b, 1/45. Allies: 1/30c.

I/35c Cypriot or Phoenician Army 665-490 BC: 1 x General in 4-horse 3-crew chariot (HCh) or on foot as hoplite (Sp), 1 x 4-horse 3-crew chariot (HCh), 1 x cavalry (Cv), 6 x spearmen (4Ax) or hoplites (Sp), 3 x archers, slingers or javelinmen (Ps).

Terrain Type: Littoral. Aggression: 0. Enemies: 1/29b, 1/30c, 1/36b, 1/41b, 1/44a, 1/44b, 1/51, 1/52g, 1/53, 1/60a. Allies: 1/30c or 1/52g.

I/35d Cypriot or Phoenician Army 489-332 BC: 1 x General on horseback (Cv) or on foot as hoplites (Sp), 1 x cavalry (Cv), 7 x spearmen (4Ax) or hoplites (Sp), 2 x archers, slingers or javelinmen (Ps), 1 x bolt-shooters (Art) or hoplites (Sp).

Terrain Type: Littoral. Aggression: 0. Enemies: 1/60a, 1/60c, 1/7, 1/12. Allies: 1/52g or 1/51.

I/36 ITALIAN HILL TRIBES 1000 BC - 124 BC

This list covers various mainland Italian hill peoples until their absorption by Rome in the third Samnite War: the Samnites before the foundation of the Samnite league in 355 BC, the Umbrians before their assimilation to Etruscan culture after 700 BC, the Ligurians until their subjection in 124 BC, and similar people of the large off-shore islands including Sicily and Sardinia. **References:** *Slingshot* 102, 103, 122, *Greece and Rome at War* P. Connolly.

I/36a Samnite, Umbrian, Hernician or Ligurian Armies: 1 x General on foot (3/4Ax) or on horseback (Cv), 10 x javelinmen (3Ax), 1 x skirmishing javelinmen (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/33a, 1/33b, 1/36a, 1/36d, 1/52i, 1/55a, 1/55b, 1/55c, 1/55d, 1/55e, 1/57a, 1/57b, 1/59, 1/8a, 1/8b, 1/8c, 1/10, 1/11, 1/13. Allies: 1/55c.

I/36b Sardinian Army 700-124 BC: 1 x General on foot (3/4Ax) or in 2-horse 2-crew chariot (LCh), 8 x javelinmen (3Ax), 3 x archers (3Bw or Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/35a, 1/35b, 1/35c, 1/61a, 1/61b, 1/32a, 1/33. Allies: 1/35b or 1/35c or 1/32a.

I/36c Sicel Army 480-380 BC: 1 x General on foot (3/4Ax or Sp) or on horseback (Cv), 5 x javelinmen (3Ax) or spearmen (Sp), 5 x javelinmen (3Ax), 1 x skirmishing javelinmen (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/52i, 1/61a, 1/61b, 1/5h, 1/9a. Allies: 1/52i or 1/61b.

I/36d Armies of other Italian Hill Tribes: 1 x General on foot (3/4Ax) or on horseback (Cv), 10 x infantry (3Ax/3Wb), 1 x skirmishing javelinmen (Ps).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** 1/33a, 1/33b, 1/36a, 1/36d, 1/52i, 1/55a, 1/55b, 1/55c, 1/55d, 1/55e, 1/57a, 1/57b, 1/59, 1/8a, 1/8b, 1/8c, 1/10, 1/13. **Allies:** 1/55c.

I/37 MANNAIAN & OTHER TAURUS & ZAGROS HIGHLANDERS 950 BC - 610 BC

This list covers the major Iron Age (mostly non-Iranian) highland states of the Taurus and Zagros mountains, including Mannaia, Zamua, Kummeh, later Nairi lands south of Lake Van, Shubria, Hubushkia, and Musasir. After 710 BC it also covers the independent fragments of Tabal (Kappadokia) and Hilakku (Kilikia) in eastern Asia Minor. Armies were typical mountain javelinmen, with nobles riding horses or chariots. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/37a Taurus or Zagros Highland Army 950-750 BC: 1 x General in 2-horse 2-crew chariot (LCh), 2 x cavalry (Cv), 5 x javelinmen (3Ax), 4 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** 1/5d, 1/25a, 1/25b, 1/37a, 1/39a, 1/39b, 1/41a, 1/42. **Allies:** 1/6b or 1/25a or (1/39a and/or 1/41a).

I/37b Taurus or Zagros Highland Army 749-610 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x cavalry (Cv), 1 x cavalry (Cv/LH), 5 x spearmen (3Ax), 4 x archers (Ps or 3Bw).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** 1/25b, 1/37b, 1/39b, 1/40, 1/41a, 1/41b, 1/42, 1/43a, 1/44a, 1/45, 1/51. **Allies:** (1/39b and/or 1/41a) or (1/43a and/or 1/45 or 1/51).

I/38 LIBYAN EGYPTIAN 946 BC - 712 BC

The successors of Ramesses III were weak rulers and in later years the kingdom split up; with Nubia and the High Priests of Amun forming a separate (later Kushite) kingdom in the south. The northern kingdom was unable to resist large scale Libyan immigration and a Libyan chieftain named Sheshonq made himself pharaoh, founding the second dynasty, first of 3 successive Libyan dynasties. This list covers their armies. Libyan warriors of the Libu and Meshwesh tribes were the mainstay of the army, but native Egyptians also served. Egyptian infantry had changed their old shields for a small round variety. Some (assumed to be guardsmen) wore a linen corslet, were armed with a spear and short sword and were either bare-headed or wore a crested helmet without nose guard or cheek pieces (possibly a variant of the Carian helmet). Unarmoured Egyptian foot with round shields are depicted with javelins or spears. The Shardana royal guard also existed. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/38 Libyan Egyptian Army: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 2 x charioteers (LCh), 1 x Sherden (4Bd) or royal guard (Sp) or cavalry (Cv), 3 x "invincible" Meshwesh (4Wb), 1 x Egyptian infantry (4Ax), 1 x Egyptian archers (4Bw), 2 x Libu, Palestinian or Bedouin javelinmen (Ps), 1 x Nubian or Libu archers (Ps).

Terrain Type: Littoral. **Aggression:** 2. **Enemies:** 1/6a, 1/6b, 1/25b, 1/29b, 1/34b, 1/34c, 1/38, 1/45, 1/46a, 1/46b.

I/39 URARTIAN 880 BC - 585 BC

Urartu, centred in the mountains around Lake Van (in eastern modern Turkey), expanded into Mannaia to become the Kingdom of Van. This made it a dangerous rival to the Assyrians, but it was eventually conquered by the Medes. The Urartians initially used 2-horse 2-crew chariots, but later changed to Assyrian-style 4-horse 3-crew. Military organisation was similar to Assyrian. It initially depended almost entirely on provincial foot spearmen, skirmishing archers and well-regarded cavalry armed with spear and shield. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/39a Urartian Army 880-765 BC: 1 x General (LCh), 1 x provincial cavalry (Cv), 5 x provincial infantry (3Ax), 4 x provincial infantry (3Ax or Ps), 1 x reserves (7Hd).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** 1/25b, 1/31b, 1/37a, 1/40, 1/41a. **Allies:** 1/37a.

I/39b Urartian Army 764-585 BC: 1 x General (HCh), 1 x royal kallapu cavalry (Cv), 1 x provincial kallapu (Cv) or Kimmerian mercenary horse archers (LHf), 3 x royal infantry (4Ax), 5 x provincial foot (3Ax or Ps), 1 x reserves (7 Hd).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** 1/25b, 1/31b, 1/37a, 1/37b, 1/40, 1/41a, 1/41b, 1/45, 1/51. **Allies:** 1/37a and/or 1/37b and/or 1/41a and/or 1/31b or 1/43a).

I/40 PHRYGIAN 851 BC - 676 BC

This list covers the Phrygians (called Mushki by the Assyrians) who under 5 "kings" moved into the vacuum left by the destruction of the Hittite empire and set up a kingdom in west central Asia Minor around 850 BC. It fought the Assyrians until in 709 BC it concluded peace with Sargon II and began paying tribute; and was finally overthrown by the Kimmerians and Urartians. Foot spearmen (possibly leaders) and some horsemen are depicted in striped or chequered, striped stockings, boots and crested helmets. Foot shields are small round and highly decorated. Foot archers wear short sleeved plain tunic, trousers and conical hat. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/40 Phrygian Army: 1 x General in 2 or 4-horse 2-crew chariot (LCh), 1 x 2 or 4-horse 2-crew chariots with javelin-armed crew (LCh), 1 x horsemen with spear or bow (LH) or with helmet, armour and long spear (Cv), 7 x warriors (3Ax), 2 x archers, slingers and javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** 1/25b, 1/30b, 1/30c, 1/31b, 1/37b, 1/39a, 1/39b, 1/43a, 1/45, 1/48, 1/50, 1/51. **Allies:** 1/39a or 1/39b or 1/43a.

I/41 MEDES, ZIRKIRTU, ANDIA & PARSUA 835 BC - 550 BC

This list covers the Medes of northern Iran from their first mention in Assyrian annals until their incorporation into the Persian empire of Cyrus the Great. It also covers other early Iranian states such as Zikirtu, Andia or Parsua. Median dress was a long sleeved tunic, trousers and usually some sort of head covering. An animal skin cloak was sometimes worn over the right shoulder, leaving the left arm free. Parsuans may have substituted a longer tunic for the trousers. The rectangular shields were made by passing lengths of cane through a leather sheet, producing a patterned outer surface. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/41a Medes, Zikirtu, Andia or Parsua Army 835-621 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 4 x cavalry (Cv), 4 x spearmen (3Ax), 3 x archers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/25b, 1/37a, 1/37b, 1/39a, 1/39b, 1/41a, 1/42, 1/43a, 1/45, 1/51. **Allies:** 1/43a and/or 1/51.

I/41b Median Army 620-550 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 3 x cavalry (Cv), 1 x Kaspian or Parikanian horse archers (LH) or Armenians (3Ax) or cavalry (Cv), 3 x spearmen (Sp), 2 x archers (3Bw), 1 x spearmen (Sp) or Parthians (3/4Bw), 1 x Kaspian or Parikanian archers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/35c, 1/37b, 1/39b, 1/41b, 1/43a, 1/44b, 1/50, 1/51, 1/60a. **Allies:** 1/43a or 1/44a or 1/44b.

I/42 NEO-ELAMITE 800 BC - 639 BC

The kingdom of Elam was situated in what later became the Persian provinces of Susa and Anshan and it fought against both Babylon and Assyria. Our knowledge of the Neo-Elamite army comes from Assyrian and Babylonian reliefs. Their archers are always depicted as unarmoured and shieldless, but an Assyrian source refers to "men of the bow and the shield" and to "heavily-armed archers". The kallapani were fast light flat bed carts drawn by 2 or 4 horses or mules carrying up to 3 kneeling or sitting archers swiftly around the battlefield. The only depiction of an Elamite king shows him riding on a 4-horse kallapani cart together with one of his sons (both armed with bows) and a driver. Since it is quite practical to shoot standing or kneeling from a stationary flat bed, it is uncertain whether they ever dismounted. Horse riders rode larger horses than those of the kallapani and were armed with spear as well as bow, but had no armour or shield. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/42 Neo-Elamite Army: 1 x General in 4-horse 3-crew chariot (HCh) or as kallapani (Mtd-3Bw), 2 x kallapani (Mtd-3Bw), 1 x horse riders (LH), 7 x archers (3Bw), 1 x spearmen (3Ax) or archers (3Bw or Ps).

Terrain Type: Hilly. **Aggression:** 2. **Enemies:** 1/21b, 1/25b, 1/37a, 1/37b, 1/41a, 1/43a, 1/44a, 1/45, 1/51. **Allies:** 1/6b or 1/44a.

I/43 KIMMERIAN, SKYTHIAN & EARLY HU 750 BC - 70 AD

This list covers the early horse-archer nations of the Kimmerians from 750 BC until 600 BC, the European Skythians that pursued them into Europe and settled north of the Black Sea from 700 BC until 10 BC, the Asian Skythians such as the Dahae, Saka and Massagetae from 750 BC until 50 AD, and the "Hu" (a general term for the early mounted tribes of the Chinese border such as the Tung-hu) from their first appearance around 400 BC until around 70 AD. All these had large numbers of horse-archers and also sometimes used subject tribesmen in their armies. Nobles wore armour and carried lances, but not always as their primary weapon, so are not always Kn. European Skythian Kn may have fought in wedge formation, so can be as a deeper base with the centre figure further forward. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Armies of the Macedonian and Punic Wars* D. Head.

I/43a Kimmerian or Skythian Army 750 BC-301 BC: 1 x General (Cv or LH), 8 x horse archers (LH), 3 x horse archers (LH) or foot archers or slingers (Ps) or subject tribesmen (7Hd or 3Ax).

Terrain Type: Steppe. **Aggression:** 4. **Enemies:** 1/14d, 1/14e, 1/23b, 1/30c, 1/32c, 1/37b, 1/40, 1/41a, 1/41b, 1/42, 1/43a, 1/43c, 1/44a, 1/45, 1/48, 1/50, 1/51, 1/60a, 1/60c, 1/2, 1/4a, 1/4c, 1/4e, 1/5i, 1/7, 1/12, 1/15, 1/17a, 1/19a, 1/21a, 1/24, 1/25, 1/26. **Allies:** 1/14b or 1/37b or 1/39b or 1/48 or 1/52c or 1/5i.

I/43b Skythian Army 300 BC-19 BC and early Hu Army 400 BC-70 AD: 1 x General (3Kn) or if Hu (Cv), 1 x noble cavalry (LH or 3Kn or if Hu Cv), 8 x horse archers (LH), 2 x horse archers (LH) or foot archers or slingers (Ps) or subject tribesmen (7Hd or 3Ax).

Terrain Type: Steppe. **Aggression:** 4. **Enemies:** 1/43b, 1/43c, 1/48, 1/2, 1/3a, 1/4e, 1/17b, 1/19a, 1/19b, 1/21a, 1/24, 1/25, 1/26, 1/28b, 1/36a, 1/37, 1/38a, 1/41a, 1/41b, 1/46a, 1/46b, 1/48. **Allies:** 1/14b, 1/19d.

I/43c Massagetae Army 550-150 BC: 1 x General (Cv), 1 x noble cavalry on armoured horses (Cv), 7 x horse archers (LH), 2 x archers (3Bw or Ps), 1 x subject tribesmen (3Ax or 7Hd).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** 1/23b, 1/43a, 1/43b, 1/60a, 1/60c, 1/2, 1/7, 1/24, 1/26, 1/36a, 1/37. **Allies:** 1/2.

I/44 NEO-BABYLONIAN 746 BC - 539 BC, 522 BC - 521 BC & 482 BC

This list covers the armies of Babylon from the accession of Nabu-nasir, starting with a period of nominal Assyrian rule, then the creation of the independent Neo-Babylonian empire in 625 BC and its period of dominance until the fall of the city to the Persians in 539 BC; and finally two later revolts against the Persians. Babylonian cavalry in Assyrian reliefs are apparently unarmoured and their horses without felt trappings. After 605 BC, many archer units were fronted by spearmen with long shields like those used by Assyrians, so are represented by double elements with spearmen in front of bowmen and classed as (8Bw). **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/44a Early Neo-Babylonian Army 746-605 BC: 1 x General (HCh), 1 x 4-horse 3-crew chariot (HCh), 2 x cavalry (Cv), 1 x spearman (4Ax), 7 x Chaldean, Aramaean or militia archers (3Bw or Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 1/6a, 1/6b, 1/34c, 1/35c, 1/37b, 1/42, 1/43a, 1/45, 1/51, 1/53. Allies: 1/6b or 1/41a or 1/42.

I/44b Later Neo-Babylonian Army 604-589 BC and 522-482 BC: 1 x General (HCh), 1 x 4-horse 3-crew chariot (HCh), 2 x cavalry (Cv), 4 x archers fronted by spearmen (8Bw), 1 x mercenary hoplites (Sp) or archers (3/4Bw), 1 x levy (3Ax or Ps), 2 x emergency reserve (7Hd) or levy (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 1/6a, 1/6b, 1/34c, 1/35c, 1/50, 1/51, 1/53, 1/60a. Allies: 1/6b.

I/45 NEO-ASSYRIAN EMPIRE 745 BC - 681 BC

This list represents the main Assyrian field army between the reforms of Tiglath-Pileser III and the major changes of the later Sargonids. The large numbers of chariots are confirmed by surviving muster lists. Modern trials have shown that because they can turn 90 degree in their own length, the practical frontage of 2-horse and 4-horse chariot units is the same, but 4-horse chariots presented a solid wall of horseflesh making a more frightening sight and including more fighting men. The armoured spearmen with conical shields depicted after 705 BC are assumed to be the "zuk shepe" guard, those with flat round shields the "kisir sharruti" line or "sab sharri" feudal infantry. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Assyrian Palace Sculptures* P. Collins.

I/45 Neo-Assyrian Imperial Army: 1 x General in 4-horse 3-crew chariot (HCh), 3 x 4-horse 3-crew chariots (HCh), 2 x cavalry (Cv), 1 x zuk shepe (3Bd or 4Ax) or from 704 BC (Sp), 2 x kisir sharruti "infantry of the battle array" (4Ax), 1 x sab sharri feudal spearmen (3Ax), 2 x dikut mati levies (7Hd) or tribal levies with bow or sling (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: 1/6a, 1/6b, 1/29b, 1/34c, 1/35b, 1/37b, 1/38, 1/39b, 1/40, 1/41a, 1/42, 1/43a, 1/44a, 1/46b, 1/50. Allies: 1/6b or 1/29b or 1/31b or 1/34c or 1/35b or 1/37b or 1/38 or 1/40 or 1/41a.

I/46 KUSHITE EGYPTIAN 745 BC - 593 BC

Nubia "Kush" was lost to Egypt about 1080 BC after a civil war between its viceroy and the Libyan-connected high priest of Amun, but its rulers remained devoted to the Egyptian religion. When the Libyan pharaoh Tefnakht invaded south circa 730 BC, the Kushite king Piye counterattacked and made himself Pharaoh of Egypt as far north as Thebes, founding the 25th dynasty. In 712 BC, his successor extended his rule to the whole of Egypt. Wars with Assyria ended in defeat for the Kushites, who were driven out of Egypt in 664 BC, and retreated south to the Sudan, where they founded the kingdom of Meroe around 593 BC. Assyrian reliefs depict charioteers, archers and other infantry carrying pairs of javelins and smallish round shields. Few are armoured, possibly only officers. Nubian royal monuments show many ridden horses. **Reference:** *Armies of the Ancient Near East* N. Stillman & N. Tallis.

I/46a Early Kushite Army 745-728 BC: 1 x General in 2-horse 2-crew chariot (LCh), 1 x 2-horse 2-crew chariots (LCh), 2 x cavalry (Cv), 2 x Kushite javelinmen (3Ax), 4 x archers (Ps or 3Bw), 2 x slingers (Ps).

Terrain Type: Steppe. Aggression: 3. Enemies: 1/38. Allies: 1/38.

I/46b Kushite Egyptian Army 727-664 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x 4-horse 3-crew chariots (HCh), 2 x cavalry (Cv), 1 x Kushite javelinmen (3Ax), 2 x archers (Ps or 3Bw), 2 x Meshwesh Libyan settler militia (Sp), 1 x Libu javelinmen (3Ax) or archers (Ps), 1 x Egyptian spearmen (4Ax), 1 x Egyptian archers (4Bw).

Terrain Type: Littoral. Aggression: 3. Enemies: 1/6a, 1/6b, 1/7b, 1/7c, 1/29b, 1/34c, 1/38, 1/45, 1/51.

I/46c Later Kushite Army 663-593 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x 4-horse 3-crew chariots (HCh), 2 x cavalry (Cv), 2 x Kushite javelinmen (3Ax), 4 x archers (Ps or 3Bw), 2 x slingers (Ps).

Terrain Type: Steppe. Aggression: 3. Enemies: 1/53.

I/47 ILLYRIAN 700 BC - 10 AD

The Illyrians inhabited the lands east of the Adriatic (modern Albania and Yugoslavia). Their most aggressive period was from the creation of a powerful Illyrian state by Bardylis I around 394 BC, until the subjugation of most tribes by the Romans in 148 BC. Illyrian foot were typically tough, clean-shaven, wore a tunic decorated with vertical stripes, a helmet (sometimes crested), were armed with spear, javelins and short curved cutting sword, and carried a shield of moderate size (round and convex for southern tribes, flat and oval for northern). Their few horsemen were javelin skirmishers, initially shieldless. Foot skirmishers used javelins and slings, and possibly bows. Banditry and piracy were respected professions as was mercenary soldiering for other states. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

I/47 Illyrian Army: 1 x General on horseback (LH) or on foot (4Ax), 9 x warriors (3/4Ax), 2 x skirmishers mainly with javelins and slings (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/14c, 1/47, 1/48, 1/52c, 1/52d, 1/52h, 1/54, 1/63, 1/5d, 1/5e, 1/5f, 1/11, 1/12, 1/15, 1/17a, 1/17b, 1/18a, 1/27a, 1/31a, 1/31b, 1/31c, 1/31e, 1/31f, 1/31g, 1/31h, 1/31i, 1/31j, 1/33, 1/35, 1/47g, 1/49, 1/52, 1/56. Allies: 1/63 or 1/9a or 1/33.

I/48 THRACIAN 700 BC - 46 AD

The Thracians were wild tribesmen living north of Greece. Herodotus said they would have conquered the world if they had combined, but they enjoyed fighting each other too much! They are therefore rated low in aggression, but often provided mercenaries for more civilised states. Hill tribes included the Dii, Bessoi and Maidioi; lowland tribes included the Triballoi, Odrisai and Getai. They remained independent for most of the period, but became a Roman client kingdom in 25 BC and a Roman province in 46 AD. Nobles wore armour and charged fiercely on horseback. Others fought as skirmishing light horse, mostly with javelins, but some lowland tribes as horse archers. The majority were foot. Their main weapons were a pair of javelins and a small new crescent-shaped pelta shield, but hill tribes especially could add a long spear or the fearsome shaft-mounted curved-blade rhomphaia. From 350 BC, larger oval wicker shields came into use, but by 250 BC after the Galatian invasions, was superseded by the stronger oval wooden Celtic thureos, painted white or light ochre. Those with long spear, rhomphaia or thureos can be 4Ax. Thracians were typically red-haired, often tattooed and their national dress was a short-sleeved tunic depicted as white, cream, light blue, light green, red, red-brown or patterned, a fox-skin cap (sometimes replaced by a helmet), fawn-skin boots and a long cloak geometrically patterned in bright colours.

Reference: *Armies of the Macedonian and Punic Wars* D. Head.

I/48 Thracian Army: 1 x General (Cv or 3Kn or 4Ax), 3 x horsemen (LH) or peltasts (4Ax), 6 x peltasts (Ps or 3/4Ax), 2 x archers or slingers or "gymnetes" naked stone-throwers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** 1/30c, 1/40, 1/43a, 1/43b, 1/47, 1/48, 1/50, 1/52e, 1/52f, 1/52g, 1/54, 1/60a, 1/63, 1/5b, 1/5i, 1/11, 1/12, 1/15, 1/17a, 1/17b, 1/18a, 1/19a, 1/19b, 1/19c, 1/24, 1/30a, 1/30b, 1/33, 1/35, 1/49, 1/56. **Allies:** 1/51 or 1/56.

I/49 EARLY VIETNAMESE 700 BC - 938 AD

The Dong-Son culture of Bronze-Age Vietnam represents the ancient kingdom of Van-lang and also the kingdom of Au Lac which succeeded it in the third century BC. From 111 BC until Tang authority collapsed, Vietnam was a rebellious Chinese province and then became fiercely independent. Its "Lac lords" and their warriors fought with "boot-shaped" axes, spears, bows and crossbows. Nan-Yueh was a kingdom founded by an ex-Ch'in official based in south China but including Vietnam. It would have introduced the Chinese military methods. War-elephants were first mentioned in connection with a revolt in 248 AD. The hill-tribes (called Lao) differed from the lowland tribes at this period and did not use elephants.

Reference: *The Birth of Vietnam* K.W. Taylor.

I/49a Van-lang or Au Lac Vietnamese Army 700-207 BC: 1 x General (3Wb), 4 x axemen and spearmen (3Wb), 3 x archers (3Bw or 3Cb or Ps), 1 x hill tribesmen (3Ax), 3 x unshielded skirmishing spearmen (Ps).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** 1/32b, 1/32c, 1/49a, 1/4a, 1/4b, 1/4d, 1/4e, 1/29.

I/49b Nan-Yueh Army 206-111 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x ex-Ch'in spearmen (4Ax), 1 x ex-Ch'in dagger-axe or halberd men (4Bd), 2 x ex-Ch'in crossbowmen (4Cb), 3 x axemen and spearmen (3Wb), 2 x archers or crossbowmen (3Bw or 3Cb or Ps), 2 x unshielded skirmishing spearmen (Ps).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** 1/49b, 1/4e, 1/29, 1/41a.

I/49c Early Vietnamese Army 110 BC-247 AD: 1 x General (Cv), 2 x Chinese-style spearmen (4Ax) or halberdiers or swordsmen (4Bd), 2 x Chinese-style crossbowmen or archers (4Cb or Ps), 3 x axemen and spearmen (3Wb), 2 x archers or crossbowmen (3Bw or 3Cb or Ps), 2 x unshielded skirmishing spearmen (Ps).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** 1/49c, 1/41b, 1/63.

I/49d Early Vietnamese Army 248-938 AD: 1 x General (El or Cv or 4Bd), 2 x Chinese-style spearmen (4Ax) or halberdiers or swordsmen (4Bd), 2 x Chinese-style crossbowmen or archers (4Cb or Ps), 3 x axemen and spearmen (3Wb), 2 x archers or crossbowmen (3Bw or 3Cb or Ps), 2 x unshielded skirmishing spearmen (Ps).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** 1/49d, 1/63, 1/79b, 1/79c, 1/79d, 1/20a, 1/20b, 1/20c, 1/23b, 1/33, 1/39. **Allies:** 1/23a or 1/23b.

I/50 LYDIAN 687 BC - 540 BC

This list covers the Lydian kingdom in western Asia Minor (modern Turkey) from the overthrow of the Phrygian Maeonian dynasty in a palace coup by the native Gyges around 687 BC until the defeat of his descendant Croesus by Cyrus the Great in 540 BC and the incorporation of Lydia into the Persian empire. Croesus had successfully expanded his territory to take in most of Asia Minor, when an oracle told him that if he went to war with the Persians "a mighty kingdom will fall", but neglected to mention that it would be his own. The renowned Lydian lancers were allegedly defeated only by a stratagem with camels. The Lydians also used large numbers of mercenary and provincial troops from the surrounding area.

References: *Armies of the Ancient Near East* N. Stillman & N. Tallis, *The Cyropaedia* Xenophon, *The Histories* Herodotus.

I/50 Lydian Army: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (3Kn), 2 x Lydian cavalry (3Kn), 2 x Phrygian or Paphlagonian light horse (LH), 4 x pre-hoplite spearmen (Sp or 4Ax), 3 x javelinmen, archers or slingers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** 1/30c, 1/40, 1/41b, 1/43a, 1/44b, 1/45, 1/48, 1/51, 1/52g, 1/60a, 1/60b. **Allies:** 1/52g.

151 LATER SARGONID ASSYRIAN 680 BC - 609 BC

This list covers the Assyrian army in its final form under Esarhaddon and later successors of Sargon II until the fall of the successor Assyrian kingdom of Harran in 609 BC. The conical shield carried by guardsmen was greatly increased in size and a long pavis-like shield was introduced for spearmen. Some infantry now wore body armour. Unarmoured spearmen continued to carry a smaller flat round shield and are classed as Ax. Some archer units were twinned with the long-shield spearmen, but there is no evidence for combined units. Cavalry now wore body armour and each man now fought with both spear and bow. Horses now had protective textile trappers like those already worn by chariot horses. **References:** *Armies of the Ancient Near East* N. Stillman & N. Tallis, *Assyrian Palace Sculptures* P. Collins.

151 Later Sargonid Assyrian Army: 1 x General in 4-horse chariot (HCh), 1 x 4-horse 4-row chariots (HCh), 2 x armoured cavalry (Cv), 1 x foot guards with large conical shields (Sp), 2 x long-shield spearmen (Sp), 2 x archers (4Bw or Ps), 2 x round-shield unarmoured spearmen (4Ax), 1 x levies (7Hd or Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/6a, 1/6b, 1/29b, 1/34c, 1/35c, 1/37b, 1/39b, 1/40, 1/41a, 1/41b, 1/42, 1/43a, 1/44a, 1/44b, 1/46b, 1/50, 1/53. Allies: 1/6b or 1/29b or 1/37b or 1/41a or 1/42 or 1/43a or 1/53.

152 EARLY HOPLITE GREEK 669 BC - 449 BC

The introduction of the hoplite system is ascribed to Pheidon, tyrant of Argos 680 BC-650 BC, who used it to smash Sparta's army in 669 BC. This created a shock wave that had spread the new system across the Greek-speaking world. The lists cover the hoplite armies of Greek city states until the end of the Persian wars. The system depended on the combination of the "hoplon" (a large strong round wooden shield with bronze rim and sometimes a bronze facing or blazon) or "aspis" ("Argive shield") with a long thrusting spear "doru", bronze body-armour (initially a bronze bell corselet, but from 500 BC a bronze muscled cuirass "thorax" and usually a "Corinthian" helmet that badly restricted both sight and hearing. This combination limited tactical options to moving straight ahead in unison, initially at a run that made the first contact exceptionally violent, then in a shield-pushing scrum. Only Spartans practised drill and discipline to the point where they could occasionally manoeuvre effectively during a battle. Spartans were also unique in wearing a uniform rather than dressing to individual taste. Their tunics and large old-fashioned "himation/tribon" cloaks (probably not worn in battle) were dyed crimson and the army's appearance is described as a mass of crimson and highly polished bronze. Their hair was uncut and if veterans often grey. Their highly-polished bronze shields, like those of other cities, were painted with personal blazons, the red lambda not replacing these until around 420 BC. Most states could also field a limited number of "psiloi" (unarmoured men who skirmished with javelins, bows or slings), and mountain states had access to larger numbers of tough skirmishing hillmen with javelins and often later a small shield "pelta". Only Thebes and Thessaly also provided a limited number of shieldless horsemen. The Greek city states fought incessantly among themselves throughout this period. **References:** *The Western Way of War* V.D. Hanson, *A Storm of Spears - Understanding the Greek Hoplite in Action* C. Matthew, *The Wars of the Ancient Greeks* V.D. Hanson, *The Spartan Way* N. Fields, *Persian Fire* T. Holland, *The Defence of Greece* J.F. Lazenby, *The Rise of the Greeks* M. Grant, *Greece and Rome at War* P. Connolly, *The Histories* Herodotus, *Slingshot* 96, 97, 98, 100, 101, 102, *Killer of Men & Marathon* C. Cameron (novels).

152a Argive Hoplite Army 669-449 BC: 1 x General (Sp), 9 x hoplites (Sp), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/30c, 1/52b, 1/52e, 1/52f.

152b Spartan Hoplite Army 668-449 BC: 1 x General (Sp), 10 x citizen hoplites (Sp), 1 x perioikoi hoplites (Sp) or massed armed helots (7Hd).

Terrain Type: Arable. Aggression: 2. Enemies: 1/7c, 1/52a, 1/52c, 1/52d, 1/52e, 1/52f, 1/60c. Allies: 1/52f and/or 1/52g.

152c Thessalian Hoplite Army 668-449 BC: 1 x General on horseback (Cv) or on foot (Sp), 3 x light horse (LH), 4 x hoplites (Sp), 4 x psiloi (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/47, 1/52b, 1/52d, 1/52h, 1/54. Allies: 1/52e.

152d Theban Hoplite Army 668-449 BC: 1 x General (Sp), 1 x cavalry (Cv), 9 x hoplites (Sp), 1 x psiloi (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/47, 1/52b, 1/52c, 1/52e, 1/52f, 1/52h.

152e Early Athenian Hoplite Army 668-541 BC: 1 x General (Sp), 9 x hoplites (Sp), 2 x psiloi (Ps).

Terrain Type: Arable (since not yet a sea power). Aggression: 2. Enemies: 1/48, 1/52a, 1/52b, 1/52d.

152f Later Athenian Hoplite Army 540-449 BC: 1 x General (Sp), 7 x hoplites (Sp), 1 x Thessalians (Cv or LH) or hoplites (Sp), 1 x Thracians (Ps) or Hoplites (Sp), 1 x archers (Ps or 3Bw), 1 x psiloi or seamen (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/48, 1/52a, 1/52b, 1/52d, 1/53/1/60c.

152g Asiatic Greek Hoplite Army 668-449 BC: 1 x General (Cv), 1 x cavalry (Cv), 9 x hoplites (Sp), 1 x psiloi (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/35c, 1/48, 1/50, 1/52g, 1/60a, 1/60c, 1/62.

152h Aitolian or Akarnanian Army 668-449 BC: 1 x General (Sp), 3 x hoplites (Sp), 8 x psiloi (Ps).

Terrain Type: Hilly. Aggression: 2. Enemies: 1/47, 1/52c, 1/52d, 1/52h, 1/60a.

152i Italiot or Siciliot Hoplite Army 668-449 BC: 1 x General (Cv), 1 x cavalry (Cv or LH), 4 x hoplites (Sp), 4 x Sicels (3Ax) or hoplites (Sp), 2 x psiloi (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: 1/36a, 1/36c, 1/36d, 1/52i, 1/55a, 1/55b, 1/55c, 1/57a, 1/61a. Allies: 1/36c.

152j Any Other Hoplite Army: 1 x General (Cv) or (Sp), 9 x hoplites (Sp), 2 x hoplites (Sp) or psiloi (Ps).

Terrain Type: Arable, Hilly or Littoral. Aggression: 2. Enemies: 1/52j.

I/53 SAITIC EGYPTIAN 664 BC - 335 BC

This list covers the Egyptian Armies from the establishment of the 26th dynasty at Sais until the Persian conquest in 525 BC. It then covers the Athenian expedition to Egypt of 460 BC to 454 BC, the period from the revolt against the Persians in 405 BC until the Persian reconquest in 343 BC and the final unsuccessful revolt in 335 BC. Sais started as an Assyrian client kingdom, but later took over Egypt. The 4-horse chariot had now spread to Egypt. Some foot had round shields and a pair of javelins and horsemen had a pair of javelins but no shield. Spearman had a large shield and a long spear and were considered tough fighters by Xenophon. **Reference:** *Armies of the Ancient Near East* N. Stillman and N. Tallis.

I/53 Saitic Egyptian Army: 1 x General in 4-horse 3-crew chariot (HCh) or on horseback (Cv), 1 x Egyptian light horse (LH), 6 x guard, levy and Greek mercenary hoplite spearmen (Sp), 2 x guard and levy archers (4Bw), 1 x levy (4Ax) or Libyan javelinmen (Ps), 1 x Nubian archers (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** I/6a, I/6b, I/7c, I/29b, I/34c, I/35c, I/44a, I/44b, I/46c, I/51, I/52f, I/56a, I/58, I/60a, I/60c, I/7. **Allies:** I/7c or I/52f or I/56a.

I/54 EARLY MACEDONIAN 650 BC - 355 BC

This list covers the armies of Argead Macedonia from the establishment of the Argead dynasty until the reforms of Philip II. The army relied on its noble cavalry. A coin of Alexander I shows a cavalryman in petasos hat and cloak carrying two very long spears and riding an unarmoured horse. In the 420s, they were described as excellent horsemen and wearing corselets; and at Olynthos in 382 BC they charged aggressively. The infantry were as yet mostly armed with javelins and wicker shields. The elite pezhetai "foot companions" that replaced hoplites from 498 probably became the hypaspists of Philip II, depicted on one monument as unarmoured spearmen with helmets and hoplite shields. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

I/54 Early Macedonian Army: 1 x General (3Kn), 1 x companions (3Kn), 2 x hoplites (Sp) or pezhetai (4Ax) or peasant levies (3Ax), 6 x peasant levies (3Ax), 2 x psiloi (Ps).

Terrain Type: Arable. **Aggression:** 0. **Enemies:** I/47, I/48, I/52c, I/60a, I/63, II/5a, II/5b, II/5d, II/5i. **Allies:** I/47 or II/5b.

I/55 LATIN, EARLY ROMAN, EARLY ETRUSCAN & UMBRIAN 650 BC - 290 BC

This list covers the Italian lowland armies from the end of the Villanovan culture, modified by Etruscan and Greek influence and the building of cities. It includes the Etruscans until the founding of the Etruscan league (list 57) and Rome until the reforms of Servius Tullius around 578 BC (list 59). It also covers other Latin armies (which after 400 BC followed contemporary Roman practice) until the destruction of the Latin League in 338 BC; and Umbrian armies until the end of the third Samnite War in 290 BC. A third to a half of the troops named below as spearmen were hoplites, the remainder with scutum but no corslet being rated as second class. Most evidence for these armies is archaeological. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Gli Eserciti Etruschi* I. Fossati.

I/55a Etruscan Army 650-600 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 2 x cavalry (Cv), 6 x spearmen (Sp), 1 x axemen (4Bd) or spearmen (Sp), 2 x javelinmen, slingers or archers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** I/36a, I/36d, I/52i, I/55a, I/55b, I/55c, I/55d, I/55e.

I/55b Roman Army 650-578 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 8 x spearmen (Sp), 2 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** I/36a, I/36d, I/52i, I/55a, I/55c, I/55d, I/55e, I/57a.

I/55c Latin Army 650-400 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 7 x spearmen (Sp), 1 x spearmen (Sp) or skirmishers (Ps), 2 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** I/36a, I/36d, I/52i, I/55a, I/55b, I/55c, I/57a, I/59. **Allies:** I/36 or I/52i.

I/55d Latin Army 399-338 BC: 1 x General (Cv), 1 x cavalry (Cv), 2 x hastati (4Bd), 4 x principes and triarii (Sp), 4 x leves (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** I/36a, I/36d, I/55a, I/55b, I/55c, I/57b, II/8a, II/8b, II/8c, II/10, II/11, II/13. **Allies:** I/36 or I/52i or II/8b or II/9a or II/11.

I/55e Umbrian Army 650-290 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 2 x spearmen (Sp), 6 x spearmen (3Ax), 2 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** I/36a, I/36d, I/55a, I/55b, I/55c, I/55d, I/57a, I/57b, I/59, II/10, II/11, II/13.

I/56 KYRENEAN GREEK 630 BC - 74 BC

Kyrene was the largest of the Greek colonies in the Cyrenaica region of modern Libya. This list covers Kyrenean armies from the city's foundation until its annexation by Rome. Kyrene was unusual for copying 4-horsed chariots from its Libyan or Egyptian neighbours and for using vehicles to provide fast transport for its hoplites. The simplest way to simulate this is to represent these as chariots whose crew dismount as hoplites. In 322 BC, Kyrene was annexed by Ptolemy of Egypt, but the Macedonian governor he installed soon rebelled and set up as an independent ruler. After 308 BC, Kyrene was loosely attached to Ptolemaic Egypt, but largely independent. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

/56a Early Kyrenean Greek Army 630-314 BC: 1 x General in 4-horse chariot (HCh//Sp) or on horseback (Cv) or on foot (Sp), 3 x hoplites in chariots (HCh//Sp) or on foot (Sp), 5 x hoplites (Sp), 3 x javelinmen, archers or slingers (Ps).
Terrain Type: Littoral. Aggression: 0. Enemies: 1/7c, 1/53, 1/60a, 1/60c, 1/61a, 1/7, 1/12, 1/20a. Allies: 1/7cd or 1/61b.

/56b Later Kyrenean Greek Army 313-74 BC: 1 x General on horseback (3Kn or Cv) or on foot (Sp), 2 x Macedonians (4Pk) or mercenary peltasts (4Ax) or hoplites (Sp), 6 x hoplites (Sp), 3 x javelinmen, archers or slingers (Ps).
Terrain Type: Littoral. Aggression: 0. Enemies: 1/7d, 1/60c, 1/61b, 1/20b, 1/20c, 1/20d. Allies: 1/7c or 1/7d.

/57 ETRUSCAN LEAGUE 600 BC - 280 BC

This list covers Etruscan armies from the founding of the Etruscan League until subjection by Rome. The army may still have had a core of armoured Greek-style hoplites, now supplemented by a larger number of spearmen without body armour but carrying a large oval shield (the scutum). Special units of armoured men with two-handed axes may perhaps have been used to break through an enemy line. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Gli Eserciti Etruschi* I. Fossati.

/57a Etruscan League Army 600-400 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 1 x axemen (4Bd) or spearmen (Sp), 2 x hoplites or spearmen (Sp), 5 x spearmen (Sp), 1 x javelinmen, archers or slingers (Ps), 1 x peasant militia (7Hd) or javelinmen (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/36a, 1/36d, 1/52l, 1/55b, 1/55c, 1/55e, 1/59. Allies: 1/36 or 1/52i or 1/55ce or 1/59 or 1/5g or 1/11.

/57b Etruscan League Army 399-280 BC: 1 x General (Cv), 1 x cavalry (Cv), 2 x axemen (4Bd) or spearmen (Sp), 2 x pilum men (4Bd) or spearmen (Sp), 4 x spearmen (Sp), 1 x javelinmen, archers or slingers (Ps), 1 x peasant militia (7Hd) or javelinmen (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/36a, 1/36d, 1/55d, 1/55e, 1/8a, 1/8b, 1/8c, 1/9a, 1/10, 1/11, 1/13. Allies: 1/36 or 1/55c or 1/55d or 1/55e or 1/5g or 1/11 or 1/13.

/58 MEROITIC KUSHITE 592 BC - 350 AD

Sometime after the Kushite withdrawal from Egypt, Napata (the Kushite capital of Nubia), was destroyed by the Saitic Pharaoh Psamtik II and a new capital was established further south at Meroe. The new kingdom, known to the Greeks as 'Aithiopia' remained under Egyptian cultural influence and was frequently ruled by a Queen Mother with the title 'Candace'. The kingdom was weakened by attacks from the Nobades (list II/55), and was conquered by the Abyssinian kingdom of Axum around 350 AD. Strabo described its army as poorly marshalled and equipped spearmen with large hide shields plus axemen and swordsmen, but Meroitic art depicts archers from the core of the kingdom with axe, sword or spear in addition to their bow. **Reference:** *Meroe: A Civilisation of the Sudan* P.L. Shinnie.

/58 Meroitic Kushite Army: 1 x General (Cv or El or 3/4Bw), 1 x cavalry (Cv) or Meroitic archers (3Bw or 4Bw), 2 x Meroitic archers (3Bw or 4Bw), 5 x tribal spearmen (Sp), 2 x tribal axemen and swordsmen (4Bd), 1 x skin-clad herdsmen with bows (Ps).
Terrain Type: Steppe. Aggression: 1. Enemies: 1/53, 1/60a, 1/20a, 1/20b, 1/20c, 1/20d, 1/55a, 1/55b, 1/56, 1/62a, 1/64b. Allies: 1/55a or 1/55b.

/59 TULLIAN ROMAN 578 BC - 400 BC

This list covers the armies of Rome from the reforms of Servius Tullius until those of Camillus. The equites were centrally equipped, while the militia were unpaid, but organised into centuries by class. The first class (Sp) were equipped as hoplites with body armour and round shields. The second & third classes were also classed as Sp but were unarmoured and carried an oval scutum. The fourth class (Ax) were described as having spear and javelins and probably did not have shields. The fifth class (Ps) were armed with slings and javelins. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Making of the Roman Army* L. Keppie.

/59 Tullian Roman Army: 1 x General on horse (Cv) or on foot as first class (Sp), 1 x equites (Cv), 4 x first class with hoplon (Sp), 3 x second/third class with scutum (Sp), 1 x 4th class with no shields (3Ax), 2 x 5th class with sling or javelins (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/36a, 1/36d, 1/55c, 1/55e, 1/57a, 1/8a, 1/8b, 1/8c. Allies: 1/36 or 1/55c.

I/60 EARLY ACHAEMENID PERSIAN 550 BC - 420 BC

This list covers the Persian armies from Cyrus the Great's defeat of the Medes until the abandonment of sparabara infantry. Sparabara were men with short spear and big rectangular cane shield, used to front archer units, enabling these to better able to survive close combat; and so represented by a double element rank with spearmen in front and archers behind. The elite Immortals can be distinguished by scale instead of textile corselets and possibly by all bowmen also having spears. From 465, sparabara started to be replaced by ordinary archers with axe and crescent-shaped shield. Be warned that Xenophon's *Cyropaedia* has been described as "the first historical novel" and its troop descriptions are often regarded sceptically. However, he had fought a Persian army, there is nothing impossible about them and 1/60th provides fun games for both sides. **References:** *The Achaemenid Persian Army* D. Head, *The Cyropaedia* Xenophon, *Persian Fire* T. Holland, *Shadow of Wings* R.F. Tansell (novel).

I/60a Achaemenid Army 550-547 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 1 x cavalry (Cv or LH), 1 x Immortals (8Bw), 3 x other sparabara (8Bw), 1 x Armenians or similar (3Ax), 2 x archers (3Bw or Ps), 2 x levies (7Hd).

Terrain Type: Arable. Aggression: 3. Enemies: 1/6b, 1/7c, 1/8b, 1/23b, 1/35c, 1/35d, 1/41b, 1/43a, 1/43c, 1/44b, 1/48, 1/50, 1/52g, 1/52h, 1/53, 1/54, 1/56a, 1/58, 1/62, 1/63, II/1, II/2, II/3a. Allies: 1/41b or 1/43a or 1/52d or 1/62.

I/60b Cyrus' Army according to the Cyropaedia 546-540 BC: 1 x General (Cv), 1 x cavalry (Cv), 1 x scythed chariot (SCh), 5 x sparabara (SBw), 1 x mobile tower (WWg), 1 x camelry (Cm), 1 x Armenians or similar (3Ax), 1 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: I/50.

I/60c Achaemenid Army 539-420 BC: 1 x General in 2-horse chariot (LCh) or on horseback (Cv), 1 x cavalry (Cv), 1 x cavalry (Cv or LH), 1 x Immortals (8Bw or 4Bw), 3 x other archers (8Bw or 3/4Bw), 1 x Armenians or similar (3Ax), 1 x Greek hoplites (Sp), 3 x subject levies (7Hd or Ps).

Terrain Type: Arable. Aggression: 3. Enemies: 1/6a, 1/6b, 1/7c, 1/8b, 1/23b, 1/35d, 1/43a, 1/43c, 1/52b, 1/52f, 1/52g, 1/53, 1/56a, 1/56b, II/1, II/2, II/3a, II/5b, II/6. Allies: 1/62.

I/61 EARLY CARTHAGINIAN 550 BC - 275 BC

The city of Carthage started as a colony planted on the North African coast (in modern Tunisia) by a Phoenician rebel Queen (Dido). It grew into a powerful trading state, which would become Rome's most dangerous rival when their colonialist expansions collided in Sicily. This list covers the armies from Mago's institution of a largely mercenary army until the end of the war in Sicily against Pyrrhos of Epiros. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Punic Wars* A. Goldsworthy.

/61a Early Carthaginian Army 350-341 BC: 1 x General on foot (Sp) or on horseback (Cv) or in 4-horse 3-man chariot (HCh), 1 x 4-horse 3-man chariot (HCh), 1 x cavalry (Cv), 4 x citizen and/or African spearmen (Sp), 2 x African spearmen (Sp) or Spanish (4Ax), 1 x Sicels or similar javelinmen (3Ax) or Gauls (4Wb), 2 x skirmishing javelinmen, slingers or archers (Ps).
Terrain Type: Littoral. Aggression: 3. Enemies: 1/7c, 1/36b, 1/36c, 1/52i, 1/56a, 1/5h, 1/9a. Allies: 1/7c or 1/36c or 1/52i or 1/5h.

1/61b Early Carthaginian Army 340-275 BC: 1 x General on foot (Sp) or on horseback (Cv) or in 4-horse 3-man chariot (HCh), 1 x 4-horse 3-man chariot (HCh), 1 x cavalry (Cv), 1 x Numidians (LH) or Spanish (4Ax), 2 x citizen and/or African spearmen (Sp), 2 x African spearmen (Sp), 1 x mercenary hoplites (Sp) or Spanish (4Ax), 1 x Gauls (4Wb) or Sicels (3Ax), 2 x skirmishing javelinmen, slingers or archers (Ps).
Terrain Type: Littoral. Aggression: 3. Enemies: 1/36b, 1/36c, 1/56b, II/5h, II/9a, II/9b, II/27b. Allies: 1/36c or II/5h or II/40.

I/62 LYKIAN 546 BC - 300 BC

This list covers the armies of the Lykian princes from Cyrus' conquest of western Asia Minor until the annexation of Lykia by Peleistarchos after the battle of Ipsos. Lightly-armoured Lykian soldiers of the period are often depicted fighting alongside hoplites who could be mercenaries or also Lykian. The Karaburan tumulus shows an unarmoured foot-soldier with javelin and hoplon. The Tryson heroon (circa 383 BC) shows Lykian infantry with helmet, hoplon shield and a drepanon (a vicious scythe-like sword used one-handed which Herodotus says was a typical Lykian weapon). **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Achaemenid Persian Army* D. Head.

1/62 Lykian Army: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv), 4 x warriors (3/4Ax), 4 x warriors (3/4Ax) or hoplites (Sp), 1 x drepanon warriors (3Ed), 2 x archers or peasants (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: I/52g, I/60a, II/5b, II/12, II/16a, II/16b, II/19a.

163 PAIONIAN 512 BC - 284 BC

This list covers the armies of the Paionian tribes that lived north of ancient Macedonia; from their first contact with the Persians. By the 4th century BC, they had formed a small kingdom. This was usually dominated by its big neighbour; and under Lysimachos and the later Antigonids was formally incorporated into Macedonia. Paionian cavalry fought effectively for Alexander. The only depiction is of a rider in a vertically striped short-sleeved tunic and crested attic helmet, with spear, possibly a sword on a baldric, but no shield; and seated on a large fur or sheepskin saddle cloth extending around the horse's chest. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

163 Paionian Army: 1 x General on horseback (LH) or on foot as hypaspists (3/4Ax), 1 x cavalry (LH), 1 x hypaspists (3/4Ax), 7 x javelinmen (Ps or 3Ax), 2 x slingers or archers (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: 1/47, 1/48, 1/54, 1/60a, II/12, II/17a, II/17b, II/18a, II/18b, II/30a. Allies: 1/47 or II/18c.

164 EARLY JAPANESE 500 BC - 500 AD

This list covers Japanese armies of the Yayoi and early Kofun cultures. The Yayoi were not united and even their most powerful rulers only controlled part of the country - one of the most important of these being Yamatai ruled by the priestess-queen Himiko (183-248 AD). Warriors wore simple clothing and tattoos and their weapons included spears, dagger-axes, swords, wooden bows and slings. The Kofun period saw great increases in the use of iron armour (laced plates in Chinese style or vertical strips in the Korean style), the use of at least some very long (4m) spears and large leather pavis, a few cavalry and the gradual consolidation under an Imperial dynasty based in the Yamato basin. **References:** *The History of Japanese Armor (Vol.1) from the Yayoi to the Muromachi period* Ritta Nakanishi, *Slingshot* 200, 251, 252.

164a Yayoi culture Japanese Army 500 BC-274 AD: 1 x General (3/4Bw or 4Bd or 4Ax), 3 x dagger-axe men (4Bd), 3 x spearmen (4Ax), 5 x archers (3Bw) or slingers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: 1/64a.

164b Kofun culture Japanese Army 275-407 AD: 1 x General (4Bw), 3 x uji noble archers with armour and pavis and their retainers (4Bw), 4 x other retainers (3/4Bw), 2 x levy archers (3Bw), 2 x noble spearmen with armour and pavis and their retainers (Sp/4Pk).

Terrain Type: Hilly. Aggression: 2. Enemies: II/75, II/76, II/77. Allies: II/75.

164c Kofun culture 408-500 AD: 1 x General (4Bw or Cv), 2 x uji noble archers with armour and pavis and their retainers (4Bw), 4 x other retainers (3/4Bw), 2 x levy archers (3Bw), 2 x noble spearmen with armour and pavis and their retainers (Sp/4Pk), 1 x armoured horse archers (Cv) or pacified Emishi (Ps).

Terrain Type: Hilly. Aggression: 2. Enemies: II/75, II/76, II/77. Allies: II/75.

SECTION TWO: THE CLASSICAL PERIOD 500 BC TO 476 AD

II/1 REPUBLICAN INDIAN 500 BC - 321 BC

This list covers the oligarchic republican states of the Indus and Ganges basins (whose main source of income was hiring out mercenary troops) until their incorporation into the Mauryan empire. Instead of elephants, republican (perhaps more accurately oligarchic) armies substituted 4-horse chariots (probably provided and manned by rich citizens, since Alexander used them as hostages) which were each crewed by a driver and 2 archers, the general being recognised by the parasol carried in his chariot. All citizens were nominally of warrior class and expected to fight. The republicans were detested by neighbouring kingdoms, which made alliances unlikely. Most close-fighting foot were armed with javelins, a heavy two-handed sword and a long, narrow, hide shield but a few substituted a massive club for the sword. Archers had the usual long Indian bow. Cavalry were armed with javelins and a small round shield. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *History of Alexander and India* Arrian.

II/1 Republican Indian Army: 1 x General in 4-horse 3-crew chariot (HCh) or on horseback (Cv), 1 x chariots (HCh) or cavalry (Cv) or archers (3/4Lb) or clubmen (3Bd), 2 x cavalry (Cv), 2 x javelinmen (4Ax), 6 x archers (3/4Lb). Terrain Type: Tropical. Aggression: 0. Enemies: I/60a, I/60c, II/1, II/2, II/3a, II/15.

II/2 MOUNTAIN INDIAN 500 BC - 170 BC

This list covers the north-western mountain border tribes of India, such as the Assakenoi and Paropamisadae, from their first appearance until their incorporation into Greek Bactria. Their best troops were javelin-armed light horse, those of the Paropamisadae being brigaded by Alexander with Arachosians. Foot used a long spear or a bow against Alexander's Macedonians, but climbed hills when overmatched and were out-shot by his archers. Indian mercenary guildsmen are described by Diodorus and Nearchos as tough opponents armed with javelins, heavy sword and long narrow hide shield. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *History of Alexander and India* Arrian.

II/2 Mountain Indian Army: 1 x General (LH or El), 2 x light horse (LH), 4 x spearman (3Pk), 2 x archers (Ps), 3 x archers (Ps) or mercenary javelinmen (4Ax). Terrain Type: Hilly. Aggression: 1. Enemies: I/43a, I/43b, I/43c, I/60a, I/60c, II/1, II/2, II/3a, II/15, II/19a, II/19b, II/19c, II/36a, II/36b.

II/3 CLASSICAL INDIAN 500 BC - 545 AD

This list covers the Indus and Ganges basins and Deccan from the development of a more practical view of warfare than that depicted in the Vedas until the fall of the Guptas. Elephant crew sat astride on a padded caparison and consisted of a driver and a single noble archer, accompanied if he was a leader by a parasol or standard bearer. Larger crew mentioned in the Mauryan period may have sat on a fighting platform. Towers were first used and probably invented by Pyrrhos of Epiros. Elephant escorts, although advocated in Indian literature, are not mentioned in Poros' army. Although Indian elephants were defeated at Hydaspes by Alexander's Macedonians, they made a deep impression on his generals, who after his death tried to acquire as many as they could. The large 4-horse 6-crew chariots were mentioned only by Curtius as part of Poros' army and manned by 2 javelin-armed drivers, 2 archers and 2 shield-bearers. Other rulers used 4-horse chariots with a crew of a driver & two archers. 2-horse chariots are also depicted in art. Indian chariots were used as a main combat break-through arm against all types of enemy troops and either preceded or deployed separately from the cavalry. The javelin-armed unarmoured cavalry were used either on the flanks, to pursue broken enemy or to cover a retreat. After 178 AD, chariots were progressively replaced by extra cavalry and by 320 had been entirely replaced by men with lance and bow on armoured horses. The Indian bow was long and shot heavy arrows. Arrian suggests that their power made them difficult to string in muddy conditions and that this affected the result at Hydaspes. Archers and javelinmen carried a heavy two-handed sword for those occasions when they could not avoid close combat. Good infantry were provided by hereditary warriors or mercenaries, which usually had to be supplemented with a massed horde of often similarly armed levies. "Wild tribes" of hillmen or jungle-dwellers could provide skirmishers. A favoured deployment was to have the elephants in the centre, the chariots on their flanks and the cavalry on the wings. Gore Vidal's novel describes two Indian armies meeting frontally on the march, with first the cavalry of both sides colliding, then the chariots coming up and ploughing into them from behind, then the elephants, then the good infantry and finally the levies and camp followers. Because all the commanders are at the front and vast clouds of dust are generated, no deployment or manoeuvre is possible and the confusion continues until both armies are exhausted and night falls. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Ancient Indian Warfare* S.D. Singh, *History of Alexander and India* Arrian (and other histories of Alexander), *The Arthashastra* Kautilya, *Creation* G. Vidal (novel).

II/3a Classical Indian Army 500 BC-178 AD: 1 x General (El), 2 x elephants (El), 2 x 2-horse 2-crew (LCh) or 4-horse 3 or (if Poros) 6-crew chariots (HCh), 2 x cavalry (Cv), 3 x archers (4Lb), 1 x javelinmen (4Ax), 1 x levies (7Hd) or wild tribes archers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: I/43b, I/60a, I/60c, II/1, II/2, II/3a, II/15, II/19a, II/19b, II/19c, II/36a, II/36b, II/37, II/42a, II/42b, II/46b.

II/3b Classical Indian Army 179 AD-545 AD: 1 x General (El), 2 x elephants (El), 2 x 4-horse 3-man chariots (HCh) or cavalry (Cv), 2 x cavalry (Cv), 3 x archers (3Lb), 1 x javelinmen (4Ax) or Bactrian Greek guardsmen (Sp) or Saka horse archers (LH), 1 x levies (7Hd) or wild tribes archers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: II/3b, II/37, II/42a, II/42b, II/46b, II/80c, II/80d.

II/4 WARRING STATES & CH'IN CHINESE 480 BC - 202 BC

This list covers all the armies of the Warring States period up to the victory of Ch'in over its rivals in 221 BC. It also includes the Ch'in Empire from 220 BC until its collapse in 207 BC; and then the wars of succession preceding the Han dynasty in 202 BC. Generals and nobility rode 4-horse heavy chariots, each crewed by a driver, archer and halberdier. Massed conscript infantry were stiffened by armoured elite troops, as shown by the Ch'in terracotta army. Early infantry are depicted carrying very long ji-halberds (basically a long "ko" dagger axe with an added thrusting point) or spears, while archers shoot from behind them. Peasants were said to need little training to use these pole-arms, using horizontal reaping strokes against chariots and vertical hoeing strokes against foot. Troops with these long weapons are classed as Pk. After the mid 4th century, the dominant infantry weapon was the crossbow. The spears and dagger-axes used by close-fighting infantry were now much shorter and often used with shields, so they are classed as Ax or Bd, except in Ch'in armies, where a system of promotion based on enemy heads taken produced fanaticism that justifies Wb. **References:** *Ancient Chinese Armies* C. Peers, *The Art of War* Sun Tzu, *The Perilous Frontier* T.J. Barfield.

II/4a Ch'in Chinese Army 355 BC-221 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x chariots (HCh), 1 x cavalry (Cv), 4 x infantry (4Wb), 3 x crossbowmen (3/4Cb), 1 x archers (Ps) or horse archers (LH), 1 x archers (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: 1/14d, 1/43a, 1/49a, 1/4b, 1/4c, 1/4e, 1/21a, 1/29, 1/38a.

II/4b Yueh Chinese Army 480 BC-333 BC: 1 x General in 4-horse 3-crew chariot (HCh), 4 x ji-halberdiers (3Pk), 2 x crossbowmen (4Cb) or archers (Ps), 2 x ji-halberdiers (3Pk) or southern tribesmen (3Wb), 3 x archers (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 1/49a, 1/4a, 1/4c, 1/4d, 1/4e.

II/4c Chao Chinese Army 307 BC-202 BC: 1 x General in 4-horse 3-crew chariot (HCh) or on horseback (Cv), 1 x 4-horse 3-crew chariots (HCh) or horse archers (LH), 2 x horse archers (LH), 3 x crossbowmen (4Cb), 4 x short dagger-axe (4Bd) or spearmen (4Ax), 1 x archers (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 1/14e, 1/43a, 1/4a, 1/4b, 1/4c, 1/38a.

II/4d Other Chinese Armies 480 BC-356 BC: 1 x General in 4-horse 3-crew chariot (HCh), 1 x 4-horse 3-crew chariot (HCh), 1 x swordsmen (3Bd) or archers (Ps), 4 x ji-halberdiers (3Pk), 1 x crossbowmen (3/4Cb), 2 x ji-halberdiers (3Pk) or southern tribesmen (3Wb), 2 x archers (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 1/14d, 1/49a, 1/4b, 1/4d.

II/4e Other Chinese Armies 355 BC-202 BC: 1 x General in 4-horse 3-crew chariot (HCh) or on horseback (Cv), 1 x chariot 4-horse 3-crew (HCh) or archers (Ps), 1 x cavalry (Cv) or horse archers (LH) or archers (Ps), 2 x crossbowmen (4Cb), 2 x close-fighters (4Ax or 4Bd), 1 x swordsmen or clubmen (3Bd) or archers (Ps), 4 x crossbowmen (3/4Cb) or close-fighters (4Ax or 4Bd) or hasty levies (7Hd) or peasant rebels (5Hd).

Terrain Type: Arable. Aggression: 1. Enemies: 1/43a, 1/43b, 1/49a, 1/49b, 1/4a, 1/4b, 1/4c, 1/4e, 1/21a, 1/38a.

II/5 LATER HOPLITE GREEK 448 BC - 225 BC

This list covers the city state armies of the Greek mainland until they began to replace hoplites by thureophoroi and/or pikemen, also those of Greek colonial offshoot states in Italy (Italiot) and Sicily (Siciliot) until they lost their independence, those of Black Sea colonies and mercenary overseas expeditions. Hoplites continued to depend on the combination of a large strong round shield ("aspis" or "hoplon") with a long thrusting spear "doru". At first shields were painted with personal blazons. Sparta replaced these with a red "lambda" (upside-down V) around 420 BC. Some other cities also started to use uniform shield blazons after 500, the first letter of the city's name, or a Hercules club for Thebes. Athenians still used individual designs and a Gorgon's head was popular. Body armour had changed. Officers and the elite might wear a bronze muscled cuirass "thorax", lesser men wearing a lighter leather or textile "spolas", sometimes reinforced with bronze scales, or just a tunic. Spartans wore an "exomis" that could be adjusted to leave one shoulder bare. Xenophon describes the 10,000 in bronze helmets and greaves and a red tunic, copying the Spartan crimson. Open-faced helmets such as the "Attic" or "Boiotian" forms or a felt "pilos" (especially popular in Sparta) had mostly replaced the "Corinthian" helmet. This made it possible for other states to try to introduce Spartan-type drill, but once in contact, tactics continued to be limited to moving straight ahead in unison, first in a violent charge, then in a scrum pushing shield against shield. The Spartans used very short swords as handier in the press. The Thebans sometimes used especially deep formations (classed as 8Sp). Most states also had a few javelin-throwing armoured cavalry, of which those of Thessaly, Thebes and the Italiots were considered good and Spartan bad. Light infantry became more important and the Spartans felt the lack in the disastrous battle of Sphacteria in 425 BC. Initially they were shieldless psiloi armed with javelin, sling or bow, but the javelinmen were quickly replaced by javelin-armed peltasts (carrying small crescent-shaped "pelta" shields). The mountain states of Aitolia, Phokis and Akarnania relied heavily on light infantry and were hard to beat at home. Spartan skiritai were subjects from neighbouring mountains used as an advance guard or to support cavalry. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Western Way of War* V.D. Hanson, *A Storm of Spears - Understanding the Greek Hoplite in Action* C. Matthew, *The Wars of the Ancient Greeks* V.D. Hanson, *The Spartan Way* N. Fields, *Greece and Rome at War* P. Connolly, *Military Theory & Practice in the Age of Xenophon* J.K. Anderson, *Hellenicas* Xenophon, *Anabasis* Xenophon, *History of the Peloponnesian War* Thucydides, *The Walled Orchard* T. Holt (novel).

II/5a Spartan Army in Greece 448-276 BC: 1 x General (Sp), 9 x hoplites (Sp), 1 x hoplites (Sp) or Skiritai (4Ax or Ps) or archers and slingers (Ps), 1 x hoplites (Sp) or cavalry (Cv).

Terrain Type: Arable. Aggression: 3. Enemies: I/54, II/5b, II/5c, II/5d, II/5i, II/12, II/16b, II/17a, II/17b, II/27b. Allies: II/5b, II/5c, II/5f.

II/5b Athenian Army 448-278 BC: 1 x General (Sp), 1 x cavalry (Cv), 1 x cavalry (LH), 4 x hoplites (Sp), 3 x sailors equipped as peltasts (Ps) or hoplites (Sp), 1 x hoplites (Sp) or peltasts (Ps), 1 x archers (Ps or 3Bw).

Terrain Type: Littoral. Aggression: 2. Enemies: I/48, I/54, I/60c, I/62, II/5a, II/5b, II/5c, II/5d, II/5e, II/5f, II/5h, II/5i, II/5k, II/7, II/9a, II/12, II/15, II/16b, II/17a, II/17b, II/18a, II/18c, II/30a. Allies: I/54, II/5c, II/5d, II/5e, II/5k.

II/5c Theban Army 448-278 BC: 1 x General (8Sp or Sp), 1 x hoplites (8Sp or Sp), 5 x hoplites (Sp), 1 x hoplites (Sp) or peltasts (Ps), 2 x cavalry (Cv), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/5a, II/5b, II/5d, II/5e, II/5f, II/5i, II/12, II/16b, II/30a. Allies: II/5b, II/5d, II/5e, II/5i.

II/5d Thessalian Army 448-320 BC: 1 x General (Cv), 3 x cavalry (all LH or all Cv), 6 x hoplites (Sp), 2 x hoplites (Sp) or peltasts (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: I/47, I/54, II/5a, II/5b, II/5c, II/5d, II/5e, II/5f, II/12, II/15, II/17a, II/17b, II/30a.

II/5e Aitolian (448-279 BC) or Akarnanian (448-225 BC) Army: 1 x General (Sp), 3 x hoplites (Sp), 7 x psiloi (Ps), 1 x light horse (LH) or Psiloi (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: I/47, II/5b, II/5c, II/5d, II/5i, II/15, II/18a, II/18b, II/18c, II/30a, II/33. Allies: II/5d.

II/5f Phokian Army 357-347 BC: 1 x General (Cv), 5 x hoplites (Sp), 3 x peltasts (Ps), 1 x cavalry (Cv) or hoplites (Sp), 1 x stone-throwers (Art) or psiloi (Ps), 1 x psiloi (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/5b, II/5c, II/5d, II/12. Allies: II/5a, II/5b.

II/5g Italiot Army 448-280 BC: 1 x General on foot (Sp) or on horseback (Cv), 1 x cavalry (Cv or LH), 2 x light horse (LH), 7 x hoplites (Sp), 1 x psiloi (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: II/5g, II/5h, II/8a, II/8b, II/9a, II/10, II/13, II/33. Allies: II/5a, II/5g.

II/5h Siciliot Army 448-280 BC: 1 x General on foot (Sp) or on horseback (Cv), 1 x cavalry (Cv), 7 x hoplites (Sp), 3 x psiloi (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: I/36c, I/61a, I/61b, II/5b, II/5g, II/5h, II/9a, II/33.

II/5i Other Hoplite Armies in Greece 448-225 BC: 1 x General (Sp), 1 x cavalry (Cv) or hoplites (Sp), 7 x hoplites (Sp), 2 x hoplites (Sp) or peltasts (3Ax or Ps), 1 x psiloi (Ps).

Terrain Type: Littoral if Rhodian, Arable if not. Aggression: 1. Enemies: I/43a, I/47, I/48, I/54, II/5a, II/5b, II/5c, II/5e, II/5i, II/12, II/15, II/16b, II/18c, II/27a.

II/5j Overseas mercenary expeditions: 1 x General (Sp), 8 x hoplites (Sp), 2 x hoplites (Sp) or peltasts (Ps) or archers and slingers (Ps), 1 x hoplites (Sp) or cavalry (Cv).

Terrain Type: Littoral. Aggression: 4. Enemies: II/6, II/7.

II/5k Spartan overseas expeditions of Brasidas 428-422 BC and Agesilaus 396-394 BC: 1 x General (Sp), 1 x Macedonian [under Brasidas] or Ionian Greek [under Agesilaus] cavalry (Cv), 1 x Thracian [under Brasidas] or Paphlagonian [under Agesilaus] light horse (LH), 4 x hoplites (Sp), 3 x Thracian [under Brasidas] peltasts (Ps) or Paphlagonian foot [under Agesilaus] (3Ax) or hoplites (Sp), 2 x hoplites (Sp) or Thracian [under Brasidas] or Mysian [under Agesilaus] peltasts (Ps).

Terrain Type: Littoral. Aggression: 4. Enemies [Br]: II/5b [Ag]: II/7.

II/5l Black Sea Greeks 410-310 BC: 1 x General (Cv or Sp), 1 x Greek cavalry (Cv), 4 x hoplites (Sp), 2 x hoplites (Sp) or Skythians (LH), 1 x Thracians (3/4Ax) or Skythians (LH), 3 x Sindi or Maotian archers (Ps).

Terrain type: Littoral. Aggression: 0. Enemies: II/5l, II/15, II/25, II/26. Allies: I/43.

II/6 BITHYNIAN 435 BC - 74 BC

The Bithynians were a Thracian people occupying the NW corner of Asia Minor on the Asian side of the Bosphorus. This list runs from their independence from Persia. In 297 BC a local dynast, Zibotes, declared himself king and successive kings increasingly Hellenised the country. They maintained their independence against a succession of powerful and often aggressive neighbours until Nikomedes III was unable to resist Mithridates of Pontus, was rescued by a Roman army and later bequeathed the kingdom to Rome. On his death it became part of the new Roman province of Bithynia et Pontus. The terrain consisted of very fertile valleys separated by forested mountains, the peaks of which were snow capped well into summer. Early foot fought with javelins and there is no evidence for long spears or rhomphaia. Stelae of the second century BC show thureophori and armoured cavalry and one mentions infantry operating with advance cavalry. Persian cavalry helped against the mercenary Ten Thousand commanded by Xenophon fighting to get back home in 400 BC after being on the losing side in a Persian civil war. The Galatians that had rampaged through Greece were first invited into Asia by Nikomedes I of Bithynia in 278 BC to help him in a civil war, later establishing a neighbouring kingdom of their own in the interior. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head, *The Anabasis* Xenophon.

II/6 Bithynian Army: 1 x General (3Kn or Cv or LH), 1 x javelin-throwing horsemen (LH or Cv), 4 x warriors (3Ax), 4 x warriors (3Ax) or thureophori (4Ax), 2 x javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: I/60c, II/5a, II/5i, II/6, II/7, II/12, II/14, II/15, II/16a, II/17a, II/17b, II/30a, II/34, II/48. Allies: II/30a, II/30b.

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II/7 LATER ACHAEMENID PERSIAN 420 BC - 329 BC

This list represents the armies of Achaemenid Persia from the abandonment of sparabara as the main heavy infantry until the final defeats of Darius and Bessos by Alexander. Darius' army is depicted on the Alexander mosaic (reproduced on the cover of DBMM). The "Apple-bearers" royal guard had a spear with a golden apple butt counterweight, a bronze shield with highly polished plain face and a cuirass, and wore red-brown tunic and trousers decorated in white. Some units, especially guards may have been uniformed. Other soldiers dressed individually in usually bright but often pale colours, sometimes embroidered, except that all ranks wore a dark-yellow headdress. Armoured cavalry and most light horse were armed with javelins. None had shields. Bactrian and Saka nobles and some guards rode partly-armoured horses so are (3Kn). Greek mercenary hoplites were extensively used. Other infantry included Kardakes with hoplite shields and infantry with a wicker crescent-shaped pelta and spear who may have been called "takabara". These were backed by good quality skirmishers with bows or slings and masses of subject conscripts. Scythed chariots were a standard part of the army. Armies could be of a local satrap, fighting a civil war or the full force of the empire. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Achaemenid Persian Army* D. Head.

II/7 Later Achaemenid Persian Army: 1 x General in 2-horse 2-crew chariot (LCh) or on horseback (Cv) or 3Kn), 2 x Persian, Median or Bactrian cavalry (Cv), 2 x light horse (LH), 1 x armoured horse cavalry (3Kn) or mercenary hoplites (Sp) or Kardakes (4Ax), 1 x scythed chariot (SCh) or mercenary hoplites (Sp), 1 x archers or slingers (Ps), 3 x kardakes (4Ax) or takabara (3Ax) or mercenary hoplites (Sp) or [in 329 BC] Saka horse archers (LH), 1 x subject conscript masses (7Hd or Ps).
Terrain Type: Arable. Aggression: 1. Enemies: 1/6c, 1/7d, 1/35d, 1/43a, 1/43c, 1/53, 1/56a, II/5a, II/5b, II/5j, II/6, II/7, II/12.

II/8 CAMPANIAN, APULIAN, LUCANIAN & BRUTTIAN 420 BC - 203 BC

This list covers southern Italian armies from the Oscan conquest of Greek Italy until Hannibal's departure at the end of the second Punic War. The heavier foot had javelins, shield, helmet, corslet (unless Apulian rankers) and/or greaves. Cavalry had helmet, javelins, about half corslets; and perhaps from 350 BC shields. The Campanians had a high reputation in the 5th century BC, but only cavalry retained this after a century of soft living. In 340 BC, they became unenfranchised Roman citizens and adopted Roman infantry methods. Some Apulians joined alliances against Rome, first with Pyrrhos of Epirus (II/27) and later with Hannibal (II/32). The Lucanians fought for Hannibal until 206 BC. The Bruttians were his staunchest allies and some accompanied him back to Africa and fought at Zama. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/8a Brutian or Lucanian Armies 420-203 BC: 1 x General (Cv), 9 x warriors (3Ax or 4Ax), 2 x peasants (7Hd) or javelinmen (Ps).
Terrain Type: Hilly. Aggression: 1. Enemies: 1/36a, 1/36d, 1/55d, 1/57b, 1/59, II/5g, II/8a, II/8b, II/8c, II/10, II/13, II/33.
Allies: II/10 or II/32a.

II/8b Campanian Army 420-340 BC: 1 x General (Cv), 1 x cavalry (Cv), 4 x hoplites (Sp), 4 x warriors (3Ax), 2 x javelinmen (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: 1/36a, 1/36d, 1/55d, 1/57b, 1/59, II/5g, II/8a, II/8c, II/10, II/13, II/33.
Allies: II/13 (Samnites).

II/8c Apulian Army 420-206 BC: 1 x General (Cv), 2 x cavalry (Cv), 7 x warriors (3Ax), 2 x javelinmen (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: 1/36a, 1/36d, 1/55d, 1/57b, 1/59, II/8a, II/8b, II/10, II/13, II/33.

II/9 SYRACUSAN 410 BC - 210 BC

This list covers Syracusan armies from the extension of the city's control over the whole of eastern Sicily until the fall of the city to the Romans. Artillery and large warships were invented at Syracuse by engineers employed by Dionysios the Great. Wars were initially against Carthaginians in Sicily, but Agathokles invaded Carthaginian Africa in 310 BC. In one battle, he deployed camp followers outside the camp disguised as hoplites. If these are used, deploy them as Sp elements, but you must exchange them all for 7Hd elements when any first move, are shot at or are contacted by enemy. After Rome replaced Carthage as its main rival in Sicily, Syracuse had brief alliances with Carthage during the first & second Punic Wars. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Arrows of Hercules* L. Sprague de Camp (novel).

II/9a Syracusan Armies in Sicily: 1 x General on horseback (Cv) or on foot (Sp), 6 x hoplites (Sp), 1 x hoplites (Sp) or Gauls (4Wb), 1 x Ligurians or Spaniards (4Ax) or cavalry (Cv), 1 x bolt-shooters (Art) or Sikels (3Ax), 1 x Tarentines (LH), 1 x psiloi (Ps).
Terrain Type: Littoral. Aggression: 2. Enemies: 1/36c, 1/57b, 1/61a, 1/61b, II/5b, II/5g, II/5h, II/27b, II/32a, II/33. Allies: II/32a.

II/9b Syracusan Army in Africa 310-307 BC: 1 x General on horseback (Cv) or on foot (Sp), 6 x hoplites (Sp), 1 x hoplites (Sp) or Gauls (4Wb), 1 x Ligurians or Spaniards (4Ax) or cavalry (Cv), 1 x bolt-shooters (Art) or Sikels (3Ax) or disguised camp followers (7Hd), 1 x Tarentines (LH), 1 x psiloi (Ps).
Terrain Type: Littoral. Aggression: 4. Enemies: 1/61b. Allies: 1/7d and (II/56b or II/40).

II/10 CAMILLAN ROMAN 400 BC - 275 BC

This list covers Roman armies from the reforms of Camillus until the changes made after narrowly defeating the 280 BC invasion of Pyrrhos of Epeiros in aid of the Italiot Greek states. During this period, Rome had stubbornly mastered Italy. Her armies were still citizen levies, but were increasingly kept in the field for long periods and paid while in service. Cavalry fought with spears and small round shields. Each legion usually had shieldless leves skirmishing in front with javelins, followed by hastati with pila, sword and scutum, then by principes with long spear, sword & scutum, and finally by a reserve of veteran triarii armed like the principes. Latin and Campanian allies were now identical to and so included with the Romans. Unassimilated Italian allies should be depicted as Oscans (see II/8). **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Making of the Roman Army* L. Keppie.

II/10 Camillan Roman Army: 1 x General (Cv), 1 x cavalry (Cv), 2 x leves (Ps), 2 x hastati (4Bd), 2 x principes (Sp), 2 x triarii (Sp), 2 x unassimilated Italian allies (3Ax or 4Ax).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** 1/36a, 1/36d, 1/55d, 1/55e, 1/57b, 1/5g, 1/8a, 1/8b, 1/8c, 1/11, 1/13, 1/27b, 1/28b. **Allies:** 1/13.

II/11 GALLIC 400 BC - 50 BC

This list covers the Celts of Gaul and north Italy from the rise of the La Tene culture until the end of Caesar's conquest of Gaul. The Gauls of Italy were feared by the Romans and inflicted crushing defeats on them. Chariots were replaced by cavalry before Caesar's Wars, but important earlier. At Telamon in 225 BC both were used, with the chariots fighting on the flanks of the infantry. This is an army for extroverts who enjoy the sight of flamboyant warriors with long moustaches, lime-stiffened hair, bare chests, tartan trousers, long decorated shields, long cutting swords and javelins whooping into the enemy. They lived in open arable farmland rather than forest and are best represented as 4Wb. That they fought closely packed is suggested by a report of more than one shield being pierced by single pila. An exception were the Gaesati, a community of mercenary infantry based in the Alps. These fought naked with great dash, but proved very vulnerable to the javelins of skirmishers when attempting to hold a hill-top position, so are best represented as 3Wb. However, as cavalry became dominant, warriors without horses and un-stiffened by nobles became less stable and more brittle, so can also be 3Wb. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker.

II/11 Gallic Army: 1 x General in chariot (LCh) or on horseback (Cv) or on foot (3/4Wb), 2 x chariots (LCh) or cavalry (Cv), 2 x cavalry (Cv) or warriors (3/4Wb), 6 x warriors (3/4Wb), 1 x skirmishers with bow, javelin or sling (Ps).

Terrain Type: Arable. **Aggression:** 3 until 225 BC, then Aggression: 0. **Enemies:** 1/14c, 1/47, 1/48, 1/55d, 1/55e, 1/57b, 1/10, 1/11, 1/13, 1/32a, 1/32b, 1/33, 1/39a, 1/39b, 1/39c, 1/47a, 1/47b, 1/47e, 1/47f, 1/47g, 1/49, 1/52. **Allies:** 1/36a (Ligurians) or 1/39a or 1/47b.

II/12 ALEXANDRIAN MACEDONIAN 359 BC - 319 BC

This list covers the armies of Philip II and Alexander the Great from Philip's reforms to Alexander's Skythian campaign of 329 BC and those of the regent Antipatros from 334 BC to 319 BC. It includes the battles of Chaironeia, Granikos, Issos and Gaugamela. Alexander's later armies appear in list II/15. The 3Kn element is the general leading companion lancers armed with the 12 foot xyston, Cv are Thessalian armoured cavalry with spears, LH are prodromoi with lance and Thracians or Paeonians with javelins. None of these used shields. Macedonian "pezetairoi" phalangites were equipped with an 18 foot sarissa held in both hands, a round shield smaller than that of hoplites, helmet and greaves and are classed as Pk. Possibly only officers originally had body armour, others acquiring it from battlefield loot. The hypaspists seem to have been more mobile than the phalangites and are equated with the figures depicted on the Alexander sarcophagus at Sidon with hoplite shield, helmet, greaves and light body armour. They were not yet rearmend with pike, but carried longche (a dual-purpose throwing and thrusting spear), so are classed as 4Ax. The Ps are Agrianian javelinmen, Macedonian or Cretan archers and (possibly Rhodian) slingers. Philip II adopted artillery after a defeat by Phokis in 353 BC and Alexander used bolt-shooters in field battles against Skythians. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Alexander the Great's Campaigns* P. Barker, *Alexander the Great* R. Lane Fox, *Alexander at the World's End* T. Holt (novel).

II/12 Alexandrian Macedonian Army: 1 x General and companions (3Kn), 1 x Thessalians (Cv), 1 x light horse (LH), 1 x hypaspists (4Ax), 6 x phalangites (4Pk), 1 x psiloi (Ps), 1 x Greek hoplites (Sp) or Thracians (3/4Ax) or bolt-shooters (Art).

Terrain Type: Arable. **Aggression:** 4. **Enemies:** 1/6c, 1/35d, 1/43a, 1/47, 1/48, 1/56a, 1/62, 1/63, 1/5a, 1/5b, 1/5c, 1/5d, 1/5f, 1/5i, 1/5l, 1/6, 1/7. **Allies:** 1/5d.

II/13 SAMNITE 355 BC - 272 BC

This list covers the Samnite armies from the foundation of the Samnite League. They fought hard against the Romans in a series of wars between 343 and 272 BC and were the only Italian nation they feared. Their main strength was in swift-moving infantry armed with javelins and a (possibly tapered) scutum and wearing crested helmets, greaves and usually corslet. Unlike other Oscan infantry these were organised in cohorts and commanded by officers. They used the wooded hills of their home territory to great advantage. Where possible, they would surround an enemy force and pelt it with javelins, but would also charge downhill on enemy or block them in a narrow valley. Their first charge was most dangerous as they used a single line without reserves. Although they had fewer cavalry than the Romans and these were armed with javelins, they charged rather than skirmished. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/13 Samnite Army: 1 x General (Cv or 4Ax), 10 x warriors (4Ax), 1 x warriors (4Ax) or skirmishing javelinmen (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** 1/36a, 1/36d, 1/55d, 1/55e, 1/57b, 1/5g, 1/8a, 1/8b, 1/8c, 1/10, 1/11. **Allies:** (1/36a and/or 1/36d and/or 1/8b and/or 1/8c) or (1/55e and/or 1/57b or 1/8b and/or 1/11) or 1/10.

II/14 ARIARATHID KAPPADOKIAN 330 BC - 322 BC & 300 BC - 17 AD

Kappadokia was in central eastern Asia Minor and was famous for its horses, its fruit orchards and its worship of the mother goddess Ma. This list covers Kappadokian armies from the collapse of the Achaemenid Persian monarchy until the defeat of Ariarathes by Perdikkas, one of Alexander the Great's successors. It also covers the armies from the revival under Ariarathes II until incorporation as a Roman province under Tiberius. Mounted nobles wore armour which could include parapleuridia extending coverage to the whole leg and some may have ridden partly-armoured horses, since the nobles of their Armenian neighbours later became cataphracts, and in the Persian army at Gaugamela in 331 BC, they and the Armenians were deployed to balance heavy Massagetai and Bactrians on the opposite flank. They were initially armed in Persian style with javelins, but Eumenes after 321 BC probably gave at least his bodyguard Macedonian-style lances. Light horse used javelins. Herodotus describes the infantry as using short spear, javelins and small shield, but after 280 BC they adopted the Galatian long thureos shield and longer sword. Mercenary hoplites were replaced by Galatians. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/14 Ariarathid Kappadokian Army: 1 x General (3Kn), 1 x cavalry (3Kn), 1 x cavalry (3Kn or Cv), 2 x light horse (LH), 4 x warriors (3Ax), 1 x mercenaries (before 280 BC Sp or from 280 BC 4Wb or 4Ax) or archers (Ps), 2 x archers (Ps).
Terrain Type: Hilly. **Aggression:** 0. **Enemies:** II/6, II/15, II/17a, II/17b, II/19a, II/19b, II/19c, II/19d, II/28a, II/28b, II/30a, II/30b, II/30c, II/33, II/34, II/44, II/48, II/49, II/56. **Allies:** II/28b or II/34.

II/15 ALEXANDRIAN IMPERIAL 328 BC - 321 BC

This list covers the army of Alexander the Great from his invasion of India until its dismemberment after the murder of the regent Perdikkas. The administrative base of his new empire was now Babylon. The prodromoi scouting lancers had disappeared from the sources, probably having been drafted into the Companions together with the pick of the Persians, and had been replaced by Asiatic light horse; while the hypaspists were now pike-armed and had become the "argyraspids" (silver shields). The Thessalian and Greek cavalry had gone home and the Greek infantry used as garrisons for Alexander's newly-founded cities. The elephants surrendered by Poros are not mentioned as being used in battle by Alexander, though they would have been useful for familiarisation and future campaigns. They are described as manned by an Indian mahout with a Macedonian pikeman sitting astride behind him. When Alexander died prematurely, he was planning to attack Carthage. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Alexander the Great's Campaigns* P. Barker, *Alexander the Great* R. Lane Fox, *An Elephant for Aristotle* L. Sprague de Camp (novel), *Alexander at the World's End* T. Holt (novel), *A Choice of Destinies* M. Scott (novel).

II/15 Alexandrian Imperial Army: 1 x General (3Kn), 1 x companions (3Kn), 1 x Asiatic light horse (LH), 6 x argyraspids and phalangites (4Pk), 1 x bolt-shooters (Art) or elephants (El), 1 x Thracians, Illyrians or Agrianians (3/4Ax or Ps), 1 x archers or slingers (Ps).
Terrain Type: Arable. **Aggression:** 4. **Enemies:** I/43a, I/47, I/48, II/1, II/2, II/3a, II/5b, II/5d, II/5e, II/5i, II/6, II/14. **Allies:** II/2 or II/3a.

II/16 ASIATIC EARLY SUCCESSOR 320 BC - 285 BC

This list represents the armies of all the Asian-based successors to Alexander the Great after the murder of the regent Perdikkas in 321 BC except for Ptolemy (in Egypt) and Seleukos (in Persia). The most important of these were Antigonos Monophthalmos "One Eye", his son Demetrios Poliorketes "the Besieger" and Antigonos' great enemy Eumenes. Others' forces ended joining one of the major players' armies, the last to retain any independence being Peithon. Xystophoroi were lancers equivalent to Alexander's companions, but now including Persians; and the heavy cavalry and light horse were of assorted Asiatic types. Since the successors mainly fought each other, to establish credibility the essential backbone of each army was a pike phalanx. This was officered by Macedonians, but those in its ranks were mostly new recruits and not Alexander's veterans. Since the supply of genuine Macedonians was limited in the east, they had to be supplemented with retrained Greek hoplites and peltasts (leading to the disappearance of these in their original roles) and later by Asiatic "pantodapoi". Light troops were all barbarians or Asiatics. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Wars of Alexander's Successors* Vols 1 & 2 B. Bennett & M. Roberts, *Elephants and Castles* A. Duggan (novel), *The Bronze God of Rhodes* L. Sprague de Camp (novel), *Funeral Games* M. Renault (novel).

II/16a Antigonos' Army 320-301 BC: 1 x General (4Pk), 1 x xystophoroi (3Kn), 1 x cavalry (Cv), 1 x light horse (LH), 5 x phalangites (4Pk), 1 x elephants (El), 2 x archers, slingers or javelinmen (Ps).
Terrain Type: Arable. **Aggression:** 3. **Enemies:** I/62, II/6, II/16c, II/16d, II/16e, II/17a, II/17b, II/18a, II/18c, II/19a, II/20a, II/22f.

II/16b Demetrios' Army 315-285 BC: 1 x General (3Kn), 1 x light horse (LH), 6 x phalangites (4Pk), 1 x peltasts (3/4Ax), 2 x Greek ally hoplites (Sp) or [1 x cavalry (Cv) + 1 x elephants (El)], 1 x archers, slingers or javelinmen (Ps) or bolt-shooters or stone-throwers (Art).
Terrain Type: Littoral. **Aggression:** 3. **Enemies:** I/62, II/5a, II/5b, II/5c, II/5i, II/17a, II/17b, II/18c, II/19a, II/20a, II/22a.

II/16c Alketas' Army 320 BC: 1 x General (3Kn), 4 x phalangites (4Pk), 4 x Pisidian peltasts (Ps), 2 x Greek mercenary hoplites (Sp) or peltasts (3/4Ax), 1 x archers or slingers (Ps).
Terrain Type: Arable. **Aggression:** 3. **Enemies:** II/16a, II/16e.

II/16d Eumenes' Army 320-316 BC: 1 x General (3Kn), 1 x cavalry (Cv), 2 x Argyraspids (4Pk), 4 x phalangites (4Pk), 2 x elephants (El), 2 x Persian archers and slingers (Ps).
Terrain Type: Arable. **Aggression:** 2. **Enemies:** II/16a, II/16e, II/18a.

II/16e Peithon's, Peucestas' or other minor Asiatic Successor's Army 320-314 BC: 1 x General (3Kn), 1 x cavalry (Cv), 1 x light horse (LH), 2 x phalangites (4Pk), 2 x phalangites (4Pk) or elephants (El), 2 x hoplites (Sp) or archers (Ps), 2 x peltasts (3/4Ax), 1 x skirmishers (Ps). Terrain Type: Arable. Aggression: 3. Enemies: II/16a, II/16c, II/16d, II/16e.

II/17 LYSIMACHID 320 BC - 281 BC

Lysimachos became governor of Thrace when Alexander died and later seized Macedon and western Asia Minor. The 3Kn could be Macedonian or Thracian nobility and the light horse were javelin-armed Thracians and Paionians. In addition to his phalangites, he had Greek mercenary and coastal city hoplites and many Thracian peltasts. This is the ideal army for a paranoid who thinks his troops hate him, since Lysimachos, although able and respected by all his equals (except Demetrios who hated him) worked very hard at being unpopular. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Wars of Alexander's Successors Vols 1 & 2* B. Bennett & M. Roberts, *Funeal Games* M. Renault (novel).

II/17a Lysimachid Army 320-303 BC: 1 x General (3Kn), 1 x light horse (LH), 2 x phalangites (4Pk), 2 x phalangites (4Pk) or Greek peltasts (3/4Ax), 4 x Thracian peltasts (3/4Ax or Ps), 1 x hoplites (Sp), 1 x archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: I/43a, I/47, I/48, I/63, II/5a, II/5b, II/5d, II/6, II/14, II/16a, II/16b, II/18c, II/19a, II/27a. Allies: I/48.

II/17b Lysimachid Army 302-281 BC: 1 x General (3Kn), 1 x light horse (LH), 1 x elephants (El) or hoplites (Sp), 2 x phalangites (4Pk), 2 x phalangites (4Pk) or Thracian peltasts (3/4Ax or Ps), 4 x Macedonian phalangites (4Pk) or Lykian, Pamphylian or Mysian javelinmen (Ps), 1 x archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: I/43b, I/47, I/48, I/63, II/5a, II/5b, II/5d, II/6, II/14, II/16a, II/16b, II/18c, II/19a, II/27a. Allies: both II/18c & II/19a.

II/18 MACEDONIAN EARLY SUCCESSOR 320 BC - 260 BC

This list represents those early successors of Alexander the Great whose main power base was in Macedonia (so with plentiful supplies of the best phalangites), even if they did not manage to retain it continuously. Antipatros had been Alexander's regent in Macedonia. Polyperchon was nominated by Antipatros to succeed him as regent in Macedonia, but was never generally accepted. He was briefly allied with the dead Alexander's mother Queen Olympias, later with the Aitolian league and ended up as a subordinate of Kassandros. Kassandros was a son of Antipatros who seized control of Athens and was later accepted as King of Macedon. He killed most of Alexander's surviving relatives. When he died in 298 BC, his sons could not hold the kingdom. Ptolemy Keraunos "Thunderbolt" was a son of Ptolemy I but not his heir. He seized Macedon in 280 BC but was killed the next year when he fell off his elephant while fighting the Galatians. The competent Antigonos Gonatas "Knock-knees" (son of Demetrios and grandson of Antigonos "One Eye") became king of Macedon after defeating the Galatians in 277 BC and reigned until 239 BC. The latter part of his reign (after his last elephants died of old age) is covered in list II/35. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Wars of Alexander's Successors Vols 1 & 2* B. Bennett & M. Roberts, *Funeal Games* M. Renault (novel).

II/18a Antipatros' Army 320-319 BC: 1 x General (3Kn), 1 x Greek cavalry (Cv), 6 x Macedonian phalangites (4Pk), 1 x mercenary peltasts (3/4Ax), 1 x elephants (El), 1 x slingers or archers (Ps), 1 x Paionian javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: I/47, I/48, I/63, II/5b, II/5e, II/16a, II/16d, II/18f, II/19a, II/20a.

II/18b Polyperchon's Army 319-310 BC: 1 x General (3Kn), 1 x Greek cavalry (Cv), 6 x Macedonian phalangites (4Pk), 1 x Thessalian cavalry (Cv) or Illyrians (3/4Ax), 1 x elephants (El), 1 x slingers or archers (Ps), 1 x Paionian javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: I/63, II/5e, 18c. Allies: II/5e (Aitolian), II/18f.

II/18c Kassandros' Army 318-298 BC: 1 x General (3Kn), 1 x Greek cavalry (Cv), 4 x phalangites (4Pk), 4 x mercenary peltasts (3/4Ax), 1 x elephants (El) or Greek subject hoplites (Sp), 1 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/5b, II/5e, II/16a, II/16b, II/17a, II/17b, II/18b, II/27a.

II/18d Ptolemy Keraunos' Army 280-279 BC: 1 x General (El), 1 x xystophoroi (3Kn), 1 x Greek cavalry (Cv), 6 x phalangites (4Pk), 2 x mercenary peltasts (3/4Ax), 1 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/20a, II/30a.

II/18e Antigonos Gonatas' Army 277-260 BC: 1 x General (3Kn or Cv), 1 x cavalry (Cv), 4 x phalangites (4Pk), 2 x theurephoroi (4Ax), 2 x Galatians (4Wb) or peltasts (4Ax), 1 x elephants (El), 1 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/27b, II/30a, II/31a. Allies: II/31c and II/31i.

II/18f Queen Olympias' Army 317-316 BC: 1 x General (Lit if Olympias & bodyguard, 4Pk if not), 1 x xystophoroi (3Kn), 6 x phalangites (4Pk), 2 x Epirot foot (3Ax), 1 x elephants (El), 1 x slingers, archers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemy: II/18a. Allies: II/18b.

II/19 SELEUCID 320 BC - 64 BC

This list covers the kingdom of Syria with its capital at Antioch from its foundation by Alexander's general Seleukos until its abolition by Pompey. The language of administration and culture was Greek, the military system Macedonian and the kingdom at first extended from the Mediterranean to the borders of India. The Xystophoroi were mostly converted into cataphracts after war with the Parthians and about half the elite Argyraspid pikemen were replaced by imitation legionaries after a defeat by the Romans. The Asiatic elephant herd was slaughtered by the Romans in 162 BC, but replaced later by smaller African Forest elephants. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Wars of Alexander's Successors Vols 1 & 2* B. Bennett & M. Roberts, *The Seleucid Army: Organisation & Tactics in the Great Campaigns* B. Bar-Kochva, *The Seleucid Army* N. Sekunda, *Funeral Games* M. Renault (novel).

II/19a Seleucid Army 320-280 BC: 1 x General (3Kn), 1 x line cavalry (Cv), 1 x Asiatic light horse (LH), 4 x phalangites (4Pk), 1 x scythed chariot (5Ch) or mercenary peltasts (3/4Ax), 2 x elephants (El), 2 x Asiatic archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/6c, 1/43a, 1/43b, 1/48, 1/62, 1/2, 1/3a, 1/14, 1/16a, 1/16b, 1/17a, 1/17b, 1/18a, 1/20a, 1/22f, 1/23a, 1/28b.

II/19b Seleucid Army 279-205 BC: 1 x General (3Kn), 1 x xystophoroi (3Kn), 4 x phalangites (4Pk), 1 x Thracians (4Ax), 1 x scythed chariot (5Ch) or thureophoroi (4Ax), 1 x elephants (El), 1 x Galatians (4Wb) or levies (7Hd), 2 x Asiatic archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/43b, 1/48, 1/2, 1/3a, 1/14, 1/19b, 1/20a, 1/20b, 1/22a, 1/22f, 1/23a, 1/28b, 1/30a, 1/30b, 1/34, 1/35, 1/36a.

II/19c Seleucid Army 204-167 BC: 1 x General (3/4Kn), 1 x cataphracts (4Kn), 4 x phalangites (4Pk), 1 x elephants (El), 1 x scythed chariot (5Ch), 1 x thureophoroi (4Ax) or Thracians (3Ax), 1 x thureophoroi (4Ax) or Galatians (4Wb), 2 x Asiatic archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/48, 1/14, 1/20b, 1/22a, 1/22f, 1/23a, 1/28b, 1/30b, 1/33, 1/34, 1/35, 1/37, 1/43. Allies: 1/31.

II/19d Seleucid Army 166-64 BC: 1 x General (3/4Kn), 1 x cataphracts (4Kn), 1 x militia cavalry (LH or Cv), 4 x phalangites (4Pk), 1 x imitation legionaries (4Bd), 1 x thureophoroi (4Ax) or small African elephants (El), 1 x militia thureophoroi (4Ax), 2 x Asiatic archers and slingers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: 1/2, 1/3a, 1/14, 1/19d, 1/20c, 1/22a, 1/22d, 1/22e, 1/22f, 1/23a, 1/28a, 1/28b, 1/34, 1/35, 1/37, 1/43, 1/44, 1/50. Allies: 1/37 or 1/43 or 1/50.

II/20 PTOLEMAIC 320 BC - 30 BC

This list covers the armies of Macedonian Egypt from the death of Alexander the Great until the deaths of Cleopatra and Mark Anthony. The kingdom was founded by one of Alexander's generals, who hijacked Alexander's body as it was being taken back to Macedonia and ruled from Alexandria as Ptolemy I, becoming one of the leading contenders in the wars of the Successors. Most succeeding rulers were called Ptolemy or (if female) Cleopatra, who incestuously married and murdered each other. The Cleopatras were prettier, equally ruthless and usually more competent. Since the kingdom was exceptionally wealthy, it was a constant temptation for its neighbours. The army was mostly composed of military settlers and mercenaries. The native Egyptian former warrior class was distrusted, but in emergency provided an extra phalanx. Cretan and Pissidian peltasts were javelin skirmishers with small round shields. Tarentines were Italian-style light horse with javelins and shield. African elephants of the small forest species were tamed when the supply of Indian elephants was blocked by the Seleucids. The navy was well thought-of, but depended on foreign timber requiring interventions abroad to maintain supply. It has been suggested that after Pydna in 168 BC, some troops were equipped as "imitation legionaries" but few contemporary depictions show armour and none show pila or gladius, so they probably depict thureophoroi or (if armoured) thorakitai. Caesar reported that in his day the army largely comprised brigands and ex-pirates from Cilicia and Syria, exiles and runaway slaves, but the Gabinian legionaries left behind by a previous Roman expedition had once been good troops. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Wars of Alexander's Successors Vols 1 & 2* B. Bennett & M. Roberts, *The Ptolemaic Army* N. Sekunda, *Funeral Games* M. Renault (novel), *The Cleopatras* P. Mackie (novel).

II/20a Ptolemaic Army 320-275 BC: 1 x General (3Kn or 4Pk), 1 x xystophoroi (3Kn), 1 x Tarentines (LH), 2 x Macedonian phalangites (4Pk), 3 x Greek mercenary peltasts (3/4Ax), 2 x Greek mercenary peltasts (3/4Ax) or Macedonian phalangites (4Pk), 1 x Indian elephants (El) or phalangites (4Pk) or Thracians (4Ax) or Kilikian javelinmen (Ps), 1 x Cretan archers or Rhodian slingers (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/7d, 1/56a, 1/58, 1/16a, 1/16b, 1/18a, 1/18d, 1/19a, 1/19b.

II/20b Ptolemaic Army 274-167 BC: 1 x General (3Kn), 1 x xystophoroi (3Kn), 1 x Tarentines (LH), 2 x Macedonian phalangites (4Pk), 2 x Egyptian phalangites (4Pk), 2 x mercenary thureophoroi (4Ax), 1 x Galatians (4Wb) or Thracians (4Ax), 1 x African forest elephants (El), 1 x Cretan archers or Rhodian slingers (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/7d, 1/56b, 1/58, 1/19b, 1/19c.

II/20c Ptolemaic Army 166-54 BC: 1 x General (3Kn), 1 x Greek mercenary cavalry (3Kn or Cv), 1 x Tarentines (LH), 2 x Macedonian phalangites (4Pk), 2 x Egyptian phalangites (4Pk), 2 x mercenary thureophoroi (4Ax), 1 x imitation legionaries (4Bd) or thorakitai (4Ax), 1 x African forest elephants (El), 1 x Cretan archers, Rhodian slingers or Pissidian javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/7d, 1/56b, 1/58, 1/19d, 1/49.

II/20d Ptolemaic Army 53-30 BC: 1 x General (3Kn or Cv), 1 x Tarentines (LH), 2 x phalangites (4Pk), 2 x ex-brigands, pirates or similar (3/4Ax), 2 x Gabinian legionaries (4Bd), 1 x Celts (Cv or 4Wb), 2 x Gabinian legionaries (4Bd) or Alexandrian rioters (5Hd), 1 x Cretan or Syrian archers, Rhodian slingers or Pissidian javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: 1/7d, 1/56b, 1/58, 1/20d, 1/49, 1/51.

II/21 CH'ANG & TI CHINESE 315 BC - 550 AD

The Ch'ang were a group of tribes on the hilly western borders of China, stretching from Szechwan and Kansu into Tibet, who were never united and fought both for and against the Han Chinese. The Ti of northern Szechwan (not the same nation as the Ti of 1/14) are often associated with them and may have been related. One Ti group became the kingdom of Cheng-Han in Szechwan (302-347 AD). Another Ti clan set up the Former Ch'in dynasty (351-394 AD [not the same as the Ch'in of II/4] which briefly ruled all northern China. Other Ti and Ch'ang states were Later Ch'in (384-417 AD) and Later Liang (385-403 AD). Ch'ang and Ti fought mostly as infantry and their weaponry was described as "bows, spears, swords, short-knives and armour" but one large army was about a fifth horsemen. The Han recruited Ch'ang cavalry and some Ti cavalry were attested under Former Ch'in, but it is not clear whether these fought as nomad horse archers or in Chinese style. When some Ch'ang invaded Han territory in 111 AD, local Chinese and the Hsiung-nu joined the revolt, and did so again 184-214 AD. The Former Ch'in army included Chinese conscripts, some of whom could be armed with crossbows. **References:** *Soldiers of the Dragon*, C. Peers, *Ancient Chinese Armies* C. Peers, *Imperial Chinese Armies* C. Peers.

II/21a Ch'ang and Ti Chinese Army 315 BC-302 AD: 1 x General on horseback (Cv or LH) or on foot (4Ax), 1 x cavalry (LH or Cv), 2 x armoured tribal infantry (4Ax), 5 x tribal infantry (3Ax), 3 x archers (3Bw or Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: 1/43a, 1/43b, II/4a, II/4d, II/4e, II/21a, II/29, II/38a, II/41a, II/41b, II/61a, II/63. Allies: II/38a

II/21b Ch'ang and Ti Chinese Army 303-550 AD: 1 x General (3Kn), 1 x cavalry (Cv or LH), 2 x armoured tribal infantry (4Ax), 5 x tribal infantry (3Ax), 3 x archers (3Bw or Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: II/21b, II/38b, II/61a, II/61b, II/61c, II/63, II/79a, II/79b.

II/21c Former Ch'in Chinese Army 351-394 AD: 1 x General (3/4Kn), 1 x Chinese cavalry (3Kn), 1 x horse archers (LH), 2 x Chinese spearmen (4Ax) or halberdiers (4Bd), 2 x Chinese crossbowmen (4Cb), 3 x tribal infantry (3Ax), 1 x archers (3Bw or Ps), 1 x archers (Ps).
Terrain Type: Hilly. Aggression: 3. Enemies: II/38b, II/38c, II/61a, II/61b, II/61c, II/79a, II/79b. Allies: II/38b and/or II/61c.

II/22 ARABO-ARAMAEAN 312 BC - 240 AD

This covers most of the Aramaic-speaking Arab-ruled city states of Syria and Mesopotamia which were influenced by their Parthian and Hellenistic neighbours. It includes the Nabataean kingdom (312 BC-106 AD) which defeated Antigonus, Maccabees and Seleucids and fought fiercely against Herod the Great. The kingdom was centred on the rock-cut city of Petra "the rose-red city half as old as time". The majority of Nabataean troops were archers and it seems likely that some of their cavalry were also bow-armed. Several inscriptions refer to "cavalry companions" suggesting Hellenistic style xystophoroi rather than Parthian style cataphracts. Other kingdoms included the Arabayan kingdom of Hatra (150 BC-240 AD), Edessa (150 BC-197 AD), Singara (147 BC-198 AD), Characene/Mesene (127 BC-222 AD), Adiabene (126 BC-115 AD) and Emesa (126 BC-72 AD). Palmyra (260 AD-273 AD) is covered in list II/74. Hatra was defended by an exceptionally powerful force of artillery and the cataphract camels used by the Parthians in 217 AD were probably Hatrene. Swordsmen are depicted in long mail shirts and using a straight sword and long oval shield squared off top and bottom. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/22a Army of Nabataea 250 BC-106 AD: 1 x General (3Kn or Cv), 1 x horse archers (LH), 1 x swordsmen (4Bd) or archers (4Bw), 2 x javelinmen (3Ax or Ps), 6 x archers (3Bw or Ps), 1 x archers (3Bw) or caravan guards (Cm) or scouts (LCm).
Terrain Type: Hilly. Aggression: 0. Enemies: II/19b, II/19c, II/19d, II/22b, II/23a, II/37, II/43, II/50, II/51, II/56, II/59.

II/22b Army of Emesa 51 BC-72 AD: 1 x General (Cv or 4Kn), 2 x horse archers (LH), 1 x guard infantry (4Ax), 2 x javelinmen (3Ax or Ps), 5 x archers (3Bw or Ps), 1 x archers (3Bw) or caravan guards (Cm) or scouts (LCm).
Terrain Type: Dry. Aggression: 0. Enemies: II/22a, II/22e, II/23a, II/37, II/43, II/51, II/56, II/59.

II/22c Army of Hatra 126 BC-240 AD: 1 x General (4Kn), 1 x horse archers (LH), 1 x swordsmen (4Bd), 2 x javelinmen (3Ax or Ps) or horse archers (LH), 6 x archers (3Bw or Ps), 1 x cataphract camels (Cm) or bolt- or stone-throwers (Art).
Terrain Type: Dry. Aggression: 0. Enemies: II/23a, II/37, II/64b, II/69a. Allies: II/37.

II/22d Army of Characene 126 BC-222 AD: 1 x General (4Kn), 1 x horse archers (LH), 1 x swordsmen (4Bd), 2 x javelinmen (3Ax or Ps), 6 x archers (3Bw or Ps), 1 x Arab scouts (LCm).
Terrain Type: Dry. Aggression: 0. Enemies: II/19d, II/23a, II/37, II/64b. Allies: II/23a, II/37.

II/22e Armies of Edessa, Singara or Adiabene from 126 BC: 1 x General (4Kn or Cv), 2 x horse archers (LH), 1 x swordsmen (4Bd), 2 x javelinmen (3Ax or Ps), 5 x archers (3Bw), 1 x archers (3Bw) or caravan guards (Cm).
Terrain Type: Dry. Aggression: 0. Enemies: II/19d, II/22b, II/23a, II/44, II/56, II/69a. Allies: II/37.

II/22f Any Arabo-Aramean Army before 126 BC: 1 x General (Cv), 2 x horse archers (LH), 1 x swordsmen (4Bd), 2 x javelinmen (3Ax or Ps), 5 x archers (3Bw or Ps), 1 x archers (3Bw or Ps) or caravan guards (Cm).
Terrain Type: Dry. Aggression: 0. Enemies: II/16a, II/19a, II/19b, II/19c, II/19d, II/23a, II/37.

II/23 LATER PRE-ISLAMIC ARAB 312 BC - 633 AD

This list covers all the minor independent Arab peoples between the widespread introduction of the horse and the conversion of most Arabians to Islam. It includes wealthy trading centres such as Yathrib (later Medina), Mecca and the cities of Oman, the agricultural kingdoms of the Yemen and powerful desert nomad tribes ruled by dynasties such as the Kinda, Lakhmids and Ghassanids. The Roman collective name for all these peoples was "Saraceni" (people of the tents - although this etymology is disputed). Nomad horsemen are assumed to be unarmoured and to skirmish with light lances for loot and honour. Camels were ridden in battle by men not rich enough to possess horses. Foot warriors fought as individuals but keeping in line. Those from Yemen favoured javelins, but others emphasized the sword, sometimes with bow or spear. The Arab sword was the long straight "saif", not a scimitar, and was used with a round hide shield. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker.

II/23a Nomad Arab Army: 1 x General (LH or Cv), 1 x light horse (LH), 1 x scouts (LCm), 4 x camel-riders (Cm) or swordsmen (4Bd), 2 x swordsmen (4Bd), 1 x swordsmen (4Bd) or archers (3Bw), 1 x archers (3Bw or Ps), 1 x slingers (Ps).
Terrain Type: Dry. Aggression: 3. Enemies: II/19a, II/19b, II/19c, II/19d, II/22a, II/22b, II/22c, II/22d, II/22e, II/22f, II/23a, II/23b, II/23c, II/37, II/49, II/56, II/62a, II/62b, II/69a, II/69b, II/69c, II/74a, II/74b, III/4a, III/4b, III/17, III/25a.
Allies: II/69a or II/69b or II/69c or III/17.

II/23b City Arab Army: 1 x General (Cv), 1 x light horse (LH), 1 x scouts (LCm), 6 x swordsmen (4Bd), 2 x archers (3Bw), 1 x archers (3Bw or Ps).
Terrain Type: Dry. Aggression: 0. Enemies: II/23a, II/23b, III/25a. Allies: II/23a.

II/23c Yemeni Army: 1 x General (Cv), 1 x light horse (LH), 1 x camel riders (LCm) or slingers (Ps), 1 x warriors (4Bd) or javelinmen (3Ax), 7 x javelinmen (3Ax), 1 x archers (3Bw or Ps).
Terrain Type: Dry. Aggression: 0. Enemies: II/23a, II/56, II/62a, II/69a, II/69b, II/69, III/25a. Allies: II/69a or II/69b or II/69c.

II/24 EARLY RHOXOLANI SARMATIAN 310 BC - 100 AD

The Sarmatians were a race of nomadic horsemen from north of the Caspian Sea that moved west, replacing the Skythians. The Roxolani were among the first of the Sarmatian tribes to contact the classical world and were late in converting to armoured lancers. This list covers the early period when all but the richest were lightly armed with a short spear and bow, and were protected only by a mainly rawhide helmet, rawhide scale corslet and wicker shield and rode unprotected horses. Later armies are covered by II/26, and we assume the richest got this equipment earlier. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker.

II/24 Early Roxolani Sarmatian Army: 1 x General (3Kn), 7 x cavalry (Cv), 3 x noble cavalry (3Kn or Cv) or peasant archers (Ps), 1 x cavalry (Cv) or scouts (LH).
Terrain Type: Steppe. Aggression: 3. Enemies: I/43a, I/43b, I/43c, I/48, II/25, II/26, II/37, II/48, II/56. Allies: I/43a or I/43b.

II/25 BOSPORAN 310 BC - 107 BC & 10 BC - 375 AD

This list covers the Bosporan Kingdom of the Black Sea from the civil war of 310 BC until its fall to the Huns, excluding a period of Mithridatic rule after which it joined the Roman sphere. Earlier armies are covered by the Black Sea Greeks list II/51. Mounted nobles started as shieldless Greek cavalry, but changed to Sarmatian-style lancers, but on unarmoured horses. Citizen foot started as hoplites, but changed to thureophoroi, some armoured (thorakitai) and later were equipped as Roman auxilia. Sindi and Maotian farmers mostly fought as archers. A mobile force of bolt-shooters on mule carriages was used effectively against Goths in the 4th century AD. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker, *The Army of the Bosporan Kingdom* M. Mielczarek, *Tyrant series* C. Cameron (novels).

II/25 Bosporan Army: 1 x General (Cv or 3Kn), 2 x citizen hoplites (Sp) or noble lancers (3Kn), 2 x citizens (Sp or 4Ax), 1 x lancers (3Kn) or Skythian horse archers (LH), 2 x Sindi and Maotian javelinmen (Ps) or Skythian horse archers (LH), 2 x Sindi and Maotian archers (3Bw or Ps), 1 x archers or slingers (Ps), 1 x bolt-shooters (Art) or Skythians (LH) or [from 10 BC] Sarmatians (3Kn).
Terrain Type: Littoral. Aggression: 0. Enemies: I/43a, I/43b, II/51, II/24, II/25, II/26, II/48, II/56, II/58, II/67b, II/80d.
Allies: I/43a or II/26 or II/58.

II/26 SIRACAE, IAZYGES & LATER RHOXOLANI SARMATIAN 310 BC - 375 AD

This list covers the Sarmatian sub-groups of the Siracae and the Iazyges from their first contact with the classical world and that of the Roxolani from their change to similar equipment around 100 AD. They were originally nomads but came to rule a population of settled farmers. The Sarmatians are chiefly known for the inaccurate depictions on Trajan's Column showing both riders and horses covered from head to foot with close-fitting scale armour. In reality, they wore a spangenhelm helmet and a long split-skirted coat of rawhide or heat-flattened horn (often horse hoof) scales, with those horses that were armoured wearing a trapper of similar construction covering head, neck and body only. Rawhide is light and tough but susceptible to wet, so was sometimes water-proofed by being lacquered in red or green. Horn could be left natural colour and the effect was described as resembling a pine cone. Only the richest would have iron mail or bronze scale armour. Their primary weapon was a long heavy lance "kontos" wielded with two hands, making a shield impractical. This was backed by a long sword and a bow allegedly weaker than Parthian bows. Tacitus wrote that the Iazyges' sole effective strength was in the formidable charge of their cavalry (who were useless when forced to dismount by bad going), but that they once

offered to raise a mass levy of foot. The Siracae used skirmishing foot archers, but most levies would be farmers with light spear and shield. Scouts armed as light horse archers could be boys or young women. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker.

II/26 Siracae, Iazyges or Later Rhoxolani Sarmatian Army: 1 x General (3Kn), 7 x noble cavalry (3Kn), 1 x scouts (LH) or noble cavalry (3Kn), 3 x noble cavalry (3Kn) or skirmishing archers (Ps) or levied farmers (7Hd).
Terrain Type: Steppe. Aggression: 3. Enemies: I/43a, I/43b, I/43c, II/24, II/25, II/26, II/37, II/47g, II/48, II/52, II/56, II/58, II/64a, II/65b, II/67b, II/70b, II/78b. Allies: II/58 or II/67b or II/72a.

II/27 PYRRHIC 300 BC - 272 BC

This is the army of Pyrrhos of Epeiros, rated by Hannibal as the best general ever, but who after heavy casualties in battles against the Romans was also the origin of the term 'Pyrrhic Victory'. He first fought as a subordinate of Antigonos One Eye, then competed with Demetrius for control of Macedonia. He intervened in Italy to protect Italiote Greek cities against the Romans winning a series of expensive battles, then moved to Sicily and fought Carthaginians. Returning home to pursue his ambitions in Macedonia, he was killed in street fighting by a woman throwing a tile from a roof top. Pyrrhos not only reorganised the Epeiroi infantry into Macedonian-style phalangites, but was probably responsible for the spread of shields among the Hellenistic cavalry, having become familiar in Italy with the use of shields by his Tarentine allies. Shields were not compatible with the long xyston formerly used by this cavalry, which was often held in both hands. Plutarch described him personally using the xyston, but his shield became a trophy after his last battle. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Pyrrhus of Epirus* J. Champion.

II/27a Pyrrhic Army 300-281BC: 1 x General (3Kn), 1 x cavalry (Cv), 6 x phalangites (4Pk), 2 x Aitolian or similar javelinmen (Ps), 2 x archers or slingers (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: I/47, II/5i, II/16b, II/17a, II/17b, II/18c.

II/27b Pyrrhic Army 280-272BC: 1 x General (3Kn or Cv), 1 x Greek or Oscan cavalry (Cv), 1 x Tarentines (LH), 1 x elephants (El), 4 x phalangites (4Pk), 2 x Italiote hoplites (Sp) or Tarentine phalangites (4Pk), 1 x Oscan foot (3/4Ax) or from 275 BC Galatians (4Wb), 1 x archers or slingers (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: I/61b, II/5a, II/9a, II/10, II/18e, II/31c.

II/28 EARLY ARMENIAN & GORDYENE 300 BC - 627 AD

This list covers the mountain kingdom of Armenia in eastern Asia Minor from its foundation as an independent kingdom until Heraklios established full Byzantine control in 627 AD. It also covers the neighbouring state of Gordyene (modern Kurdistan) from coming under Parthian influence around 147 BC until subjection by the Sassanids around 225 AD. After the failure of their attempt at empire under Tigranes the Great, the Armenians survived by playing off their Roman and Parthian or Sassanid Persian neighbours against each other, formalised by their partition into Roman and Sassanid satellite kingdoms in 386 AD. The army consisted of tough mountaineers with theuros and javelins, plus nobles initially equipped as heavily-armoured cataphracts but eventually as fiercely charging lancers on unarmoured horses, supported by bow-armed skirmishers both mounted and on foot. **References:** *Armies and Enemies of Imperial Rome* P. Barker.

II/28a Tigranes' Army 83-69 BC: 1 x General (4Kn), 1 x cataphracts (4Kn), 2 x horse archers (LH), 1 x imitation legionaries (4Bd), 2 x ex-Seleucid phalangites (4Pk), 3 x javelinmen (3Ax), 2 x archers (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: II/14, II/19d, II/28d, II/37, II/44, II/49. Allies: II/28d and/or II/37.

II/28b Other Armenian Army 300 BC-244 AD: 1 x General (4Kn), 1 x cataphracts (4Kn), 4 x horse archers (LH), 4 x javelinmen (3Ax), 2 x archers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: I/43b, II/10, II/14, II/19a, II/19b, II/19c, II/19d, II/28b, II/28d, II/37, II/44, II/49, II/56, II/58, II/64b, II/69a. Allies: II/37 and/or II/58.

II/28c Armenian Army 245-627AD: 1 x General (3Kn), 1 x lancers (3Kn), 4 x horse archers (LH), 4 x javelinmen (3Ax), 2 x archers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: II/28c, II/58, II/64b, II/69a, II/69b, II/69c, II/78b, II/80b, II/80d. Allies: II/80d.

II/28d Gordyene Army 147 BC-225 AD: 1 x General (4Kn), 1 x cataphracts (4Kn), 4 x horse archers (LH), 4 x javelinmen (3Ax), 1 x archers (Ps), 1 x bolt-shooters (Art) or archers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: II/28a, II/28b, II/37, II/69a, II/69b, II/69c.

II/29 TIEN & K'UN-MING CHINESE 295 BC - 45 AD

Tien is the area around a highland lake in the remote southwest of China. Around 295 BC, a rebel Chinese general proclaimed it an independent kingdom, but in 109 BC its ruler submitted peacefully to an army sent by the Han emperor and became a client ruler. It was incorporated as a province in 45 AD. K'un-Ming is a plain, bordered by mountains to the north, with a mild climate and renowned for horse and cattle rearing and cereal growing. Its people were less civilised enemies of the Tien, distinguishable by their long pig-tails. The main sources of information are rich weapon finds in graves and dioramas used to decorate the lids of bronze vessels. They show axemen with a variety of disk, crescent and dagger-bladed axes, some wearing cumbersome armour. Pikemen are depicted with long weapons thrusting two-handed, some with shields. Cavalry (some armoured) carry sword and spear. **References:** *Soldiers of the Dragon*, C. Peers.

II/29 Tien and K'un-ming Chinese Army: 1 x General (Cv), 1 x axemen (4Bd) or light horse (LH) or tribal foot (3Wb), 2 x axemen (4Bd), 6 x pikemen (4Pk), 1 x crossbowmen (3Cb or Ps), 1 x skirmishers with bow or spear (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: I/49a, I/49b, II/4a, II/4d, II/21a, II/29, II/41a, II/41b.

II/30 GALATIAN 280 BC - 25 BC

This list covers the branch of the Celts who went east through the Danubian plains and invaded Greece, causing many upsets before they settled down in central Asia Minor. Pausanias, Justin & Diodorus quote large numbers of both foot and cavalrymen. Some light Celtic chariots initially used were supplemented in 273 BC by captured Seleucid scythed chariots. Galatian foot fought naked in dense bodies, displaying fanatic fervour and indifference to wounds and destroyed several pike armies, but could not cope with skirmishers in difficult terrain or on one occasion with elephants. Their few skirmishers usually supported the cavalry. Fanaticism waned after they were stopped by Pergamon 241-228 BC, but they still fought naked against the Romans in 189 BC. Thessalian and Aenianian nobles joined the invasion of Greece in 279 BC and Pisidian allied contingents assisted in Asia Minor. The tetrarch Diodorus was made king of Galatia by Pompey's settlement of the east and sent troops to aid Roman armies in 50-51 BC and 47 BC. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker, *Celt and Greek* P. B. Ellis.

II/30a Galatian Army 280-274 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on foot (4Wb), 1 x chariots (LCh), 2 x cavalry (Cv), 7 x naked warriors (4Wb), 1 x chariots (LCh) or skirmishers with javelin or bow (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: 1/48, 1/63, 11/5b, 11/5c, 11/5d, 11/5e, 11/6, 11/14, 11/18d, 11/18e, 11/19b. Allies: 1/63.

II/30b Galatian Army 273-65 BC: 1 x General in 2-horse 2-crew chariot (LCh) or on foot (4Bd), 2 x cavalry (Cv), 1 x armoured foot (4Bd) or chariots (LCh) or naked warriors (4Wb), 5 x naked warriors (4Wb), 1 x scythed chariot (5Ch) or naked warriors (4Wb) or skirmishers with javelin or bow (Ps), 2 x naked warriors (4Wb) or Pisidian javelinmen (Ps).

Terrain Type: Arable. Aggression: 4 before 189 BC, then Aggression: 1. Enemies: 1/48, 11/14, 11/19b, 11/19c, 11/33, 11/34, 11/48, 11/49.

II/30c Galatian Army 64-25 BC: 1 x General as armoured cavalryman (Cv), 2 x armoured cavalry (Cv), 2 x imitation legionaries (4Bd), 6 x imitation legionaries (4Bd) or warriors (4Wb), 1 x skirmishers with javelin or bow (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: 11/14, 11/49.

II/31 HELLENISTIC GREEK 278 BC - 146 BC

This list covers the period during which the mainland Greek states progressively abandoned the traditional hoplite; first for thureophoroi using the Celtic long "thureos" shield, but with some skirmishing ability, then for pike phalanxes. It ends when Greece became a Roman province. It includes the Aetolian League, Boiotia from 278 BC, the Achaian League from 251 BC, Sparta from 225 BC until 195 BC, and Elis and a number of minor states on the mainland or in western Asia Minor. Machanidas of Sparta used artillery in a field battle at Mantinea in 207 BC. Psiloi can be armed with javelins, bow or sling. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/31a Boiotian Army 278-246 BC: 1 x General (Cv), 1 x light horse (LH), 8 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/18e, 11/31c, 11/31f, 11/31h, 11/31i, 11/31j. Allies: 11/31j.

II/31b Boiotian Army 245-146 BC: 1 x General (Cv), 1 x light horse (LH), 6 x phalangites (4Pk), 2 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/31c, 11/31d, 11/31e, 11/31f, 11/31g, 11/31h, 11/31i, 11/31j. Allies: 11/31j.

II/31c Spartan Army 278-226 BC: 1 x General (Sp), 5 x citizen hoplites (Sp), 2 x perioikoi hoplites (Sp) or mercenary thureophoroi (4Ax), 1 x cavalry (Cv), 1 x light horse (LH), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/27b, 11/31a, 11/31b, 11/31f, 11/31h, 11/31i, 11/31j. Allies: 11/31j.

II/31d Spartan Army 225-223 BC: 1 x General (4Pk), 1 x phalangites (4Pk), 4 x perioikoi (Sp), 1 x cavalry (Cv), 1 x light horse (LH), 2 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 11/31b, 11/31f, 11/31h, 11/31i, 11/31j. Allies: 11/31j.

II/31e Spartan Army 222-195 BC: 1 x General (4Pk), 5 x phalangites (4Pk), 1 x cavalry (Cv), 1 x light horse (LH), 2 x thureophoroi (4Ax), 1 x psiloi (Ps), 1 x psiloi (Ps) or bolt-shooters (Art).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/31b, 11/31f, 11/31g, 11/31h, 11/31i, 11/31j, 11/35. Allies: 11/31j.

II/31f Achaian Army 251-208 BC: 1 x General (Cv), 1 x light horse (LH), 8 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/31a, 11/31b, 11/31c, 11/31d, 11/31e, 11/31h, 11/31i, 11/31j. Allies: 11/31j.

II/31g Achaian Army 207-146 BC: 1 x General (3Kn), 1 x light horse (LH), 6 x phalangites (4Pk), 2 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/31b, 11/31e, 11/31h, 11/31i, 11/31j, 11/33.

II/31h Athenian Army 278-146 BC: 1 x General (3Kn), 1 x light horse (LH), 4 x hoplites (Sp), 4 x thureophoroi (4Ax), 2 x psiloi (Ps).

Terrain Type: Littoral. Aggression: 0. Enemies: 1/47, 11/31a, 11/31b, 11/31c, 11/31d, 11/31e, 11/31f, 11/31g, 11/31h, 11/31j.

II/31i Eleian Army 278-146 BC: 1 x General (Cv), 1 x light horse (LH), 4 x hoplites (Sp), 2 x thureophoroi (4Ax), 4 x psiloi (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: 1/47, 11/31a, 11/31b, 11/31c, 11/31d, 11/31e, 11/31f, 11/31g, 11/31h, 11/31j, 11/33. Allies: 11/31j, 11/33.

II/31j Aitolian Army 278-146 BC: 1 x General (LH), 1 x light horse (LH), 6 x psiloi (Ps), 4 x thureophoroi (4Ax) or psiloi (Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: 1/47, 11/31a, 11/31b, 11/31c, 11/31d, 11/31e, 11/31f, 11/31g, 11/31h, 11/31i, 11/33, 11/35.

II/32 LATER CARTHAGINIAN 275 BC - 146 BC

This list includes Carthaginian armies from just after the war against Pyrrhos of Epeiros until the destruction of Carthage by the Romans. It covers the first Punic War against the Romans 264-241 BC fought mainly in Sicily, the Mercenary War of 240-237 BC in Africa, conquests in Spain 237-218 BC, the second Punic War against the Romans in Spain 218-206 BC, under Hannibal in Italy 218-206 BC and in Africa 205-202 BC, then the third Punic War against the Romans in Africa 149-146 BC. After Sicily, Poeni (Phoenician-descended citizens) did not fight outside Africa except as officers and the army was largely regular Libyan spearmen and Spanish and Gallic mercenaries. At Cannae in 216 BC, the centre of the Carthaginian front line consisted of Spaniards and Gauls, who were intended to be pushed back so that pursuing Romans could be struck in flank by the Libyan spearmen on the ends of the line. It is unlikely that the Libyans and veterans said to have been rearmed with captured Roman equipment after Hannibal's initial victories in Italy adopted Roman weapons as well as mail armour. All horsemen now used shield and javelins. Cavalry became a mix of Poeni, Spanish, Gauls and Italians. Numidian LH shrank when their ruler changed sides in 205 BC. Spanish foot were mostly scutari with long shields, the rest caetrati with small round shields. At the Trebia in 218 BC, Hannibal's Gallic foot fought under tribal leaders and the next year were accused of bad march discipline and lack of stamina, so are classed as Wb. At Cannae in 216 BC, they were organised in small controllable units and mixed with Spanish and so can alternatively be 4Ax. The elephants Hannibal took to Italy over the Alps quickly died and replacements were infrequent. At Zama in 202 BC, larger numbers of inadequately-trained elephants were used as an expendable front line; and recently recruited Gallic foot supported by Ligurians are said to have attacked with great enthusiasm and to have resented lack of support from the Libyans and Poeni behind, so are classed as Wb. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Punic Wars* A. Goldsworthy, *The First Punic War* J.F. Lazenby, *Hannibal's War* J.F. Lazenby, *Hannibal's Campaigns* T. Bath, *The Second Punic War A Reappraisal* T. Cornell, B. Rankov & P. Sabini.

II/32a Later Carthaginian Army 275-202 BC: 1 x General (Cv), 1 x cavalry (Cv) or elephants (El), 1 x elephants (El) or light horse (LH), 1 x Numidians (LH), 3 x Libyan or Poeni spearmen (Sp), 1 x Spanish scutari or Ligurians (4Ax), 2 x Gauls (4Wb/4Ax) or Spanish scutari (4Ax), 1 x African or Spanish caetrati javelinmen (Ps), 1 x slingers (Ps).
Terrain Type: Littoral. Aggression: 4. Enemies: 1/36b, II/9a, II/11, II/33, II/39a, II/39b, II/39c, II/40. Allies: II/5h or (II/8a and/or II/8b) or II/9a or II/39a or II/39c.

II/32b Later Carthaginian Army 201-146 BC: 1 x General on horseback (Cv) or on foot (Sp), 1 x cavalry (Cv), 1 x Numidians (LH) or Poeni spearmen (Sp), 6 x Poeni spearmen (Sp), 3 x javelinmen (Ps).
Terrain Type: Littoral. Aggression: 1. Enemies: II/11, II/33, II/39a, II/39b, II/39c, II/40.

II/33 POLYBIAN ROMAN 275 BC - 105 BC

This list covers the Roman wars with Carthage, Macedonia and the Seleucids. The change from the Camillian system is dated to the last year of the war against Pyrrhos of Epeiros on the assumption that it was a response to the new problems posed by enemy pikes and elephants. Armies were not permanent, but raised annually by the two consuls if required. Each citizen had an obligation to serve in the army when called upon, so lost armies were replaced at a rate disconcerting to victorious opponents, even if raw legions took time to reach full efficiency. A consular army was normally 2 legions, supported by the same number of allied alae. Each legion should be deployed with the velites skirmishing in front with javelins, then the hastati and principes, each of whom had pilum (a heavy throwing spear capable of penetrating armour or immobilising an enemy's shield), gladius Hispaniensis (an acutely pointed Spanish sword ideal for thrusting past your own shield, but rather longer than the Early Imperial gladius), scutum (a large stout oval shield), bronze helmet and either a mail shirt (if wealthy) or small rectangular breastplate (if not), and at the rear, a reserve of veteran triarii still armed with long spear instead of pilum. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Making of the Roman Army* L. Keppie, *The Complete Roman Army* A. Goldsworthy, *Scipio Africanus: Soldier and Politician* H.H. Scullard.

II/33 Polybian Roman Army: 1 x General (Cv), 1 x equites (Cv), 4 x hastati/principes (4Bd), 2 x hastati/principes (4Bd) or allies (3/4Ax), 2 x triarii (Sp), 2 x velites (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: 1/36b, 1/47, 1/48, II/5e, II/5g, II/5h, II/8a, II/8b, II/8c, II/9a, II/11, II/14, II/19c, II/19d, II/30b, II/31g, II/31i, II/31j, II/32a, II/32b, II/34, II/35, II/39a, II/39b, II/39c, II/40, II/44, II/45a. Allies: II/11 or (II/31) and/or (II/34) or II/39a or II/39b or II/40.

II/34 ATTALID PERGAMENE 263 BC - 129 BC

This list represents the army of the kingdom of Pergamon in south-west Asia Minor from Eumenes I's assumption of independence until the defeat of Aristonicus' revolt after Attalos II bequeathed the kingdom to Rome, to whom the Pergamon had long been a stout ally. The mainly mercenary and light infantry army included cavalry who may still have been Hellenistic-type shieldless lancers, light horse with javelins and shield, Cretan archers and a large number of traditional light-armed peltasts. Citizen militia (possibly equipped as thureophoroi) served in garrisons, but were not relied on in field battles. Despite their reputation as the bulwark of Greece against the Galatians, they often hired Galatians, in 218 BC an entire tribe who were such a nuisance that they were dismissed. A few elderly ex-Seleucid elephants inherited in 189 BC quickly died out, but ex-Seleucid phalangites became a permanent part of the army. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/34 Attalid Pergamene Army: 1 x General (3Kn or Cv), 1 x Hellenistic lancers (3Kn) or Galatian cavalry (Cv), 1 x local light horse (LH), 5 x mercenary peltasts (Ps), 1 x Cretan archers (Ps), 1 x Trallian slingers (Ps), 2 x Mysian javelinmen (Ps or 3Ax) or Galatian foot (4Wb) or citizen militia (4Ax or 7Hd) or ex-Seleucid phalangites (4Pks).
Terrain Type: Hilly. Aggression: 1. Enemies: II/6, II/14, II/19b, II/19c, II/19d, II/30b, II/33, II/35. Allies: II/14 or II/31g.

II/35 LATER MACEDONIAN 260 BC - 148 BC

This list covers the period from the death from old age of the last Macedonian elephants until the incorporation of Macedonia as a Roman province. It includes the defeats by the Romans of Philip V at Kynoskephalai in 197 BC and Perseus at Pydna in 168 BC. Guard infantry included the Agema and more guard pikemen somewhat confusingly called "Peltasts" (possibly derived from the earlier hypaspists). The main part of the infantry were also phalangites, half called Chalkaspides "brazen/bronze shields", the other half called leukaspides "White Shields". Cavalry now had javelins and shield instead of xyston. Supporting foot were Greek thureophoroi, thorakitai, Thracians, Galatian warband and Cretan psiloi. **Reference:** *Armies of the Macedonian and Punic Wars D. Head.*

II/35 Later Macedonian Army: 1 x General (Cv), 1 x Greek or Galatian cavalry (Cv), 1 x Greek or Illyrian javelin-armed light horse (LH), 2 x agema and "peltasts" (4Pk), 2 x brazen shields (4Pk), 2 x white shields (4Pk), 2 x thorakitai or thureophoroi (4Ax) or Akarnanian javelinmen (Ps), 1 x Cretan archers (Ps) or Thracians (4Ax) or Galatians (4Wb).
Terrain Type: Arable. Aggression: 1. Enemies: 1/47, 1/48, 1/19b, 1/19c, 1/19d, 1/31e, 1/31j, 1/33, 1/34. Allies: 1/31f or 1/31g.

II/36 GRAECO-BACTRIAN 250 BC - 130 BC & GRAECO-INDIAN 170 BC - 55 BC

This list covers the Greek states in Bactria and India from Diodotos' revolt against the Seleucids and founding of an independent Bactrian kingdom until the fall of the last Greek state in India. The revolt was after the adoption of thureophoroi and they appear in Bactrian art, so it is likely that colonist foot were so armed. The Greek cavalry adopted bows in response to horse-archers and elephants. A Bactrian-Greek silver dish shows a cavalryman in Iranian dress with cased bow and using a long lance in both hands, while a Graeco-Indian coin shows a king in Greek armour, but carrying a bow and short spear in a quiver. From 150 BC Bactrian-Greek lancers could be cataphracts. **References:** *Armies of the Macedonian and Punic Wars D. Head, The Armies of Bactria V.P. Nikonorov, Slingshot 217.*

II/36a Graeco-Bactrian Army: 1 x General (3Kn), 1 x Arachosians (LH), 1 x Saka horse archers (LH), [1 x Iranian lancers (3Kn), 1 x Iranian lancers (3Kn) or cataphracts (4Kn), 1 x Indian elephants (El), 4 x phalangites (4Pk), 1 x military settlers (3/4Ax), 1 x Cretan or Indian archers (Ps)] or [4 x Iranian lancers (3Kn), 4 x Bactrians (Cv/LH), 1 x Arachosians (LH)].
Terrain Type: Steppe. Aggression: 1. Enemies: 1/43b, 1/43c, 1/2, 1/3a, 1/19b, 1/36a, 1/36b, 1/37, 1/46a. Allies: 1/43b.

II/36b Graeco-Indian Army: 1 x General (Cv), 1 x Indian cavalry (Cv) or Saka horse archers (LH), 4 x phalangites (4Pk), 2 x elephants (El), 2 x Indian archers (3/4Wb), 1 x Indian javelinmen (4Ax), 1 x skirmishing archers (Ps).
Terrain Type: Tropical. Aggression: 1. Enemies: 1/2, 1/3a, 1/36a, 1/36b, 1/46a. Allies: 1/3 and/or 1/46a.

II/37 PARTHIAN 250 BC - 225 AD

This list covers the Parthian armies from the foundation of the Parthian kingdom to the replacement of the Arsacid dynasty by the Sassanid Persians and also the vassal states of Media-Atropatene (147 BC-225 AD), Elymais (147 BC-205 AD) and Persis (141 BC-220 AD). The fully armoured cataphracts were mounted on horses whose head, neck, chest and sides were similarly protected by metal armour and the army's strength lay in the combination of these troops with the light horse archers. The least successful Parthia armies were those using the most cataphracts and the fewest horse archers. The cataphract camels used in 217 AD were probably Hatrene. Foot were only used by the vassal states or in defending cities or in the mountains. **References:** *Armies and Enemies of Imperial Rome P. Barker, Winter Quarters A. Duggan (novel), The Parthian V. Hurley (novel).*

II/37 Parthian Army: 1 x General (4Kn), 1 x cataphracts (4Kn), 1 x cataphracts (4Kn) or horse archers (LH), 2 x cataphracts (4Kn) or horse archers (LH) or vassal state archers (Ps), 1 x cataphracts (4Kn) or horse archers (LH) or Daylami (4Ax), 4 x horse archers (LH), 2 x horse archers (LH) or Hyrkanian mountaineers (3Ax) or city militia (3Wb).
Terrain Type: Steppe until 126 BC, then Arable. Aggression: 2. Enemies: 1/43b, 1/43c, 1/3a, 1/3b, 1/19c, 1/19d, 1/22a, 1/22b, 1/22c, 1/22d, 1/22f, 1/23a, 1/24, 1/26, 1/28a, 1/28b, 1/28d, 1/36a, 1/37, 1/44, 1/46a, 1/46b, 1/48, 1/49, 1/51, 1/56, 1/58, 1/64b, 1/69a. Allies: 1/43b or 1/22c or 1/22e or 1/23a or 1/26 or 1/28b or 1/44.

II/38 HSIUNG-NU or JUAN-JUAN 250 BC - 555 AD

The Hsiung-NU established rule over other nomad tribes in the third century BC. Their empire was weakened by Han Chinese attacks in the second century BC and broke up into northern & southern hordes after a civil war around 50 AD. The northern horde was driven west in 91 AD by the Hsien-pi and may be ancestors of the Huns. The southern horde survived to found several kingdoms on Chinese soil, starting with the Former Chao (304-329 AD). Three clans recombined to form the Juan-juan in 308 AD and their large steppe empire was only conquered by their former Gok Turkish allies in 552-555 AD. Surprisingly, most major battles against the Chinese were fought at home on the steppe. **References:** *Imperial Chinese Armies C. Peers, The Perilous Frontier T.J. Barfield.*

II/38a Hsiung-nu Army 250 BC-303 AD: 1 x General (Cv), 2 x cavalry (Cv), 8 x horse archers (LH), 1 x horse archers (LH) or foot archers (Ps).
Terrain Type: Steppe. Aggression: 2. Enemies: 1/43b, 1/4a, 1/4c, 1/4e, 1/21a, 1/38a, 1/41a, 1/41b, 1/46a, 1/46b, 1/61a, 1/63. Allies: 1/21a and/or 1/41a.

II/38b Southern Hsiung-nu Army 304-439 AD: 1 x General (3Kn), 1 x cataphracts (4Kn), 6 x horse archers (LH), 3 x Ch'iang or Ti tribal infantry (3Ax), 1 x Ch'iang or Ti archers (3Wb or Ps).
Terrain Type: Steppe. Aggression: 2. Enemies: 1/21b, 1/21c, 1/38b, 1/61a, 1/61b, 1/61c, 1/63, 1/79b.

II/38c Juan-juan Army 308-555 AD: 1 x General (Cv), 1 x noble cavalry (Cv), 9 x horse archers (LH), 1 x horse archers (LH) or foot archers (Ps).

Terrain Type: Steppe. Aggression: 2. Enemies: II/21c, II/38c, II/61a, II/61b, II/61c, II/63, II/79a, II/80d, III/8, III/11b. Allies: III/11b.

II/39 ANCIENT SPANISH 240 BC - 20 BC

This list extends from the Carthaginian expansion into Spain until the last Spanish revolt against Roman rule. Usually the foot comprised around two-thirds "long shield" scutarii (Iberian 3/4Ax or Celtiberian 3Bd) and one-third "round shield" caetrati (Ps). The Lusitanian's (in modern Portugal) used only caetrati, but some of these wore armour or greaves, so can be 3Ax. The Celtiberians were more warlike than other tribes and often served as mercenaries. The brilliant disaffected Roman general Sertorius organised the Lusitanians from 80-72 BC as regulars and fought successfully against Sulla and Pompey. He was joined by a larger force of Roman exiles under the treacherous Perperna, but he maintained a separate command and so is treated as an ally. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies and Enemies of Imperial Rome* P. Barker.

II/39a Iberian Army: 1 x General with long-shield cavalry (Cv), 1 x round shield cavalry (LH), 6 x scutarii (3/4Ax), 4 x caetrati (Ps).

Terrain Type: Arable. Aggression: 0. Enemies: II/11, II/32a, II/32b, II/33, II/39b, II/39c, II/47a, II/49.

II/39b Celtiberian Army: 1 x General with long-shield cavalry (Cv), 1 x round shield cavalry (LH), 6 x scutarii (3Bd), 4 x caetrati (Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: II/11, II/32a, II/32b, II/33, II/39a, II/39c, II/47a, II/49.

II/39c Lusitanian Army: 1 x General with long-shield cavalry (Cv), 1 x round shield cavalry (LH), 3 x caetrati (3Ax or Ps), 6 x caetrati (Ps), 1 x Sertorian Roman legionaries (4Bd) or Celtiberian mercenaries (3Bd).

Terrain Type: Hilly. Aggression: 0. Enemies: II/11, II/32a, II/32b, II/33, II/39a, II/39b, II/49. Allies: II/49.

II/40 NUMIDIAN & EARLY MOORISH 215 BC - 24 AD

This list covers the two North African kingdoms of Mauretania (modern Morocco) and Numidia (modern Algeria) from just before the first Roman mission arrived to train King Syphax's Numidian infantry in 213 BC until the suppression of the Numidian deserter Tacfarinas' revolt of 15-24 AD. It can also be used from 309 BC to provide allied contingents. Mauretania retained nominal independence until 44 AD and is covered in list II/57. The strength of their armies lay in superb light horsemen riding without saddle or bridle and armed with javelins and a small shield. They became a valued part of the Roman army until absorbed in the new "Illyrian" cavalry type in the 4th century. At home, the horse were supported by large numbers of similarly armed foot. Small numbers of African elephants were used. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Slingshot* 283.

II/40 Numidian or Early Moorish Army: 1 x General (with Spanish bodyguard Cv, otherwise LH), 4 x horsemen (LH), 4 x javelinmen (Ps), 1 x archers or slingers (Ps) or elephants (El), 2 x Roman-trained regular javelinmen (4Ax) or imitation legionaries (4Bd) or javelinmen (Ps) or horsemen (LH).

Terrain Type: Hilly. Aggression: 1. Enemies: I/7d, II/32a, II/32b, II/33, II/40, II/49, II/56. Allies: II/56.

II/41 HAN CHINESE 202 BC - 189 AD

This list covers the Western (or "Former") Han dynasty from their victory in the civil wars after the fall of Ch'in and the Eastern Han until the warlord Tung Cho effectively seized power. Chariots were abandoned after they failed against the Hsiung-nu. Predominantly mounted forces were often used in the steppe by the Western Han from about 150 BC. Foot were mostly conscripts of doubtful quality, sometimes supplemented by convicts. Some close-fighters carried halberds, while others with spear and shield were thought more suitable in dense vegetation such as reed marsh and bamboo thickets. The Western Han combined halberdiers and crossbowmen. Horse archers were levied from minor states and nomad tribes. The Eastern Han could also call on Hsiung-nu allies. **Reference:** *Imperial Chinese Armies* C. Peers.

II/41a Western Han Army 202 BC-24 AD: 1 x General in 4-horse 3-crew chariot (HCh) or on horseback (Cv), 2 x cavalry with spear, halberd, bow or crossbow (Cv), 1 x light horse with spear or halberd (LH), 3 x horse archers (LH), 4 x crossbowmen sometimes fronted by halberdiers (8Cb or 4Cb) or peasant rebels (5Hd) or horse archers (LH), 1 x spearmen (4Ax) or archers (Ps) or convict labour troops (7Hd) or bolt-shooters or rope-pull small stone-throwers (Art) or cavalry with spear, halberd, bow or crossbow (Cv).

Terrain Type: Arable. Aggression: 3 if no foot included, otherwise 1. Enemies: I/43b, I/49b, II/21a, II/29, II/38a, II/41a, II/46a, II/46b.

II/41b Eastern Han Army 25-189 AD: 1 x General (Cv), 2 x cavalry with spear, halberd, bow or crossbow (Cv), 1 x light horse with spear or halberd (LH), 2 x horse archers (LH), 3 x crossbowmen (4Cb), 2 x halberdiers (4Bd) or spearmen (4Ax), 1 x archers (Ps) or convict labour troops (7Hd) or bolt-shooters or rope-pull small stone-throwers (Art).

Terrain Type: Arable. Aggression: 1. Enemies: I/43b, I/49c, II/21a, II/29, II/38a, II/41b, II/46b, II/61a. Allies: II/38a and/or II/61a.

II/42 TAMIL INDIAN & SINHALESE 175 BC - 1515 AD

This list covers the armies of southern India from the rise of the kingdoms of Cholas, Pandyas, Satiyaputras & Kerelaputras until their final conquest by the major Hindu state of Vijayanagar in 1370 AD. It also includes those of Ceylon (Sri Lanka) until the introduction of firearms. In southern India, elephants were plentiful, but horses were hard to obtain. Cavalry were mediocre and armed with bows or spears. The best foot were Valpera swordsmen in singlet and shorts with small round shields. Villikal archers are described shooting down cavalry. Wild tribes wore skin, grass or bark cloth kilts, put feathers in their hair and were mainly skirmishing archers. Chavers were only loincloths, oiled their bodies, shaved their heads and had a reputation for ferocity. "Left hand troops" in Chola armies of 980-1279 AD were probably conquered vassals. Sinhalese armies had a core of paid regulars, supported by a numerous militia. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *Armies of the Middle Ages* Volume 2 L. Heath.

II/42a Tamil Army 175 BC-300 AD: 1 x General (El), 2 x elephants (El), 1 x cavalry (Cv), 4 x Valpera swordsmen (3Wb), 2 x Villikal archers (3Bw), 2 x wild tribes archers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: II/3a, II/3b, II/42a, II/42c.

II/42b Tamil Army 301-1370 AD: 1 x General (El), 2 x elephants (El), 1 x cavalry (Cv), 3 x Valpera swordsmen (3Bd), 2 x Villikal archers (3Bw), 1 x Chavers (3/4Wb) or "left hand troops" (7Hd), 2 x wild tribes archers (Ps) or "left hand troops" archers (3Bw).

Terrain Type: Tropical. Aggression: 3 if 980-1279AD, otherwise 0. Enemies: II/3b, II/42b, II/42d, III/10a, III/10c, IV/37a. Allies: II/42d or III/10c.

II/42c Sinhalese Army 175 BC-300 AD: 1 x General on elephant (El) or in palanquin (Lit), 1 x elephants (El), 2 x Valpera swordsmen (3Wb), 6 x militia (3Bw), 2 x wild tribes archers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: II/42a, II/42c.

II/42d Sinhalese Army 301-1515 AD: 1 x General on elephant (El) or in palanquin (Lit), 1 x elephants (El), 2 x Valpera swordsmen (3Bd), 6 x militia (3Bw), 2 x wild tribes archers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: II/42b, II/42d, III/9b, III/10c, IV/37a, IV/73.

II/43 MACCABEAN JEWISH 168 BC - 104 BC

This list covers the period from the initial Jewish revolt against the Seleucids until the death of John Hyrcanus. An initial guerrilla phase ended with the recognition of Jonathan in 152 BC as ruler with the power to collect taxes and raise troops. The War Rule section of the Dead Sea Scrolls describe the infantry as forming three large divisions, armed with large shields and 12-foot spears, but who start the battle by advancing in ranks to throw 7 successive volleys of javelins. These are taken as equivalent to Hellenistic thureophoroi (4Ax). References in battle accounts after 149 BC to the "phalanx" may still apply to these or imply partial rearmament with pikes. The section also mentions interpenetrating slingers and describes two types of cavalry. The older men are heavy cavalry (3Kn) who wore body armour, helmets, greaves, a small shield and were armed with a 12-foot spear. The younger men form unarmoured units (LH) with bow or javelin that supported the infantry divisions. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Dead Sea Scrolls in English* G. Vermes, *Battles of the Bible* C. Herzog & M. Gichon, *Slingshot* 228.

II/43 Maccabean Jewish Army: 1 x General (LH or 3Kn), 2 x light horse (LH), 4 x thureophoroi (4Ax) or phalangites (4Pk), 2 x thureophoroi (4Ax), 1 x light horse (LH) or slingers (Ps), 2 x guerrillas with javelins or bow (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: II/19c, II/19d, II/22a, II/22b.

II/44 COMMAGENE 163 BC - 17 AD & 38 AD - 72 AD

This list covers the armies of the kingdom of Commagene in northern Syria from the secession of the Seleucid governor Ptolemaios. Once independent, Commagene initially sided with Parthia, but later became a client-state of Rome. It was annexed by the Romans under Tiberius in 17 AD, then was restored by Caligula in 38 AD only to be finally absorbed under Vespasian in 72 AD. The troops called hoplitai were actually pike-armed Seleucid-style phalangites. From 80 BC, they were replaced by imitation legionaries. However, during the Jewish revolt against the Romans 68-72 AD, Antiochus IV led his recreated Macedonian-style bodyguard personally to help the Romans, so enough phalangites have to be available for this. **Reference:** *Armies of the Macedonian and Punic Wars* D. Head.

II/44 Commagene Army: 1 x General on horseback (4Kn) or on foot (4Pk), 1 x cataphracts (4Kn) or Tarentines (LH), 2 x horse archers (LH), 2 x hoplitai (4Pk/4Bd), 4 x archers (3Bw), 1 x hoplitai (4Pk) or thureophoroi (4Ax) or Thracians (4Ax) or Galatians (4Wb), 1 x slingers and javelinmen (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: II/14, II/19d, II/22e, II/28a, II/28b, II/33, II/37, II/49, II/56, II/59.

II/45 SICILIAN & ITALIAN SLAVE REVOLTS 135 BC - 71 BC

This list covers the three major slave revolts against the Romans; the first two in Sicily and the third famous one under Spartacus in Italy, largely around Mt. Vesuvius. The two Sicilian revolts were marked by extreme rivalry and treachery between slave commanders, but Spartacus seems not to have had this problem. Diodorus' account suggests a strong Hellenistic Asian background to the first revolt (First Servile War) since he gives the name "Antiochos" to the leader. He also mentions the use of axemen and slingers. The Second Servile War made good use of looted horses as well as captured arms. In Spartacus' army, the Gauls and Germans formed distinct units and probably fought in their own native style, but not costume. Although the revolt started in a gladiatorial school, it is unlikely that large numbers were gladiators who had retained gladiatorial weapons. The majority of ex-slaves are classed as 5Hd to reflect the combination of desperation (surrender meant death) and shortage of equipment. Plutarch mentions the use of herdsmen and shepherds as skirmishers, probably with slings. "No, I'm Spartacus" jokes are unfortunately inevitable. **References:** *Rubicon* T. Holland, *Slingshots* 126, 127 & 128.

II/45a Armies of the First Servile War in Sicily 135-132 BC: 1 x General (3/4Ax), 3 x Syrian and Kilikian ex-slaves (3Ax), 5 x ex-slaves (5Hd), 3 x herdsmen and shepherds (Ps).
Terrain Type: Arable. Aggression: 0. Enemy: II/33.

II/45b Armies of the Second Servile War in Sicily 103-99 BC: 1 x General (Cv), 1 x light horse (LH), 1 x bandits (3Ax), 2 x ex-slaves with Roman equipment (4Bd), 5 x other ex-slaves (5Hd), 2 x herdsmen and shepherds (Ps).
Terrain Type: Arable. Aggression: 0. Enemy: II/49

II/45c Spartacus' Army in southern Italy 74-71 BC: 1 x General on horseback (Cv) or on foot (4Bd), 1 x ex-gladiators or veteran war prisoners with Roman equipment (4Bd), 3 x other ex-slaves with Roman equipment (4Bd), 1 x German or Gaul ex-slaves fighting in native style (3/4Wb), 4 x other ex-slaves (5Hd), 2 x herdsmen and shepherds (Ps).
Terrain Type: Hilly. Aggression: 0. Enemy: II/49.

II/46 KUSHAN 135 BC - 477 AD

The Kushans were originally one of the five Yueh-chi clans from central Asia that occupied Sogdiana and conquered the Bactrian Greek kingdom shortly before 130 BC. In the first century AD, the Kushans established the "Great Kushan Empire" over northern India, eastern Iran and much of central Asia. They became vassals of Sassanid Persia in 262 AD, revolted in 356 AD, were defeated in 358 AD, revolted again in 370 AD and established their independence in 390 AD. This new Kushan or Kidarite state lost its northern territories to the Sassanids after a defeat in 468 AD, but remained south of the Hindu Kush until it fell to the Hephthalite Huns shortly after 477 AD. Both cataphracts and horse archers were very similar to Parthian types until they started to copy Chionite Huns. Hellenistic phalangites are depicted on early coins. **Reference:** *The Armies of Bactria* V. P. Nikonorov.

II/46a Kushan Army 135-51 BC: 1 x General (4Kn), 2 x cataphracts (4Kn), 4 x horse archers (LH), 1 x elephants (El) or horse archers (LH), 2 x horse archers (LH) or Kushan or mountain tribes spearmen (3Ax) or ex-Bactrian phalangites (4Pk), 2 x Kushan or mountain tribes archers (Ps).
Terrain Type: Steppe. Aggression: 2. Enemies: I/43b, II/36a, II/36b, II/37, II/38a, II/41a. Allies: I/43b.

II/46b Kushan Army 50 BC-410 AD: 1 x General (4Kn), 1 x cataphracts (4Kn), 2 x horse archers (LH), 1 x elephants (El), 1 x swordsmen in quilted armour (4Bd), 2 x Indian javelinmen (4Ax), 2 x Indian archers (3Lb), 1 x Kushan or mountain tribes spearmen (3Ax), 1 x Kushan or mountain tribes archers (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: I/43b, II/3a, II/3b, II/37, II/38a, II/41a, II/41b, II/63, II/69a, II/69b, II/80c, II/80d. Allies: I/43b or II/37 or II/80d.

II/46c Kushan Kidarite Army 411-477 AD: 1 x General (4Kn), 2 x cataphracts (4Kn), 6 x Chionite horse archers (LH), 1 x elephants (El) or Chionite horse archers (LH), 1 x Kushite or mountain tribes spearmen (3Ax), 1 x Kushan or mountain tribes archers (Ps).
Terrain Type: Hilly. Aggression: 2. Enemies: II/69b, II/69c, II/79a, II/80d.

II/47 EARLY GERMAN 115 BC - 250 AD

This list covers the German tribes from the first Roman encounter with the Cimbri and Teutones until the effect of contact with Rome on German military techniques had become significant. The origins of the Cimbri & Teutones are uncertain; some consider them to be "Trans-Danubian Celts", others to be Scandinavian, while Julius Caesar twice called them "German". The Germans destroyed four Roman armies before being crushed by Marius, but their most famous victory was at the Teutoburger Wald in 9 AD. Their defeats are less often remembered. The German tribes were more varied than previously thought, and it is now necessary to differentiate between 3Wb used to moving through woods or marsh and 4Wb toe-to-toe sloggers from more open farmland. Cherusci and Batavi specialised in ambushes from woods or marsh, led by group of heroes with improbably long spears, supported by unshielded skirmishers dressed only in a cloak and hurling sheaves of fire-hardened wooden javelins at a distance, but most tribes were known as stubborn hand-to-hand fighters in close formation with a light spear called a "framea" and shield and wore trousers and usually a shirt. Red and blue dyes are archaeologically attested for the better-off warriors, but commoners may have mostly worn un-dyed natural wool. Skirmishers were otherwise usually youngsters with javelins, but a minority could be older men with bows. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Ancient Germanic Warriors* M.P. Speidel, *Germania* Tacitus, *Votan* J. James (novel).

II/47a Armies of the Cimbri or Teutones 113-102 BC: 1 x General (Cv), 1 x cavalry (Cv), 9 x warriors (4Wb), 1 x skirmishers (Ps).

Terrain Type: Forest. Aggression: 4. Enemies: II/11, II/39a, II/39b, II/47g, II/49. Allies: II/11.

II/47b Ariovistus's Army in 58 BC: 1 x General (4Wb), 2 x cavalry (Cv), 8 x warriors (4Wb), 1 x skirmishers (Ps).

Terrain Type: Forest. Aggression: 4. Enemies: II/11, II/47g, II/49.

II/47c Civilis' Batavian Army in 69 AD: 1 x General (Cv), 2 x Batavian deserters from Roman auxilia (4Ax), 8 x warriors (3Wb), 1 x skirmishers (Ps).

Terrain Type: Littoral. Aggression: 2. Enemy: II/56. Allies: II/47g.

II/47d Other Batavian or Cherusi Army: 1 x General (Cv), 2 x heroes with long spears (4Wb) or warriors (3Wb), 7 x warriors (3Wb), 2 x skirmishers with sheaves of fire-hardened wooden javelins (Ps).

Terrain Type: Littoral. Aggression: 2. Enemies: II/47e, II/47f, II/47g, II/49, II/56. Allies: II/47e or II/47f or II/47g.

II/47e Marcomannic Army of Maroboduus 9 BC-19 AD: 1 x General (Cv), 1 x cavalry (Cv), 1 x cavalry (Cv) or skirmishers (Ps), 6 x warriors (4Wb), 2 x warriors drilled to "almost Roman standard" (4Bd), 1 x skirmishers (Ps).

Terrain Type: Forest. Aggression: 2. Enemies: II/11, II/47d, II/47f, II/47g, II/56, II/64a. Allies: 0-2 of II/47d or II/47f or II/47g.

II/47f Suevi: 19-49 AD: 1 x General (3Kn), 1 x Sarmatian cavalry (3Kn), 1 x cavalry (Cv) or skirmishers (Ps), 8 x warriors (4Wb), 1 x skirmishers (Ps).

Terrain Type: Forest. Aggression: 2. Enemies: II/11, II/47d, II/47e, II/47g, II/56, II/64a. Allies: II/47d or II/47e or II/47g.

II/47g Other Early German Armies: 1 x General on horseback (Cv) or on foot (4Wb), 1 x cavalry (Cv), 8 x warriors (4Wb), 1 x cavalry (Cv) or skirmishers (Ps), 1 x skirmishers (Ps).

Terrain Type: Forest. Aggression: 2. Enemies: I/47, II/11, II/26, II/47a, II/47b, II/47d, II/47e, II/47f, II/47g, II/49, II/56, II/64a, II/66. Allies: II/47d or II/47e or II/47f or II/47g.

II/48 MITHRIDATIC 110 BC - 47 BC

This list extends from the accession of Mithridates the Great to the throne of Pontus until the final defeat of his son Pharnaces. Mithridates was provoked into war with Rome when Nikodemus IV of Bithynia along with the governor of the Roman province of Asia (formerly Pergamon), invaded Pontus. Driving the invaders out, Mithridates followed up by invading and conquered Roman Greece, instituting a slaughter of all Roman citizens in Asia and executing the greedy governor by pouring molten gold down his throat. He raised a second phalanx from freed slaves, distinguished from his existing "Bronze Shields" by a lack of gold and silver decoration. Initially he left the army under the command of the professional soldier Archelaos, who was defeated by Sulla and his veterans of the Social War and bundled out of Greece. Mithridates now took personal command and reformed the army on Roman lines reorganising the infantry as imitation legionaries (Bd). He was defeated by Lucullus, but reoccupied Pontus after Lucullus moved on into Armenia, only to be defeated by Pompey, and forced to flee to his Bosporan sub-kingdom. He died in 63 BC and was succeeded by his son Pharnaces, who reoccupied Pontus and was defeated by Caesar. Pontic armies won several victories over lesser Roman generals and the earlier armies used standard Hellenistic tactics while making full use of their cavalry and scythed chariots. The heavy cavalry were Pontic, Bosporan or Iazygian Sarmatian noble armoured lancers. The light horse were Pontic or Thracian javelinmen and Skythian horse archers. In later battles against the Romans, the scythed chariots proved less effective, but were used from time to time throughout the period. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker, *He Died Old* A. Duggan.

II/48 Mithridatic Army: 1 x General (Cv), 1 x lancers (3Kn), 1 x Pontic or Thracian light horse (LH), 4 x all "brazen shields" phalangites (4Pk) before 84 BC and all imitation legionaries (4Bd) from 84 BC, 1 x scythed chariot (5Ch) or horse archers (LH), 1 x thureophoroi (4Ax), 2 x javelinmen (3Ax or Ps), 1 x archers and slingers (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: I/43b, II/6, II/14, II/24, II/25, II/26, II/30b, II/37, II/49. Allies: II/28a or II/28b.

II/49 MARIAN ROMAN 105 BC - 25 BC

This list covers the Roman armies from the reforms of Marius until those of Augustus. It includes the armies of Marius himself, Sulla, Lucullus, Pompey, Crassus and Julius Caesar. Legionaries were now long-service regulars recruited from the poor and a farm was the reward for service. All were armed with pilum and gladius and protected by bronze helmet, iron mail shirt and big oval scutum. Auxiliaries were equipped and fought in their own native styles. Cavalry were most often Spanish, Gallic or German, javelin-armed light horse might be Spanish, Numidian, Thracian or Illyrian, horse archers could be Thracian or from Asian client rulers, skirmishing javelinmen could be Spanish caetrati, German, Numidian or Greek, auxilia could be Spanish scutarii, Gauls, Illyrians, Thracians or Ligurians, slingers either Greek or Balearic, archers Cretan. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Rubicon* T. Holland, *Winter Quarters* A. Duggan (novel), *Three's Company* A. Duggan (novel), *Nobody loves a Centurion* J.M Roberts (novel).

II/49 Marian Roman Army: 1 x General (Cv or 4Bd), 1 x Gallic, Spanish, Macedonian, Greek or similar auxiliary cavalry (Cv) or javelin-throwing Numidian, German, Illyrian or similar light horse (LH), 5 x legionaries (4Bd), 2 x legionaries (4Bd) or Spanish, Illyrian or similar auxiliary foot (4Ax) or Syrian horse archers (LH), 1 x German, Numidian, Spanish or similar javelinmen (Ps or 3Ax), 1 x archers or slingers (Ps), 1 x Numidian elephant (El) or wild Gauls (4Wb) or cavalry (Cv) or requisitioned city bolt-shooters (Art).

Terrain Type: Arable. Aggression: 3. Enemies: I/7d, I/47, I/48, II/11, II/14, II/20c, II/20d, II/23a, II/28a, II/28b, II/30b, II/30c, II/37, II/39a, II/39b, II/39c, II/40, II/44, II/45b, II/45c, II/47a, II/47b, II/47d, II/47g, II/48, II/49, II/51, II/52, II/53. Allies: II/6 or II/11 or (II/23a and/or II/51) or II/28b or II/30b or II/30c or II/40 or II/49 or II/52.

II/50 HASMONEAN JEWISH 103 BC - 63 BC

This list covers the armies of the later Hasmonean rulers of Judaea who fought Seleucids, Ptolemaic Egypt, Nabataeans and each other. It continues the Maccabean list from the accession of the unpopular Alexander Yannai who was kept in power by Hellenistic mercenaries. It ends with the sack of Jerusalem by the Romans under Pompey. **References:** *Armies of the Macedonian and Punic Wars* D. Head, *The Jewish War* Josephus.

II/50 Hasmonean Jewish Army: 1 x General and cavalry of the army (3Kn), 1 x cavalry of the phalanx (LH), 3 x foot of the phalanx (4Ax), 2 x mercenaries (4Ax or 4P), 3 x archers and slingers (Ps), 2 x javelinmen (Ps).
Terrain Type: Hilly. Aggression: 1. Enemies: II/19d, II/22a, II/50. Allies: II/22a.

II/51 LATE JUDAean 63 BC - 6 AD

This list covers the armies of the later Hasmonean and Herodian rulers of Judaea from Pompey's sack of Jerusalem until annexation by Rome under Augustus. The "spear bearer" bodyguard could have been Hellenistic-style xystophori (3Kn) or Roman-style lancarii (4Ax). Native troops were stiffened by foreign mercenaries: Celtic (Cv), German (Cv) and Thracian (Cv or LH). Babylonian Jewish horse-archers (LH) and Thracian foot, possibly some imitation legionaries. **Reference:** *The Jewish War* Josephus.

II/51 Late Judean Army: 1 x General as "spear bearers" (3Kn or 4Ax), 2 x Thracian cohorts (4Ax or 4Bd), 3 x Judean and Idumaean cohorts (4Ax), 1 x German, Gallic or Thracian cavalry (Cv or LH), 3 x archers and slingers (Ps), 2 x javelinmen (Ps) or Idumaean or Iturean hillmen (3Ax) or rioting or religious mob (5Hd) or other Judean foot (7Hd).
Terrain Type: Hilly. Aggression: 1. Enemies: II/20d, II/22a, II/22b, II/37, II/49, II/51, II/56. Allies: II/37 or II/49 or II/56.

II/52 DACIAN 60 BC - 106 AD & CARPI 106 AD - 380 AD

Dacia was always a source of raids into lands south of the Danube, but became a greater menace under two ambitious kings Burebistas and Decebalus. This list covers armies from the accession of the former until the death of the latter. Roman campaigns against Dacia were initially in response to Dacian aggression. They continued with varied success until Dacia was finally defeated and annexed after two major wars under Trajan in 101-102 AD and 105-106 AD. Even after this, remnant tribes (known as Carpi or Carpodace) continued to give trouble until around 380 AD. The most distinctive part of the Dacian army were men armed with the falx, a murderous curved blade mounted on a haft and depicted used two-handed by impetuous bare-chested trouser-wearing warriors, who may actually be Bastarnae, a neighbouring people. Light horse and most foot warriors wore trousers and shirts and fought with javelins and an oval shield similar to those of Roman auxilia. Only members of the quite extensive noble class wore caps, the remainder being bare headed. On monuments, only the ruler is depicted in a scale corslet, although scales are often found archaeologically and mail has been found in some horsemen's graves. Sarmatians cannot be used in addition to a Sarmatian ally. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Trajan's Column* F. Lepper & S. Frere, *Trajan's Column and the Dacian Wars* L. Rossi.

II/52 Dacian or Carpi Army: 1 x General on foot (4Wb) or on horseback (Cv), 1 x horsemen (LH or Cv), 6 x warriors (3Wb), 1 x Bastarnae or Dacian falxmen (3Bd), 2 x javelinmen (Ps), 1 x falxmen (3Bd) or Sarmatians (3Kn) or javelinmen (Ps).
Terrain Type: Hilly. Aggression: 1. Enemies: I/47, II/11, II/26, II/49, II/52, II/56, II/64b, II/78b. Allies: II/26.

II/53 ANCIENT BRITISH 55 BC - 75 AD

This list covers British armies of tribes from the area south of the Forth-Clyde line from their first appearance in Julius Caesar's memoirs until their final pacification. The prestige arm was the 2 horse, 2 crew light chariotry, described by Caesar as hurling javelins and disordering opponents, by Tacitus as indulging in noisy manoeuvring and by Cassius Dio as breaking up enemy groups by running into them. The effect of crew dismounting in support of the cavalry is already included in the combat factors. The Romans agree that British strength lay in the fierce charges of warbands that emphasised impetus and mobility in bad going, rather than dense formation like the Gauls. Warband warriors were armed with javelins, long cutting swords and long shields decorated with personalised Celtic patterns. They were clean shaven except for moustaches, but some washed their hair in lime to produce a sort of white Afro. They wore trousers or knee breeches and usually a shirt worn outside them. Stripes and tartans were popular, but these had no clan significance. The tribes of the southwest were especially fond of the sling and should have the maximum number. In the north, documents found in the Roman fort of Vindolanda dismiss the pony-riding cavalry as "contemptible little Britons". Their BUA will usually be an Iron-age hill fort whose remains survive in all but the flattest parts of Britain. The most famous British war leader was Caradoc/Caractacus of the Catevellauni who led resistance to the Roman invasion by Claudius 44-50 BC. In 61 AD, Suetonius' invasion of Anglesey (an island Druid base off northern Wales) was opposed by sacrificing Druids and screaming women, giving an opportunity for modellers. Almost at the same time Boudicca's Iceni rebels (of modern East Anglia) successfully ambushed a legionary relief force hurrying incautiously by road to Colchester. In the final battle (probably near Wall in Staffordshire) British chariots were countered by archery, their foot broken up by aggressive legionary column thrusts and then hindered in their rout by their families in wagons drawn up to watch the battle (offering an unusual variation on the camp). A Roman force once intervened on behalf of Queen Cartimandua of the Brigantes in modern Yorkshire (a competent redhead who seduced 2 Roman governors) against rebels led by a discarded husband. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Histories & Annals* Tacitus, *The Mark of the Horse Lord* R. Sutcliffe (novel), *Imperial Governor* G. Shipway (novel), *The Provincial Governor* J. Scott (novel).

II/53 Ancient British Army: 1 x General in chariot (LCh) or on foot (3Wb), 2 x light horse (LH), 3 x chariots (LCh) or slingers (Ps) or warband (3Wb), 5 x warband (3Wb), 1 x warband (3Wb) or slingers (Ps) or sacrificing druids and screaming women (7Hd).
Terrain Type: Arable. Aggression: 0. Enemies: II/49, II/53, II/54a, II/56, II/60. Ally (only if Brigantes): II/56.

II/54 SCOTS-IRISH 55 BC - 841 AD

This list covers Irish armies (then usually called "Scots") of "The Island of the Blessed" from the time of Caesar's invasions of Britain until Irish methods changed in response to Viking raids and settlement. Ireland was split into kingdoms whose normal interaction was war or raiding. Its most famous leader was CuChullain, champion of the King of Ulster; described as a small dark-haired man riding in a chariot drawn by one gray and one black pony with a red-haired driver. Intermittent contact with Roman Britain existed (e.g. in 81 AD Agricola was requested to help an Irish ruler retain his throne), but was poorly documented except for seaborne raids on Roman Britain. What appears to be a fortified Roman coastal settlement has been found north of Dublin; and one of CuChullain's legendary enemies was the wizard Clan Calatan who with his 27 sons combined together to have 28 heads, 56 arms and legs and throw a volley of 28 spears (possibly a Roamn testudo). No evidence has been found for either cavalry or body armour. Nobles rode in chariots, until this went out of fashion, then started fighting on foot. Irish infantry equipment was lighter than that of other Celtic nations comprising a short sword or axe and a small shield and javelins; ideal for skirmishing in boggy or wooded terrain. Fianna were professional warrior bands with a reputation for savagery, sometimes of young nobles passing the time between fostering and inheritance. They wore their hair shaved in front and in long plaits behind. Saint Columba was given chief credit for the victory of the Uí Néill in a war of 561, decisively out-praying Saint Finnian on the other side. The Attacotti are covered in the Pictish list II/68.

References: *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *The Cattle Raid of Cooley* trans J. Dunn, *Not For All the Gold in Ireland* J. James (novel).

II/54a Scots-Irish Army 55 BC-432 AD: 1 x General in 2-horse, 2-crew chariot (LCh), 2 x chariots (LCh), 1 x chariots (LCh) or Fianna (3Wb) or warriors (3Ax) or Romans (4Ax) or Attacotti (4Ax or 4Wb), 6 x warriors (3Ax), 2 x skirmishing javelinmen (Ps).

Terrain Type: Littoral. Aggression: 3. Enemies: II/53, II/54a, II/56, II/60, II/64a, II/68a, II/78a, II/81a, II/81b.

II/54b Scots-Irish Army 433-841 AD: 1 x General in chariot (LCh) or on foot (4Ax), 9 x warriors (3Ax), 1 x skirmishing javelinmen (Ps), 1 x saint and praying monks (7Hd) or skirmishing javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: II/54b, II/68a, II/68b, II/81b, II/81c, II/81d, III/19a, III/40a, III/40b.

II/55 NOBADES, BLEMMEYE & BEJA 30 BC - 1500 AD

The Blemmye were nomads of the desert east of Egypt and Nubia and were subject to the Kushites of Meroe in the first century BC. They began to raid Roman Egypt after the introduction of the camel in the third century AD and conquered its southern frontier, extending control into lower Nubia in the fifth century. They were ejected by the partly Christianised Nobades about 540 AD, but remained in their ancestral desert, where the medieval Arabs knew them as "Beja". Cavalry are depicted as bareheaded with stylised negroid hair, wearing thigh and elbow length mail or scale shirts over a long sleeved tunic with tight trousers and shoes or half-boot; and armed with bow, spear and small conical shield. They ride unarmoured horses on a sheepskin pad, possibly dyed blue. However, a chamfron has been found and it is possible that some horses may have had more extensive armour. Some foot are depicted with javelins and round shields and foot archers elsewhere with short arrows stuck through their head band. Camel riders are described by Arab sources as dressed in wild animal skins and using long multiply-barbed spears. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker.

II/55a Army of the Nobades or Blemmye 30 BC-200 AD: 1 x General (Cv), 1 x cavalry (Cv), 2 x cavalry (Cv) or spearman (3Ax), 4 x archers (3Bw or Ps), 4 x spearmen (Sp or 3Ax).

Terrain Type: Dry. Aggression: 2. Enemies: I/58, II/55a, II/56, II/62a, II/64b.

II/55b Blemmye or Nobades Army 201-831 AD: 1 x General (Cv), 2 x cavalry (Cv), 1 x camel riders (LCm) or archers (3Bw), 2 x spearmen on camels (Cm) or on foot (if Nobades army all Sp or if Blemmye army all 3Ax), 2 x spearmen (if Nobades army all Sp or if Blemmye army all 3Ax), 4 x archers (3Bw or Ps).

Terrain Type: Dry. Aggression: 2. Enemies: I/58, II/55b, II/62a, II/64b, II/78b, III/4a, III/4b, III/12, III/17, III/25b, III/25c, III/31, III/37a

II/55c Beja Army 832-1500 AD: 1 x General (Cv or LH), 5 x Beja archers (3Bw or Ps), 3 x Beja spearmen (3Ax) or Arab cavalry (LH), 2 x Beja or Arab camelry (Cm) or Arab swordsmen and spearmen (4Bd), 1 x Beja cavalry (LH or Cv) or Arab archers (3Bw or Ps).

Terrain Type: Dry. Aggression: 2. Enemies: II/55c, II/62a, II/62b, III/12, III/31, III/37a, III/37b, III/49, III/66, IV/20, IV/45. Allies: III/12.

II/56 EARLY IMPERIAL ROMAN 25 BC - 197 AD

This covers the period from Augustus' reorganisation until the defeat in civil war of Albinus by Septimius Severus. This is the period of the legionary equipped with pilum, now shorter gladius sword, semi-cylindrical rectangular shield, iron helmet and lorica segmentata banded iron corslet that is the popular image of the Roman legionary, although they were not all used universally. Some eastern units may have retained their mail and by the end of the period oval shields were replacing rectangular, firstly in the praetorian guards. Auxiliary equites (cavalry) and pedites (infantry) were regularly recruited and became citizens at the end of their career. They were uniformly equipped and drilled, were armed with short spear, javelins and long swords, had more convenient oval shields bearing regimental patterns, wore mail corslets (probably initially cut down from those previously worn by legionaries of which there were large stocks) and had helmets (initially based but quickly replaced by iron). A few alae of otherwise similar contabitorum cataphracti lancers formed by Trajan and Hadrian were equipped with the long two-handed kontos, had no shields and rode unarmoured horses. Numidians and Moors provided their native javelin-throwing light horse. Archers were mostly easterners depicted in long tunic, mail and

acorn-shaped helmet. Symmacharii were German or British irregulars. Dromedarii camel men were first raised by Hadrian and used as border scouts. The elephant and camels brought by Claudius when he invaded Britain were too few to be included here. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *The Roman Army at War 100 BC-AD 200* A. Goldsworthy, *The Long Year AD 69* K. Wellesley, *The Roman Legions Recreated in Colour Photographs* D. Peterson, *Imperial Governor G. Shipway* (novel), *The Provincial Governor* J. Scott (novel), *Year of Four Caesars* H. Nield (novel).

II/56 Early Imperial Roman Army: 1 x General on horseback (Cv) or on foot (4Bd), 1 x equites (Cv), 4 x legionaries (4Bd), 3 x auxiliaries pedes (4Ax), 1 x equites (Cv) or pedes (4Ax) or archers (4Bw or Ps), 1 x Numidians or Moors (LH) or symmacharii (3Wb) or slingers (Ps) or gladiators (3Bd), 1 x lancers (3Kn) or horse archers (LH) or bolt-shooters (Art) or dromedarii (LCm).

Terrain Type: Arable. Aggression: 3. Enemies: 1/7d, 1/47, 1/48, 1/58, 1/14, 1/22a, 1/22b, 1/22e, 1/23a, 1/23c, 1/24, 1/25, 1/26, 1/28b, 1/37, 1/40, 1/44, 1/47c, 1/47d, 1/47e, 1/47f, 1/47g, 1/51, 1/52, 1/53, 1/54a, 1/55a, 1/56, 1/57, 1/58, 1/59, 1/60, 1/64b. Allies: (1/22a or 1/22b or 1/22e and/or 1/44) or 1/28b or 1/47d or 1/51.

II/57 LATER MOORISH 25 AD - 696 AD

This list covers Moorish armies of inland north-west Africa from the initial attempt at annexation by the Romans until the Arab conquest. Repeated attempts were made by the Romans throughout the period to convert their homeland into a province, but it was too easy for independent-minded inhabitants to move out of the zone of control, despite the creation of a chain of frontier posts. After the Vandal take-over, Moors twice badly defeated Vandal armies. The strength of Moorish armies lay in superb unarmoured light horsemen riding without saddle or bridle and armed with javelins and a small shield, supported by large numbers of similarly armed foot. Camp defences were tethered camels. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker.

II/57 Later Moorish Army: 1 x General (LH or Cv), 5 x horsemen (LH), 6 x javelinmen (3Ax or Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: 1/56, 1/64a, 1/78a, 1/84, 1/14a, 1/4b, 1/17, 1/25b, 1/25c, 1/29, 1/31.

II/58 ALAN 50 AD - 1500 AD

The Alans were the most easterly and durable of the Sarmatian nations, primarily based in the northern foot hills and adjoining plains of the Caucasus mountains, where they became the modern Ossetians. This list starts with their first appearance in this homeland. They were subjugated in turn by the Huns, Khazars, Mongols and Georgians, but always re-emerged. Ammianus Marcellinus described them as "nearly all tall, blond and handsome". They did not all stay at home, which generated a poetic cliché of "the wandering Alans". Alan contingents often joined other tribal migrations and invasions, leading to various short lived kingdoms or lesser settlements of conquerors or foederati scattered over the later Roman west and in due course absorbed by neighbouring cultures. Many settled among the Bretons, providing them with mounted nobility, and "Alain" is still a common personal name there. Arrian's second century "Order of Battle against the Alans" assumes that all Alans will always charge, but will be vulnerable to infantry missiles, which implies that most did not have horse armour. The 3,000 Alans that charged desperately against the Catalan company in the 14th century were mostly light horse. They were accompanied by 6,000 foot, probably mostly armed with (probably woodsmen's) axes.

References: *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath.

II/58 Alan Army: 1 x General (3Kn or LH), 3 x nobles (3Kn) or horse archers (LH), 5 x horse archers (LH), 2 x horse archers (LH) or peasant axemen (4Bd), 1 x horse archers (LH) or peasant or camp follower archers (Ps).

Terrain Type: Steppe until 400AD, then Arable. Aggression: 1. Enemies: 1/25, 1/26, 1/28b, 1/28c, 1/37, 1/56, 1/65b, 1/65c, 1/66, 1/67b, 1/69a, 1/69b, 1/69c, 1/78a, 1/78b, 1/80b, 1/80d, 1/13b, 1/14a, 1/16, 1/31, 1/47, 1/54a, 1/54b, 1/71a, 1/71b, 1/71c, 1/74b, 1/80, 1/80d, 1/24a, 1/31, 1/34, 1/35, 1/46, 1/47, 1/50, 1/55a, 1/55b, 1/60, 1/75, 1/77.

II/59 JEWISH REVOLTS 66 AD - 70 AD & 132 AD - 135 AD

This list depends heavily on Josephus' account of the Jewish rebellion against Roman rule of 66 AD. The Jewish leaders were mostly at daggers drawn and often fought each other instead of the Romans. The Judeans did not accept that Galileans were proper Jews and both hated the Samaritans, while even the 3 major sects of the Judeans disagreed on most issues. The main leader of the first rebellion was Simon bar Giora who controlled 10,000 men assisted and hindered by 2 feuding factions of Zealots providing 8,400 more and by 5,000 Idumean hillmen interested mostly in loot. He struggled to arm his troops and persuade his allies to work together. At the start of the rising, masses of rebels were ridden down by Roman cavalry charges, but the survivors learned to fight effectively from a distance and became reluctant to close, though they would fanatically hold city walls. Dissension was less of a problem in the revolt of 132 AD, when Shimon Bar Kochba was the recognised single leader and letters to his subordinates were clearly couched as orders. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker, *The Jewish War* Josephus, *Son of a Star* Andrew Meisels (novel).

II/59 Armies of the Jewish Revolts: 1 x General (3/4Ax), 2 x regulars (4Ax), 4 x masses (5Hd/3Ax), 2 x zealots (3Wb), 3 x archers and slingers (Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: 1/22a, 1/22b, 1/44, 1/56, 1/59.

II/60 CALEDONIAN 75 AD - 211 AD

This list covers the armies of the Caledones of the northern half of modern Scotland (the Scots had not yet arrived from Ireland) from their first serious conflicts with the Romans until their defeat in the campaigns of Septimius Severus caused them to be replaced by the Picts. The Caledones differed from the British tribes south of the Forth-Clyde line (list II/53) in that there is no evidence for cavalry or slingers. Roman monuments from the area show warriors either wholly naked or naked to the waist and carrying sword and either an oval or a small rectangular shield being trampled under the hooves of Roman cavalry. Tacitus' account of the battle of Mons Graupius in 84 AD mentions chariots (manoeuvring in front and defeated by Roman cavalry) and warband on the hill behind, throwing dense volleys of javelins while parrying Roman missiles with their short shields, then when charged by auxiliaries, being disadvantaged by those small shields and their long slashing swords. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Agricola* Tacitus.

II/60 Caledonian Army: 1 x General in chariot (LCh) or on foot (3Wb), 2 x chariots (LCh), 8 x warriors (3Wb), 1 x warriors (3Wb) or skirmishing javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/53, II/54a, II/56, II/64a.

II/61 HSIEN-PI, T'U-YU-HUN, WU-HUAN, PRE-DYNASTIC KHITAN & HSI 90 - 1000 AD

The Tung-hu split into the Hsien-pi and Wu-huan living in Manchuria. The Wu-huan were closer to the Chinese border and were loyal allies to the Chinese until their disappearance around 316 AD. The Hsien-pi were united for a while in the mid-second century AD by Tan-shi-huai, who defeated the Hsiung-nu and briefly dominated the Mongolian steppe, but were more usually split into feuding clans. They set up kingdoms in China in the 4th century, the last of which fell in 431 and their steppe descendants included the Khitan before their amalgamation into the Khitan-Liao centralised monarchy and the Hsi before they were absorbed by the Khitan Liao around 1000. The T'u-yu-hun kingdom (later Khanate) was founded by Hsien-pi who conquered local Hsiung-nu and Ch'iang tribes in modern Quinghai in 285 and became rich on "silk-road" traffic. The cataphract cavalry used by all these nations are assumed to be similar to those of the Northern Wei dynasty founded in 386 by the T'o-pa in China, who are all depicted on armoured horses and with lance, but some with only lance had armoured limbs (4Kn) and others had unarmoured limbs but added a bow (3Kn). Whether the latter formed the rear ranks of the former or had a different tactical role is uncertain, but on one occasion in the 4th century, the Mu-jung clan of the Hsien-pi is reported to have chained 5,000 elite mounted archers in a square to resist shock cavalry. On another, large numbers of women mounted on oxen carrying fake banners and throwing dust in the air from sacks were used to simulate cavalry and are deployed represented by knight or cavalry elements, then exchanged in their side's second bound for hordes element. **Reference:** *Imperial Chinese Armies* C. Peers, *The Perilous Frontier* T.J. Barfield.

II/61a Wu-huan, T'u-yu-hun or Hsien-pi Army 90-316 AD: 1 x General (Cv), 2 x nobles (Cv) or horse archers (LH), 8 x horse archers (LH), 1 x archers (Ps).

Terrain Type: Steppe. **Aggression:** 1 if Wu-huan or T'u-yu-hun, 3 if Hsien-pi. **Enemies:** II/21a, II/21b, II/21c, II/38a, II/38b, II/38c, II/41b, II/61a, II/61b, II/63, II/76.

II/61b Mu-jung Hsien-pi Army 300-431 AD: 1 x General (4Kn), 2 x nobles (4Kn or 3Kn), 4 x horse archers (LH) or chained cavalry (6Cv) or dust-throwing women with banners mounted on oxen (7Hd), 2 x Chinese-trained close-fighting infantry (4Bd), 2 x Chinese-trained archers (4Cb), 1 x archers (Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** II/21b, II/21c, II/38b, II/38c, II/61a, II/61c, II/61d, II/63, II/76, II/79a. **Allies:** II/21c.

II/61c Other Hsien-pi or T'u-yu-hun Army 317-431 AD: 1 x General (4Kn), 3 x noble cavalry (4Kn or 3Kn), 5 x horse archers (LH), 2 x horse archers (LH) or T'u-yu-hun Ch'iang subjects (3Ax), 1 x archers (Ps).

Terrain Type: Steppe. **Aggression:** 3. **Enemies:** II/21b, II/21c, II/38b, II/38c, II/61b, II/61c, II/61d, II/63, II/76, II/79a.

II/61d Khitan or Hsi Army 350-1000 AD: 1 x General (Cv), 2 x nobles (Cv), 8 x horse archers (LH), 1 x skirmishers (Ps).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** II/61b, II/61c, II/61d, II/76, II/79a, III/11b, III/20a, III/20c, III/39, III/42a, III/42b, III/56.

II/62 ABYSSINIAN & HORN-OF-AFRICA 100 AD - 1529 AD

This list covers Christian Ethiopian and pagan or Muslim Horn-of-Africa armies from the foundation of the Ethiopian Axumite empire until the conquest of Gran the left-handed. Little armour was worn except helmets. Spears were short and accompanied by javelins, short swords and large round hide shields. Axumite generals sometimes rode elephants and supported the tribal levies (Wb) with a core of professional sarawit swordsmen, usually using a long straight cutting sword, but a few replacing it with an enormous sickle-shaped "shotel" intended to hook over an opponent's shield or a "dembus", described as an iron mace, staff or club. Camels (LCm) were used for scouting. Cavalry increased with time, most being Shara or Galla tribesmen riding scrubby ponies and armed with short spear and javelins. Their few shields were greatly prized and decorated with silver or a lion's mane. **References:** *Slingshots* 131,132,139 & 140.

II/62a Abyssinian or Horn-of-Africa Army 100-1284 AD: 1 x General (LH or if Axumite El), 1 x sarawit (3Bd) if Axumite or tribal levies (3Wb) if not, 1 x light horse (LH or LCm) or tribal levies (3Wb), 6 x tribal levies (3Wb), 2 x archers (3Bw or Ps), 1 x javelinmen (Ps).

Terrain Type: Hilly. **Aggression:** 3 before 576AD, then 1. **Enemies:** I/58, II/23a, II/23c, II/55a, II/55b, II/55c, III/12, III/31, III/37a, III/37b, III/66. **Allies:** (II/23a and/or II/23c) or (I/58 and/or II/55b).

II/62b Abyssinian or Horn-of-Africa Army 1285-1529 AD: 1 x General (LH), 2 x light horse (LH), 2 x light horse (LH) or scouting camelry (LCm), 4 x tribal levies (3Wb), 2 x archers (3Bw), 1 x javelinmen (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** II/23a, II/55c, III/12.

II/63 THREE KINGDOMS & WESTERN TS'IN (CHIN) CHINESE 189 AD - 316 AD

After the Han lost power, China was dominated by rival warlords. The survivors were the "Three Kingdoms", namely Wei in the north, Wu in the southeast and Shu Han in the southwest. Wei conquered Shu Han in 263. Su-ma Yen seized power and proclaimed the Ts'in (Chin) dynasty in 266 and conquered Wu in 280. This "Western Ts'in" dynasty broke up in civil wars. After 304 AD barbarian peoples set up their own kingdoms in the north, and by 316 the Ts'in were completely ejected from northern China, the refugees then setting up a new "Eastern Ts'in" regime in the south. Most cavalry had lances; some had bows, but whether in addition or instead is unclear. Horse-armor is occasionally mentioned but was probably not common. **References:** *Imperial Chinese Armies* C. Peers, *Slingshots* 150,151.

II/63 Three Kingdoms or Western Ts'in (Chin) Chinese Army: 1 x General (Cv), 1 x cavalry with lance and/or bow (Cv) or southern tribesmen (3Wb), 1 x horse archers (LH) or southern tribesmen (3Wb), 2 x halberdiers (4Bd), 1 x spearmen (4Ax), 3 x crossbowmen (4Cb) or archers (4Bw), 1 x archers (Ps), 1 x halberdiers (4Bd) or dare-to-die swordsmen (3/4Bd) or carts with archers and crossbowmen (WWg), 1 x bolt-shooters or rope-pull stone-throwers (Art) or tribal horse archers (LH). Terrain Type: Arable. Aggression: 1. Enemies: 1/49c, 1/49d, II/21a, II/21b, II/38a, II/38b, II/38c, II/46b, II/61a, II/61b, II/61c, II/63, II/75, II/76, II/77a. Allies: II/21a or II/21b or (II/38a and/or II/61a).

II/64 MIDDLE IMPERIAL ROMAN 193 AD - 324 AD

This list covers the armies from Septimius Severus. It overlaps the Late Imperial Roman lists (II/78) since Constantine's rivals still used the old system. Lorica segmentata are last shown on the Arch of Severus, but are depicted with banded armour extending to the neck with no upper chest plate and either no or small shoulder pieces. This could be a new variety or be due to unfamiliarity with the armour type. The arch also has the last depictions of armoured auxiliary infantry, but also shows many unarmoured auxiliaries. There is NO later evidence for armoured auxiliary foot. There is no credible evidence for the replacement of pila by thrusting spears as suggested by Stephenson, which seems to be based on a single reference to spears as the characteristic Roman weapon in Herodian's account of a speech by Caracalla. 4th century battle accounts continue to refer to the old weapons. Legionary armour was now a knee-length heavy coat (often with long sleeves) of mail or bronze scale; and helmets with the large cheek pieces usually associated with cavalry were in use. The long spatha had replaced the gladius and shields were now a large heavy near round oval. Whether the patterns on the shields found at Dura were anything but shopkeeper's samples is unknown, but units raised in this period that survived into the 4th century to be included in the Notitia Dignitatum have shield patterns there of a simpler type. The inside of some surviving shields is a dull red. That legionary equipment was now heavier required an intermediate type armed with the light lancea. This is first mentioned as legionary equipment in Arrian's second century "Order of Battle Against the Alans" in which 4 ranks armed with lancea throw them over 4 ranks armed with pilum. Under Diocletian, legions split off vexillations 1-2000 strong and their lanciarum were often deployed as a separate vexillation. A tombstone shows a lanciarum as unarmoured and carrying a small shield and 5 light throwing spears. Equites Illyriciani (LH) appeared when Gallienus expanded the cavalry and included Dalmatae, Moors, scutarii (with long shields) and later the promoti (formerly attached to legions), all javelin-armed light horse. Heavier cavalry continued much as before but with increased status, auxiliary alae being replaced in field armies by vexillations with the title "equites" and ranked higher than the legions. Part-mounted cohorts equitatae were converted to cavalry, Catafractarii (3Kn) substituted a two-handed lance for spear and javelins. Completely armoured lancers on fully scale-armoured horses, first raised by Severus Alexander from Parthian refugees, were called clibanarii. Tunics were long-sleeved and white (with the possible exception of legionaries who may have worn red). Purple decorations are first depicted around 250 AD and are smaller and simpler than later. Trousers are usually dark brown. Cloaks were yellow-brown "russus". The empire was sometimes split into eastern (Thrace, Macedonia/Greece, Pontus, Asia, Syria and Egypt) and western (Britain, Gaul, Spain, Africa, Italy and Illyricum) halves with separate but hopefully co-operative rulers. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Roman Infantry Equipment - The Later Empire* I. P. Stephenson, *Restorer of the World - The Roman Emperor Aurelian* J.F. White, *Diocletian and the Roman Recovery* S. Williams, *Queen of the East* A. Baron (novel), *Family Favourites* A. Duggan (novel), *Warrior of Rome (series)* H. Sidebottom (novels).

II/64a Western Roman Army: 1 x General (Cv), 1 x cavalry (Cv), 1 x Illyrian light horse (LH) or legionaries (4Bd), 4 x legionaries (4Bd), 3 x auxiliaries (4Ax), 1 x auxiliaries (4Ax) or archers (4Bw or Ps), 1 x catafractarii (3Kn) or legionaries (4Bd) or lanciarum (3Bd) or bolt-shooters (Art). Terrain Type: Arable. Aggression: 1. Enemies: II/26, II/47e, II/47f, II/47g, II/54a, II/57, II/60, II/64a, II/64b, II/65b, II/66, II/68a, II/70a, II/72a, II/72b, II/72c, II/72d, II/73, II/78a. Allies: II/72d.

II/64b Eastern Roman Army: 1 x General (Cv), 1 x cavalry (Cv), 1 x eastern horse archers (LH), 4 x legionaries (4Bd), 3 x auxiliaries (4Ax), 1 x auxiliaries (4Ax) or archers (4Bw or Ps), 1 x clibanarii (4Kn) or legionaries (4Bd) or lanciarum (3Bd) or bolt-shooters (Art).

Terrain Type: Arable. Aggression: 2. Enemies: I/58, II/22c, II/22d, II/28b, II/28c, II/37, II/52, II/55a, II/55b, II/56, II/64a, II/64b, II/65b, II/66, II/69a, II/69b, II/71, II/74b, II/78a. Allies: (II/23a and/or II/28b or II/28c) or II/65b.

II/65 TERVINGI & EARLY VISIGOTHIC 200 AD - 419 AD

This list covers the Tervingi (or "men of the forest", later called "Visi") from their arrival on the Dniester until the founding of the Visigothic Tolosan kingdom. Their foot are described as charging in dense formations and fighting with javelins, long sword and round, oval and coffin-shaped shields. They wore their fair hair long but their beards trimmed, and wore trousers and long-sleeved shirts in natural fawn-coloured linen with a coloured hem but not cuffs, and a cloak of natural dark wool or dyed a solid dark colour. Only chiefs and nobles wore armour. They initially raided the Roman empire by boat, notably in 267, but fled the Huns into East Roman territory in 376. They quarrelled with their hosts, brought in friends and won a crushing victory over the East Roman army at Adrianople in 378, but after their king died with no credible successor, were settled by treaty and provided recruits for regular Roman units. One was Alaric who rose to become "magister militum per Illyricum" entitling him to Roman logistic support. He fought for the Eastern Empire against the West 395-399 and then changed sides and fought for the West against the East 403-407. After Stilicho's murder in 408, he rebelled, was joined by a new emigration of Greuthingi, by ex-prisoners conscripted by the West from the defeated invading German army of Radagaisus and by escaped slaves; invaded Italy and sacked Rome. His successors invaded Gaul and then Spain, fought on behalf of (but not together with) Rome against rebels, Suevi and Vandals before settling as foederati in southern Gaul. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Barbarians within the Gates of Rome* T.S. Burns, *Goths and Romans* 332-489 P. Heather.

II/65a Gothic Army at Adrianople 378 AD only: 1 x General (4Wb), 2 x Greuthingi (3Kn), 1 x Alans (LH), 7 x warriors (4Wb), 1 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemy: II/78b.

II/65b Tervingi or Early Visigothic Army 200-407 AD: 1 x General on horseback (3Kn) or on foot (4Wb), 1 x noble cavalry (3Kn), 8 x warriors (4Wb), 2 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: II/26, II/58, II/64a, II/64b, II/65b, II/66, II/67b, II/71, II/72d, II/78a, II/78b, II/80a, II/80d. Allies: (II/52 and/or II/67b) or II/78a.

II/65c Alaric & successors 408-419 AD: 1 x General (3Kn), 2 x noble cavalry (3Kn), 1 x cavalry (3Kn or LH), 4 x warriors (4Wb), 2 x freed German prisoners of war and other ex-slaves (4Wb or 7Hd), 2 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: II/58, II/65c, II/66, II/67b, II/71, II/72d, II/78a, II/78b, II/80a, II/80d, II/81c.

II/66 EARLY VANDAL 200 AD - 442 AD

This list covers the Asding and Siling Vandals from their first appearance beyond the Roman Danube frontier until Gaiseric's consolidation of their African conquests and construction of a fleet. During the third century, they attempted to raid across the Danube but were foiled when Aurelian fortified it. They settled in Pannonia, but then joined the great barbarian invasion across the Rhine into Gaul of 406 together (but not co-operating) with the Suevi and Alans; and then continued across the Pyrenees into Spain in 409. Although the Suevi and a faction of the Alans also crossed into Spain, the Vandals were not allied with them and fought them incessantly, as also did the Asdings and Silings each other. The Siling states in Spain were destroyed in 416 by the Visigoths acting on behalf of Rome. The Asdings and an Alan remnant crossed to Africa in 428 and captured Carthage in 439. Jordanes (the historian of the Goths) considered the Vandals to be Gothic in origin, so they can be depicted as similar to Tervingi. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker.

II/66 Early Vandal Army: 1 x General (3Kn), 2 x nobles (3Kn or 4Wb), 7 x warriors (4Wb), 1 x nobles (4Wb or 3Kn) or Alans (LH), 1 x dregs (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: II/47g, II/58, II/64a, II/64b, II/65b, II/65c, II/71, II/72a, II/72c, II/72d, II/78a, II/82a, II/83a. Allies: II/57 or (II/58 and/or II/72c).

II/67 GREUTHINGI, EARLY OSTROGOTHIC, HERUL, SCIRI & TAIFALI 200 AD - 493 AD

This list covers the Greuthingi/Greutungi Goths ("men of the steppes") from their arrival in the Ukraine until the organisation of the Italian Ostrogothic kingdom; and related peoples. Jordanes' equating of the Greuthingi with the Ostrogoths is now thought simplistic. The Greuthingi seem to have split up under attack from Attila's Huns: with some joining the Tervingi (list II/65) in invading Roman territory in 376, some remaining independent and invading Italy under Radagaisus together with assorted Germans in 405, while the majority became Hunnic subjects from 441 until 454, then unified as the Ostrogoths. The most famous achievement of the Greuthingi cavalry was at Adrianople in 378 when they charged into the rear of a Roman army engaged in front. They did not use long lances or stirrups. Goth archers feared cavalry. Heruls from by the Sea of Azov had good light infantry, but said to be drunken and treacherous. They lacked metal armour or helmets. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker, *Goths and Romans* 332-489 P. Heather.

II/67a Radagaisus' Army 401-406 AD: 1 x General (3Kn), 4 x noble cavalry (3Kn), 1 x Alans (LH), 4 x German warriors (4Wb), 2 x archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemy: II/78a.

II/67b Other Armies: 1 x General (3Kn), 5 x noble cavalry (3Kn), 6 x javelinmen if Heruls, archers if not (Ps).
Terrain Type: Littoral if Heruls, Arable if not. Aggression: 3. Enemies: II/25, II/26, II/58, II/65b, II/65c, II/71, II/72d, II/78a, II/78b, II/80a, II/80d, II/82a, II/82b, II/83a, II/83b, III/2. Allies: (II/52 and II/80d) or (II/71 and/or II/72d).

II/68 PICTISH 211 AD - 842 AD

When Septimius Severus broke the power of the Caledones, the political vacuum created was filled by a new confederacy of coastal peoples, initially spreading out from the Orkneys into the north and north-western parts of modern Scotland and building the coastal round-towers called broch. Although it is sometimes stated that broch-building belonged to an earlier period, excavation shows that they were still lived in throughout the Roman period and that the inhabitants possessed Roman loot. Their name for themselves was Cruithni, but the Romans called them Picti "painted people", from which they get their modern name. They left depictions of themselves on numerous symbol stones, bare-headed, straggly bearded and bare legged, wearing a long shirt and cloak, armed with a long spear grasped in 2-hands and about half with a small shield, usually rectangular and grasped at the intersection of 2 diagonal sticks connecting the corner, slung behind. A few are shown instead with javelins or light axe, and there are depictions of crouching archers with hooded cloak pulled up for concealment. Our own Pictish figures are painted with faded saffron shirts, blue-green woad patterns on exposed flesh, tartan-pattern cloaks dyed in natural colours and include many redheads. The culture was metal-poor, so only chiefs could have armour or swords. Chariots were used before 500, then being replaced by horsemen. The Picts raided Roman Britain extensively, often outflanking Hadrian's Wall by sea, but were invaded in turn by Scots from the north of Ireland. The last ends with the union of the two peoples under Kenneth Mac Alpin, who then ruled as the first king of Scotland. The "Barbarian Conspiracy" which raided Britannia in 365-368 consisted of Picts, Atecotts, Saxons and Scots-Irish. Whether this was collusion or fortuitous opportunism is debated. The Atecotts (Tu-ata-cottie "people of Cat/the cat" in an Ulster dialect), one of the tribes of the Firbolg in Irish legend, were especially savage raiders and mercenaries (accused by St. Jerome of cannibalism) said to have emigrated from Ireland to Caithness, Man and the Hebrides, but insufficient is known for a separate list. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *The Painted Men* T.C. Lethbridge, *The Age of the Picts* W.A. Cummins, *Slingshot* 243.

II/68a Pictish Army 211-499 AD: 1 x General in 2-horse 2-crew chariot (LCh), 1 x chariots (LCh) or horsemen (LH), 1 x horsemen (LH) or Atecotts (4Wb), 5 x spearmen (3Pk), 1 x spearmen (3Pk) or javelinmen (Ps), 3 x archers (Ps).
Terrain Type: Littoral. Aggression: 3. Enemies: II/54a, II/54b, II/64a, II/68a, II/73, II/78a, II/81a, II/81b, II/81c. Allies: II/54a and/or II/73.

II/68b Pictish Army 500-842 AD: 1 x General on horseback (Cv) or on foot (3Pk), 2 x light horse (LH), 6 x spearmen (3Pk), 3 x archers or crossbowmen (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: II/54b, II/73, II/81c, II/81d, III/24a, III/24b, III/40a, III/40b.

II/69 SASSANID PERSIAN 220 AD - 651 AD

This list covers the Sassanid dynasty of Persia from their revolt against the Parthian Arsacids until their extinction by the Arabs. Aggression is high because they regarded themselves as heirs to the Achaemenids and claimed all the territories these had ever owned, unfortunately including most of the contemporary eastern Roman empire. Early depictions show mail-shirted kings and princes with heavy lance and bow charging at the gallop on leather or felt-armoured horses. A limited number of Parthian style cataphracts (4Kn) became available as the former Parthian noble families became assimilated, providing a striking force of lancers in full metal armour incorporating tubular arm and leg defences and masked helmets riding metal-armoured horses. The strength of the army was the asavaran. During the revolt, these may have been Parthian-style horse archers, but as they became minor aristocrats ruling subject peasants, they wore mail shirts, rode horses in full leather or felt protection (or occasionally frontal metal half-armour) and were armed with bow and heavy sword. They shot faster but less powerfully than Huns or Byzantines. The archers mentioned on foot in sieges were probably dismounted asavaran. Peasant levy spearmen with rectangular cane-reinforced rawhide shields were brought for camp labour, but formed a rear line in battle. War elephants are first attested in 337, and could not have been available before 260. They were not used to fight cavalry, but only positioned behind the infantry or to head desperate assaults. Several are reported being killed by Late Roman legionaries and auxilia palatina. They are described as having frontal armour "with terrifying crests" or as carrying towers with archers. Vassal nations provided horse archers and Dailami and other hill tribes mercenary infantry. The most useful guides to Sassanid warfare are the Roman and Byzantine accounts of the army in action. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *Roman Histories* Ammianus Marcellinus, *History of the Wars* Procopius, *Maurice's Strategicon* G.T. Dennis (trans), *Rome and Persia at War* 502-532 G. Greatrex, *Warrior of Rome (series)* H. Sidebottom (novels).

II/69a Sassanid Persian Army 220-224 AD: 1 x General (3Kn), 2 x nobles (3Kn) or asavaran (Cv or LH), 6 x asavaran (Cv or LH), 1 x nomad horse archers (LH) or archers and slingers (Ps), 2 x levies (7Hd) or nomad horse archers (LH).
Terrain Type: Arable. Aggression: 3. Enemies: II/22c, II/22e, II/23a, II/23c, II/28b, II/28c, II/28d, II/37, II/46b, II/58, II/64b, II/78b.

II/69b Sassanid Persian Army 225-493 AD: 1 x General (Cv), 1 x cataphracts (4Kn), 4 x asavaran (Cv), 1 x elephants (El) or asavaran (Cv), 1 x asavaran (Cv) or nomad or vassal horse archers (LH), 1 x asavaran (Cv) or archers and slingers (Ps), 1 x nomad or vassal horse archers (LH) or Arabs (LH) or Dailami (4Ax) or other hillmen (3Ax), 2 x levies (7Hd).
Terrain Type: Arable. Aggression: 3. Enemies: II/23a, II/23c, II/28c, II/28d, II/46b, II/46c, II/58, II/64b, II/69b, II/74a, II/78b, II/80b, II/80d, II/82b, III/4a, III/11b. Allies: II/23a or II/28c or II/46b or II/80b or II/80d.

II/69c Sassanid Persian Army 494-651 AD: 1 x General on elevated golden throne (Lit) or on horse (Cv or 4Kn), 5 x asavaran (Cv), 1 x nomad or vassal horse archers (LH), 1 x elephants (El) or asavaran (Cv), 1 x archers and slingers (Ps) or hired Arabs (LH), 1 x Dailami (4Ax or 3Bd) or Asavaran (Cv), 2 x levies (7Hd) or hired Arabs (LH).
Terrain Type: Arable. Aggression: 3. Enemies: II/23a, II/28c, II/58, II/69c, II/82b, III/4b, III/11b, III/16, III/17, III/25a, III/25b. Allies: II/23a or II/28c or II/58 or II/80 or III/11b.

II/70 BURGUNDI & LIMIGANTES 250 AD - 539 AD

The Burgundi differed from other contemporary Germans such as the Franks and the Suevi in their preference for the use of light javelins instead of heavier throwing spears. In 436 their invasion of Roman territory in Gaul was crushed by the Huns at Roman instigation, and they were then settled in eastern Gaul as *foederati*. Their kingdom there was conquered and absorbed by the Franks in 534, but the Franks sent a Burgundian army to help the Ostrogoths in Italy in 539. The Limigantes were slave subjects of the Sarmatians, but rebelled against them in 334; and then became a predatory nuisance on the Roman's Danube frontier until destroyed by the army of Constantius II in 359 AD. Like the Burgundi, they used javelins and fought in close wedge, but their cavalry were light skirmishers. **Reference:** *Armies and Enemies of Imperial Rome* P. Barker.

II/70a Army of the Burgundi 250-534 AD: 1 x General on horseback (Cv) or on foot (4Wb), 1 x noble cavalry (Cv) or foot warriors (4Wb), 8 x warriors (4Wb), 2 x archers or javelinmen (Ps).

Terrain Type: Forest until 436AD, then Arable. Aggression: 3. Enemies: II/64a, II/72b, II/72c, II/72d, II/78a, II/80a, II/81c, II/82a, III/3, III/5a.

II/70b Army of the Limigantes 334-359 AD: 1 x General on horseback (LH) or on foot (4Wb), 1 x light horse (LH) or warriors (4Wb), 8 x warriors (4Wb), 2 x javelinmen (Ps).

Terrain Type: Steppe in 334 AD, then Arable. Aggression: 3. Enemies: II/26, II/78b.

II/71 GEPID 250 AD - 566 AD

This list covers the Gepids (named according to a humorous Goth from "gepanta", meaning slow, sluggish or thick) from their first appearance on the Roman Danube frontier until their annihilation by the combined armies of Lombards and Avars. They were subjugated by the Huns in 375 AD and provided a large allied contingent in Attila's army, but then led the rebel Germans who crushed his successors at the Nedao in 454 AD. They were very similar to Goths, but differed in appearance by wearing their hair in long braids in front. Grave goods suggest the Gepids had three classes, a rich upper class fighting mounted with long lances, a middle class of infantry spearmen whose weapons included heavy throwing spears and a poor class fighting as archers. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath.

II/71 Gepid Army: 1 x General (3Kn), 3 x cavalry (3Kn), 4 x spearmen (4Wb), 4 x archers (Ps).

Terrain Type: Steppe. Aggression: 3. Enemies: II/64b, II/65b, II/65c, II/66, II/67b, II/71, II/72a, II/72c, II/72d, II/80d, II/83a, II/83b, III/1c, III/2, III/3, III/4a, III/4b, III/13a. Allies: II/66 or (II/67b and/or II/73).

II/72 EARLY FRANKISH, ALAMANNIC, SUEVI, QUADI, RUGIAN & TURCILINGI 250 AD - 496 AD, 506 AD, 406 AD, 584 AD, 487 AD & 493 AD.

All these German tribes repeatedly attacked the West Roman Rhine frontier; and the first two finally took over most of Roman Gaul. The Alamanni are described as red haired "of huge size" "savage and uncontrollable", exhibiting "extreme resolution" and once as charging led by the dismounted king and "fiery" nobles "fighting in frenzied rage". The Franks were the most successful in the end and absorbed most of Alamannic Gaul by 506. Their name derives from their favourite throwing axes "francisca". They wore horizontally-striped shirts and hairy shoes. Suevi was a collective term for the German tribes of the upper Danube (including Quadi, Marcomanni & some of the Alamanni) that invaded across the frozen Rhine in 406, crossed into Spain in 409 and set up a kingdom in its north-west corner, which was absorbed by the Visigoths in 584. Rugians were based across the upper Danube in Bohemia and vanish from history after a defeat by Odovakar's Patrician Roman army in 487 while invading Illyria. The Turcilingi were associated with the Rugians in Roman service. The Germans now fought with large round or oval shields, heavier throwing spears called "bebrae" and long swords in dense formations, though only rich nobles had helmets and armour. The Alamanni had learned mass archery. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *Emperor Prefects & Kings* P.S. Barnwell.

II/72a Quadi Army 250-406 AD: 1 x General (3Kn), 10 x warriors (4Wb), 1 x javelinmen (Ps).

Terrain Type: Forest. Aggression: 3. Enemies: II/64a, II/66, II/71, II/72d, II/78a, II/78b, II/80d. Allies: II/26.

II/72b Alamanni Army 250-506 AD: 1 x General on horseback (Cv/4Wb), 7 x warriors (4Wb), 3 x archers (3Bw) or levies (7Hd), 1 x javelinmen (Ps).

Terrain Type: Forest until 406 AD, then Arable. Aggression: 3. Enemies: II/64a, II/70a, II/72d, II/73, II/78a, II/83a. Allies: (II/67b and/or II/70a) or II/72a or II/72d.

II/72c Suevi Army 250-584 AD: 1 x General (3Kn), 8 x warriors (4Wb), 2 x archers (3Bw or 2Ps), 1 x javelinmen (Ps).

Terrain Type: Forest until 406 AD, then Arable. Aggression: 3. Enemies: II/64a, II/66, II/70a, II/71, II/72d, II/78a, II/82a, II/83a. Allies: II/67b or II/78a or II/82.

II/72d Other Early Frankish, Rugian or Turcilingi Armies: 1 x General on horseback (Cv) or on foot (4Wb), 10 x warriors (4Wb), 1 x archers or javelinmen (Ps).

Terrain Type: Forest until 406AD, then Arable. Aggression: 3. Enemies: II/64a, II/65b, II/65c, II/66, II/67b, II/70a, II/71, II/72a, II/72b, II/72c, II/72d, II/73, II/78a, II/80a, II/80d, II/82a, II/83a, III/1c, III/2, III/3. Allies: II/72b.

II/73 OLD SAXON, FRISIAN, BAVARIAN, THURINGIAN, & EARLY-ANGLO-SAXON 250 AD - 804 AD

This list covers the Old Saxon, Frisian, Bavarian and Thuringian peoples of Germany until their absorption by the Franks in 804, 690, 788 & 531 respectively. It also covers the Thuringian and Saxon revolt against the Franks of 555; and the Anglo-Saxons in Britain from Hengist's arrival in Kent circa 428 as leader of mercenaries employed by Vortigern until the accession of Edwin of Northumbria circa 617. All these were light-haired, bearded, wore long-sleeved shirt, trousers and sometimes cloak or cap; and fought with short spear and a moderate-sized round shield. Only nobles had proper swords, the remainder a large knife (or saex). **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath.

II/73 Old Saxon Army 250-804 AD, Frisian Army 250-690 AD, Bavarian Army 250-788 AD, Thuringian Army 250-531 AD & 555 AD and Early Anglo-Saxon Armies 428-617 AD: 1 x General (4Wb), 10 x warriors (4Wb), 1 x archers (Ps).

Terrain Types: Arable for Saxons, Littoral for Frisians and Forest for Bavarians & Thuringians. **Aggression:** 2. **Enemies:** II/64a, II/68a, II/68b, II/72b, II/72d, II/73, II/78a, II/81a, II/81b, II/81c, II/81d, II/83a, III/1a, III/2, III/3, III/5a, III/13b, III/19a, III/21a, III/21b, III/28. **Allies for Bavarians only:** III/1a or III/1b or III/13a or III/13b.

II/74 PALMYRAN 260 AD - 273 AD

This list covers the whole period of Palmyran independence. Palmyra was an Arab trading city on the route to Parthia. In 260 AD, the capture of the Roman emperor Valerian by the Sassanids gave the Palmyran ruler Odenathus his chance. After defeating the Sassanids and putting down a usurping Roman general, he was given command of the eastern Roman army by the western emperor Gallienus. After his murder in 267 AD, his widow Zenobia occupied the Roman provinces of Egypt and Asia Minor and proclaimed her young son emperor in 271 AD. Her army (at first commanded by her husband's old general Zabdas) was defeated by Aurelian's Romans in two epic battles in 272 AD; in which the charge of cataphract lancers in complete iron armour on fully iron or bronze scale armoured horses was foiled by the Roman Illyrian-type light horse, and the excellent Palmyran foot archers could not stop advancing legionaries. The list is based on contemporary accounts and archaeological finds from Palmyra and Dura Europos, the most important of which being the horse armour from Dura and the Dura synagogue fresco, which shows two kinds of light horse (one in blue tunic and red trousers and charging with lances and the other horse archers with bow only) as well as swordsmen in hooded mail shirts. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Palmyra and its Empire* R. Stoneman, *Queen of the East* A. Baron (novel), *Warrior of Rome* series H. Sidebottom (novels).

II/74a Odenathus' Army 260-271 AD: 1 x General (4Kn), 2 x cataphracts (4Kn), 1 x Palmyran light horse (LH), 2 x regular archers (4Bw), 2 x archers (3Bw or Ps), 1 x swordsmen (4Bd) or archers (4Bw or Ps) or Roman cavalry (Cv) or Sagittarii indigene horse archers (LH), 2 x Roman legionaries (4Bd), 1 x Roman auxilia (4Ax).

Terrain Type: Dry. **Aggression:** 1. **Enemies:** II/23a, II/69a. **Allies:** II/23a.

II/74b Zenobia's Army 271-273 AD: 1 x General (4Kn) or if Zenobia (Cv or LCm), 2 x cataphracts (4Kn), 1 x cataphracts (4Kn) or swordsmen (4Bd) or archers (3Bw), 2 x Palmyran light horse (LH), 4 x archers (4Bw), 2 x archers (3Bw or Ps).

Terrain Type: Dry. **Aggression:** 1. **Enemies:** II/23a, II/64b. **Allies:** II/23a.

II/75 PAKCHE & KAYA KOREAN 300 AD - 663 AD

During the Han dynasty, China had conquered most of Korea. After its collapse, the Korean tribes coalesced into the three kingdoms of Koguryo in the north, Shilla in the southeast and Paekche in the southwest. Kaya was the area between Paekche and Shilla which never quite formed a kingdom and was conquered by Shilla in 562. Its troops are assumed to be similar to those of Paekche but irregular. Paekche fell in 660 AD to a naval invasion by Tang China and a revolt against the Tang in 663 AD was defeated. The Paekche army was organised into three tiers, guard units stationed at the capital, permanent regular provincial troops and militia. Provincial and militia close fighting foot were armed with long spears, but there is no evidence for large shields. Cavalry are usually shown on unarmoured horses, but Koguryo sources depict enemy cataphracts and cataphract horse armour has been found in 5th century Paekche tombs. This was probably introduced after losing a war with Koguryo 392-404. **References:** *Slingshot* 234-236, *Armies of Tang China* K.H. Ranzitsch.

II/75 Paekche or Kaya Korean Army: 1 x General (Cv or 4Kn), 1 x cavalry (Cv or 4Kn), 1 x cavalry (Cv), 4 x spearmen (3Pk), 4 x archers (3Bw), 1 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 0. **Enemies:** I/64b, I/64c, II/63, II/76, II/77a, II/79a, III/20a, III/20c. **Allies:** I/64b or II/76 or II/77a or III/7a or III/7b.

II/76 KOGURYO KOREAN 300 AD - 668 AD

Koguryo was the northern kingdom formed in Korea after the collapse of the Chinese Han dynasty. Overland invasions by Sui and Tang Chinese armies failed to capture the heavily fortified frontier cities of the kingdom and it was only in 668 AD when weakened by civil war Koguryo fell to the Chinese forces. Koguryo soldiers are described as "warlike" and texts emphasize the widespread use of armour. The core of the army was its noble cavalry, nearly always depicted on fully armoured horses. Son Bae were elite young nobles who could be represented as a fully armoured lancer riding an unarmoured horse. The Malgal tribes of Manchuria provided both horse and foot archers. Armoured halberdiers depicted on one general's tomb carry long Chinese-style halberds and medium sized shields. Militia had long spears, but lacked large shields. An earlier Chinese source mentions Yemaek tribesmen armed with pikes "as long as 3 men" and a regiment so armed was taken over by Shilla after the fall of Koguryo. **References:** *Slingshots* 234-236, *Armies of Tang China* K.H. Ranzitsch.

II/76 Koguryo Korean Army: 1 x General (4Kn), 1 x cataphracts (4Kn), 1 x SonBae (3Kn or 4Kn) or horse archers (LH), 1 x Malgal horse archers (LH) or armoured swordsmen or halberdiers (3/4Bd), 1 x armoured archers (4Bw), 2 x long-spearman (4Pk) or militia (3Pk), 2 x militia (3Pk), 2 x militia archers (3Bw), 1 x Malgal or other archers (Ps or 3Bw).
Terrain Type: Arable. **Aggression:** 0. **Enemies:** 1/64b, 1/64c, 1/61a, 1/61b, 1/61c, 1/61d, 1/63, 1/75, 1/77a, 1/20a, 1/20b, 1/20c. **Allies:** 1/38b or 1/61c or 1/75 or 1/77a or 1/77b.

II/77 SHILLA KOREAN 300 AD - 935 AD

Located in the southeast corner of Korea, Shilla was the most backward of the Korean Three Kingdoms, but had excellent rulers, diplomats and generals. It destroyed the rival states of Paekche and Koguryo with Chinese help, but when the Tang Chinese tried to impose its rule over Shilla, it was able to rally the other Korean forces under a common flag and to resist them. A peace treaty concluded in 678 left Shilla only nominally a vassal of China. Chong were an elite guard who became cataphracts after 405. Hwarang "flower boys" were young nobles renowned for splendid dress and reckless heroism. Modern reconstructions depict them as horse archers, but they are described as lancers and were forbidden to retreat. "Red banner" foot were pikemen taken over from Koguryo after its fall in 670. **References:** *Slingshots* 234-236, *Armies of Tang China* K.H. Ranzitsch.

II/77a Shilla Korean Army 300-670 AD: 1 x General and Chong (Cv or 4Kn), 1 x hwarang (3Kn or LH), 1 x cavalry (Cv), 4 x spearman (3Pk), 1 x crossbowmen (4Cb), 3 x archers (3Bw), 1 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 0. **Enemies:** 1/64b, 1/64c, 1/63, 1/75, 1/76, 1/79a, 1/77a, 1/77b, 1/20a, 1/20b. **Allies:** 1/75 or 1/76 or 1/20c.

II/77b Shilla Korean Army 671-935 AD: 1 x General and Chong (Cv or 4Kn), 1 x hwarang (3Kn or LH), 1 x cavalry (Cv), 2 x spearman (3Pk), 1 x crossbowmen (4Cb), 3 x archers (3Bw), 2 x red banner spearman (4Pk) or militia spearman (3Pk), 1 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 0. **Enemies:** 1/77b, 1/20c, 1/39, 1/55, 1/56, 1/57.

II/78 LATE IMPERIAL ROMAN 307AD - 408 AD

This list covers the Roman army from the reforms of Constantine I until the murder of Stilicho. Since the reforms did not reach the east until the fall of Licinius, there is some overlap with list II/64. The army was now optimised for fighting barbarian warbands and most legions replaced in seniority by new cavalry units ("veclationes") and new lighter elite infantry units ("auxilia palatina"). Legions continued to use body armour which now consisted of muscled corslets with dangling strips "pteruges". Those of senior officers were probably metal, but it has been postulated by the late H. Russell Robinson of the Royal Armouries that others were moulded rawhide, which is light and cheap but a tough defence easily mass produced. Rawhide could have been introduced when metal armour was scarce, such as the great expansion in numbers under Diocletian or after heavy losses as at Adrianople. Later it could be replaced by short mail corslets worn over an undergarment with pteruges. The inclusion of elite legions in the central field army where they had to march long distances might also have been an influence. Some earlier helmets continued in use, but most were now simple designs with two parts joined at the centre-line by a ridge piece. The pilum was replaced by the spiculum "capable when thrown with skill and force of penetrating the shields of the foot and the clianaria of the horsemen", carried with a short javelin "verutum", and both together referred to by Vegetius as "the common missile weapons". They also carried five lead-weighted feathered throwing darts "martioabululi" stored behind the large oval shield. Their sword continued to be the long spatha. Auxilia palatina had the same weapons and shield but no body armour. Both legions and auxilia palatina now included a proportion of archers. Auxilia palatina recruited from German tribes were bearded and bare-headed, others clean-shaven and wore helmets. Their long-sleeved tunics were usually white, decorated front and back with purple stripes down from each shoulder and purple roundels near the bottom. A few depictions show men who might be legionaries in red tunics with similar markings. Belts are dark-red leather. Descriptions of helmet crests are consistent with white for guards, yellow for auxilia, black for legionaries and possibly red for officers. A painted tombstone showed a dark green saddlecloth and red harness. Trousers are depicted as dark brown, cloaks as yellow-brown "russus". Cavalry continued as in II/64, except that after 337 Constantius II had re-equipped the catafractarii as clianarii. Field army shield designs are illustrated in the *Notitia Dignitatum* and are reproduced with colour notes in the first reference. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Roman Histories* Ammianus Marcellinus, Vegetius: *Epitome of Military Science* N.P. Milner (trans), *Notitia Dignitatum* O. Seeck (ed), *The Later Roman Empire* A.H.M. Jones, *The Late Roman Army* P. Southern & K.R. Dixon, *The Rise and Decline of the Late Roman Field Army* R.S. Cromwell, *The Fall of the West* A. Goldsworthy, *The Little Emperors* A. Duggan (novel).

II/78a Western Roman Army: 1 x General (Cv), 1 x equites (Cv), 2 x equites Illyriciani (LH), 2 x legionaries (4Bd), 3 x auxilia palatina (4Ax), 2 x auxilia palatina (4Ax) or archers (Ps), 1 x catafractarii (3Kn) or clianarii (4Kn) or Equites Alani, Taifali or Sciri (3Kn) or horse archers (LH) or bolt or stone-throwers (Art) or legionaries (4Bd) or Franks (4Wb).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** 1/54a, 1/57, 1/58, 1/64a, 1/64b, 1/65b, 1/65c, 1/66, 1/67a, 1/67b, 1/68a, 1/70a, 1/72a, 1/72b, 1/72c, 1/72d, 1/73, 1/78a, 1/78b, 1/80d, 1/82a. **Allies:** 1/57 or 1/72d.

II/78b Eastern Roman Army: 1 x General (Cv), 2 x clianarii (4Kn), 1 x equites Illyriciani (LH), 1 x horse archers (LH), 3 x legionaries (4Bd), 2 x auxilia palatina (4Ax), 1 x archers (4Bw or Ps), 1 x equites (Cv) or bolt or stone-throwers (Art).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** 1/26, 1/28c, 1/52, 1/55b, 1/58, 1/65a, 1/65b, 1/65c, 1/67b, 1/69a, 1/69b, 1/70b, 1/72a, 1/78a, 1/80d. **Allies:** 1/23a or 1/28c or 1/65b.

II/79 CHINESE NORTHERN & SOUTHERN DYNASTIES 317 AD - 589 AD

This list covers the northern Wei dynasty founded in 386 AD by the T'o-pa clan of the Hsien-pi (which unified the other barbarian kingdoms) and its successor dynasties until the Sui seized power in 581 AD; and the native Chinese southern dynasties from the establishment of the eastern T's'in (or Chin) in 317 AD until the Sui conquest of the south in 589 AD. The Wei armies did not immediately become sinicised, troops on the northern frontier remaining attached to their barbarian roots. Wei infantry were numerous rather than efficient, hence the Horde option. Some riders of barded horses had unarmoured arms and lower legs, so are 3Kn. Others were fully protected. **References:** *Imperial Chinese Armies* C. Peers, *Medieval Chinese Warfare* D.A. Graff.

II/79a Northern Dynasty Army: 1 x General (3Kn or 4Kn), 2 x barded cavalry (3Kn or 4Kn), 1 x horse archers (LH), [1 x dare-to-die swordsmen (3/4Bd) or un-barded cavalry (Cv) + 1 x archers (3Bw) or tribal foot (3Ax) + 3 x militia (Sp or 7Hd) + 2 x militia archers (3Bw) + 1 x militia crossbowmen (3Cb) or archers (Ps)] or [2 x barded horsemen (3Kn or 4Kn) + 2 x un-barded cavalry (Cv) + 4 x horse archers (LH)].

Terrain Type: Arable. **Aggression:** 2. **Enemies:** II/21b, II/21c, II/38c, II/46c, II/61b, II/61c, II/61d, II/75, II/76, II/77a, II/79a, II/79b, III/8, III/11b, III/20a. **Allies:** II/38c or III/11a.

II/79b Southern Dynasty Army: 1 x General (3Kn or 4Kn), 1 x cavalry (3Kn or 4Kn or Cv), 2 x swordsmen or halberdiers (3/4Bd), 2 x spearmen (3Ax), 4 x archers (3Cb or Ps), 2 x tribesmen (3Wb) or war wagons (WWg) or [1 x horse archers (LH) + 1 x archers (3Cb or Ps)].

Terrain Type: Arable. **Aggression:** 1. **Enemies:** I/49d, II/21b, II/21c, II/38b, II/79a, II/79b, III/20a.

II/80 HUNNIC 356 AD - 570 AD

This list covers western Hunnic armies from their emergence from the steppes and contact with the Alans in 374 until the last remnants were absorbed by the Avars. The list also covers the (possibly unrelated) Chionites and Hephthalites or "White Huns" and the Sabir; the Chionites from their first intervention in Kushan Bactria in 356 until their destruction by the Sassanids in 468; the Hephthalites until their western part's amalgamation with remnants of the Juan-juan to form the Avars after 558 and the loss of the eastern part's Indian empire around 570; and the Sabir from their arrival in the steppes north of the Caucasus around 515 until they were absorbed into the Volga Bulgar confederacy in 558. Contemporaries stress the Huns' savagery and barbarism "even compared to their neighbours", that "while other peoples were carried on horseback, the Huns lived there", their expertise with exceptionally powerful bows and their total confidence. Huns are initially described as wearing linen or animal-skin garments and "furlowing their cheeks with knives to prevent the growth of beards" (which could simply mean they were bad at shaving). When they acquired textile garments, they wore them unwashed until they rotted and fell off. Their mounts were not small ponies but big, tractable, tough, but ugly horses with heavy heads and flat rumps. Only a few nobles had armour and lances. Others sometimes accompanied bows and bone-tipped arrows with javelins or a lasso. The western Huns were most dangerous when united, the most famous example being the army of Attila until his death in 453 enabled his subject peoples to rebel. The Sabir Huns provided both Byzantines and Sassanids with mercenary infantry that were "exceedingly ferocious and rapacious" and good at siege work. How they were equipped is obscure, since they are described both as "hoplitai" and shooting rapidly on foot and there is also a mention of a Hun leaning on a long shield. Chionites included a proportion of unarmoured riders with lance as well as bow and otherwise looked much like Parthian horse archers. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *The World of the Huns* O.J. Maenchen-Helfen, *The Death of Attila* C.Holland (novel), *The Year of the Horse* R.F. Tapsell (novel).

II/80a Attila's army 433-453 AD: 1 x General (Cv or LH), 5 x Hun horse archers (LH), 1 x Ostrogoths and Gepids (3Kn), 2 x Hun horse archers (LH) or Burgundian, Rugian, Thuringian and Frankish subject warriors (4Wb), 2 x subject warriors (4Wb), 1 x archers (Ps).

Terrain Type: Steppe. **Aggression:** 4. **Enemies:** II/65b, II/65c, II/67b, II/69b, II/70a, II/72d, II/82a, II/83a, II/83b.

II/80b Sabir Hunnic Army 515-558 AD: 1 x General on horseback (Cv or LH) or on foot (4Wb), 6 x horse archers (LH), 5 x Hunnic warriors (4Wb or 4Bw).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** II/28c, II/58, II/69b, II/80d, II/83b.

II/80c Chionite or Hephthalite Hunnic Army in Bactria or India 356-570 AD: 1 x General (Cv), 8 x light horse (LH), 1 x lancers [if Chionite] (3Kn) or elephants crewed by 10 halberdiers [if Hephthalite] (EL), 2 x archers (3Bw/LH).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** II/3b, II/46b, III/10c.

II/80d Other Hunnic Armies 374-558 AD: 1 x General (Cv or LH), 11 x horse archers (LH).
Terrain Type: Steppe. **Aggression:** 3. **Enemies:** II/3b, II/25, II/28c, II/38c, II/46b, II/46c, II/58, II/65b, II/65c, II/67b, II/69b, II/71, II/72a, II/72d, II/78a, II/78b, II/80b, II/80d, II/83a, II/83b, III/8, III/11b.

II/81 SUB-ROMAN BRITISH 407 AD - 1034 AD

This list covers the lowland states of mainland Britain and Armorica (modern Brittany). When the Germans invaded across the Rhine into Gaul in 406, Roman Britain was cut-off from the central imperial administration in Italy. After a brief period of upheaval, Constantine III was proclaimed emperor in Britain and took the field army to Gaul, leaving the British garrison troops behind. Although successful at quelling the invaders, he was attacked by the army of Honorius as a rebel and ultimately defeated. Honorius then sent a rescript telling the British local authorities to govern themselves. The split was not intended to be permanent and there may have been a temporary partial reoccupation in 417 which could not be maintained due to local intransigence. Powerful magnates took over the running of their local city and garrison commanders may also have become de facto rulers of their local area, gradually evolving into petty kings. Britannia Prima, the western province, maintained some Roman organisation and city life until the late 460s. As kingdoms evolved they started to quarrel and external threats from Irish and Picts continued. A ruler named in several texts as Vortigern called in Saxon foederati and settled them in modern Kent, where they rebelled and established their own expansionist kingdom. This example was followed by other invaders (Angles in the north-east and Saxons in the south), who made war on the British kingdoms. All the evidence suggests that the Anglo-Saxon conquest of Angle-land was a slow process with many setbacks which demonstrate the existence of British opposition under British leaders (probably including Arthur). The Saxon conquest at first advanced rapidly from the south-east, then slowed as opposition increased. The lowland cities of former Britannia Prima fell between 522 and 577, York in 580 and Dumnonia in the south-west was reduced to Cornwall around 800, which also ended the Armorican connection. The list ends with the incorporation of the northern British kingdom of Alt Clut (Strathclyde) in Scotland. This is a period which is still riven by controversy, for which there are few contemporary sources and much speculation. Vortigern continued in power as late as St Germanus' visit in 446 and fought against Ambrosius Aurelianus (described as "the last of the Romans") alleged in later accounts to be the uncle of Arthur. There is also documentary evidence for Riothamus "King of the Britons" who led an army to Gaul in 468 to help Syagrius (the ruler of a remnant Roman state in Gaul) against the Visigoths. He is last mentioned retreating towards the Gallic town of Avalon and it is likely that Geoffrey of Monmouth's account of King Arthur's continental campaigns is based on Riothamus. We assume that the army was initially composed of the Roman limitani legiones, old auxiliary alae and cohortes and newer vexillationes and numeri of the garrison troops of the Comes Litoris Saxonici and Dux Britanniarum, but that these were initially supplemented, then replaced by ruler's bodyguards "comitatus" and town militias, then by infantry levies "pedyt" and noble cavalry. Many Alans settled in Armorica, but eventually took up javelins in place of their bows. A few may have had Sarmatian-style horse armour. Although there are many hypothetical reconstructions of later British warriors, the only near contemporary descriptions are of noble cavalry with yellow crested helmet, mail corslet, javelins, sword and white shield on swift unarmoured horses. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *History of the Kings of Britain* Nennius, *Britannia Prima* R. White, *The Age of Arthur* J. Morris, *The Discovery of King Arthur* G. Ashe, *Civitas to Kingdom* K.R. Dark, *An Age of Tyrants* C.A. Snyder, *Lords of Battle* S.S. Evans, *The Little Emperors* A. Duggan (novel), *Conscience of the King* A. Duggan (novel), *The Badon Parchments* J. Masfield (novel), *Artorius Rex* J. Gloag (novel), *Men Went to Cattraeth* J. James (novel), *Sword at Sunset* R. Sutcliffe (novel).

II/81a Armies of the Dux Brit, the Com Lit Sax, Britannia Prima, Ambrosius, Riothamus or Arthur 407-470 AD: 1 x General (Cv or 3Kn), 1 x equites or alares (Cv), 1 x equites Dalmatae (LH) or Welsh gentry (Cv), 1 x equites catafractarii (4Kn) or alares (Cv), 2 x legionarii [of VI Victrix or II Augusta] (4Bd) or pedyt (Sp), 5 x cohortales or numeri (4Ax) or pedyt (Sp), 1 x archers (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/54a, II/68a, II/73, II/81a, II/81b. Allies: II/78a or II/82a.

II/81b Vortigern's Army 429-441 AD: 1 x General on horseback (Cv) or on foot (4Bd), 1 x equites (Cv) or comitatus (Cv or 4Bd), 6 x numeri (4Ax) or pedyt (Sp), 1 x Saxons (4Wb), 2 x Saxons (4Wb) or militia (7Hd), 1 x archers, slingers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/54a, II/68a, II/73, II/81a, II/81c. Allies: II/73.

II/81c British Armies 471-580 AD or Armorican Army 429-580 AD: 1 x General (Cv or 3Kn), 1 x comitatus (Cv), 4 x light horse (LH) or pedyt (Sp), 4 x pedyt (Sp) or peasants (7Hd), 2 x javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/70a, II/72d, II/73, II/82, II/83. Allies: II/58, II/72d.

II/81d Strathclyde Army 580-1034 AD: 1 x General on horseback (Cv), 2 x comitatus (Cv), 1 x comitatus (Cv) or pedyt (Sp), 7 x pedyt (Sp), 1 x archers, slingers or javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: II/54b, II/68b, II/73, III/24a, III/24b, III/40a, III/40b, III/45. Allies: III/40b.

II/82 PATRICIAN ROMAN 408 AD - 493 AD

This list runs from the murder of the great general Stilicho by the ungrateful western emperor Honorius, until the eastern empire organised an Ostrogothic move from Illyria into Italy which destroyed Odoacar's west Roman army; and also conveniently ended the east's dependence on barbarians. While this period lasted, successful generals such as Odoacar sought to become the "Patrician" commander in chief of a puppet Roman emperor. Regular Late Roman units continued in existence, but service in the legions had become unpopular due to their heavier equipment, leading to a shrinkage in number, while the survivors of the Gothic foederati that Stilicho had used and other barbarians had been formed by him into new vexillationes and auxilia (often with the titles "Honoriani" and "Arcadiani" after the two young emperors) enlisted as individuals under Roman discipline. After the fall of Attila's Hunnic empire, many stray Huns and Hunnic groups were similarly recruited, which provided expertise that led in time to the replacement of cavalry javelins by Hunnic bows. The loss of territory in the west (especially that of Africa to the Vandals in 439) damaged recruitment; and the gap was increasingly filled by barbarian groups enlisted under their own leaders as foederati who fought in their own native style.

References: *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *Notitia Dignitatum* O. Seeck (ed), *Emperor Prefects & Kings* P.S. Barnwell, *The Rise and Decline of the Late Roman Field Army* R. Cromwell, *Warfare in Roman Europe AD 350-425* H. Elton, *The Fall of the West* A. Goldsworthy, *The Rome That Did Not Fall* S. Williams & G. Friel.

II/82a Western Patrician Roman Army: 1 x General (Cv or 3Kn), 1 x equites (Cv), 2 x equites (Cv or 3Kn or LH) or Gothic foederati (3Kn), 1 x legionaries (4Bd), 2 x auxilia palatina (4Ax), 3 x auxilia palatina (4Ax) or German foederati (4Wb), 2 x archers (Ps).

Terrain Type: Arable. **Aggression:** 0. **Enemies:** II/66, II/67b, II/71, II/72b, II/72c, II/72d, II/73, II/80a, II/80d, II/82a, II/83a, II/84, III/17. **Allies:** II/40 or II/58 or II/70 or II/72 or II/73 or II/80d or II/81a or II/81c or II/82b or II/83a.

II/82b Eastern Patrician Roman Army: 1 x General (3Kn), 1 x equites (3Kn or Cv), 2 x horse archers (LH), 1 x equites clibanarii (4Kn) or Gothic foederati (3Kn), 2 x legionaries (4Bd), 2 x auxilia palatina (4Ax), 2 x legionaries (4Bd) or German foederati (4Wb) or archers (Ps) or Isaurian javelinmen (Ps), 1 x archers (Ps or 4Bw).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/67b, II/69b, II/69c, II/71, II/80a, II/80b, II/80d, II/83a, II/83b, II/84, III/1c, III/17. **Allies:** II/23a or II/67b.

II/83 LATER VISIGOTHIC 419 AD - 720 AD

This list covers the Visigoths from the establishment of their Tolosan kingdom in south-western Gaul, through its extension into Spain (469-478) and the loss of the Gallic provinces to the Franks in 507, to the Islamic conquest of 711 and then the vassal kings Aquila (711-713) and Ardo (713-720). Buccellarii were the nobles' well-armoured followers. Gardingi were minor royal officials, lesser gentry and followers in more traditional Gothic equipment, but now relying more on skirmishing with javelins rather than a full-out charge. Spearman were initially the bulk of the former foot warriors settled as prosperous farmers, but were increasingly provided from their slaves. Roman auxilia formerly garrisoned in towns degenerated into town militia. **References:** *Armies and Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath.

II/83a Later Visigothic Army 419-621 AD: 1 x General (3Kn), 1 x bucellarii (3Kn), 2 x gardingi (Cv), 2 x gardingi (Cv) or Romans (4Ax), 4 x spearmen (4Wb), 2 x archers and slingers (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/66, II/70a, II/72c, II/72d, II/78a, II/80a, II/80d, II/81c, II/82a, II/83a, III/4b, III/5a, III/5b, III/17. **Allies:** II/70a or II/72c or III/3 or III/4b.

II/83b Later Visigothic Army 622-720 AD: 1 x General (3Kn), 1 x bucellarii (3Kn), 2 x gardingi (Cv), 1 x Romans (4Ax or 7Hd), 4 x spearmen (Sp), 2 x archers (Ps), 1 x Basque javelinmen and slingers (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/67, II/71, II/80a, II/80b, II/82b, III/1c, III/5b, III/17, III/28, III/31, III/34a.

II/84 AFRICAN VANDAL 442 AD - 535 AD

This list covers the Vandals from Gaiseric's consolidation of their African conquests until the Byzantine reconquest. Rather than work for a living, the Vandals imposed themselves as an aristocracy on the existing population which they exploited ruthlessly and did not allow to bear arms. In consequence, their army was entirely of noble cavalry, with no infantry except occasionally a few hired Moorish javelinmen. The Alans that accompanied them in the invasion were assimilated into the nobility. Having built a large fleet, the Vandals of Africa raided Italy. They defeated counter-invasions by west Roman armies aided by the east, but twice lost badly to Moorish armies, and finally fell to a small Byzantine army led by Belisarius (partly due it must be said to a combination of incompetent commanders, the fog of war and bad luck). **References:** *Armies and Enemies of Imperial Rome* P. Barker, *History of the Wars: The African War* Procopius.

II/84 African Vandal Army: 1 x General (3Kn), 10 x Vandals (3Kn), 1 x Alans (3Kn or LH) or Moors (LH or Ps) or Vandals (3Kn).

Terrain Type: Littoral. **Aggression:** 3. **Enemies:** II/57, II/82a, II/82b, III/4a. **Allies:** II/57.

SECTION THREE: THE EARLY MEDIEVAL PERIOD 476 AD TO 1071 AD

III/1 EARLY SLAV 476 AD - 1218 AD

This list covers the independent Slav tribes and starts from their first move west until their absorption into the Croat, Serb, Bulgar, Magyar, Polish, Rus and East Frankish states. "Northern Slavs" include the tribes who successfully defended their native forests against the Rus until 985 AD and the Wends of the Baltic coast until at least 1218 AD. "Western Slavs" are the Carantini of Austrian Carinthia until absorbed by the Franks and Bohemians and also the Moravians until the acquisition of their lands by Poland in 1003 AD. "Southern Slavs" are Balkan tribes mostly north of the Danube and include the Slavs and Antes who fought against the Byzantines and each other, alternately fought or were dominated by Steppe peoples such as the Avars, Magyars, Bulgars and Khazars; and whose independent existence ended by 896 AD. Maurice describes Southern Slavs as living in river-side villages deep in the forest and being mostly armed with a pair of short javelins, some adding pretty but unwieldy oblong "door-shields". Their archers used poisoned short arrows. From about 580 nobles started fighting mounted in mail shirts. The Moravians, whether mounted or on foot, used single-handed hatchets with short shafts. **References:** *Armies of the Dark Ages* I. Heath, *Maurice's Strategikon* G.T. Dennis (trans).

III/1a Northern Slav Armies 580-1218 AD: 1 x General (Cv), 1 x noble cavalry (Cv), 7 x javelinmen (3Ax), 1 x Vikings (4Bd) or Danish, Old Saxon or Thuringian mercenary cavalry (Cv) or mercenary knights (3Kn) or archers (3Bw), 2 x archers (Ps). Terrain Type: Littoral. Aggression: 1. Enemies: II/73, III/40a, III/40b, III/40c, III/40d, III/48, III/53, III/63a, III/63b, IV/13a. Allies: II/73 (Old Saxon).

III/1b Western Slav Armies 741-1003 AD: 1 x General (Cv), 1 x noble cavalry (Cv) or Swabian or Frankish knights (3Kn) or archers (3Bw), 8 x spearmen (Sp), 2 x archers (Ps or 3Bw). Terrain Type: Arable. Aggression: 1. Enemies: III/28, III/30b, III/53, III/63a, III/68a. Allies: II/73 (Bavarian), III/30b or III/47.

III/1c Southern Slav Armies 476-896 AD: 1 x General on horseback (Cv) or on foot (3Ax), 1 x javelinmen (3Ax) or cavalry (Cv), 8 x javelinmen (3Ax), 2 x skirmishers (Ps). Terrain Type: Forest. Aggression: 1. Enemies: II/71, II/72d, II/83b, III/2, III/4a, III/4b, III/5a, III/13a, III/13b, III/14a, III/14b, III/14c, III/16, III/17, III/21a, III/26a, III/26b, III/28, III/29, III/30a, III/30b, III/32, III/40a, III/47, III/48, III/53, III/63a.

III/2 EARLY LOMBARD 489 AD - 584 AD

This list starts with the Lombard settlement in Pannonia and presumed adoption of cavalry warfare. In 568 AD they invaded Italy and the list ends with the definitive settlement of Lombards on land that is attributed to Authari in 584 AD. "Langobard" should mean "long beards" and may refer to facial hair or to their axes, but this is not confirmed either by their grave-goods or by depictions of Lombards in contemporary art. Later laws, which may reflect this period, divided the Lombards into armoured noble cavalry, unarmoured cavalry (who probably formed a reserve line) and shielded archers. In the Pannonian period, the unarmoured troops may have fought on foot, armed with spear or sax and shield. Archers were drawn from the lowest class, including freed serfs. Maurice lists the Lombards among the "fair-haired peoples" who he says charge fiercely whether mounted or on foot, are disobedient to their leaders and are easy to ambush. **References:** *Armies of the Dark Ages* Ian Heath, *Maurice's Strategikon* G.T. Dennis (trans).

III/2 Early Lombard Army: 1 x General (3Kn), 4 x nobles (3Kn), 4 x followers (3Kn/4Wb), 3 x archers (3Bw).

Terrain Type: Arable. Aggression: 2. Enemies: II/67b, II/71, II/72d, II/73, II/83a, III/1c, III/2, III/3, III/4a, III/4b, III/5a, III/13a, III/13b, III/17. Allies: II/72c (Suevi) or II/73 (Old Saxons) or (III/5a and/or III/13b) or III/14a.

III/3 ITALIAN OSTROGOTHIC 493 AD - 561 AD

This list covers Ostrogothic armies from the establishment of the Ostrogothic kingdom in Italy by Theodoric the Great after overthrowing Odovacar's Patrician Roman army (with East Roman connivance), through the Byzantine invasion ordered by Justinian I in 535 (led initially by the brilliant Belisarius and from 551 by the elderly but competent Narses) until the suppression of the last revolt, by which time incessant fighting had ruined Italy. The main Ostrogothic leader in the first half of the Byzantine years up to 539 was the slow-thinking Wittigis, but from then on the clever Totila. The Ostrogoths formed an armoured mounted nobility superimposed on a remnant Roman organisation. Nobles charged fiercely on horseback, but are often described throwing spears or javelins as well as using shields and swords. Foot were mostly archers. Since these were frightened of Byzantine cavalry, they are classed as Psiloi. Shielded spearmen occasionally mentioned or hinted might have been Rugians or remnants of Odovacar's army or dismounted nobles. Peasant levies used on one occasion in Lucania were not a success. Burgundian allies sent by the Franks did assist in some battles against the Byzantines; but the Franks themselves were nominally allied to both sides, but helped neither and eventually actually attacked both on their own account. **References:** *Armies of the Dark Ages* Ian Heath, *History of the Wars: The Gothic War* Procopius, *Let Darkness Fall* L. Sprague de Camp (novel).

III/3 Italian Ostrogothic Army: 1 x General (3Kn), 5 x nobles (3Kn), 2 x nobles (3Kn) or spearmen (Sp), 2 x archers (Ps), 2 x archers (3Bw) or peasant levies (7Hd).

Terrain Type: Arable. Aggression: 0. Enemies: II/70a, II/71, II/72d, II/73, III/2, III/4a, III/4b, III/5a. Allies: II/70a.

III/4 EARLY BYZANTINE 493 AD - 578 AD

"Byzantine" is a modern term for the Roman state (whose citizens actually called themselves "Romans") with its original capital at Constantinople "The City of Constantine" (built in 330 AD on the site of the ancient Greek city of Byzantium). It is now Istanbul "It is the City". The city is still surrounded by its nearly impregnable (it was once captured by a unit of light horse that found a gate open and unguarded) triple walls, which can be explored. This list covers Roman armies from the end of the Western empire until the reforms of Maurice and includes the armies of Belisarius 527-548 and Narses 551-565. Generals were hindered by insubordinate juniors, slowly-paid troops and the economic effects of plague. Kavallarioi are described by Procopius as armed with Hunnic bow, sword and corslet and a "short" (probably round) shield hung from the shoulders. Despite their armour, they originally often fought in Hunnic style (LH) "shooting from all angles" and this gives better results against western opponents. Boukellarioi are the general's bodyguard and from 527 Belisarius' extended household. They added a lance and their shields were larger since on one occasion they protected the general with them. They did not return to Italy with him in 544 and are not mentioned under Narses. At Casilinum in 544, Agathias describes all Byzantine cavalry as having both bow and spear, with some substituting a longer lance, so boukellarioi practise may have spread. Horse armour had not yet been copied from the Avars, though it was being advocated by a theoretician around 550. The skutatoi were surviving Roman legions and auxilia palatina (Bd) and are depicted in art with short spears, muscle cuirasses, pteruges and large oval shields with Late-Roman shield patterns. Symmachoi were foreigners fighting in native style. 40 years ago, wargamers had to rely on "Count Belisarius" for information, but new availability of Byzantine military texts have rendered it outdated. Herul mercenaries employed after they ceased to be an important tribe were independent enough to be classed as allies. **References:** *Armies & Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *History of the Wars* Procopius, *Historiae* Agathias, *The Byzantine Wars* J. Haldon, *The Age of Hippopotamoi* I. Syvonne, *Belisarius: The Last Roman General* I. Hughes, *Rome and Persia at War 502-532* G. Greatrex, *Justinian's Wars* R. Boss, *Count Belisarius* R. Graves (novel).

III/4a Early Byzantine Army 493-544 AD: 1 x General with boukellarioi (Cv), 5 x kavallarioi (all LH or all Cv), 2 x skutatoi (4Bd), 2 x psiloi (Ps), 1 x boukellarioi (Cv) or Isaurian javelinmen (3Ax) or Gothic or Herul symmachoi (3Kn), 1 x Hunnic or Moorish symmachoi (LH).
Terrain Type: Arable. Aggression: 3. Enemies: II/23a, II/55b, II/57, II/69b, II/71, II/84, III/1c, III/2, III/3, III/5a. Allies: II/23a.

III/4b Early Byzantine Army 545-578 AD: 1 x General (Cv or 6Cv), 1 x kavallarioi (LH or Cv), 5 x kavallarioi (Cv or 6Cv), 1 x Cepid, Vandal, Herul or Gothic symmachoi (3Kn) or Slavs (3Ax), 2 x skutatoi (4Bd), 2 x psiloi (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: II/23a, II/55b, II/57, II/69b, II/69c, II/71, II/83a, III/1c, III/2, III/3, III/5a, III/13a, III/13b, III/14a. Allies: II/67 (Herul) or II/80b (Sabir) or III/2.

III/5 MIDDLE FRANKISH 496 AD - 639 AD

This list covers Frankish armies from the absorption of Alamannic Gaul until the death of the last effective Merovingian king Dagobert I. After the death of Clovis in 511, the kingdom was divided between his 4 sons and under their descendants became subject to fluctuating and disconnected partitions. In 623 it finally permanently split on geographical rather than dynastic lines into the kingdoms of Austrasia and Neustria. Most external wars were fought by the Austrasians. Frankish tribal infantry carried iron-rimmed shields with a prominent boss, sword and angon (a large barbed spear with iron-covered shaft) or francisca (a throwing axe with a short wooden handle). They were described as wearing multi-coloured tunics and green cloaks with red embroidery. Mounted nobles had spears, swords, round shields and varying amounts of armour (Cv or Kn). Levies are Gallo-Roman peasants and town militia. **References:** *Armies & Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath.

III/5a Austrasian or Burgundian Armies: 1 x General (3Kn or Cv), 1 x noble cavalry (3Kn or Cv), 6 x tribesmen (4Wb), 3 x levies (Sp) or tribesmen (4Wb), 1 x archers or Basque javelinmen or slingers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: II/70a, II/73, II/82a, III/1c, III/2, III/3, III/4a, III/4b, III/5a, III/5b, III/13a, III/13b, III/17, III/18, III/21a. Allies: II/83a.

III/5b Neustrian, Aquitanian or Provencal Armies: 1 x General (3Kn or Cv), 1 x noble cavalry (3Kn or Cv), 6 x levy infantry (Sp), 3 x levies (Sp) or tribesmen (3/4Wb), 1 x archers or Basque javelinmen or slingers (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: II/82b, II/83a, III/5a, III/18, III/21a. Allies: II/83a.

III/6 EMISHI 500 AD - 878 AD

This list is provided as the main enemy for the contemporary Japanese. It ends with the last revolt against the Japanese in 878. The Emishi were the indigenous people of northern Japan, including both the Ainu and groups ethnically closer to the Japanese. They are doubtfully credited with introducing curved swords and leather armour to the Japanese. In the eighth and ninth centuries they were described as masterly horse archers and earlier as archers, but not on horseback. "They swarm like ants and gather like bees! When we attack, they flee! When we relax, they assault our fortifications!" Ainu are described as "blood-drinking" hunters rather than farmers, tattooed, wearing fur garments (often concealing swords) and carrying arrows for their short bows in the topknot of their hair. **References:** *Slingshot* 251 & 252

III/6a Emishi Army 500-699 AD: 1 x General (3/4Bw), 11 x archers (Ps or 3Bw).
Terrain Type: Forest. Aggression: 0. Enemies: III/7a, III/7b.

III/6b Emishi Army 700-878 AD: 1 x General (LH or Cv), 9 x horse archers (LH), 2 x archers (Ps or 3Bw) or horse archers (LH).
Terrain Type: Forest. Aggression: 0. Enemies: III/7b.

III/7 PRE-SAMURAI JAPANESE 500 AD - 900 AD

This list covers the Japanese army of the Later Kofun, Ritsuryo and Early Heian states that preceded the rise of the Samurai. Kofun armies intervened in Korea and Ritsuryo armies fought in Korea against Tang China, but mainly against the wild Emishi of northern Japan. Initially the army were mainly provided the nobles and their retainers of uji clans. Most were armoured archers who shot from behind a line of portable pavises, but some others instead fought with spears up to 14 feet long. These clan troops were replaced in the Heian period by conscript Heishi militia, who fought in deep combined formations with pavises for the front rank. Armoured cavalry had been copied from Korea, but with weaker horses and lacking lances. Horse armour had been abandoned by the start of this list. Although a few captured Sui Chinese artillery pieces were acquired in 618, artillery became widespread in the mid-7th century and was important in the Jinshin war of 672. **References:** *Heavenly Warriors* W.W. Farris, *The History of Japanese Armor (Volume 1) - From the Yayoi period to the Muromachi period* R. Nakanishi, *Slingshot* 251 & 252.

III/7a Kofun Army 500-645 AD: 1 x General on horseback (Cv) or on foot (4Bw), 1 x armoured horse archers (Cv), 2 x uji noble archers with armour and pavisé (4Bw), 4 x less-armoured retainers (3/4Bw), 2 x uji with long spear and pavisé (Sp/4Pk), 1 x Emishi scout archers (Ps) or levies (7Hd), 1 x levy archers (3Bw) or levies (7Hd).

Terrain Type: Hilly. Aggression: 2. Enemies: II/77a, III/6a, III/7a, III/20a, III/20c. Allies: II/75.

III/7b Ritsuryo or Early Heian Army 646-900 AD: 1 x General on horseback (Cv) or on foot (4Bw), 2 x armoured horse archers (Cv), 1 x Emishi (LH or Ps), 6 x heishi militia (4/8Bw), 1 x Emishi (LH) or peasant conscripts (7Hd), 1 x bolt-shooters (Art).

Terrain Type: Hilly. Aggression: 2. Enemies: II/77a, II/77b, III/6a, III/6b, III/7b, III/20c. Allies: II/75.

III/8 CENTRAL-ASIAN CITY STATES 500 AD - 1000 AD

This list covers the Sogdian city states and the kingdom of Khwarizm from their emergence after the fall of the Kushan empire until the Arab conquest in the eighth century, and also the city-states of the Tarim basin (such as Turfan, Kucha and Khotan) until the fall of the last independent city, Khotan, to the Qarakhanids. Chakars were Sogdian nobles and their retainers and had a strong heroic ethos. They were armoured and carried lance, bow and sometimes a round shield; and are usually depicted charging with lances, while the bow was used in heroic duels on foot. Sogdian dihqan land-owning gentry and Tarim basin nobles and gentry were similarly equipped but less heroic. Local nomad horse-archers (LH) were used as scouts. **References:** *Empires of the Silk Road* C. Beckwith, *Sassanian Armies* D. Nicolle.

III/8 Central-Asian City Army: 1 x General (3Kn or Cv), 2 x chakars (3Kn) or dihqan (Cv), 3 x dihqan (Cv), 1 x horse archers (LH), 4 x archers (3/4Bw), 1 x spearman (7Hd) or archers (Ps).

Terrain Type: Steppe. Aggression: 0. Enemies: II/38c, II/79a, II/80d, III/8, III/11b, III/15, III/20a, III/20c, III/25b, III/25c, III/31, III/39, III/43c. Allies: III/11b or III/31.

III/9 BURMESE 500 AD - 1526 AD

This list covers the Burmese army from the foundation of the kingdom of Pyu (circa 500) until its destruction by the Nanchao in 832; and then from the founding of the kingdoms of Pagan and Pegu in 849 until the start of King Tabinshweti of Toungoo's campaigns of re-unification. It includes Pagan's flowering, its overthrow by the Yuan Mongols and its shift to a new capital at Ava. Before the unification of Burma in 1044 by King Anawrahta, the army was mainly infantry with few elephants, but he shifted the emphasis to massed elephants. Contemporary sources describe Burmese elephant crew as 12-16 and 8-10, but it has been suggested that only 4 rode in a howdah while the rest walked alongside. However, a late account from "Cochin China" (southern Vietnam) describes a two-tier platform carrying 14 men (3 top and 3 below on each side and 2 behind). Kings rode a white elephant with a gold chain ornamented with precious stones around its neck; and some battles were decided by personal combat. Cavalry were recruited from the Shan, occupiers of the extensive grass lands in Burma. They were shield-less, wore quilted armour and had black or white bull's hair at the heads of their spears. Some generals led raids on horses disguised as dragons. Guard infantry wore gilt helmets and quilted black cotton jackets and fought with sword and shield. Other foot were more numerous than efficient. Archers could have either bows or crossbows, but were out-shot by dismounted Mongols. The standard tactic was a mass charge by elephants in the centre, possibly supported by foot, with foot guards in a second line protecting the general and cavalry supported by foot trying to outflank. **Reference:** *Armies of Medieval Burma AD700-1300* D. Mersey.

III/9a Burmese Army 500-1043 AD: 1 x General (El), 1 x cavalry (Cv), 6 x spearmen (3Ax), 3 x archers or crossbowmen (3Bw or 3Cb), 1 x archers (3Bw or 3Cb or Ps).

Terrain Type: Tropical. Aggression: 2. Enemies: I/49d, III/9a, III/15, III/20c, III/23a, III/36, III/60.

III/9b Burmese Army 1044-1526 AD: 1 x General on elephant (El) or on dragon horse (Cv), 2 x elephants with large crew or escorts (El), 1 x cavalry (Cv), 3 x spearmen (3Ax), 1 x spearmen (3Ax) or guards (3Bd), 1 x guards (4Cb), 2 x crossbowmen or archers (3Cb or 3Bw), 1 x archers (3Bw or 3Cb or Ps) or Thai spearmen (3Wb).

Terrain Type: Tropical. Aggression: 2. Enemies: II/42d, III/9b, III/10c, III/23a, III/60, IV/40, IV/48, IV/73. Allies: IV/48.

III/10 HINDU INDIAN 545 AD - 1510 AD

This list covers the Hindu (and a few Buddhist) states of northern and central India from the fall of the Gupta empire until the introduction of hand firearms. The Guptas were replaced by a number of small states, reunified from 606 by Harsha into the Kanauj empire. This fell apart after his death in 647; to be replaced by the Pratiharas empire, which reduced Arab India to 2 small remnant states and lasted until 1036. Its rivals and successors included the Rashtrakutas, Palas and Vijayanagar. These were all attacked by a new wave of Turkish Muslim invaders that in 1206 became the Sultanate of Delhi and conquered all of them except the southern state of Vijayanagar. The Rajputs were a warrior caste, thought by some to be descended from Saka or Huna (Hephthalites), who ruled states in central and western India and fought both against and for the Sultanate. They had a strong heroic ethos and ended lost battles with a suicidal charge instead of surrender and wore yellow as a badge of fanaticism. Elephants were described as armoured and carrying howdahs containing several crew. Cavalry were armed with lance or bow, sword and shield, were armoured and sometimes rode barded horses. Some Rajput horses were trained to rear up, so that their riders could fight elephant crew from a similar height. Foot were unarmoured and skimpily dressed. Swordsman had either a rectangular or a small round shield. **References:** *Armies of the Middle Ages* Vol.2 I. Heath, *Slingshot* 248.

III/10a Kanauj Army 606-647 AD: 1 x General (EI), 2 x elephants (EI), 2 x cavalry (Cv), 1 x swordsmen (3Bd), 3 x archers (3Bw), 2 x spearmen (Sp) or javelinmen (Ps), 1 x spearmen (Sp) or camp followers (7Hd).
Terrain Type: Tropical. Aggression: 2. Enemies: II/42b, III/10c.

III/10b Rajput Army 747-1303 AD: 1 x General on elephant (EI) or on horseback (3Kn), 2 x cavalry (3Kn), 1 x elephants (EI) or cavalry (3Kn), 2 x swordsmen (3Bd), 3 x archers (3Bw), 1 x camel riders (Cm) or archers (3Bw), 1 x javelinmen (Ps), 1 x javelinmen (Ps) or camp followers (7Hd).
Terrain Type: Dry or Tropical. Aggression: 2. Enemies: III/10b, III/10c, III/15, III/31, III/38, III/43a, III/43b, III/64a, III/64b, IV/8, IV/36a. Allies: III/10c.

III/10c Other Hindu Indian Armies: 1 x General (EI), 1 x elephants (EI), 2 x cavalry (Cv), 1 x swordsmen (3Bd), 4 x archers (3Bw), 1 x javelinmen (Ps), 1 x javelinmen (Ps) or camp followers (7Hd), 1 x elephants (EI) or (if Vijayanagar after 1336) rocketeers or bombardiers (Art).
Terrain Type: Tropical. Aggression: 2. Enemies: II/42b, II/42d, II/80c, III/9b, III/10a, III/10b, III/10c, III/15, III/31, III/37a, III/38, III/43b, IV/36a, IV/36b, IV/75. Allies: II/42b or II/80c or III/10b or III/15 or IV/36a or III/38.

III/11 CENTRAL ASIAN TURKISH 550 AD - 1330 AD

This list covers Central Asian Turkish armies from the emergence of the "original" Turks until the final demise of the Turfan Uighur state. The Gok Turks (T'u-chueh to the Chinese) rebelled against the Juan-juan in 551 and established a vast empire bordering on Byzantium, Sassanid Persia and China, but this split into eastern and western khanates about 582. The western Turkish khanate broke up during a Qarluq revolt in 630, but was later re-established and fought against the Arabs in Transoxiana in the eighth century. The eastern khanate submitted to the Chinese in 630, was restored about 680 and destroyed by a Uighur revolt in 744. The Uighurs then ruled Mongolia until overthrown by the Kirghiz in 840, then created a new state at Turfan in the Tarim basin about 860. They became tributary to the Qara-Khitai in 1130, then to the Mongols in 1209 AD and finally disappeared around 1330 in the course of a dispute between the Yuan Chinese and their unassimilated Mongol rivals. Other tribes fared similarly. The Kirghiz controlled Mongolia from 840 until driven out by the Khitan in 920, and then remained in their southern Siberian homeland until they submitted to the Mongols in 1207. The Toquz Oghuz "nine tribes", (called "Ghuzz" by the Arabs, "Ouzoi" by the Byzantines and "Torki" by the Russians) migrated into the central Asian steppe around 780 AD, chasing the Pechenegs westward. Under pressure from Kimaks and Kipchaks, some Oghuz groups led by the Seljuq clan pushed into Iran after 1000 AD (becoming known as "Turkomans") while others moved into the south Russian steppe. The Qarakhanids "Black Khans" were a dynasty of the Qarluq that relied mainly on ghulam slave cavalry. They conquered Transoxiana from the Samanid Khurasanians in 999 and became vassals of the Qara-Khitai in 1130. Contemporary depictions of all these peoples show lamellar-armoured cavalry with bow, sword and slung shield, of whom some also have lances and/or barded horses. **References:** *Armies of the Dark Ages* I. Heath, *Slingshot* 249, *The Year of the Horses* R.F. Tapell (novel).

III/11a Turfan Uighur Army 860-1330 AD: 1 x General (Cv), 2 x noble cavalry (Cv or LH), 3 x horse archers (LH), 3 x archers (3Bw or Ps), 3 x spearmen (Sp).
Terrain Type: Steppe. Aggression: 3. Enemies: III/11b, III/15, III/39, III/42a, III/42b, III/44, III/56, III/67, IV/15, IV/35, IV/48, IV/52. Allies: III/11b or III/15.

III/11b Other Turkish Armies: 1 x General (Cv), 2 x noble or ghulam cavalry (Cv), 6 x horse archers (LH), 1 x archers on Bactrian (2-hump) camels (Mtd-3Bw) or foot archers (3Bw or Ps) or horse archers (LH), 2 x levy spearmen (7Hd) or horse archers (LH).
Terrain Type: Steppe. Aggression: 3. Enemies: II/38c, II/61d, II/69c, II/79a, II/80d, III/8, III/11a, III/11b, III/13b, III/14a, III/15, III/16, III/20a, III/20b, III/20c, III/31, III/32, III/37a, III/43a, III/43b, III/43c, III/44, III/47, III/56, III/64a, III/74b, III/80, IV/8, IV/15, IV/24a, IV/35. Allies: III/8 or III/14a or III/15 or III/31 or III/56.

III/12 CHRISTIAN NUBIAN 550 AD - 1500 AD

With the conversion of the Nobades to Monophysite Christianity around 550 AD, three Christian kingdoms arose in the Sudan and this list describes their armies. These were, from north to south, Nobatia, Makouria (around modern Dongola) and Alwa (with its capital at Soba near the junction of the White and Blue Niles). Nobatia was conquered by Makouria circa 650-700 and after this the combined state was often called Nubia. It fought successive Muslim Egyptian regimes and inflicted the first serious reverse on the Muslim Arab conquest armies at Dongola in 643, but also enjoyed long periods of peaceful trade with Egypt. Bedouin Arabs (in particular the Banu Kanz tribe) moved south from Egypt after being expelled by Saladin in 1174 and seized control from 1323-1365, after which the history is obscure, though a Nubian successor state survived until at least 1484. Alwa also suffered from Bedouin incursions and fell around 1500, either to these or to Funj migrating from the south. The army were renowned for its very effective foot archers. Contemporary depictions of other foot show segmented nasal-guard helmet, quilted armour, cloak, a figure-of-eight shield which may be shown under-sized, a spear and a broad-bladed shafted stabbing weapon similar to the later Zulu assegai. Since most inhabitants were poor peasants, these well-armed foot may have been an elite or a court standing army. Mounted troops used both horses and camels throughout the period and it was one of the few army to use charging camels, many of whom may have been provided by Beja (see II/45) or similar allies. Court nobility probably provided the cavalry (both mailed and unarmoured) in gold-embroidered robes seen in Nubian art. Camel riders fighting against the Mamluks in 1286 are described swathed in black felt cloaks and using spears. **Reference:** *Armies of the Dark Ages* I. Heath.

III/12 Christian Nubian Army: 1 x General and court cavalry (Cv or 3Kn), 2 x camel warriors (Cm), 2x light horse (LH), 3 x warriors (4Bd/4Ax), 3 x archers (3/4Bw), 1 x levies (7Hd) or Arab archers (Ps) or Arab camel riders (LCm).
Terrain Type: Dry. **Aggression:** 1. **Enemies:** II/55b, II/55c, II/62a, II/62b, III/12, III/25b, III/25c, III/31, III/37a, III/37b, III/49, III/66, III/69, IV/20, IV/45. **Allies:** II/55b or II/55c or IV/45.

III/13 AVAR 553 AD - 826 AD

This list describes the army of the Avars, who were probably the combined remnants of the Juan-juan and the White Huns after both were driven west by the Gok Turks. They subjugated the Bulgars, the Gepids and many of the southern Slavs and in 562 came into conflict with the Frankish kingdoms, but lost face after a failed attack on Constantinople in 626 in conjunction with the Sassanids. This inspired the Slavs and Bulgars to rebel, leaving only a rump Avar state in modern Hungary. The Franks led by Charlemagne inflicted several defeats on them, culminating with the capture of their great "ring" earthwork in 791 and defeat by a combined Frankish and Bulgarian attack in 796. They were finished off by Bulgars in 826. Maurice describes Avar cavalry as having mail, swords (but not shields), bows and lances (slung over their shoulders when not in use); and the richest as riding horses with frontal armour of iron or felt. They probably introduced the stirrup to the Byzantines. Maurice calls them scoundrels, devious and very experienced in military matters (high compliments from a Byzantine?), and says they are governed by fear, prefer to win by deceit, surprise attacks and cutting off supplies, are ruthless, scorn their oaths, do not keep agreements and even while making them and accepting gifts are planning treachery and betrayal. They fought as multiple groups in a single wide line with a small reserve, disliked rough going and never fought dismounted. Playing an Avar in a wargames campaign would be fun if you have forgiving friends. **Reference:** *Armies of the Dark Ages* I. Heath, *Maurice's Strategikon* G.T. Dennis (trans).

III/13a Avar Army 553-557 AD & 632-826 AD: 1 x General (Cv), 9 x noble cavalry (Cv), 2 x cavalry (LH or Cv).
Terrain Type: Steppe. **Aggression:** 3. **Enemies:** II/71, III/1c, III/2, III/4b, III/5a, III/14a, III/14b, III/14c, III/17, III/21a, III/21b, III/26a, III/26b, III/28. **Allies:** III/14b.

III/13b Avar Army 558-631 AD: 1 x General (Cv), 4 x nobles (Cv), 2 x horse archers (LH), 3 x Slav javelinmen (3Ax), 1 x Slav archers & scouts (Ps), 1 x Slav javelinmen (3Ax) or [in 626 AD only] stone-throwers (Art).
Terrain Type: Steppe. **Aggression:** 3. **Enemies:** II/58, II/73, III/1c, III/2, III/4b, III/5a, III/11b, III/14a, III/17, III/21a, III/26a, III/26b. **Allies:** II/69c.

III/14 EARLY BULGAR 558 AD - 1018 AD

The Bulgars originated as a combination of Utigur and Kutrigur Hun remnants with Sabirs and Onogur. They became subject to the Avars in 558 but cast off Avar rule in 631 and formed the new united khanate of Great Bulgaria around the Sea of Azov. After defeat by the Khazars around 675, some fled up the river Volga and formed the "Volga Bulgar" state (see III/32). Most fled to the Danube basin where they founded an empire rivaling the Byzantines that lasted until 1018. Their greatest King was King Krum 807-814. Cavalry are depicted in one Byzantine manuscript with small round shields and lances and wearing trousers vertically striped in red, white and blue. **Reference:** *Armies of the Dark Ages* I. Heath.

III/14a Bulgar Army 558-674 AD: 1 x General (Cv), 5 x boyars (Cv) or horse archers (LH), 6 x horse archers (LH).
Terrain Type: Steppe. **Aggression:** 1. **Enemies:** II/58, III/1c, III/4b, III/11b, III/13a, III/13b, III/16, III/17, III/26a, III/29, III/30a.

III/14b Bulgar Army 675-803 AD: 1 x General (Cv), 2 x boyars (Cv), 4 x Bulgar horse archers (LH), 4 x Slav javelinmen (3Ax), 1 x Slav archers (Ps).
Terrain Type: Arable. **Aggression:** 2. **Enemies:** III/1c, III/13a, III/16, III/26a, III/29, III/30a.

III/14c Bulgar Army 804-1018 AD: 1 x General (3Kn), 2x boyars (3Kn), 4 x Bulgar horse archers (LH), 4 x peasants and town militia (Sp), 1 x archers (3Bw or Ps).
Terrain Type: Arable. **Aggression:** 2. **Enemies:** III/1c, III/13a, III/26a, III/29, III/30b, III/47, III/48, III/65, III/68a. **Allies:** III/13a or III/47.

III/15 TIBETAN 560 AD - 1065 AD

This list describes the army of the Yarlung dynasty of Tibet, which was established around 560 when a local Tibetan chieftain revolted against his Zan-Zun overlords. By about 630, the Tibetan clans were united and formed an empire which fought expansionist wars for the next two centuries. After 841 the empire broke up, but successor states survived and fought among themselves. Tibetan cavalry were described by the T'ang as armed with a long lance, while both man and horse were completely mailed except for the eyes and invulnerable to swords or bows. A T'ang source says that when a mounted charge failed, they dismounted in dense ranks with long spears to charge again. Although they did not have shields, cataphract armour then justifies classing them as Spears. **References:** *The Tibetan Empire in Central Asia* C. Beckwith, *The Army of Tang China* K.H. Rantitsch.

III/15 Tibetan Army: 1 x General (4Kn//Sp), 4 x Tibetan cataphracts (4Kn//Sp), 3 x Tibetan cataphracts (4Kn//Sp) or Nepalese cavalry (Cv), 1 x Nepalese cavalry (Cv) or garrison spearmen (Sp) or nomad horse archers (LH) or mountain tribal archers (Ps) or Nepalese swordsmen (3Bd), 1 x Nepalese archers (Ps) or nomad nobles (Cv), 2 x Tibetan cataphracts (4Kn//Sp) or nomad horse archers (LH).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** III/8, III/9a, III/10b, III/10c, III/11a, III/11b, III/15, III/20c, III/31, III/36, III/37a, III/37b, III/39, III/62a, III/67. **Allies:** III/8 or III/11b or III/36.

III/16 KHAZAR 568 AD - 1083 AD

This list covers the army of the Khazar Khaganate. The Khazars were unusually devious even for nomads and adopted Judaism as a political ploy to counterbalance their Christian and Muslim neighbours. The Khaganate maintained a standing "Royal army" of regular ghulam-type cavalry with lance and bow from 775-965. Khazar nobles also had lance and bow, but preferred to use their lances. The army was supplemented with levies from their numerous subjects. Artillery was used in a field battle against the Arabs in 652. **Reference:** *Armies of the Dark Ages* I. Heath.

III/16 Khazar Army: 1 x General (3Kn or Cv) or if the Khagan, in his wagon (CWg), 1 x Khazar nobles (3Kn), 4 x royal army (Cv) or Khazar horse archers (LH), 2 x Khazar horse archers (LH), 2 x levy spearmen (7Hd), 1 x Khazar guard (Sp) or levy archers (Ps), 1 x bolt-shooters or stone-throwers (Art) or Alan, Magyar or Bulgar horse archers (LH).

Terrain Type: Steppe. **Aggression:** 1. **Enemies:** II/58, II/69c, III/1c, III/11b, III/14a, III/14b, III/14c, III/25b, III/25c, III/29, III/30a, III/31, III/32, III/37a, III/37b, III/43a, III/43c, III/47, III/64a, III/64b, III/71a. **Allies:** III/11b.

III/17 MAURIKIAN BYZANTINE 575 AD - 650 AD

This list covers the period from the appointment of the future emperor Maurikios (Maurice) as Comes Excubitorum or Foederatorum and his reforms of the army. It is largely based on his surviving manual. It includes the epic wars of Heraklios against the Sassanids and then the Arabs; and ends with the completion of the thematic system under Konstantinos. The army was now almost entirely regular. Kavallarioi were deployed in 2 separated lines an arrow shot apart with the commanding general in the second. They wore helmets with small plumes, hooded mail shirts extending to the elbows and knees, large cloaks, tunic, trousers and boots. They rode on saddles with stirrups copied from the Avars and the horses of the front rank wore frontal armour of iron or felt. They formed up to 10 ranks deep, the 2 foremost and the last armed with long Avar lance, sword and kite-shaped shield, the others only with bow and sword. Some of the bow-armed could instead form on the flanks of the lancers (which were then called "defensores") or be sent out in front as "cursores" or to scout. Optimates were noble foreigners fighting with their native weapons. If infantry were used, their units usually alternated with kavallarioi or formed the centre. They wore knee-length gothic tunics, a simple cloak and shoes not long boots, and short hair. Most were skoutatoi each with moderate-length spear, helmet, big shield painted a regimental colour, sword, sling and lead-weighted darts. At least those in front had mail corslets. Archers formed behind the skoutatoi for drill. Some shot from behind in battle, but if they were plentiful they deployed on the flanks. In bad going they joined the javelinmen to skirmish, javelinmen being preferred in woods. Both had a small round shield and a short axe. Bolt-shooters are described as in swivel mounts on carts. **References:** *Armies & Enemies of Imperial Rome* P. Barker, *Armies of the Dark Ages* I. Heath, *Maurice's Strategikon* G.T. Dennis (trans), *The Age of Hippokratou I. Syvonne, The Byzantine Wars* J. Haldon, *Warfare, State and Society in the Byzantine World 565-1204* John Haldon.

III/17 Maurikian Byzantine Army: 1 x General (Cv/6Cv), 5 x kavallarioi (6Cv/Cv), 3 x cursores (LH) or skoutatoi (Sp), 2 x cursores (LH) or foot archers (4Bw or Ps), 1 x optimates (3Kn) or javelinmen (Ps) or bolt-shooters (Art).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/23a, II/55b, II/57, II/69c, II/82a, II/83b, III/1c, III/2, III/5a, III/13a, III/13b, III/14a, III/21a, III/25a, III/25b, III/26a, III/26b, III/27. **Allies:** II/23a or II/57 or II/69b or II/69c or III/16.

III/18 BRETON 580 AD - 1072 AD

This list covers the Armorican/Breton armies of modern Brittany from the end of the Sub-Roman British connection until their assimilation to the Norman-French military system. The Alan foederati settled in Armorica had been Christianised and assimilated into the population. The date for the changeover to an all-cavalry army is conjectural, but a British immigrant is credited with popularising horse racing and later battle accounts mention only cavalry; though Breton foot javelinmen appear elsewhere later as mercenaries. Alan horsemen now used javelins instead of bows and continued to use them after neighbours had switched to charging with the lance. Regino of Prüm writing 906-909 describes their tactics as similar to those of the Magyars. The Bretons at Hastings in 1066, although depicted identically to Norman knights, were the first to try a feigned flight. The Saxon contingent that helped against the Franks in 590 were disguised in Breton clothes and haircuts and hidden among peasants. **Reference:** *Armies of the Dark Ages* I. Heath.

III/18 Breton Army: 1 x General (Cv), 5 x cavalry (Cv), 3 x cavalry (Cv or LH), 1 x skirmishers (LH or Ps), 2 x cavalry (Cv) or 2 x peasants (7Hd) or [1 x peasants (7Hd) + 1 x disguised Saxons (depict and move as Breton 7Hd, but replace with 4Wb on contact)].

Terrain Type: Arable. Aggression: 1. Enemies: III/5a, III/5b, III/28, III/40a, III/40b, III/52. Allies: III/28 or III/40a or III/40b.

III/19 WELSH 580 AD - 1420 AD

This list covers the armies of Welsh princes after the fall of the lowland Sub-Roman states of Britannia. The Welsh were a cultural and language group rather than a state. Giraldus Cambrensis says that success in war was measured solely in loot "it is their habit to steal anything they could lay their hands on and to live on plunder, theft and booty". They preferred to fight in rough or marshy terrain and were very fierce in their initial attack, so battles "were almost always won or lost at the first encounter" and "From their first fierce attack and showers of javelins they seem most formidable opponents" but "if the enemy resist manfully they are thrown into confusion. If there is further resistance, they turn their backs without making any attempt at counter-attack and seek refuge in flight". When they encountered Norman knights, these initially terrified them and forced them to change their javelins, swords and bucklers, for long spears if North Welsh and powerful bows if South Welsh. Uchelwyr were mailed gentry on horseback. **References:** *Armies of Feudal Europe & Armies of the Middle Ages* Vol. I I. Heath, *The Taming of the Dragon* W.B. Bartlett. *The Revolt of Owain Glynn Dwr* R.R. Davies.

III/19a Welsh Army 580-1149 AD: 1 x General as uchelwyr (Cv) or on foot (3Bd or 3Wb), 9 x warriors (3Wb), 2 x skirmishing javelinmen (Ps).

Terrain Type: Hilly. Aggression: 3. Enemies: II/54b, II/73, II/81d, III/19a, III/24a, III/24b, III/40a, III/40b, III/52, III/72, IV/3. Allies: III/24a or III/40b.

III/19b South Welsh Army 1100-1197 AD: 1 x General as uchelwyr (Cv), 9 x archers (3Lb), 2 x javelinmen (3Ax or Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: III/19b, III/19c, III/40b, IV/3, IV/23. Allies: IV/23.

III/19c North Welsh Army 1150-1420 AD: 1 x General as uchelwyr (Cv or 3Kn), 10 x spearman (3Pk), 1 x archers (Ps).

Terrain Type: Hilly. Aggression: 2. Enemies: III/19b, III/19c, III/40b, IV/3, IV/9, IV/23, IV/62a, IV/62b, IV/62c.

Allies: III/19b (even after 1197) or IV/23 or IV/64b.

III/20 SUI & EARLY T'ANG CHINESE 581 AD - 755 AD

This list covers the armies of the Sui and Tang dynasties. The Sui dynasty was founded in northern China in 581 AD and had reunited the whole country by 589 AD. Initial successes were followed by disastrous wars against Koguryo in Korea 611-614 and rebellions. A new Tang dynasty re-united China by 623 AD and then extended the Chinese frontier further than ever before. Early armies were based on a well-trained militia, but expansion for the Korean war caused the foot to deteriorate. Pu-ping "marching infantry" were armed with either spear and shield or pike, and in theory with a bow. We assume that bowmen were often, and under the Tang invariably, in the rear ranks. Crossbowmen were less used and under the Tang also had halberds. Cataphracts lacking arm and leg armour are 3Kn. T'ang cavalry were mostly armed in Turkish style with lance, bow and lamellar body armour, and rode unarmoured horses. **References:** *Soldiers of the Dragon* C. Peers, *Medieval Chinese Warfare 300-900 D.A.* Graff, *The Army of Tang China* K.H. Ranzitsch.

III/20a Sui Army 581-611 AD: 1 x General (3/4Kn), 1 x cataphracts (4Kn), 1 x cataphracts (3Kn), 4 x Pu-ping (Sp or 3Pk or 8Bw), 4 x Pu-she archers (4Bw or Ps), 1 x Mo-ho Manchurian horse archers (LH) or southern tribesmen (3Wb or Ps) or crossbow specialists (4Cb) or bolt-shooters and stone-throwers (Art).

Terrain Type: Arable. Aggression: 3. Enemies: I/49d, II/61d, II/76, II/77a, II/79a, II/79b, III/7a, III/8, III/11b, III/23b. Allies: III/11b.

III/20b Sui Army 612-623 AD: 1 x General (3/4Kn), 1 x cataphracts (4Kn or 3Kn), 1 x cataphracts (3Kn) or cavalry (Cv), 6 x mass conscripts (7Hd), 2 x archers (Ps or 3Bw), 1 x horse archers (LH) or bolt-shooters and stone-throwers (Art).

Terrain Type: Arable. Aggression: 3. Enemies: II/76, III/11b, III/20c.

III/20c T'ang Army 618-755 AD: 1 x General (Cv), 3 x cavalry (Cv), 2 x horse archers (LH), [3 x Pu-ping (8Bw) + 2 x Pu-she (4Bw) + 1 x crossbowmen with halberd (4Cb)] or [2 x cavalry (Cv) + 4 x nomad horse archers (LH)].

Terrain Type: Arable. Aggression: 3. Enemies: I/49d, II/61d, II/75, II/76, II/77b, III/7a, III/7b, III/8, III/9a, III/11b, III/15, III/20b, III/23b, III/31, III/36, III/37a. Allies: II/61d or II/77a or III/8 or III/11b.

III/21 ITALIAN LOMBARD 584 AD - 1076 AD

In 568 AD, the Lombards invaded Byzantine Italy, founding a kingdom in the north and two independent duchies in the south at Benevento and Spoleto. Astolf's 8th-century laws divided the Lombards into armoured gastaldi (minor nobles) and gasindi (retainers of kings and dukes) cavalry, followers serving as a second line of unarmoured cavalry and peasant foot archers with shields. In 774 the Lombard kingdom was conquered by the Franks and from then until 888, north Italy was ruled by the Carolingian kings as the "Kingdom of Italy" with a blend of Lombard and Frankish military institutions and personnel. After 888 it was part of the German empire. The 2 southern duchies remained independent until conquered by the Normans, and the list ends with the Norman capture of Salerno. 7th century cavalry are depicted using a long lance in 2 hands and sometimes also with a small round shield, but shields found in graves are 600-800mm in diameter. After 774 they adopted Frankish styles and from then on followers are assumed to form the rear ranks of armoured knight elements. Lombard foot at Olivetti in 1041 were thought useless because they lacked shields and left in reserve with "a few knights to keep up their courage". **Reference:** *Armies of the Dark Ages* I. Heath, *L'Esercito Longobardo 568-774 M.* Balbi.

III/21a Lombard Army 584-774 AD: 1 x General (3Kn), 3 x gastaldi and gasindi (3Kn), 4 x followers (3Kn), 3 x archers (3Bw or Ps), 1 x archers (Ps) or Italian town militia (Sp).

Terrain Type: Arable. Aggression: 1. Enemies: II/73, III/1c, III/5a, III/5b, III/13a, III/13b, III/17, III/28, III/29. Allies: III/1c or III/13b.

III/21b Lombard Army 775-1076 AD: 1 x General (3Kn), 4 x knights (3Kn), 4 x Italian town and rural militia (Sp), 1 x archers (3Bw or Ps), 2 x archers (Ps) or peasant levies (7Hd).

Terrain Type: Arable. Aggression: 1. Enemies: II/73, III/13a, III/21b, III/28, III/29, III/30b, III/33, III/52, III/53, III/65, III/76. Allies: III/29 or III/33 or III/34b or III/52 or III/53 or III/65.

III/22 MAYA 600 AD - 1546 AD

This list covers the Mesoamerican lowland Maya army of the Late Classic (600-900) and Post-Classic periods, from which nearly all evidence of Mayan warfare derives. There was usually no single Maya state, only rival cities which fought among themselves. At the end of the Classic period, soil erosion and deforestation had crippled the Maya and forced the abandonment of many cities. When their civilisation revived, its centre had moved from the hillier Peten area to the flat and nearly river-less forests of the Yucatan peninsula. Until 987, the Maya fought only each other. They were then conquered by the Toltecs, who were replaced by the Itza after 1224. The Maya defeated a Spanish invasion from 1528-1535, but fell to another in 1542 and the rebellion of 1546 failed. Mayan warriors were described as ugly, tattooed, wearing a loin cloth and armed with a short spear, a club and a rectangular shield that rolled-up like a window blind. Leaders of Mayan descent added jaguar hide or quilted cotton armour and wooden or hide helmets with elaborate feather crests. Toltec and Itza leaders and Ah Camul mercenaries also wore cotton armour, but fought with an obsidian bladed maquahuitl, javelins thrown with an atlatl and a small round shield. **References:** *Armies of the 16th Century Vol 2* I. Heath, *Slingshot* 107.

III/22a Maya Army 600-987 AD: 1 x General (3/4Ax), 10 x Maya warriors (3Ax), 1 x peasant slingers (Ps).

Terrain Type: Arable. Aggression: 0. Enemy: III/22a.

III/22b Maya Army 988-1282 AD: 1 x General with Ah Camul mercenary bodyguard (4Bd), 1 x Toltec or Itza nobles (4Bd), 9 x Maya warriors (3Ax), 1 x peasant slingers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: III/22b, III/59.

III/22c Maya Army 1283-1461 AD: 1 x General (4Bd), 1 x noble warriors (4Bd), 8 x Maya warriors (3Ax), 1 x Toltec-Chichimec mercenary archers (4Bw), 1 x peasant slingers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: III/22c, IV/19a, IV/63.

III/22d Maya Army 1462-1546AD: 1 x General (3/4Ax), 8 x Maya warriors (3Ax), 2 x archers (Ps or 3Bw), 1 x archers or hornet-nest throwers (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: III/22d, IV/63.

III/23 KHMER & CHAM 605 AD - 1471 AD

This list covers the armies of the Khmer and Cham kingdoms situated in modern Cambodia and Vietnam from the invasion of Champa by a Sui Chinese expedition in 605 until the Thai destruction of the Khmer empire in 1431 and the Vietnamese conquest of Champa in 1471. It is based on reliefs from Angkor, Bayon and Banteay Chmar of 1113-1218 and on the reports of foreign emissaries. Khmer elephants were crewed by a driver with shield and spear and a single archer or sometimes a spearman. Elephants ridden by a general were accompanied by 1 or more parasol bearers on foot. Cham elephants were all crewed by a driver, a javelin thrower and a parasol bearer riding behind. Maiden guard dressed like modern Siamese dancers and were armed with a ph'kak (an axe-like weapon shaped like a hockey stick) and some rode horses apparently disguised as dragons, replacing the normal chamfron with a dragon mask and the rump protector with a dragon tail. Ordinary cavalry had leather chamfrons, sometimes neck and chest protectors, and a rump guard worn over the tail, which was plaited to a point. Spearman had either long or small round shields and the best wore flower-embroidered jackets that may have been textile armour. Some archers shot from behind pavises, but most skirmished. Bolt-shooters could be on wheeled mounts or on elephants. **References:** *Armies of Angkor* Michel Jacq-Hergoualc'h, *Slingshot* 229.

III/23a Khmer Army 605-1431 AD: 1 x General (El), 1 x elephants (El), 1 x cavalry (Cv), 4 x long-shield spearmen (4Ax), 1 x small-shield spearmen (3Ax), 1 x archers with pavises (4Bw), 2 x archers or crossbowmen (Ps), 1 x bolt-shooters (Art) or Ph'kak men (3Bd) or maiden guard (Cv or 4Ax) or Thai (3Wb).

Terrain Type: Tropical. Aggression: 2. Enemies: III/9a, III/9b, III/23a, III/23b, IV/37a, IV/37c, IV/40. Allies: III/9a or III/9b or III/23b.

III/23b Cham Army 605-1471 AD: 1 x General (El), 1 x elephants (El), 1 x cavalry (Cv) or small-shield spearmen (3Ax), 5 x long-shield spearmen (4Ax), 1 x small-shield spearmen (3Ax) or archers (Ps), 2 x archers (Ps) or hill tribes (3Wb), 1 x bolt-shooters or stone-throwers (Art) or small-shield spearmen (3Ax) or hill tribe archers (Ps).

Terrain Type: Tropical. Aggression: 2. Enemies: I/49d, III/20a, III/20c, III/23a, III/23b, III/36, III/39, III/60, IV/37c, IV/48. Allies: III/23a or III/60.

III/24 MIDDLE ANGLO-SAXON 617 AD - 1016 AD

This list covers the Anglo-Saxon kingdoms of Wessex, Mercia, East Anglia and Northumbria and minor states from the accession of Edwin of Northumbria in 617, through the wars of Penda of Mercia 634-655, Alfred of Wessex 871-899 and others, until united as England under Edgar in 959; and then under Ethelred the Redeless "dim or ill-advised" until the Danish conquest and the accession of Knut (Canute) in 1016. Hird were thanes and elite followers who wore helmets and mail and owned swords as well as spears. Select fyrd were the best of the spear-armed remainder. A considerable increase in shield diameter around 700 is taken as evidence of a switch to shield-wall tactics. A Boy was given a shield and spear on his 12th birthday. Britons of the West Mercian cantons of the Wroccensaete and Magonsaete and some Northumbrian nobles fought as cavalry. References: *Armies of the Dark Ages* I. Heath, *The Early Wars of Wessex* A. Major, *Anglo-Saxon Weapons and Warfare* R. Underwood, *Kings and Kingdoms of Early Anglo-Saxon England* B. Yorke, *An Alternative History of Britain: The Anglo-Saxon Age* T. Venning, *The King of Athelney* A. Duggan (novel).

III/24a Anglo-Saxon Army 617-700 AD: 1 x General (4Wb), 1 x hird (4Wb), 6 x select fyrd (Sp), 2 x select fyrd (Sp) or great fyrd (7Hd), 1 x archers or scouts (Ps), 1 x cavalry (Cv) or hird (4Wb).

Terrain Type: Arable. Aggression: 2. Enemies: II/68b, II/81d, III/19a, III/24a. Ally (if Mercian): III/19a.

III/24b Anglo-Saxon Army 701-1016 AD: 1 x General (4Bd), 2 x hird (4Bd), 6 x select fyrd (Sp), 2 x select fyrd (Sp) or great fyrd (7Hd), 1 x archers or scouts (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: II/68b, II/81d, III/19a, III/24b, III/40a, III/40b, III/45. Allies: III/40b.

III/25 ARAB CONQUEST 622 AD - 660 AD & KHAWARIJ 658 AD - 873 AD

This list covers the wars of the Prophet and his immediate successors (the khalifs Abu Bakr, Umar, Uthman and Ali) from the "hijra" or migration of the Prophet and his followers to Medina until the establishment of the Umayyad Khalifate by Mu'awiya. Many horses were acquired in the initial conquests. It also covers rebellions between 658 and 873 by Khawarij religious and egalitarian fanatics bitterly opposed to both Sunni and Shia, who they thought authoritarian and insufficiently dedicated to fighting unbelievers. References: *Armies of the Dark Ages* I. Heath, *The Great Arab Conquests* J.B. Glubb, *The Great Arab Conquests* H. Kennedy, *In the Shadow of the Sword* T. Holland.

III/25a Arab Conquest Army 622-638 AD: 1 x General (Cv/4Bd) or in black tent (CT), 2 x Muslim archers (3Bw), 7 x Muslim swordsmen (4Bd), 1 x javelinmen and slingers (Ps) or camel scouts (LCm), 1 x bedouin (LH or Cm/4Bd).

Terrain Type: Dry. Aggression: 2. Enemies: II/23a, II/23b, II/23c, II/69c, III/17.

III/25b Arab Conquest Army 639-660 AD: 1 x General (Cv), 4 x "jund" regular cavalry (Cv), 1 x Muslim archers (3/4Bw), 5 x Muslim swordsmen (4Bd), 1 x javelinmen (3Ax) or javelinmen and slingers (Ps) or camel scouts (LCm).

Terrain Type: Dry. Aggression: 4. Enemies: II/55b, II/57, II/69c, III/8, III/12, III/16, III/17, III/27, III/29.

III/25c Khawarij Army 658-873 AD: 1 x General (3Kn), 4 x Khawarij horsemen (3Kn), 5 x Khawarij swordsmen (3Wb), 1 x archers (3Bw), 1 x Khawarij swordsmen (3Wb) or camel scouts (LCm) or Bedouin horse (LH).

Terrain Type: Dry. Aggression: 3. Enemies: III/25b, III/25c, III/31.

III/26 EARLY SERBIAN OR CROATIAN 627 AD - 1180 AD or 1089 AD

The Serbs and Croats are thought by some authorities to have originated as Sarmatian elites ruling Slav populations. They were commissioned by the Byzantine emperor Heraklios in 627 to drive the Avars out of western Illyricum and settle there on condition that they became Orthodox Christians. They quickly merged with their new Slav subjects. The Serbs became nominally independent of Byzantium in 820, but Muslim raiders caused second thoughts and they returned to being increasingly rebellious subjects until 1180. The Croats accepted the rule of Charlemagne after the defeat of the Avars in 796 and became Catholic, but later rebelled, gaining independence from both Franks and Byzantines in 879. They were conquered by Hungary in 1089. Serbs and Croats shared a language, mutual dislike and a love of ambushes. The military repute of the Serbs was as fiercely-charging lancers and deadly archers, that of the Croats as axemen. Reference: *Armies of Feudal Europe* I. Heath.

III/26a Serbian Army 627-1180 AD: 1 x General (3Kn), 2 x nobles (3Kn), 4 x javelinmen (3Ax) or from 798 spearmen (Sp), 2 x javelinmen (3Ax) or ill-armed (7Hd), 2 x archers (3Bw), 1 x archers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: III/1c, III/13a, III/13b, III/14a, III/14b, III/14c, III/17, III/26b, III/29, III/65, III/68a, III/68b, III/76, IV/1a, IV/1b.

III/26b Croatian Army 627-1089 AD: 1 x General (Cv), 2 x nobles (Cv), 8 x javelinmen with axes (4Ax), 1 x archers (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: III/1c, III/13a, III/13b, III/17, III/26a, III/28, III/29, III/65, III/68a, III/73a, III/76.

III/27 RSHTUNI ARMENIAN 639 AD - 717 AD

This list covers the independent Armenian state founded by Theodore Rshtuni from its inception after the Byzantine defeat at the Yarmuk until its final conquest by the Arabs. Throughout its existence it was a no-man's land fought over by Byzantines and Arabs, playing off each neighbour against the other. The nucleus of its army was Byzantine-trained cavalry who became the nakharak nobility, supplemented by volunteer horse archers and tough Armenian mountain peasants. **Reference:** *Histoire de l'Arménie des origines à 1071*. René Grousset.

III/27 Rshtuni Armenian Army: 1 x General (6Cv or Cv), 2 x nakharak and followers cavalry (6Cv), 2 x volunteer horse archers (LH), 2 x spearmen (3Ax), 1 x archers (Ps), 4 x spearmen (3Ax) or volunteer horse archers (LH).

Terrain Type: Hilly. Aggression: 0. Enemies: III/17, III/25b, III/25c, III/29, III/31. Allies: III/25b or III/29 or III/31.

III/28 CAROLINGIAN FRANKISH 639 AD - 888 AD

This list covers the Frankish army of the death of Dagobert I (the last effective Merovingian king) until the final partition of Charlemagne's empire. After the death of Dagobert, the Mayors of the Palace became the effective rulers and one of them, Charles Martel, gained victories over the Arabs at Tours and Poitiers in 732. His descendants, the Carolingians, took the throne in 751. Under Charlemagne (768-814) the empire expanded on all frontiers, but his descendants could not control such a large area and spent much time fighting each other. In 888 the empire split into Eastern and Western portions. Swabian and Bavarian caballarii fought better on foot. Whether the select levy fought with sword and big shield before Charlemagne is disputed. **Reference:** *Armies of the Dark Ages* I. Heath, *Slingshot* 273, 274, 276, 279, 280.

III/28 Carolingian Army: 1 x General (3Kn), 2 x caballarii (3Kn), 2 x Swabian or Bavarian caballarii (3Kn/4Bd) or [1 x Basque or Gascon javelinmen (Ps) + 1 x Andalusian, Basque or Gascon javelin-throwing light horse (LH)], 1 x caballarii (3Kn) or [1 x Thuringians Cv], 4 x select levies (all 4Bd or all Sp until 814, then all Sp), 1 x archers (3Bw or Ps), 1 x archers (Ps) or [latter lesser levies (7Hd)].

Terrain Type: Arable. Aggression: 3. Enemies: II/73, II/83b, III/1b, III/1c, III/13a, III/18, III/21a, III/21b, III/26b, III/28, III/29, III/33, III/34a, III/34b, III/35a, III/40a, III/40b. Allies: II/73 (Old Saxon or Frisian) or III/1c or III/18, or III/21b or III/26a.

III/29 THEMATIC BYZANTINE 650 AD - 963 AD

This list covers the Byzantine army from the loss of the East beyond Asia Minor to the Arabs until the 10th century Byzantine shift to the offensive. It is the period of the "Taktika" of the Byzantine emperor Leo VI. Most of the army was decentralised with each corps serving part time in its own theme or province. Although a few invasions of enemy territory did take place, strategy was essentially defensive, relying on "dog and pounce" to counter raids; and helped by a central professional reserve "the tagmata" and neighbouring themes against larger Arab invasions. Most battles were amid border hills. Except in rear line thematic units, kavallarioi archers were sent out to skirmish as cursores. Skoutatoi now had 14' spears and big shields and were used to block defiles, supported by archers on the side slopes. **References:** *Armies of the Dark Ages* I. Heath, *The Taktika of Leo VI* G.T. Dennis (trans), *(On Skirmishing in) Three Byzantine Military Treatises* G.T. Dennis, *The Byzantine Wars* J. Haldon.

III/29 Thematic Byzantine Army: 1 x General (Cv), 3 x cursores kavallarioi (LH), 3 x defensores kavallarioi (Cv), 2 x rear line kavallarioi (6Cv), 1 x archers (4Bw or Ps), 1 x skoutatoi (Sp), 1 x skoutatoi (Sp) or archers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: III/1c, III/14a, III/14b, III/14c, III/21a, III/21b, III/25b, III/27, III/29, III/31, III/33, III/37a, III/37b, III/47, III/48, III/51, III/53. Allies: III/1c or III/14b.

III/30 MAGYAR 650 AD - 1003 AD

The Magyars were a Finno-Ugric race of horsemen who moved west on to the steppe in the 5th century, becoming subject-allies of the Khazars after 650. They became independent in the early 8th century, when they migrated to the plains of the middle Danube. This list starts with the Magyar's first appearance as allies to the Khazars and ends with their metamorphosis into the Christian Kingdom of Hungary under Stephen I. Magyar armies raided far into Europe between 899 and their defeat at the Lechfeld in 955 by Otto I of Germany led to Otto being proclaimed Holy Roman Emperor. Kavars were dissident Khazar tribes that joined the Magyars. Szekely were an elite that formed the vanguard in battle and may have been remnant Avars. **Reference:** *Armies of the Dark Ages* I. Heath.

III/30a Magyar Army 650-895 AD: 1 x General (Cv), 1 x Magyar nobles (Cv), 10 x Magyar horse archers (LH).

Terrain Type: Steppe. Aggression: 3. Enemies: III/1c, III/14a, III/14b, III/14c, III/16, III/47, III/48.

III/30b Magyar Army 896-1003 AD: 1 x General with Kavar guards (Cv), 2 x Magyar nobles and gentry (Cv), 1 x Szekely horse archers (LH), 7 x Magyar horse archers (LH), 1 x Magyar horse archers (LH) or Slavs (3Ax or Ps).

Terrain Type: Steppe. Aggression: 3. Enemies: III/1c, III/14c, III/21b, III/26a, III/26b, III/48, III/52.

III/31 Umayyad Arab 661 AD - 750 AD

This list covers the armies of the Arab Khalifate (which now included Syria, Egypt, most of North Africa and much of Persia) from the battle of Siffin that enabled Mu'awiya's succession after the death of the Prophet's son-in-law Ali until the final success of the Abbasid revolt. Mu'awiya (formerly the Prophet's secretary) was the first of the secular khalifs and founded the Umayyad dynasty, with its capital at Damascus. His efforts to further expand focussed on the Byzantine empire, unsuccessfully besieging Constantinople 668-677. His commanders were more successful in the east, reaching both Kabul and the Indus. Jund were members of the conquest armies now settled in Syria in permanent military camps to prevent dilution by less warlike peoples. Their most prosperous members were mailed fencing lancers on unarmoured horses. From experience fighting Sassanid cavalry, foot now depended more on spears than on the long straight "saif" sword. Archers usually deployed in front and shot kneeling, protecting their heads with their shields. Only the least

enterprising Arabs remained in the desert as bedouin and were regarded as poorly armed and unreliable. Asawira were resettled Persian gentry, used together with the fursan guard as a reserve on barded horses. Ghazis were religious fanatics. **References:** *Armies of the Dark Ages* I. Heath, *The Great Arab Conquests* J.B. Glubb, *The Great Arab Conquests* H. Kennedy, *The Armies of the Caliphs* H. Kennedy, *In the Shadow of the Sword* T. Holland.

III/31 Umayyad Arab Army: 1 x General (Cv), 3 x jun'd cavalry (Cv), 3 x spearmen (Sp), 3 x archers (3Bw or Ps), 1 x Asawira (Cv) or Bedouin (LH or Lcm), 1 x Ghazis or Turkish horse archers (LH) or Dailami (4Ax) or Syrian hillmen (3Ax or Ps).

Terrain Type: Dry. Aggression: 3. Enemies: II/55b, II/57, II/58, II/62a, II/83b, III/8, III/10b, III/10c, III/11b, III/12, III/15, III/16, III/27, III/29, III/31, III/37a. Allies: II/57 or III/8 or III/15.

III/32 VOLGA BULGAR 675 AD - 1237 AD

When the Khazar attacks broke up Great Bulgaria circa 675, one group (the "silver" Bulgars) moved east and set up a new state in the middle Volga and Kama valleys, in the transition zone between forest and steppe. Their capital Bulghar became a major centre of the fur and slave trade and they became farmers and fishermen as well as semi-nomadic herdsman. They remained subordinate to the Khazars until the fall of the Khazar empire in 965, by which time they had embraced Islam. They fought against the Rus until their capital and state were destroyed by the Mongols in 1237. They shaved their heads but not their faces, wore boots, long ornate top coats and Arab turbans, but by the 12th century had acquired Russian-type cavalry armour. Their foot had a reputation for archery with flat wooden bows, but are also mentioned using spears and throwing axes. **Reference:** *Armies of the Dark Ages* I. Heath.

III/32 Volga Bulgar Army: 1 x General (Cv), 4 x Bulgar cavalry (Cv), 3 x Bulgar or allied nomad horse archers (LH), 1 x archers (3Bw), 2 x town levies (7Hd), 1 x Finns (3Ax) or Ugrians (3Wb) or archers (3Bw or Ps).

Terrain Type: Forest. Aggression: 1. Enemies: III/1c, III/11b, III/16, III/47, III/48, III/79, III/80, IV/35. Allies: III/79.

III/33 EARLY MUSLIM NORTH AFRICA & SICILY 696 AD - 1160 AD

This list covers the resident armies of the Umayyads, then of the Abbasids, then after revolt against the Abbasids in 800, the Aghlabids of Tunisia until they were replaced by the Fatimids in 909, the Idrisids of Morocco until conquered by the Umayyads of Spain in 926, the Fatimids until they conquered Egypt in 972, then Maghrawanids in Morocco and Zirids in Tunisia until 1160. Sicily was seized in 827, but progressively lost 1063-1091. Armies were a combination of coastal and city-dwelling Arabs with Berber converts from the hinterland and slave troops brought across the Sahara. **References:** *Armies of the Dark Ages* I. Heath, *Armies of Feudal Europe* I. Heath.

III/33 Early Muslim North African or Sicilian Army: 1 x General (Cv), 1 x Arab or Berber lancers or Khurasanians (Cv), 3 x Berber javelin-throwing light horse (LH), 3 x Berber javelinmen (Ps/3Ax) or Arab, Berber or black slave spearmen (Sp), 1 x Arab archers (3/4Bw or Ps) or Berber archers or slingers (Ps), 3 x Berber javelinmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: III/21b, III/28, III/29, III/33, III/34a, III/34b, III/35a, III/35b, III/37a, III/49, III/52, III/53, III/66, III/70, III/73a, III/73b, III/75, IV/4a, IV/5a. Allies: in Sicily III/34b or III/65, in Africa: III/70.

III/34 ANDALUSIAN 710 AD - 1172 AD

This list covers the armies of the original Muslim states set up in Spain "Al-Andalus"; from the original Umayyad Arab invasion from Africa, through the almost entire conquest of the Visigothic kingdom in 711, the reduction of the Umayyads to a relic independent Spanish emirate by the Abbasid revolution of 749, the self-promotion of this emirate to a new Spanish Umayyad Khalifate with temporary possession of Morocco, the loss of Morocco to the Maghrawanids, the fanatical Berber invasions of Spain from Morocco starting in 1086 and the fragmentation of Spain into warring Berber and Andalusian Arab emirates and revanchist Christian kingdoms (the period of "El Cid"), then ends with the completion of Murabit Berber domination over Spanish Muslims by the fall of Murcia in 1172. The original invasion force consisted of a small number of Arab cavalry and masses of Berber foot, but was reinforced by regular cavalry of the jund from Syria. The jund regular organisation was continued by the Umayyads, but reliance on them came to be replaced by non-Arab speakers called "the Silent Ones". Cavalry were usually Frankish, Lombard and Spanish professionals but were misleadingly referred to as "Slav ghulams". They were supplemented by unpaid irregulars serving for loot called "mujahids". Berber horse, negro foot and even Christian knights were employed as mercenaries. **References:** *Armies of the Dark Ages* I. Heath, *Armies of Feudal Europe* I. Heath.

III/34a Andalusian Army 710-765 AD: 1 x General (Cv), 2 x Arab jund (Cv), 1 x Andalusian or Berber javelin light horse (LH), 3 x Berber javelinmen (Ps), 1 x archers or slingers (Ps), 4 x Andalusian spearmen (Sp) or Berber javelinmen (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: II/83b, III/28, III/33, III/34a, III/35a.

III/34b Andalusian Army 766-1172 AD: 1 x General (Cv), 1 x ghulam or Andalusian cavalry (Cv), 2 x mujahids (LH), 1 x Christian guard (3Kn or 4Cb) or black guard (Sp), 2 x archers or slingers (Ps), 2 x Andalusian or black spearmen (Sp), 3 x Berber javelinmen (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: III/28, III/33, III/34b, III/35a, III/35b, III/40a, III/40b, III/52, III/75. Allies: III/35a, III/35b, III/75.

III/35 FEUDAL SPANISH 718 AD - 1340 AD

This list covers all Christian Spanish armies from the founding of the Asturian kingdom that started the reconquista until the partial introduction of plate armour. Initially the Christian armies were restricted to mountainous areas and were probably a combination of town militia and remnant Visigothic units supplemented by refugees. Hidalgos were nobles equipped like contemporary European knights, caballeros villanos were partly armoured horsemen of non-noble birth. Jinetes were javelin-throwing light horse developed from an Andalusian type which later became thought of as the typical Spanish cavalry. Bidets were professional javelin skirmishers. Almughavars were tough mountaineers with spear and javelin and little respect for or fear of their betters. **References:** *Armies of the Dark Ages* I. Heath, *Armies of Feudal Europe* I. Heath.

III/35a Feudal Spanish Army 718-950 AD: 1 x General (3Kn/4Bd), 2 x hidalgos (3Kn), 1 x Basque or mercenary Berber javelin light horse (LH) or archers and slingers (Ps), 3 x spearmen (Sp), 5 x javelinmen (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/28, III/33, III/34a, III/34b, III/35a.

III/35b Feudal Spanish Army 951-1200 AD: 1 x General (3Kn/4Bd), 3 x hidalgos (3Kn), 1 x caballeros villanos (Cv), 1 x javelin light horse (LH) or foreign crusaders (3Kn), 3 x spearmen (Sp), 2 x javelinmen (Ps), 1 x crossbowmen (3Cb) or archers or slingers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** III/33, III/34b, III/35b, III/52, III/75, IV/4a, IV/4b. **Allies:** III/34b.

III/35c Feudal Spanish Army 1201-1340 AD: 1 x General (3Kn), 3 x hidalgos and foreign crusaders (3Kn), 1 x caballeros villanos (Cv) or jinetes (LH), 1 x jinetes (LH), 1 x crossbowmen (3/4Cb), 2 x spearmen (Sp), 1 x bidets (3Ax or Ps) or almughavars (4Ax), 1 x archers or slingers (Ps), 1 x javelinmen (Ps) or jinetes (LH).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/35c, III/73b, III/75, III/76, IV/4b, IV/5c, IV/38, IV/39a, IV/39b. **Allies:** III/75 or IV/38.

III/36 NAN-CHAO & TA-LI 728 AD - 1382 AD

The Nan-chao kingdom was formed when one local ruler in Yunnan (a province of southern China) overcame his neighbours with Tang Chinese support. The new kingdom played the Tang off against the Tibetans, allying with and deserting each in turn. It twice defeated the Pyu kingdom of Burma in the 760s and in 832, and in the 830s marched through Cambodia to the sea. In the 860s they invaded the Tang province of Annam in modern Viet Nam. It then went through a period of internal troubles, with several changes of dynasty and name, the Ta-li kingdom being the last and longest-lived. It was conquered by the Mongols of Kubilai as part of their campaign against Sung China, but briefly became independent again in 1382. Officers, cavalry and guardsmen wore elephant, rhino or buffalo-hide armour, dyed red and decorated with flower, insect and animal designs in yellow and black. Only guards can provide rear support for guards. **Reference:** *Slingshot* 230.

III/36 Nan-chao or Ta-li Army: 1 x General on armoured horse (Cv) or on foot with yuyi guardsmen with axe or halberd (4Bd), 2 x cavalry with bow or crossbow and spear (Cv), 2 x archers (4Bw or Ps), 2 x guards (4Pk), 4 x spearmen (3Pk/3Ax), 1 x crossbowmen (4Cb) or tribal infantry (3Wb).

Terrain Type: Hilly. **Aggression:** 3. **Enemies:** I/49d, III/9a, III/15, III/20c, III/23b, III/39, III/62a, III/62b, IV/35. **Allies:** I/49d or III/9a or III/15 or III/20c.

III/37 ABBASID ARAB 747 AD - 945 AD

This list covers the armies of the Abbasid Khalifate from the first revolt of Abu Muslim's Khurasani Arab troops against the Umayyads. Political and religious discontent with Umayyad rule spread the rebellion, but apart from massacre of the ruling family, the rebels had few common motives, so the only result was a change of dynasty to the Abbasids (in whom the Khalifate now became hereditary) and the capital being moved from Damascus to a new city which became Baghdad and then again in 835 to Samarra. The Umayyads retained only their territories in Spain. After 830, Persia was lost to the Tahirids and then to the Saffarids and Samanids, Morocco was taken over by the Idrisids and Tunisia first by the Aglabids, then the Fatimids. Egypt was taken over by the Tulunids; and eastern Arabia in 897 by the fanatic Qaramita sect, who raided up to Baghdad before being defeated by the Buysids in 976, these having taken over the Abbasid heartlands in 945 and relegated the Baghdad caliphate to a purely spiritual role. Mailed cavalry were initially traditional Arab skirmishing lancers. Caliph al-Mutasim (833-42) largely replaced them with armoured bow and lance cavalry called ghulams "boys" and later mamluks "slaves". These started as surplus youths from pagan steppe horse archer tribes, bought by entrepreneurs, converted to militant Islam and formed into military units of highly trained and disciplined soldiers that became self-perpetuating corporations. They were widely used by Muslim states that could afford them and prized for their efficiency and loyalty. Foot continued to be spearmen with big shields and archers. Swords were still the straight "saif", not the Hollywood scimitar. Flags and guardsmen's uniforms were black. Mutatawwi'a were unpaid religious volunteers. Zanji were East African slave troops with sword, javelins and shield. Faraghina were mercenary Turkic horse archers with a lower status than ghulams. **References:** *Armies of the Dark Ages* I. Heath, *The Armies of the Caliphs* H. Kennedy *In the Shadow of the Sword* T. Holland.

III/37a Abbasid Arab Army 747-835 AD: 1 x General (Cv), 3 x lancers (Cv), 3 x spearmen (Sp), 2 x archers (4Bw or Ps), 1 x Zanj (3Bd) or Bedouin volunteers (LH), 1 x Mutatawwi'a (3Wb) or Bedouin volunteers (LH), 1 x town militia (7Hd) or archers (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/55b, II/55c, II/62a, III/10c, III/11b, III/12, III/15, III/16, III/20c, III/29, III/31, III/33, III/37a, III/38.

III/37b Abbasid Arab Army 836-945 AD: 1 x General (Cv), 2 x ghulams (Cv), 1 x lancers (Cv), 1 x Faraghina horse archers (LH), 2 x spearmen (Sp), 2 x archers (4Bw or Ps), 2 x Zanji (3Bd), 1 x Mutatawwi'a (3Wb) or Dailami (4Ax) or rope-pull stone-throwers (Art).

Terrain Type: Arable. Aggression: 1. Enemies: II/55c, II/62a, III/12, III/15, III/16, III/29, III/37b, III/43b, III/49, III/50, III/51, III/54a, III/54b, III/58a. Allies: III/54a.

III/38 ARAB INDIAN 751 AD - 1206 AD

Between 710 and 712, an Arab force penetrated the River Indus from the sea and conquered most of the regions of Sind and Kutch. In 725 an Arab army from Sind invaded Central India on instructions from the Umayyad Khalif. It penetrated as far as the northern foothills of the Vindhya range, but was defeated by the Hindu Pratiharas. A further invasion in 833 was beaten even more decisively, causing the loss of Kutch and much of Sind; and Arab India then survived as the two small states of Mansurah and Multan. Multan was conquered by Mahmud of Ghazni in 1010 and both states were finally suppressed by Qutb-ud-Din Aibek, founder of the Delhi Sultanate. **Reference:** *Armies of the Middle Ages Vol 2 I. Heath.*

III/38 Arab Indian Army: 1 x General (Cv), 3 x Arab & Sindhi cavalry (Cv), 2 x Arab spearmen (Sp), 2 x Arab archers (3/4Bw or Ps), 2 x Hindu archers (3Bw), 1 x Hindu archers (3Bw) or javelinmen (Ps), 1 x Hindu swordsmen (3Bd) or archers (3Bw). Terrain Type: Tropical. Aggression: 3. Enemies: III/10b, III/10c, III/37a, III/38, III/43b, III/43c, III/64a, III/64b, IV/8, IV/36a.

III/39 LATE T'ANG & FIVE DYNASTIES CHINESE 755 AD - 979 AD

After defeats on several fronts in the 750s, the T'ang empire of China was rocked by An Lu-Shan's rebellion of 755 AD and dissolved into anarchy; and in 907 was replaced by the first of the "Five Dynasties"; which then successively ruled North China. This list first covers the Late T'ang army (not to be confused with the "Later Tang", the Sha-t'o-ruled second of the Five Dynasties, nor with the "Southern Tang", one of the "Ten Kingdoms"), then the first and last of the "Five Dynasties" (the "Later Liang" and the "Later Chou"; and the Ten Kingdoms of the south and outlying regions. The other three of the "Five Dynasties" were ruled by the Sha-t'o Turks and are covered by list III/42. Cavalry had lance and bow but no shield, wore helmets, lamellar corsets extending to the elbow and lamellar chaps covering the front of their legs, and rode unarmoured horses. Foot include both regulars and well-trained militia. Some foot had long spears but no shields. Most battles were inside China in terrain unsuitable for horsemen. The Southern Han kingdom had not only a strong field-artillery force but the only standing war-elephant corps in Chinese history. **References:** *Soldiers of the Dragon C. Peers, The Army of Tang China K.H. Rantitsch, Medieval Chinese Warfare 300-900 D.A. Graff, Defending Heaven J. Waterson.*

III/39 Late T'ang or Five Dynasties Army: 1 x General (Cv), 1 x cavalry (Cv), 2 x crossbowmen (3/4Cb), 2 x archers (3Bw or Ps), 2 x spearmen (3Pb or Sp), 2 x vanguard swordsmen (3Bd), 2 x poorly-trained militia (7Hd) or Southern tribesmen (3Wb or if Zhuang 4Ax) or tribal horse archers (LH) or [if Southern Han 1 x elephants (El) + 1 x stone or bolt-throwers (Art)]. Terrain Type: Arable. Aggression: 1. Enemies: I/49d, II/61d, II/77b, III/8, III/11a, III/15, III/23b, III/36, III/39, III/42a, III/44, III/56, III/57, III/60, III/62a. Allies: II/61d or III/11a, or III/15 or III/36 or III/42a or III/42b or III/56.

III/40 NORSE VIKING & LEIDANG 790 AD - 1280 AD

This list covers Norse armies from the first Viking raids on Britain until the establishment of the feudal system in their homeland. Viking armies are those composed of volunteers for overseas raiding expeditions, or the forces of Viking colonies such as Jorvik (York), Dublin, Orkney, Isle of Man (Manx) or Novgorod, but not of the Hebrides. We distinguish between early undisciplined collections of Viking raiders and the larger more controlled raiding armies under jarls or kings from 850 on. Leidang armies were Norwegian, Danish (including the south of what is now Sweden) or Swedish royal levies and were used for home defence or major aggressive wars. Most warriors are classed as Blades because of the universal ownership of swords and axes and the stress placed on individual weapon skills. Bows were also carried by individuals, but mainly used on ship-board, although archers could occasionally be sent out to skirmish. Except for a small number of slightly insane berserks (mainly employed as chief's tax collectors and bully-boys) they were too disciplined to be classed as Warband. Huscarls are taken to be the most skilled and uniformly armoured men, nobles and their professional followers. Hird were the mass of the army. Boendr (plural of bondi) were respectable small farmers tied to their land who could only be shifted from it by more important people using considerable force. They are assumed to have less skill and mail than huscarls, but more mail and experience though less youthful vigour than younger members of the Hird, who are likely to have been their surplus sons. Thralls were un-free peasants and farm labourers. **References:** *Armies of the Dark Ages I. Heath, Armies of Feudal Europe I. Heath, The Viking Art of War P. Griffith, The Long Ships F. Bengtsson (novel).*

III/40a Viking Army 790-849 AD: 1 x General and huscarls (4Bd), 10 x raiders (3Bd), 1 x huscarls (4Bd) or berserks (3Wb) or archers (Ps).

Terrain Type: Littoral. Aggression: 4. Enemies: II/54b, II/68b, II/81d, III/1a, III/1c, III/18, III/19a, III/24b, III/28, III/34b, III/40a, III/40c, III/45, III/46.

III/40b Viking Army 850-1280 AD: 1 x General and huscarls (4Bd), 10 x hird (4Bd), 1 x archers (Ps or 4Bw) or berserks (3Wb) or [only if Dublin or Manx] Irish (3Ax).

Terrain Type: Littoral. Aggression: 4. Enemies: II/81d, III/1a, III/18, III/19a, III/19b, III/19c, III/24b, III/28, III/34b, III/40b, III/40c, III/40d, III/45, III/46, III/52, III/53, III/72, III/78, III/79, IV/9, IV/13a, IV/13b, IV/13c, IV/16, IV/27, IV/28. Allies: III/45 or III/46 or III/72.

III/40d Leidang Army 790-1070 AD: 1 x General (4Bd), 2 x huscarls (4Bd), 6 x boendr (4Bd or in Finland 3Ax), 2 x boendr archers (3Bw or Ps), 1 x free-lance raiders (3Bd) or Lapp archers (Ps) or thralls (7Hd).

Terrain Type: Littoral. Aggression: 1. Enemies: III/1a, III/40a, III/40b, III/40c, III/53, IV/13a. Allies: III/1a.

III/40d Leidang Army 1071-1280 AD: 1 x General (3Kn), 1 x huscarls (4Bd), 6 x boendr (4Bd), 2 x boendr archers (3Bw or Ps), 1 x Laenstroppe (3Kn) or huscarls (4Bd), 1 x free-lance raiders (3Bd) or Lapp archers (Ps) or thralls (7Hd).
Terrain Type: Littoral. Aggression: 1. Enemies: III/1a, III/40b, III/40d, III/52, IV/13a, IV/13b, IV/27, IV/28. Allies: IV/13a or IV/13b.

III/41 CHICHIMEC & PUEBLO CULTURES 800 AD - 1500 AD

The Aztec term for all the waves of barbarian migration into Mexico was "Chichimec", frequently translated as "Dog Peoples" but possibly meaning "Newly-born". These claimed to have originated from a distant northern homeland called Aztlan, which has not been identified. They had linguistic affinities with some of the Pueblo Indians, many of whom were forced to migrate by some disaster such as the prolonged drought of 1276-1299 that caused the abandonment of hundreds of Pueblo villages. This list covers both the migrants and those that remained Pueblo dwellers or stayed in the desert. The proto-Toltec and proto-Aztec tribes used the atlatl dart thrower while the others preferred the bow. **Reference:** *Armies of the 16th Century Vol 2* 1. Heath.

III/41a Proto-Toltec 800-930 AD or Proto-Aztec 800-1325 AD Armies: 1 x General (3Wb), 2 x club-wielders (3Wb), 8 x tribesmen with atlatl (3Ax or Ps), 1 x slingers (Ps).

Terrain Type: Dry. Aggression: 3. Enemies: III/41a, III/41b, III/59, IV/10, IV/11, IV/19a, IV/19b, IV/53, IV/63.

III/41b Chichimec or Pueblo Culture Army: 1 x General (3Bw or 3Wb), 2 x club-wielders (3Wb), 9 x tribesmen with bow (3Bw or Ps).

Terrain Type: Dry. Aggression: 3. Enemies: III/41a, III/41b, III/59, IV/10, IV/11, IV/19a, IV/19b, IV/53, IV/63.

III/42 SHA-TU TURKISH 808 AD - 951 AD

The Sha-tu or "sand-dune dwellers" were a small Turkish group of three tribes who settled in the Ordos on the Chinese border in 808 and supported the Tang Chinese against rebels from time to time. After the defeat of Huang Ch'ao's rebellion in 883, their leader became governor of Ping-chou in Shansi province. In 923, after their leader had been adopted into the Tang imperial family, they overthrew Liang, the first of the Five Dynasties and founded the "Later Tang". They never had quite enough horses to mount all their tribesmen; and after 880 relied heavily on Chinese troops. Their final dynasty fell in 951 when the Chinese commander of its central field army rebelled. **Reference:** *Soldiers of the Dragon C. Peers.*

III/42a Sha-tu Turkish Army 808-880 AD: 1 x General (Cv), 3 x Sha-tu armoured cavalry (Cv), 4 x Sha-tu horse archers (LH), 4 x Sha-tu foot archers (3Bw or Ps).

Terrain Type: Steppe. Aggression: 3. Enemies: II/61d, III/11a, III/39, III/42a, III/44.

III/42b Sha-tu Turkish Army 881-951 AD: 1 x General (Cv), 2 x Sha-tu cavalry (Cv), 2 x Sha-tu horse archers (LH), 1 x Chinese swordsmen (3Bd), 1 x Chinese crossbowmen (4Cb), 1 x Chinese archers (3Bw or Ps), 2 x Chinese spearmen (Sp or 3Pk), 2 x untrained Chinese militia (7Hd) or Sha-tu foot archers (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: II/61d, III/11a, III/42b, III/44, III/56. Allies: III/44 or III/56.

III/43 KHURASANIAN 821 AD - 1073 AD

The Arabs used the term "Khurasan" for Khurasan proper (the north-eastern province of modern Iran), but also more broadly to include Khwarazm, Transoxania, Seistan and modern Afghanistan. The Khurasanian leader Tahir "the ambidextrous" led the Abbasid army of Khurasan to victory in the Abbasid civil war of 810-813 and was rewarded with the governorship of Khurasan. His descendants "the Tahirids" were semi-independent but loyal Abbasid subjects. In 861, Ya'qub ibn Layth Saffar seized power in Seistan and by 873 had destroyed the Tahirids and taken over Khurasan, founding the Saffarid dynasty. The Samanids took Khurasan proper from them in 900, but the Saffarids held Seistan as Samanid and then Buyid, Ghaznavid and Seljuq vassals with considerable autonomy until 1073. The Samanids were governors of Transoxania under the Abbasids and Tahirids, but became independent after the Tahirids fell. They came to control much of eastern Iran, Afghanistan and Central Asia, but in 999 their territory was divided between their Ghaznavid former vassals and the Qarakhanid Turks. The army's core was a palace force of Turkish ghulams, forming a counter-balance to the Khurasanian nobles' troops. Both had lance, bow and mail, but the ghulams are more likely to have added horse armour. What may be Khurasanian professional infantry are described in the Shah-nama of Ferdowsi. They include armoured spearmen, armoured and shielded archers and armoured javelinmen who are probably Dailami. **Reference:** *The Great Arab Conquests* H. Kennedy.

III/43a Tahirid Army 821-873 AD: 1 x General and noble cavalry (Cv), 1 x noble cavalry (Cv), 1 x Khurasanian horse archers (LH), 3 x spearmen (Sp), 3 x archers (4Bw or Ps), 1 x Dailami javelinmen (4Ax), 1 x mutatawwi'a volunteers (3Wb), 1 x slingers (Ps) or peasant levy (7Hd).

Terrain Type: Dry. Aggression: 1. Enemies: III/10b, III/11b, III/16, III/43a, III/43b. Allies: III/37b.

III/43b Saffarid Army 861-1073 AD: 1 x General and ghulams (Cv), 1 x noble cavalry (Cv), 1 x Khurasanian horse archers (LH), 2 x spearmen (Sp), 2 x archers (4Bw or Ps), 2 x mutatawwi'a volunteers (3Wb), 2 x Indian archers (3Bw), 1 x Dailami javelinmen (4Ax) or slingers (Ps) or peasant levy (7Hd).

Terrain Type: Dry. Aggression: 1. Enemies: III/10b, III/11b, III/16, III/37b, III/38, III/43a, III/43b, III/43c. Allies: III/25c or III/38 or III/74b.

III/43c Samanid Army 900-999 AD: 1 x General and ghulams (Cv), 1 x ghulams (Cv), 1 x noble cavalry (Cv), 1 x Khurasanian horse archers (LH), 3 x spearmen (Sp), 3 x archers (4Bw or Ps), 1 x Dailami javelinmen (4Ax) or Turkish horse archers (LH), 1 x slingers (Ps) or peasant levy (7Hd).

Terrain Type: Dry. Aggression: 1. Enemies: III/8, III/11b, III/16, III/38, III/43b, III/58a, III/58c, III/64a. Allies: (III/11b and/or III/58c) or III/38 or III/43b or III/64a.

III/44 TRIBAL MONGOLIAN 840 AD - 1218 AD

This list covers the tribal Mongolian people such as Tatars, Onggud, Merkit, Kereyit, Naimans and the Mongols themselves before Genghis Khan established his new military organisation and progressively extended his rule over them. It starts with the collapse of Uighur power in Mongolia and ends with the defeat of Kuchluk's Naiman remnants in 1218. **Reference:** *The Perilous Frontier* T.J. Barfield.

III/44 Tribal Mongolian Army: 1 x General (Cv), 2 x nobles and retainers (Cv), 9 x horse archers (LH).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** III/11a, III/11b, III/39, III/42a, III/42b, III/44, III/56, III/62a, III/62b, III/67, IV/14a, IV/14b, IV/15, IV/35. **Allies:** IV/15.

III/45 PRE-FEUDAL SCOTS 842 AD - 1124 AD

Many generations of fighting between the Pictish kingdom and the invading Scots-Irish ended when, as the result of intermarriage, both found they had the same prince as heir to the throne in Kenneth McAlpine, who became the first king of a united Scotland. This list covers armies from then until the accession of David I, who managed to introduce the feudal system into at least southern Scotland. At the start of the period, Scotland (then called Alba) did not include the Orkneys, Hebrides and Caithness (which were under Viking rule) or Strathclyde, which was still independent until 945. Scots aggression is rated as low because they mainly fought each other or went on plundering expeditions into northern England. The greatest of these resulted in the battle of Brunanburh in 937 (probably at Bromborough in Cheshire) between West Saxon and Mercian armies on the one side and those of Scotland and Norway on the other. This was the biggest battle in England before Hastings. The invasion from England in 1054 to replace Macbeth (1040-57) as king actually resulted in a drawn battle. Little definite is known about troop types, but it is assumed that the Pictish combination of long spear held in 2 hands and small shield survived to become the basis for the pikemen of medieval Scots armies and that gentry such as thegns fought with sword, shield and throwing spear, often wore armour and came under heavy Viking influence. Faces were not painted blue and the kilt was not worn! A thigh-length shirt (though Galwegian shirts were later described in 1138 as only half covering their buttocks) was accompanied by a "breacan" (Gaelic for spotted, striped or patterned) cloak. Legs and often feet were bare. Macbeth brought in Norman knights, but too few to feature here. **References:** *Armies of the Dark Ages I*, Heath, *Armies of Feudal Europe I*, Heath, *The Battle of Brunanburh* M. Livingston (ed), *Macbeth - High King of Scotland 1040-57 AD* P. Berresford Ellis.

III/45 Pre-Feudal Scots Army: 1 x General on horseback (Cv) or on foot (4Wb), 1 x light horse (LH), 1 x thegns (4Wb), 6 x spearmen (3Pk), 2 x spearmen (3Pk) or Galwegians (3Wb), 1 x archers or javelinmen (Ps).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/81d, III/24b, III/40a, III/40b, III/45, III/52, III/72, III/78, IV/3. **Allies:** II/81d or III/40b.

III/46 NORSE IRISH 842 AD-1300 AD

This list covers Irish armies from the first documented instance of co-operation between Irish and Norse until the introduction of good skirmishing cavalry and substantial amounts of armour. It is the period of Brian Boru, who in old age at the battle of Clontarf in 1014 remained stationary in a pavilion or booth surrounded by guards. The upper classes wore a long usually bleached linen shirt "leine" and a coloured (often purple, crimson or green) fringed mantle "brat". The lower classes wore short jackets and tight knee or ankle-length trows. Their clothing was usually natural or bleached wool or linen and colours restricted by a sometimes ignored law to yellow, white or black. Hair and beards were untrimmed. Light javelins remained the chief weapon, but the best troops now supplemented them with a heavy-headed (but usually 1-handed) axe able to defeat Viking armour. Poorer warriors substituted a short sword/long knife. Shields were small and round. While there were often horsemen who sometimes clashed, the better of them usually dismounted to fight, while their attendant "horse boys" went ravaging and crop burning. "Rising-out" were emergency home defence levies, many of whom threw stones by hand. Ostmenn were townsmen from Viking colonies on the coast. "Dibernach" is a collective term for warrior bands such as the "Sons of Death", fierce in attack and unrestrained in behaviour. Gall Gaidhil were Islesman mercenaries. **References:** *Armies of the Dark Ages I*, Heath, *Armies of Feudal Europe I*, Heath, *Irish Battles* G.A. Hayes-McCoy.

III/46 Norse Irish Army: 1 x General (4Ax or in 1014 CP), 2 x nobles and household troops (4Ax), 5 x warriors (3Ax), 3 x javelinmen (Ps or 3Ax) or Ostmenn (4Bd) or "rising out" stone-throwers (Ps), 1 x dibbernach (3Wb) or Gall Gaidhil (4Bd) or horsemen (Cv or LH) or slingers, staff slingers and archers (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** III/40a, III/40b, III/46, III/52, III/78, IV/3, IV/16, IV/21a. **Allies:** III/40b or IV/3.

III/47 PECHENEG 850 AD-1122 AD

This list covers the Pecheneg or Patzinak armies from their move west into Khazar and Magyar territories north of the Black Sea circa 850 until their destruction by the Byzantines at Berrhoia in 1122. A nation that inspires the proverb "as stupid as a Pecheneg" but still terrified the Magyars must have had something going for it! A few nobles were sufficiently armoured to tackle Byzantine cavalry, and one wounded Alexios Komnenos in the buttock with a lance held in 2 hands. Their horse archers were frequently used as mercenaries by the Byzantines (since they were readily available and cheap), often tempting the enemy into an ambush with a feigned flight, but against canny opponents like the Normans, this was a trick that only worked once. The main wagon type was a 4-wheeler with high wooden sides pierced for archery. It was said that they always won if they brought their wagons and always lost if they did not. **Reference:** *Armies of the Dark Ages I*, Heath.

III/47 Pecheneg Army: 1 x General (Cv), 1 x nobles (Cv) or horse archers (LH), 8 x horse archers (LH), 2 x foot (3Bw or 7Hd) or wagons manned by archers (WWg).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** II/58, III/1c, III/11b, III/14c, III/16, III/29, III/30a, III/32, III/47, III/48, III/65, III/68a, III/68b, III/76, III/79, III/80, IV/1a.

III/48 RUS 860 AD - 1054 AD.

The Rus or Rhos were the result of an amalgamation of Vikings and Slavs when Rurik of Jutland gave up a career raiding the coasts of Germany, France and England to move first to Ladoga and then to Novgorod. In 855, two of his chieftains, Askold and Dir obtained permission to travel to Constantinople. Sailing down the Dnieper, they came to Kiev and remained there, gathering many Varangians (Norse mercenaries) and establishing their rule over the surrounding area. They ruled this as the first Rus state until Rurik's successor, "Oleg the Wizard" killed them and took over. Kiev and Novgorod expanded further, were united by Oleg in 880 as the principality of Russia and expanded even faster. The Rus were just as aggressive as the Vikings and attacked Byzantines, Khazars, Danube and Volga Bulgars, Pechenegs, Poles, Croats, Estonians and Cumans among others. Rus were primarily armed with the long spears previously used by Vikings on ship-board and axes as a secondary weapon. They replaced the traditional Scandinavian round shields with heavy wooden rectangular shields. Their ferocity is commented on, but so are their close formation, steadiness and levelled spears. Rus javelinmen were employed by the Byzantines. Clothing is described as white. Druzhina were initially Varangian mercenary bodyguards but later evolved into nobility. They occasionally fought mounted. Other troops were provided by townsmen, peasants having no role in war. The list starts with Askold and Dir's raid on Constantinople in 860 and ends with the breakup of the Kievan state into competing principalities. **Reference:** *Armies of the Dark Ages I*. Heath.

III/48 Rus Army: 1 x General and družina (4Bd or Cv), 8 x spearmen (Sp), 2 x archers (Ps) or spearmen (Sp), 1 x spearman (Sp) or javelinman (4Ax) or Alan, Bulgar or Magyar horse archers (LH).

Terrain Type: Forest. **Aggression:** 3. **Enemies:** III/1a, III/1c, III/14c, III/29, III/30a, III/30b, III/32, III/47, III/48, III/58b, III/63a, III/65, III/68a, III/76. **Allies:** III/14a or III/40b or (III/47 and III/63a) or III/63a.

III/49 TULUNID OR IQSHIDID EGYPTIAN 868 AD - 905 AD & 935 AD - 969 AD

Ahmad ibn Tulun was a Turkish soldier sent to restore order to revolt-ridden Egypt in 868. He became semi-independent and also occupied much of Syria, but the cost of running the army of Turkish-style ghulams and black Sudanese 'abid' slave-troops bankrupted the Tulunid state, which returned to Abbasid rule in 905. Muhammad ibn Tughj, known by the Ferghanan title of 'iqshid', was appointed governor in 935 to defend Egypt against attacks from Tunisia. He too became independent and his state lasted until Fatimid conquest in 969. Thughur were volunteers on the Byzantine frontier. **Reference:** *Armies of the Dark Ages I*. Heath.

III/49 Tulunid or Iqshidid Egyptian Army: 1 x General with ghulams or black guard (Cv or 4Bd), 3 x ghulams (Cv), 1 x Berber or Bedouin javelin light horse (LH), 2 x 'abid (4Bd), 2 x 'abid (4Bw or 4Bd) or thughur (Sp), 2 x Berber javelinmen (Ps) or ghazis (3Wb), 1 x archers or slingers (Ps) or Syrian adhad town militia or Egyptian levy (7Hd).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** II/55c, III/12, III/33, III/37b, III/54a, III/54b, III/65, III/66.

III/50 ZANJ REVOLT 869 AD - 883 AD

The Zanj revolt was a rising of East African slaves and local Arabs in the southern Iraqi marshlands, led by Ali ibn Muhammad. They over-ran most of southern Iraq, sacking Basra in 871, and established their own fortified cities. From 879-883 they were progressively subdued by the Abbasid Khalif's brother with a large army. Zanj armies provide interesting games and are a considerable challenge for mounted armies. **Reference:** *Slingshot 255*.

III/50 Zanj Army: 1 x General on foot (3/4Bd) or on horseback (Cv), 4 x men with sword or spear (4Bd), 2 x archers (Ps or 3Bw), 2 x fierce but ill-armed men with clubs, sickles or similar (5Hd), 2 x skirmishers throwing stones by hand (Ps), 1 x Arab tribal light horse (LH) or small rope-pull stone-throwing engines (Art) or elite swordsmen (3Bd).

Terrain Type: Littoral. **Aggression:** 0. **Enemy:** III/37b.

III/51 BAGRATID ARMENIAN 885 AD - 1045 AD

This list covers the army of Armenia from its re-emergence as an independent nation following the crowning of Ashot I Bagratuni "the Great" by both the Abbasid Khalif in 885 and the Byzantine Emperor in 887. The country split in 908, then again in 961 and 970. The list ends with the absorption of the last independent Armenian state until modern times by the Byzantines in 1045. During this period the Armenians tried to steer a neutral course between the Byzantines and the Arabs, though when forced to choose they usually, joined the Byzantines who were fellow Christians, even if unsympathetic ones of the wrong sort. Nakhararks were the nobility and are depicted in helmet and lamellar corslet, armed with lance, sword and a smallish round shield. They are described as impetuous, quick to charge and devastating in effect. Azatsks were their mounted followers who fought with javelins, lance or bow. Foot warriors were mostly armed and trained peasant tenants of the nobility, described as fighting in close packed ranks with spear or bow. Spearmen are depicted in helmets, short lamellar corslets (probably of leather) with large pteruges and with small round shields. Levy probably had javelins and small shield, mostly acted as scouts and occasionally became over-enthusiastic at the sight of trespassers or loot. **Reference:** *Armies of the Dark Ages I*. Heath.

III/51 Bagratid Armenian Army: 1 x General (3Kn), 1 x Nakhararks (3Kn), 2 x Azatsks (Cv), 2 x Azatk skirmishers (LH), 2 x foot warriors (Sp), 2 x archers (3/4Bw or Ps), 2 x spearmen (Sp) or levy (Ps or 5Hd).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/29, III/37b, III/51, III/54a, III/58a, III/61, III/65, III/71a, III/76. **Allies:** III/29 or III/65 or III/71a.

III/52 WEST FRANKISH & NORMAN 888 AD - 1072 AD

This list covers the armies of the West Frankish kingdom as it evolved into the Kingdom of France. It includes Norman armies from their adoption of the Frankish feudal system circa 923 until the completion of their conquest of England and the organisation of the Sicilian Norman state. "Milites" was the contemporary name for the upper-class horseman with acorn-shaped helmet, elbow and thigh length hooded mail shirt, long kite shield, light lance and heavy sword familiar from the Bayeux tapestry and who would soon be termed "knights". When invading England in 1066, many of the milites could not be accompanied on their ships by horses, so instead provide the mailed Norman foot mentioned by early written sources. **Reference:** *Armies of the Dark Ages I*. Heath, *The Battle of Hastings* S. Morillo (ed).

III/52 West Frankish or Norman Army: 1 x General (3Kn), 3 x milites (3Kn), 3 x milites (3Kn or 4Bd), 2 x milites (3Kn or if Bretons Cv), 2 x archers (3Bw) or spearmen (Sp) or Sicilian Greeks (3Ax), 1 x archers (3Bw/Ps) or crossbowmen (3Cb/Ps) or servants, grooms and peasants (7Hd) or Gascon javelinmen (Ps or LH).

Terrain Type: Arable. **Aggression:** 2 if Frankish, 3 if Norman. **Enemies:** III/18, III/19a, III/21b, III/33, III/34b, III/35b, III/40b, III/45, III/46, III/52, III/53, III/66, III/72, III/73a, III/76, III/77. **Allies:** III/21b or III/33 or III/40b.

III/53 EAST FRANKISH 888 AD - 1106 AD

This list covers both royal/imperial armies and those raised by independent-minded lords after the East Frankish kingdom finally separated from the western kingdom; and ends with the death of the emperor Heinrich IV. The kingdom began to be referred to as "Teutonicus" or "German" from the late 11th century. The crown, and the title of "Holy Roman Emperor" were elective, not hereditary, and each emperor had to be crowned in Rome by a usually reluctant pope. Frontiers with the western kingdom and in Italy and the east were fluid; and there were also frequent internal wars between coalitions of rival nobles. "Milites" were the same as in the previous list, except that from 1085 mail shirts often extended to the wrist and mail leg protection was coming into use. Some, such as Frankonians and Lotharingians charged as hard as any westerners, but Swabians and Bavarians relied on their swords more than their lances and frequently preferred to dismount to fight. **Reference:** *Armies of the Dark Ages I*. Heath.

III/53 East Frankish Army: 1 x General (3Kn), 4 x milites (3Kn), 2 x Swabian or Bavarian milites (3Kn/4Bd), 1 x Old Saxon, Thuringian or Bohemian cavalry (Cv) or spearmen (Sp), 2 x archers (Ps) or peasants (7Hd).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/1a, III/1b, III/1c, III/21b, III/29, III/30b, III/33, III/40b, III/40c, III/40d, III/52, III/53, III/63a, III/65, III/68a, III/72, III/73a, III/76, IV/1a, IV/4a. **Allies:** III/1c or III/21b or III/30a or III/52 or III/63a or III/73a or III/77.

III/54 DYNASTIC BEDOUIN 890 AD-1150 AD & QARAMITA 897 AD - 1078 AD

After Abbasid power collapsed, several Bedouin Arab dynasties gained local control in Syria and parts of Iraq. This list covers their armies. The Hamdanid dynasty ruled from Mosul 890-991 and in Aleppo 945-1008. The Uqaylid replaced them in Mosul 996-1096 and the Mirdassid clan of the Banu Asad ruled southern Iraq from Hillal 997-1150. The Hamdanids distrusted dependence on military settlers from the Thughur military zone on the frontier with the Byzantines and taxed their subjects to finance regular ghulams and Dailami. Other dynasties relied on light tribal cavalry which the Byzantines called "Arabaita", sometimes supplemented by tribal foot. The Qaramita were militant (originally Ismaili) Shia Arabs centred on Bahrain who attacked the Abbasids until defeated in 976 and who terrorised eastern Arabia, where they were the dominant power until crushed in 1078. Considering the pilgrimage to Mecca a heresy, they massacred pilgrims. All but a few rich armoured cavalry rode camels instead of horses and the rest often fought on foot with man-height shields and long spears or with "enormous wooden bows which few men can bend". They lived well off the agriculture of 30,000 black slaves and tribute from caravans; and wore pink (or faded red?) textile armour. **Reference:** *Slingshot* 256.

III/54a Dynastic Bedouin Armies 890-1150 AD: 1 x General with armoured lancers or ghulams (Cv), 1 x armoured lancers (Cv), 4 x Arabaita (LH), 1 x Dailami (4Ax) or Hamandid Khurasani horse archers (LH), 4 x thughur (Sp) or tribal foot (3Ax), 1 x archers (Ps) or Hamandid or Uqaylid town militia or Mirdassid peasants (7Hd).

Terrain Type: Dry. **Aggression:** 1. **Enemies:** II/58, III/37b, III/49, III/51, III/54a, III/54b, III/58a, III/58c, III/61, III/65, III/66, III/71a, III/71b, III/71c, III/74b, III/76, IV/1a. **Allies:** III/61.

III/54b Qaramita Armies 897-1078 AD: 1 x General with armoured lancers or ghulams (Cv), 1 x armoured lancers (Cv), 4 x Qaramita (Cm/Sp), 1 x Qaramita scouts (LCm), 4 x Qaramita (Cm/3Lb), 1 x archers (Ps).

Terrain Type: Dry. **Aggression:** 1. **Enemies:** III/37b, III/49, III/54a, III/66, III/74b.

III/55 EARLY SAMURAI 900 AD - 1300 AD

This list covers Japanese armies from the rise of the samurai until after the Mongol invasions. Aggression is rated as low only because civil war prevented many overseas initiatives! Although "samurai" and "bushi" later became synonymous, at this period only senior warriors qualified for the title. Generals and bushi wore armour, fought with bow and "tachi" sword, closely followed by retainers mostly armed with naginata. These are best represented as 6Cv; with the foot forming the back row of the element. When dismounted to deploy as 4Bw, retainers were left with the horses. **References:** *Heavenly Warriors* W.W. Farris, *Weapons and Fighting Techniques of the Samurai Warrior* T. B. Conlan, *Samurai, Warfare and the State in Early Medieval Japan* K. Friday, *Samurai* Mitsuo Kure.

III/55 Early Samurai Army: 1 x General (6Cv or Cv), 3 x bushi (Cv) or bushi mounted with retainers (6Cv), 3 x bushi (6Cv or Cv or 4Bw) or warrior monks or provincial bushi with naginata (3Bd), 5 x foot followers with mixed weapons (3Ax).

Terrain Type: Hilly. **Aggression:** 0. **Enemies:** II/77b, III/55, III/57, III/62a, III/62b, IV/48.

III/56 KHITAN-LIAO 907 AD - 1125 AD

The Khitan, nomads speaking a Mongolian language, had lived in southern Manchuria from 400 AD. In 907 AD, Yeh-lu A-pao-chi started to transform their tribal organisation into a centralised monarchy. As T'ang China disintegrated, the new state expanded to control modern Inner Mongolia and the Jurchen tribes of the northern Manchurian forests; and in 936 supported a Sha-t'o rebel in the creation of the Later Chin state, was rewarded with a foothold in Chinese territory that included the modern Chinese capital Beijing and by 947 had taken the Chinese dynastic name of Liao. The Liao defeated several obstinate Sung Chinese attempts to regain this territory, but fell to a revolt of their Jurchen vassals 1114-1125. Liao military strength was based on the Khitan regular soldiers of the "ordos", supplemented by tribal troops and sometimes from 936 by Chinese militia. Each ordo soldier was armed with long lance, bow, sword and mace, rode an armoured horse and also provided a part-armoured mounted "forager" and an unarmoured mounted orderly. **References:** *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson. *Soldiers of the Dragon* C. Peers, *Slingshot* 96 & 98.

III/56 Khitan-Liao Army: 1 x General (as ordo soldiers (3Kn/Cv)), 2 x ordo soldiers (3Kn/Cv), 2 x foragers (Cv), 3 x orderlies or tribal horse archers (LH), [1 x ordo soldiers or foragers (3Kn/Cv) + 2 orderlies or tribesmen (LH)] or [1 x Chinese swordsmen (3/4Bd) + 2 x Chinese crossbowmen (4Cb)], 1 x Jurchens (LH) or Chinese levy (7Hd) or Chinese stone or bolt-shooters (Art).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** II/61d, II/77b, III/11a, III/11b, III/39, III/42b, III/44, III/57, III/62a, III/67, IV/14a. **Allies:** III/39 or III/44 or III/67.

III/57 KORYO DYNASTY KOREAN 918 AD - 1392 AD

The Shilla dynasty that had ruled most of Korea since 678 as a nominal vassal of China after fighting the T'ang to a standstill was replaced in 918 by the Koryo, who expanded their rule north to the Yalu river. The Khitan attacked them in 993, and penetrated deep into Korea before being fought to a draw. Further invasions in 1010 and 1018 ended similarly. After the establishment of the Jurchen-Chin dynasty in 1115 in China, they became tributary to it. They fought against Mongol invasions 1231-1273, some forces assisting the Mongols but others waging guerrilla warfare from the hills, often against Koryo dynasty orders. The dynasty ended in 1392 after a general, Yi Song-gye, refused to follow orders to help the Mongols against Ming China, revolted and founded the Yi dynasty. **Reference:** *Generals and Scholars: Military Rule in medieval Korea* Edward Schultz.

III/57 Koryo Dynasty Korean Army: 1 x General (Cv), 1 x armoured cavalry with lance or bow (Cv), 1 x horse archers (LH), 4 x spearmen (Sp), 4 x archers (4Bw), 1 x stone-throwers (Art) or war wagons (WWg) or guerrillas (3Pk) or archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** II/77b, III/39, III/55, III/56, III/62a, III/62b, IV/14a, IV/14b, IV/35, IV/48, IV/59a. **Allies:** IV/14b or IV/48.

III/58 BUYID OR OTHER DAILAMI DYNASTIES 927 AD - 1090 AD.

The Dailami were fierce Iranian mountaineers from south of the Caspian Sea, noted mercenaries since Sassanid times, who began to set up their own dynasties with the decline of Abbasid power. The first significant Dailami dynasty were the Ziyarids, who ruled in the homelands 927-1090. The Musfirids ruled Azerbaijan 941-984, imposed tribute on Bagratid Armenia and were the victims of a great Rus raid in 945. The Buyids were the most successful dynasty from 933, taking Baghdad in 946. They operated as a family federation with junior branches being installed in western Iran; but never ruled the Dailami homelands, which remained controlled by local chiefs. Dailami foot fought with the "zupin" (a short spear with a blade at each end), javelins and large leather shields. Some also had axes or (especially if guardsmen) light body armour. Agathias described them as neither light nor exclusively close-fighting troops "for they both discharge missiles at a distance when occasion arises and are expert at charging an enemy phalanx and breaking its close-knit ranks with the force of their charge. They reform their ranks with ease and adapt themselves to any contingency. Even steep slopes they run up with ease". Ghulams were employed almost from the start. **Reference:** *Armies of the Dark Ages* I. Heath.

III/58a Baghdad Buyid Army 946-975 AD: 1 x General with ghulam guard (Cv) or Dailami guard on foot (3Bd or 4Ax), 2 x ghulams (Cv), 2 x ghulams (Cv) or zupin-men (4Ax), 4 x zupin-men (4Ax), 2 x archers or crossbowmen (Ps or 3/4Bw or 3Cb), 1 x Indian swordsmen (3Bd) or city religious factions (5Hd) or Bedouin (LH).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/37b, III/43c, III/51, III/54a, III/58b, III/58c, III/61. **Allies:** III/43 or III/54a (Mosul Hamandids) or III/61.

III/58b Musfirid Army 941-984 AD: 1 x General with ghulam guard (Cv), 1 x ghulams (Cv), 6 x zupin-men (4Ax), 3 x archers (Ps), 1 x Kurds (Cv or 3Kn) or zupin-men (4Ax).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/48, III/51, III/58a, III/58c. **Allies:** III/51.

III/58c Other Dailami Armies: 1 x General (4Ax), 7 x zupin-men (4Ax), 4 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/43c, III/54a, III/58a, III/58b, III/61, III/64a, III/64b, III/71a.

III/59 TOLTEC 930 AD - 1168 AD

The Toltecs started as one of the early waves of Chichimec "Dog People" immigrants into Mexico from the north and their leader Mixcoatl "Cloud Serpent" established a capital at Culhuacan in 930. His son Quetzalcoatl "Plumed Serpent" moved to Tula around 968 and made it the capital of a large empire, but was forced out by his rival Tezcatlipoca and according to legend sailed across the Atlantic to "Red land". However, the leader of the Toltec immigrants that imposed their rule on the Maya was called Kukulcan, which also means "Plumed Serpent". Tula was destroyed in either 1156 or 1168 and the empire fell to another wave of immigrants. Toltec art is obsessed with depictions of ugly-looking warriors with pillbox hats, wooden swords edged with obsidian volcanic glass called maquahuitl, atlatl dart-throwers and small shields; and scenes of human sacrifice. There is no evidence of skirmishers, but the usual peasant slingers of the area cannot be discounted. **Reference:** *War and Society in Ancient Mesoamerica* R. Hassig.

III/59 Toltec Army: 1 x General (4Bd), 10 x warriors (4Bd), 1 x warriors (4Bd) or peasant slingers (Ps).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** III/22b, III/41a, III/41b, III/59.

III/60 MEDIEVAL VIETNAMESE 939 AD - 1527 AD

Ngo Qyen defeated a Chinese invasion in 938 and was proclaimed king of Dai Co Viet. Afterwards, Vietnam (still called Annam "pacified south" by the Chinese) remained independent, except for a brief Ming Chinese occupation 1407-1427. The army was based on a regional peasant militia, "the Ten Circuit Army", decimally organised, wearing distinctive leather-covered hats and armed with spear and light round shield or with bow; plus a Chinese-influenced standing army of court troops called "Sons of Heaven" or "Permanent Troops", armed with halberd, sword, bow or crossbow. To draw a more recent parallel, these could be thought of as equivalent to Viet Cong and NVA respectively. Tactics stressed archery, ambushes, raids on supply routes and the use of elephants (some of which had a 2-tier platform for an unusually large number of fighting crew). Handguns were used from 1390 and thought better than Chinese. **References:** *The Making of South East Asia* George Coedès, *Ancient Vietnam: History and Archaeology* A. Schreyer.

III/60 Medieval Vietnamese Army: 1 x General (El or Cv), 1 x elephants (El) or cavalry (Cv), 1 x court halberdiers or swordsmen (4Bd), 1 x court archers and crossbowmen (4Cb or 4Bw), 4 x militia spearmen (4Ax), 3 x militia archers (Ps), 1 x tribesmen (3Wb) or hand gunners (Ps).

Terrain Type: Tropical. **Aggression:** 2. **Enemies:** III/9a, III/9b, III/23b, III/39, III/62a, III/62b, IV/40, IV/48, IV/73. **Allies:** III/23b.

III/61 DYNASTIC KURDISH 950 AD - 1085 AD

After the collapse of Abbasid power, several Kurdish dynasties gained local power in northern Iraq and this list covers their armies. It ends with the conquest of the last Kurdish state by the Seljuks. Kurds were herdsmen migrating between summer and winter pastures. They relied on tribal cavalry said to fight mainly with the sword and to be more heavily armoured and ride heavier, slower horses than the Arabs. On the few occasions when foot are mentioned, they are almost always archers. **Reference:** *Kurds and Kurdistan* Safran.

III/61 Dynastic Kurdish Army: 1 x General (as tribesmen Cv/3Kn), 8 x Kurdish tribesmen (Al Cv or all 3Kn), 1 x Kurdish scouts (LH) or Georgian ghulams (Cv) or Kurdish archers (3Bw), 2 x town militia (7Hd) or Bedouin (LH).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/51, III/54a, III/58a, III/58c, III/61, III/74b. **Allies:** III/58a or III/58c.

III/62 SUNG CHINESE 960 AD - 1279 AD

The Sung dynasty originated in a general's coup which overthrew the Later Chou. Between 960 and 979, it conquered the rival Chinese dynasties but failed to drive the Khitan and Hsi-Hsia from the north. These became the main external enemies, requiring emphasis on cavalry, artillery and fortifications. In 1125-7 the Jurchen-Chin, having destroyed the Khitan, invaded China and pushed the Sung south of the mighty Yangtze river. Loss of horse-breeding areas greatly limited Sung cavalry numbers, but water-borne mobility was a partial substitute and dense cultivation inconvenienced mounted opponents. The Jurchen-Chin were destroyed in 1235 by the Mongols, who fought the Sung until their final victory in 1279. Sung Imperial infantry were armoured and organised in units with a front rank of spearmen, 3 ranks of crossbows and a final rank of archers. These can be represented as a single element with mixed spear and crossbowmen figures or as a double element with crossbows behind a row of spearmen. Picked men with long sword or axe led assaults. Cavalry mostly had unarmoured horses and halberds or later fire lance. Provincial foot were poor in quality; and militia morale had to be boosted with numerous flags and drums. Zhuang were javelinmen with 1 in 3 also having a big rattan shield. **Reference:** *Soldiers of the Dragon* C. Peers, *Defending Heaven* J. Waterson.

III/62a Northern Sung Army 960-1126 AD: 1 x General (Cv), 1 x cavalry (Cv), 1 x picked infantry (3/4Bd), 4 x imperial infantry (4Cb or 8Cb), 2 x provincial infantry (3Ax or 3Bw), 2 x militia (7Hd), 1 x heavy bolt or stone-throwers (Art).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/15, III/36, III/39, III/44, III/55, III/56, III/57, III/60, III/67, IV/14a. **Allies:** II/61d or III/39.

III/62b Southern Sung Army 1127-1279 AD: 1 x General (Cv), 1 x cavalry (Cv, or if some modelled with fire-lance 3Kn), 1 x picked infantry (3/4Bd) or Mongols (LH), 4 x imperial infantry (4Cb), 1 x imperial infantry (3Pk/4Bd) or provincial infantry (3Ax/3Bw) or Zhuang tribesmen (4Ax) or other tribesmen (3Ax), 2 x militia (7Hd), 1 x bolt or bomb throwers (Art), 1 x fire-lance foot (Ps) or hand-held rocketeers (Art).

Terrain Type: Littoral. **Aggression:** 0. **Enemies:** III/36, III/44, III/55, III/57, III/60, III/67, IV/14b, IV/35, IV/48.

III/63 EARLY POLISH 960 AD - 1335 AD.

This list covers Polish armies from the coronation of Mieszko I until the reforms of Casimir the Great. Having a king did not imply having a unified state. It was only under Boleslav I in 1024 that the last of the western Slav tribes were incorporated in the state; and when not actively engaged in civil war it usually functioned as a plethora of duchies ruled by members of the Piast dynasty. Military organisation was based on the *drużyna* "brotherhood" of paid armoured cavalymen (who evolved into feudal knights), supported by a levy of all freemen, who served as unarmoured infantry with spear or bow, axe and shield under village headmen. The Poles were fond of ambushes, especially at river crossings, but for pitched battles formed with *drużynnik* in the centre, spearmen on their flanks or later behind them and archers on the wings. The Teutonic Orders described Polish ambushers with long axes as "murderous rustics" **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath.

III/63a Polish Armies 960-1200 AD: 1 x General (Cv), 2 x *drużynnik* (Cv), 4 x spearmen (Sp), 4 x archers (3Bw or Ps), 1 x slingers (Ps).

Terrain Type: Forest. Aggression: 2. Enemies: III/1a, III/1b, III/1c, III/48, III/53, III/63a, III/68a, III/68b, III/79, IV/13a IV/18. Allies: III/1c or III/40b or III/48 or III/68b.

III/63b Polish Armies 1201-1335 AD: 1 x General (3Kn), 2 x *drużynnik* (3Kn), 1 x Lithuanian, Hungarian or Cuman mercenaries (LH), 3 x spearmen (Sp), 1 x "murderous rustics" (3Bd), 3 x archers (3Bw or Ps), 1 x slingers (Ps).

Terrain Type: Forest. Aggression: 2. Enemies: III/1a, III/63b, III/68b, III/79, IV/13b, IV/18, IV/28, IV/30, IV/35, IV/43a, IV/44a, IV/47, IV/54d. Allies: III/68b or IV/30.

III/64 GHAZNAVID 962 AD - 1186 AD

This list covers the armies of the Ghaznavid state centred on the town of Ghazni in modern Afghanistan; from its foundation by a Turkic ghulam general revolting against the Samanids, through the conquest of northern India by Sultan Mahmud 1001-1024 and the loss of all but their Indian territories to the Seljuks by 1055, until their final destruction by Mohammed of Ghur in 1186. Ghulams in ceremonial dress are depicted in palace wall paintings. They are not uniformly clad, but wear long highly decorated coats and their weapons and shields are described as ornamented in silver and gold. Senior members of the corps carried maces. It is uncertain whether all had lance as well as bow and curved sword. Standards were black with a silver moon and phoenix (or lion for palace ghulams). Regular foot had short spear and/or bow, short sword, shield and mail corslet. Elephants were armoured, but horses were not. **References:** *Armies of the Dark Ages* I. Heath, *Slingshot* 73, 74 & 75.

III/64a Ghaznavid Army 962-1001 AD: 1 x General with palace ghulams (Cv), 5 x other ghulams (Cv), 2 x Turkish, Tajik or similar nomad horse archers (LH), 1 x Arab or Kurd horse (LH), 2 x regular infantry (Sp or 4Bw), 1 x Afghans (3Pk) or Dailami (4Ax) or ghazi (3Wb).

Terrain Type: Dry. Aggression: 3. Enemies: III/10b, III/11b, III/16, III/38, III/43c, III/58c

III/64b Ghaznavid Army 1002-1186 AD: 1 x General (Cv) or (El), 1 x armoured elephants (El), 3 x ghulams (Cv), 1 x nomad horse archers (LH) or Afghans (3Pk), 1 x Arabs or Kurds (LH), 2 x regular infantry (Sp or 4Bw), 1 x Indian swordsmen (3Bd) or ghazis (3Wb), 2 x Indian archers (3Bw).

Terrain Type: Dry. Aggression: 3. Enemies: III/10b, III/16, III/38, III/58c, III/74b, IV/8. Allies: III/10b or III/11b.

III/65 NIKEPHORIAN BYZANTINE 963 AD - 1042 AD

This list covers Byzantine armies from the accession of the first of the soldier emperors Nikephoros II Phokas (963-969), Ioannes "John" I Tzimiskes (969-976) and Vasileios II Bulgaroktonos "Basil the Bulgar-basher" (976-1025) until the military economies of Konstantinos IX. Arab dissension and the impact of the Rus enabled the Byzantines to regain large swathes of territory in Syria and in the Balkans. Their new professional army replaced the part-time soldiers of the Thematic System. *Klibanophoroi* were heavily armoured men with normal sized shields on completely felt or leather armoured horses; who fought in a deep wedge aimed at the enemy general. They are best represented by a double element (in front 2 figures armed with maces and behind them 2 lesser-armoured archers flanked by lancers). Their last use in battle was 971. They were flanked by conventional armoured *kavallarioi*, best represented by a base containing 1 archer and 2 lancer figures. "Out-flankers" and "flank guards" were armoured horse archers. *Skoutatoi* wore textile armour and felt caps and are best represented as a double element with the first row with pike and long shield and the second of archers. They are classed as Bow because their function was continuous protected archery and they were supplied with vast quantities of arrows. *Menavlatoi* had the same armour, but smaller shields like those of javelinmen, and were armed with a spear with a 15' head and a 6' shaft "as thick as a man can grasp". They were thought to be a good defence against enemy *klibanophoroi*. **References:** *Armies of the Dark Ages* I. Heath, *Sowing the Dragon's Teeth* E. Mc Geer, (Campaign Organisation and Tactics in) *Three Byzantine Military Treatises* G.T. Dennis, *The Byzantine Wars* J. Haldon.

III/65 Nikephorian Byzantine Army: 1 x General (Cv), 1 x *klibanophoroi* (6Kn) or Varangian mercenaries (4Bd), 4 x *kavallarioi* (Cv), 1 x advance-guard, out-flankers or flank guards (LH), 3 x *skoutatoi* (8Bw), 1 x *skoutatoi* (8Bw) or archers (Ps), 1 x Rus (3Ax) or other javelinmen (Ps) or *menavlatoi* (3Bd).

Terrain Type: Arable. Aggression: 4. Enemies: III/14c, III/21b, III/26a, III/26b, III/47, III/48, III/49, III/51, III/52, III/53, III/54a, III/65, III/66, III/68a, III/71a. Allies: III/21b or III/48 or III/51 or III/54a or III/71a.

III/66 FATIMID EGYPTIAN 969 AD - 1171 AD

This list covers Fatimid armies from their conquest of Egypt until their replacement by the Ayyubid dynasty founded by Saladin. The army consisted of 3 broad ethnic groups intended to counter-balance each other politically; Westerners (initially mostly Berbers), Easterners (mamluks and Dailami) and 'abid al-shira (East African slave troops). 'Abid fought with dense showers of javelins followed up with swords. **References:** *Armies of the Dark Ages I*. Heath, *Armies & Enemies of the Crusades I*. Heath, *Slingshot* 150, 151 & 238.

III/66 Fatimid Egyptian Army: 1 x General (Cv), 2 x Berber lancers or ghulams (Cv), 1 x Bedouin (LH), 2 x Berber spearmen (Sp) or Dailami (4Ax) or Armenians (3/4Bw), 3 x 'Abid al-Shira (4Bd), 1 x Berber lancers (Cv) or Kurds (Cv or 3Kn), 1 x mutatawwi'a volunteers inspired by religion and/or loot (5Hd) or Syrian town militia infantry (7Hd), 1 x Sudanese archers (3Bw or Ps).

Terrain Type: Dry. **Aggression:** 1. **Enemies:** II/55c, II/62a, III/12, III/33, III/49, III/52, III/54a, III/54b, III/65, III/74b, III/75, III/76, IV/6a or IV/6c, IV/7, IV/17. **Allies:** III/21b or IV/6a or IV/6c or IV/17.

III/67 HSI-HSIA 982 AD - 1227 AD

Following the collapse of Tibetan power in the Ordos region of what is now north-west China, a number of Tangut warlords set up independent states. After years of squabbling, they were induced to unite by a Sung attempt to conquer them 982-1004; and this culminated in 1038 when Yuan-hao took the title of emperor and founded the Tangut Hsi-Hsia dynasty. This provoked another Sung attack and intermittent wars with Sung China continued until 1119. Defeated by Genghis Khan in 1207, the Hsi-Hsia became nominal subjects of the Mongols, but refused to supply troops when called on, leading to their destruction in 1227. Tangut horsemen were mostly armoured and armed with lance, bow and sword, with those who could afford it riding armoured horses. Elite shock troops were called "iron sparrowhawks" and were probably the horsemen formed so close that they were said to be fastened together. "Foot treaders" were bad terrain specialists. They were backed by Chinese-style conscripts. Light stone-throwers were transported on camels. **References:** *Soldiers of the Dragon* C. Peers, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson, *The Great State of White and High* Ruth Dunnell.

III/67 Hsi-Hsia Army: 1 x General (Cv), 1 x "iron sparrowhawks" (4Kn), 2 x Tangut cavalry (Cv), 1 x horse archers (LH), 2 x foot treaders (4Ax), 2 x crossbowmen (4Cb), 2 x swordsmen and halberdiers (4Bd), 1 x stone-throwers (Art) or archers (Ps) or levy infantry (7Hd).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** III/11a, III/15, III/44, III/56, III/62a, III/62b, IV/14a, IV/14b, IV/35. **Allies:** III/11a or III/15 or IV/14b.

III/68 EARLY HUNGARIAN 997 AD - 1245 AD

This list covers Hungarian armies from the foundation of the kingdom until the Mongol conquest and follows on from the Magyar list (III/30). Hungarian nobles quickly copied the equipment of western mercenary knights, but the gentry started to do so only in the 12th century and even then retained their bows. They ruled Slav peasants. **Reference:** *Armies of Feudal Europe I*. Heath.

III/68a Hungarian Army 997-1102 AD: 1 x General (3Kn), 1 x Hungarian cavalry (Cv), 5 x Hungarian horse archers (LH), 1 x Szekely borderers (LH), 2 x Slav spearmen (Sp), 1 x Slav archers (Ps), 1 x Serbs or Vlachs (3Ax or Ps).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** III/1b, III/14c, III/26a, III/26b, III/47, III/48, III/53, III/63a, III/65, III/73a, III/76, III/79, IV/1a.

III/68b Hungarian Army 1103-1245 AD: 1 x General (3Kn), 1 x Hungarian nobles (3Kn), 1 x Hungarian gentry (Cv or 3Kn), 3 x Hungarian horse archers (LH), 1 x Szekely borderers (LH), 2 x Hungarian Slav foot (Sp), 2 x Croat foot (Sp or 4Ax), 1 x Hungarian Slav or Croat archers (Ps).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** III/26a, III/47, III/63a, III/63b, III/73a, III/73b, III/79, III/80, IV/1a, IV/1b, IV/13a, IV/13b, IV/22, IV/25, IV/35. **Allies:** III/63a or III/80.

III/69 WESTERN SUDANESE 1000 AD - 1591 AD

The western Sudan is the lightly wooded rolling grassland south of the Sahara desert. Nations dwelling there included Ghana, Mali, Songhai, Bornu, Kanem, Bulala and the Hausa states. The period ends with the Moroccan destruction of the Songhai in 1591, but armies as late as 1850 differed only in the number and type of firearms used. Yan lifida such as the "barde" bodyguard were protected against local archery and javelins by thick quilted armour for man and horse introduced about 1390. They were kept as a central reserve and advanced at a slow walk. Yan kwarbai were lesser javelin cavalry, some tribes using of armour and some relying entirely on speed. The infantry types were: Yam baka who used weak bows to shoot dense clouds of un-flighted poisoned arrows (yam lifida added quilts, shield and short spear), yam fate-fate who used long straight sword and shield, Yam assigiri with long metal spears, big shields and quilts used to stop cavalry or as a striking force, yam mashi who used javelins and shield and zagi who were unshielded javelinmen that often supported yan kwarbai. Kanem and Bornu used Kanembu spearmen with very large shields who advanced slowly in close formation. **References:** *Warfare in the Sokoto Caliphate* J.P. Smaldone, *Warfare in Atlantic Africa 1500-1800* J.K. Thornton, *Slingshot* 216, 217, 221 & 224, *African Arms & Armour* C. Spring.

III/69 Western Sudanese Army: 1 x General (4Kn or Cv or 4Bd), 1 x yan lifida (4Kn) or yan kwarbai (Cv) or yam assigiri (Sp) or pathfinders (LCm), 2 x yan kwarbai (Cv or LH), 1 x yam lifida baka (4Bw) or yam baka (3Bw + 5 x yam baka (3Bw)) or 6 x Kanembu (Sp), 2 x yam fate-fate (4Bd) or yam assigiri (Sp) or yam mashi (3Ax) or yam baka (Ps/3Bw) or Zagi (Ps).

Terrain Type: Steppe. **Aggression:** 0. **Enemies:** III/12, III/69, III/70, III/75. **Allies:** III/70.

III/70 TUAREG 1000 AD - 1880 AD

This list covers the universally face-veiled and indigo-clad camel-riding nomads from deep in the Sahara desert of Africa until the introduction of rifles. It is uncertain when the culture developed, but 1000 AD is a reasonable estimate. They mainly fought each other, but armies of up to 12,000 camel men intervened in the western Sudan. A late description of a Tuareg attack described it as a "tidal wave of white camels" that still struck fear even in the days of machine guns. Tuareg riding camels are pale cream in colour, darker animals being used only for baggage and tourists. The Ihaggeren aristocrats raided, armed with the short all-iron "allarh" lance, a long straight sword and a long white hide shield. Imrad vassals without shields but with allarh or a quiver of javelins herded goats and camels or traded and Ikkan negro serfs with javelins and dagger cultivated and smithed. Beside the Ikkan, only tribes from the Hoggar mountains fought mainly on foot. Indigo dye produces a range of blue shades. **Reference:** *African Arms and Armour* C. Spring.

III/70 Tuareg Army: 1 x General (Cm), 3 x Ihaggeren and Imrad camel warriors (Cm), 2 x camel warriors (Cm) or Ikkan (Ps), 5 x camel warriors (Cm) or mountain tribesmen (3Wb), 1 x scouts (LCm) or mountain tribes slingers (Ps).

Terrain Type: Dry. Aggression: 1. Enemies: III/33, III/69, III/70, III/75.

III/71 GEORGIAN 1008 AD - 1683 AD

This list covers the Georgian Kingdom at the eastern end of the Black Sea formed from Lazica, Iberia and Abasgia after their break away from Armenian rule until its subjection by the Ottomans. Cumans settled depopulated areas from 1089. After 1245, the country split into competing kingdoms. Georgians differed from the dour Armenians in being extrovert and cheerful. Their standards were windsock lions tethered by the upper lip. Their uncompromising attitude in religion was demonstrated by making coins inscribed with "Sword of the Messiah" (in Arabic) and marching on pilgrimage to Jerusalem with banners displayed, refusing tribute and daring Arab rulers to stop them, and naming a border fort "Kiss My Arse". Aznauri were nobles, devoted to charging with the lance, but later under Seljuq and Cuman influence taking to the bow. Ossetians were stay-at-home Alans. **Reference:** *Armies & Enemies of the Crusades* I. Heath.

III/71a Georgian Army 1008-1089 AD: 1 x General (3Kn), 3 x aznauri (3Kn), 2 x retainer horse archers (LH), 2 x spearmen (Sp), 3 x archers (3Bw or Ps), 1 x javelinmen (Ps) or Rus mercenaries (Sp) or Ossetians (LH).

Terrain Type: Hilly. Aggression: 2. Enemies: II/58, III/16, III/51, III/54a, III/58c, III/65, III/71a, III/74b, III/76.

III/71b Georgian Army 1090-1121 AD: 1 x General (3Kn), 2 x aznauri (3Kn), 1 x retainers (LH), 4 x Cuman horse archers (LH), 2 x spearmen (Sp), 2 x archers (3Bw or Ps).

Terrain Type: Hilly. Aggression: 2. Enemies: II/58, III/54a, III/71b, III/74b.

III/71c Georgian Army 1122-1683 AD: 1 x General (Cv), 2 x aznauri (Cv), 4 x Cuman horse archers (LH), 2 x spearmen (Sp), 2 x archers (3Bw or Ps), 1 Turkoman (LH) or Crusaders (3Kn) or Cuman gentry (Cv).

Terrain Type: Hilly. Aggression: 2. Enemies: II/58, III/54a, III/71c, III/74a, III/74b, IV/20, IV/24a, IV/34, IV/35, IV/47, IV/49, IV/55b, IV/67, IV/75, IV/77.

III/72 ANGLO-DANISH 1014 AD - 1075 AD

This list covers English armies from the Danish conquest of 1014 until the completion of the Norman conquest. Its main focus is defence against Welsh invasions, Harold Godwinson's campaigns in Wales and Harold Hardrada's invasion from Norway and the invasion by William of Normandy that culminated in the battle of Hastings. Scots exile allies enable it to be used for Seward of Northumbria's campaign again against Macbeth; and Welsh allies for punitive expeditions into Wales. Huscarls were professional royal bodyguards wearing acorn helmets and long mail shirts, having long kite-shaped shields and fighting with long axes swung 2-handed. Select fyrd were nobles, thanes and their best equipped followers, often similarly armoured but fighting with spear and sword and a few traditionalists keeping the old convex round shield. Great fyrd were the remaining levies, mostly unarmoured and with round shields and less rigidly under control, so best simulated by 7Hd. At Hastings they pursued rashly off their hill. **References:** *Armies of the Dark Ages* I. Heath, *An Alternative History of Britain: The Anglo-Saxon Age* T. Venning, *The Battle of Hastings* S. Morillo (which includes monochrome illustrations of the Bayeux tapestry), *The Cuning of the Dove* A. Duggan (novel), www.bayeuxtapestry.org.uk for coloured images of the tapestry.

III/72 Anglo-Danish Army: 1 x General (4Bd), 2 x huscarls (4Bd), 4 x select fyrd (Sp), 4 x great fyrd (Sp/7Hd), 1 x archers and slingers (Ps) or select fyrd (Sp).

Terrain Type: Arable. Aggression: 1. Enemies: III/19a, III/40b, III/45, III/52, III/72, IV/3. Allies: III/19a or III/40b or III/45.

III/73 COMMUNAL ITALIAN 1029 AD - 1320 AD

This list covers Italian city states until the rise of the condottieri. Communal troops were city militia who drilled part-time and were usually uniformed and fought under the banner of their city quarter or guild. Contadini were the (generally distrusted) feudal gentry of the surrounding countryside and their followers. By 1150 knights would be in complete armour. Berrovieri were mercenary light horse with sword and shield and often crossbow. 8Cb are double-depth elements with a row of crossbowmen behind a row with spear and pavis. Plaustrella were man-pushed carts with scythe blades and frontal shield used by Milan in 1169. Neither these nor conventional war wagons used later achieved great success, but they look pretty on the table. **References:** *Armies of Feudal Europe* Ian Heath, *Armies of the Middle Ages Vol 1* I. Heath.

III/73a Communal Italian Army 1029-1150 AD: 1 x General on horseback (3Kn) or with Carroccio standard wagon (CWg), 1 x communal or contadini knights (3Kn), 6 x communal spearmen (Sp), 2 x communal crossbowmen (4Cb) or archers (Ps), 2 x Contadini infantry (7Hd).

Terrain Type: Arable. Aggression: 2. Enemies: III/26b, III/33, III/52, III/53, III/68a, III/68b, III/73a, III/77, IV/4a, IV/5a, IV/5b, IV/13a. Allies: III/53 or IV/13a.

III/73b Communal Italian Army 1151-1320 AD: 1 x General on horseback (3Kn) or with Carroccio standard wagon (CWg), 1 x communal or contadini knights (3Kn), 1 x mercenary knights (3Kn) or Berrovieri (LH), 2 x communal spearmen (Sp), 2 x communal crossbowmen (4Cb) or archers (Ps), 2 x Contadini foot (7Hd), 1 x plaustrella or other war wagons (WWg) or mercenary knights (3Kn) or archers (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: III/33, III/35c, III/68b, III/73b, III/77, IV/4b, IV/5a, IV/5b, IV/5c, IV/13b. Allies: IV/13b.

III/74 SELJUQ TURK 1037 AD - 1276 AD

This list covers the Seljuq Turks from their revolt against the Ghaznavids. Alp Arslan and his son Malik Shah established a "Great Seljuq" empire, initially stretching from the Byzantine frontier to the Caucasus mountains and Aral Sea in the north, to Afghanistan in the east and to the Syrian provinces of the Fatimids in the south. After the battle of Manzikert in 1071 it also included formerly Byzantine Anatolia. After the death of Malik Shah in 1092, the empire split into the sultanates of Rum in Anatolia, Hamadan in Iran, and the more powerful Merv further east. Merv fell to its revolting Ghuzz mercenaries in 1157 and Hamadan to Khwarizm in 1194. Rum was defeated by the first Crusade in 1096, lost territory to the resurgent Byzantines and split into smaller sultanates and emirates. It had a brief spectacular revival under Kai Kobad and Kai Khosru 1220-1243, but fell to the Mongols in 1276. With plentiful access to real Turks, the Seljuq initially relied on a levy of armoured nobles and lesser tribesmen, supplanted from 1063 in Rum by a guard of home-grown mamluks with bow and lance and a professional free "askar" of armoured cavalry with bow assimilating ex-ghulams of conquered states. Fierce but unreliable Turkoman tribesmen provided an important supplement. Franks were not all western knights. Nothing is known of Agulani except that they and their horses were completely armoured in iron and they fought only with swords. **Reference:** *Armies & Enemies of the Crusades* I. Heath.

III/74a Rum Army 1063-1276 AD: 1 x General with mamluks (Cv), 2 x askaris (Cv), 5 x Turkoman horse archers (LH), 1 x Armenians or Kurds or Georgians (3Kn or Cv) or Franks (3Kn) or Turkomans (LH), 2 x Armenian or Kurdish foot (3Bw or Ps) or Turkomans (LH), 1 x Agulani (4Kn) or Dailami (4Ax) or Turkomans (LH).

Terrain Type: Steppe. Aggression: 3. Enemies: III/71c, III/74b, IV/1a, IV/1b, IV/2, IV/6a, IV/6b, IV/6c, IV/7, IV/20, IV/24a, IV/26, IV/31, IV/32, IV/34, IV/35. Allies: III/11b, IV/24a or IV/46.

III/74b Other Seljuq Turkish Armies: 1 x General with ghulams or nobles (Cv), 2 x Seljuq nobles or ghulams (Cv), 5 x Seljuq tribesmen or Turkomans or Ghuzz (LH), 2 x tribal foot (Ps or 3Bw or 3Ax) or Turkomans (LH), 1 x Dailami (4Ax) or Kurds (Cv or 3Kn), 1 x city militia (7Hd) or Syrian cavalry (Cv) or Bedouin (LH or 1Cm).

Terrain Type: Steppe. Aggression: 3. Enemies: II/58, III/11b, III/54a, III/54b, III/61, III/64b, III/66, III/71a, III/71b, III/71c, III/74a, III/74b, III/76, III/80, IV/1a, IV/1b, IV/2, IV/6a, IV/6b, IV/6c, IV/7, IV/8, IV/15, IV/17, IV/20, IV/24a, IV/45, IV/46, IV/47, IV/49, IV/50, IV/51a. Allies: III/11b or III/54a or III/64b or IV/8.

III/75 ISLAMIC BERBER 1039 AD - 1529 AD

This list starts with the fanatical Murabit "Confederate" sect founded in Morocco in 1039 AD, which had imposed its rule by forced conversion on the whole of Morocco by 1084. In 1086, they crossed into Spain and by 1110 had subjected all the Andalusian Arab states. A new sect, the Almohades "Unitarians" rose up in 1121 and by 1145 controlled not only the former Murabit territories but the whole North African coast as far as the border of Egypt. Marinid rebels progressively replaced the Almohades in Morocco 1215-1269. The Marinids lost face after the Portuguese seizure of the coastal city of Ceuta in 1415 and were replaced by the Hafsid, Wattasid and Zayanids. The list ends with the introduction of firearms. **Reference:** *Armies of Feudal Europe* I. Heath.

III/75 Islamic Berber Army: 1 x General (Cv or LH or with black guards Sp), 3 x Berber javelin-throwing light horse (LH), 4 x Berber or black spearmen (Sp), 2 x Berber or black archers (Ps), 1 x Berber javelinmen (Ps), 1 x Tuareg (Cm) or Christian Spanish mercenaries (3Kn or 4Cb) or Ghuzz horse archers (LH) or Berber or African slingers (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: III/33, III/34b, III/35b, III/35c, III/66, III/69, III/70, III/75, IV/5a, IV/5b, IV/5c, IV/38, IV/68a, IV/68b, IV/68c, IV/68d, IV/68e, IV/68f. Allies: III/34b.

III/76 KONSTANTINIAN BYZANTINE 1042 AD - 1073 AD

After the military successes of the previous period, the Byzantines returned to civilian-influenced government. This list covers their armies from the military economies of Konstantinos IX until the aftermath of the disastrous battle of Manzikert in Armenia and the loss of Anatolia to the Seljuq. Normans were hired from Italy to replace klibanophoroi. The long axes associated with the Varangian guard are not attested before 1075. The Normans did not fight at Manzikert, having been detached to Khlbat, but their commander Roussel de Balliol had a brief civil war career in Anatolia after the battle. The only infantry mentioned besides garrisons were Armenian levies. Lancer and heavy infantry shields were now kite-shaped. **References:** *Armies and Enemies of the Crusades* I. Heath, *The Dreadful Day* A. Friendly, *The Byzantine Wars* J. Haldon, *The Lady for Ransom* A. Duggan (novel).

III/76 Konstantinian Byzantine Army: 1 x General (Cv) or if emperor on horse with purple caparison with Varangian escort (CP), 4 x kavallarioi (Cv), 1 x Turkish, Alan, Pecheneg or Cuman horse archers (LH), 1 x Normans (3Kn) or nomad horse archers (LH), 1 x Normans (3Kn) or kavallarioi (Cv) or archers and slingers (Ps), 2 x Armenians (Sp) or kavallarioi (Cv), 1 x kontaratoi (8Bw) or nomad horse archers (LH), 1 x rope-pull stone-throwers (Art) or kavallarioi (Cv).

Terrain Type: Arable. Aggression: 1. Enemies: III/21b, III/26a, III/26b, III/47, III/48, III/51, III/52, III/53, III/54a, III/66, III/68a, III/71a, III/74b, III/76.

III/77 PAPAL ITALIAN 1049 AD - 1320 AD

This list covers the period from the accession of Pope Leo IX until the rise of the condottieri. Perugian, Romagnol, Anconan, Tuscan or Spoletan contingents are treated as allies from III/73, because of the casual attitude of those cities to their military obligations. Luckily the popes had money to hire mercenaries. **References:** *Armies of Feudal Europe* I. Heath.

III/77 Papal Italian Army: 1 x General; either papal gonfalonieri (3Kn) or pope on portable throne with papal bodyguard (Lit), 2 x papal feudal or Lombard mercenary knights (3Kn), 3 x mercenary archers (Ps), 2 x mercenary spearmen (Sp), 2 x mercenary crossbowmen (4Cb), 1 x French (3Kn) or German (3Kn/4Bd) mercenary knights, 1 x Roman militia (7Hd) or infuriated peasants (5Hd).

Terrain Type: Arable. Aggression: 3. Enemies: III/52, III/53, III/73a, III/73b, IV/5a, IV/5b, IV/5c, IV/13a, IV/13b. Allies: III/21b or III/52 or III/53 or (0-2 of III/73a) or (0-2 of III/73b) or III/76 or IV/5a or IV/5b or IV/5c.

III/78 SCOTS ISLES & HIGHLANDS 1050 AD - 1493 AD

This list covers the armies of the Lords of the Isles from the death of Macbeth's viceroy Kalv Arnasson until the execution of the final Lord and imposition of direct rule from Edinburgh. Both parts of the lordship had a part-Norse ruling class, the Isles being more heavily influenced than the Highlands. Contemporary monuments depict men in acorn helmets with mail hood, quilted aketon, kite shield, long sword, either a short spear or a long axe and bare legs. The "worse kind of Islesmen" were occasionally sent home from the muster. On one occasion their shields were red. Highlanders were described from 1156 to 1638 as armed with bow, sword, small axe and mail shirt and "shooting thickly". Their chiefs are depicted on tombs as very similar to Islesmen. However, there was a worse armed lower class "caterans" with only dirk or axe and sometimes a small round "target" shield. Highland archers were out-shot by English longbowmen; and their followers' vulnerability to archery produced reluctant behaviour at Northallerton, contrasting with their enthusiasm in ambush or when looting. Galwegians were fiercer and fought as warband until they came under Scottish rule in 1181 and were re-armed with pikes. **References:** *Armies of Feudal Europe* I. Heath.

III/78 Scots Isles or Highlands Army: 1 x General (4Bd), 5 x Islesmen (4Bd), 2 x Islesmen (4Bd) or Galwegians (3Wb or 3Pk), 1 x Islesmen (4Bd) or Irish mercenaries (3Ax), 2 x Highland warriors (3Bw), 1 x Highland caterans (5Hd) or scouts (Ps).

Terrain Type: Littoral. Aggression: 3. Enemies: III/40b, III/45, III/46, III/78, IV/16, IV/58. Allies: III/40b.

III/79 EARLY RUSSIAN 1054 AD - 1246 AD

This list covers the period from the break-up of the Kievan Rus state (see III/48) into competing principalities until the Mongol conquest of Russia. Druzhina were the prince's or boyars' personal troops, in helmet and thigh-length mail or lamellar hauberk, with kite or heater-shaped or small round shield, light lance and sword or mace-and-chain, mounted on unarmoured chestnut, bay, grey and black horses. Under nomad influence, they came to be used as a reserve striking force of charging lancers; with horse archers deployed either on their flanks, or in front to provoke enemy to commit prematurely. Kazaks or svoi poganye "our own pagans" were former nomads (mostly Pecheneg) now settled within the borders and fighting as horse archers, but in scale, mail, lamellar, leather or textile corsets. Infantry formed behind or on the wings. Polk were town militia (mostly armoured spearmen) and Smerdy were peasants of woodland villages, in unbleached linen or wool. Frequent Cuman allies (III/80) were called "Polovtsy". **References:** *Armies of Feudal Europe* I. Heath, *The Year of the Horse* R.F. Tapsell (novel).

III/79 Early Russian Army: 1 x General (3Kn), 4 x druzhina (3Kn), 2 x Kazaks (LH), 2 x polk (Sp), 1 x smerdy (Sp) or woodsmen (3Ax) or German knights (3Kn/4Bd), 1 x archers (Ps or 3Bw), 1 x ill-armed smerdy (7Hd) or archers (Ps).

Terrain Type: Forest. Aggression: 0. Enemies: III/32, III/40b, III/47, III/63a, III/63b, III/68a, III/68b, III/79, III/80, IV/18, IV/27, IV/28, IV/30, IV/35. Allies: III/63a or III/63b or III/68a or III/68b or III/80.

III/80 CUMAN (KIPCHAK) 1054 AD - 1394 AD

This list covers the Cumans (or Kipchaks) from their first appearance on the borders of Kievan Russia. They originated as an off-shoot either of the Ghuzz or Kimaks. Starting north-east of the Caspian Sea, they rapidly advanced west, conquering most of the Pechenegs and pushing the remainder before them. In 1068 they defeated the southern Russian princedoms. By 1090 they were established on the Danube. They were then bordered to the north by Russia and the Volga Bulgars, to the south by the Byzantines and Alans and to the west by Hungary. In 1091, 40,000 Cumans combined with a Byzantine Army under Alexios I Komnenos to defeat a larger Pecheneg army, but sneaked off during the following night in fear of Byzantine treachery. They are best known under the alternative name of "Polovtsy" as the stars of Borodin's opera "Prince Igor", but I cannot resist mentioning a leader variously called "Bonyak the Scabby", "Bonyak the Godless" and "Bonyak, that god-less mangy thief and bandit who broke his lance on the gate of Kiev". The Cumans were crushed by a Mongol invasion force sent by Ghengis Khan in 1221 and mainly absorbed into Hungary and Russia, the last independent remnants being finished off by Timur. Most Cumans fought as horse archers, but (possibly Russian-influenced) nobles were also noted throwers of javelins carried 3 in a quiver and at least Bonyak had a lance. Clothing was boots, trousers, a long under-tunic split at the back, a kaftan, a short over-tunic, a cloak and a cap. Materials were wool, brocade, fur, linen, silk or leather, of which the colour, embroidery and fur trim depended on wealth and social status. Short armour corslets also depended on status and could be scale, mail, lamellar, leather or quilted-fabric. **Reference:** *Armies of Feudal Europe* I. Heath.

III/80 Cuman or Kipchak Army: 1 x General (3Kn or Cv), 2 x Cuman nobles (Cv) or horse archers (LH), 7 x horse archers (LH), 1 x horse archers (LH) or bolt-shooters on wagons or stone-throwers (Art) or Greek fire hurlers (Ps), 1 x Vlach javelinmen (Ps) or Cuman foot (7Hd).

Terrain Type: Steppe. **Aggression:** 3. **Enemies:** II/58, III/11b, III/32, III/47, III/68b, III/74b, III/79, IV/1a, IV/1b, IV/15, IV/24a, IV/25, IV/35, IV/44a, IV/44b, IV/47. **Allies:** II/58.

SECTION FOUR: THE HIGH MEDIEVAL PERIOD 1071 AD TO 1520 AD

IV/1 KOMNENAN BYZANTINE 1071 AD - 1204 AD

This list covers Byzantine armies from the disaster of Manzikert until the capture of Constantinople by the Fourth Crusade. Alexios I's first campaigns after his accession in 1081 were against Norman invaders from Sicily, in which his ingenuity and cunning finally won out. He then had to deal with attacks by Pechenegs in 1087 and 1090 and by Cumans in 1094. An appeal to the Pope in 1095 for volunteers to serve as mercenaries against the Seljuqs was an embarrassing success that culminated in the arrival of several crusader armies from 1096. The crusader victory at Dorylaeum in 1097 enabled the recovery of much of Anatolia. His strategy and that of his two successors (John II & Manuel I) then became to launch a strong expedition to recover lost territory, culminating in a siege, then go immediately on to the defensive and seek a diplomatic settlement. They avoided decisive open battles. The loss of the Anatolian recruitment areas forced the army to depend heavily on foreigners. The Varangian guards were now mainly Anglo-Saxons émigrés from England after the Norman conquest who fought on foot with long axes. Latinikon were Frankish mercenary knights now organized into obedient regular units. Kavallarioi were the native Byzantine armoured cavalry who had previously been lancers with a proportion of archers. The troops Anna Komnena calls "peltastai" are regulars recruited in Europe, who rode horses, shot with the bow (usually while mounted) and from their name should have small round shields. Since no one else uses the name, they were probably detached kavallarioi archers acting as cursors. Manuel I (1143-1180) made kite shields mandatory for the kavallarioi and trained them all to charge in Frankish style. The option to class the general as Kn prior to this reflects occasional rash behaviour, as when one charged into a tree and broke his neck. Skythikon were irregular horse archers recruited first from Pechenegs, then from Cumans. Vardariotai were a new guards unit first attested in 1160 and possibly originally recruited from Magyar settlers in the Vardar valley. **References:** *Armies and Enemies of the Crusades* I. Heath, *The Alexiad of Anna Komnena* (Penguin Classics), *The Byzantine Wars* J. Haldon, *Warfare, State and Society in the Byzantine World 565-1204* J. Haldon, *Byzantium and the Crusades* J. Harris, *Count Bohemond A. Duggan* (novel).

IV/1a Komnenan Byzantine Army 1071-1142 AD: 1 x General (Cv or 3Kn), 2 x kavallarioi (Cv), 2 x kavallarioi (Cv) or peltastai (LH), 1 x latinikon (3Kn) or skythikon (LH), 2 x skythikon (LH), 2 x archers (3/4Bw), 1 x Varangian guard (4Bd) or kontaratoi (Sp) or Slavs or Vlachs (3Ax), 1 x archers or slingers (Ps) or Turks (LH). Terrain Type: Arable. Aggression: 1. Enemies: III/26a, III/47, III/53, III/54, III/68a, III/68b, III/74a, III/74b, III/80, IV/2, IV/5a, IV/7, IV/17. Allies: III/74b or III/80 or IV/17.

IV/1b Komnenan Byzantine Army 1143-1204 AD: 1 x General (3Kn), 2 x kavallarioi (3Kn), 1 x latinikon or Georgians, Alans or Serbs (3Kn) or skythikon (LH), 3 x skythikon (LH), 2 x archers (3/4Bw), 1 x kontaratoi (Sp) or archers (3/4Bw), 1 x archers or slingers (Ps), 1 x Varangian guard (4Bd) or vardariotai (LH) or Slavs or Vlachs (3Ax). Terrain Type: Arable. Aggression: 0. Enemies: III/26a, III/68b, III/74a, III/74b, III/80, IV/2, IV/6a, IV/6b, IV/6c, IV/17, IV/20, IV/25. Allies: III/68b or IV/17.

IV/2 CILICIAN ARMENIAN 1071 AD - 1375 AD

This list covers the Armenians of Cilicia/Kilikia on the southern coast of modern Turkey from their gaining independence from the Byzantines after Manzikert 1071 until the conquest of their kingdom by the Mamluks. After a period of local groups mainly living in the hills and temporising with Seljuqs and Byzantines, from 1075 they were ruled by a prince, the last of whom made them into a kingdom in 1198. King Hethum travelled to meet the Mongol ruler Mongke in 1255, willingly submitted to the Mongols in the hope of help against the Rum Seljuqs; and then, with his son-in-law Bohemond VI of Antioch and Tripoli, helped the Mongols storm Aleppo in 1260. In 1263 his army included 150 Armenians dressed as Mongols to further demoralize the enemy. The Armenians remained loyal to the Ilkhanid branch of the Mongols thereafter, thus incurring the wrath of the Mamluks. The Crusading military orders held castles in Cilicia long after the loss of their fortresses in Palestine. After the fall of the Crusader kingdom, Cilicia was heavily influenced by Lusignan-ruled Cyprus and recruited Frankish mercenary foot soldiers from there. Whether the armoured foot spearmen depicted in art are native Armenians or Franks is a matter of opinion. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath.

IV/2 Cilician Armenian Army: 1 x General (3Kn), 2 x Armenian nobles (3Kn), 6 x Armenian javelinmen (3Ax) or spearmen (4Sp), 2 x Armenian archers (3Bw or Ps), 1 x Armenian archers (Ps) or Bedouin (LH) or Crusader orders (3Kn) or Frankish crossbowmen (4Cb) or Armenians disguised as Mongols (LH). Terrain Type: Hilly. Aggression: 1. Enemies: III/74a, III/74b, IV/1a, IV/1b, IV/6a, IV/6b, IV/6c, IV/7, IV/17, IV/20, IV/26, IV/45, IV/46, IV/49, IV/55a, IV/55b, IV/67, IV/75. Allies: III/74a or IV/7 or IV/17 or IV/26 or IV/46.

IV/3 ANGLO-NORMAN 1072 AD - 1181 AD

This list covers English armies from the completion of the Norman conquest until Henry II's assize of arms in 1181. The wagon standard is the banner of St. Cuthbert of Durham or St. Peter of York. It cannot be used if the king is present but is especially appropriate if defending against the "breechless and barbarous Scots". Knights now wore a longer-sleeved mail hauberk coming down to the wrist and by 1085 the mail leg protection worn by some wealthy knights on the Bayeux tapestry was standard for the well-armed knights in the front rank. Crossbowmen were rare in England at this time, but an archer element can include a crossbow figure for variety. Welshry were tenants of marcher lords, as opposed to independent Welsh. **References:** *Armies of Feudal Europe I*. Heath, *Warfare under the Anglo-Norman Kings 1066-1135* S. Morillo, *Anglo-Norman Warfare* M. Strickland (Ed), *Normans and Plantagenets - An Alternative History of Britain* T. Venning.

IV/3 Anglo-Norman Army: 1 x General (3Kn/4Bd) or with standard wagon (CWg), 3 x knights (3Kn/4Bd), 4 x feudal foot sergeants, fyrd or town militia (Sp), 1 x archers (Ps), 2 x archers (Ps or 3Bw) or Brabançon or Flemish mercenaries (4Pk), 1 x mercenaries (3Kn) or mounted archers (Mtd-3Bw) or Welshry (3Ax) or South Welsh (3Lb).
Terrain Type: Arable. Aggression: 2. Enemies: III/19a, III/19b, III/19c, III/45, III/46, III/72, IV/3, IV/4a, IV/16, IV/39a. Allies: III/19c or IV/4a.

IV/4 FEUDAL FRENCH 1072 AD - 1330 AD

This list covers the French armies from the rebirth of a strong central monarchy (even though Royal control of the nobility outside the Ile de France remained doubtful) until the transition to plate armour. The knights wore long-sleeved mail hauberk and mail leg-armour was now common. Shields were getting shorter. The less-armoured sergeants forming their rear ranks are assumed to be included in each knight element. Infantry could be drawn up behind as a rallying point, placed on the wings of each cavalry division or sent in front to prepare the charge. Most foot are depicted armed with spear and shield or with mixed 2-handed cutting weapons and without shields, wearing quilted aketon or gambesons and only occasionally with metal armour. Bretons, bidets and bidowers were mercenary javelinmen. Dardiers with 2 heavy javelins specialized in ambushes from difficult terrain. Ribauds were knife-armed looters enthusiastic only in pursuit. Artillery was important in a battle of 1304 against the Flemings. **References:** *Armies of Feudal Europe I*. Heath, *Armies of the Middle Ages Vol 1* L. Heath, *Western Warfare in the Age of the Crusades 1000-1300* J. France.

IV/4a Feudal French Army 1072-1199 AD: 1 x General (3Kn), 3 x knights (3Kn), 2 x communal militia (Sp), 2 x feudal spearmen (Sp) or Low Countries mercenaries (4Pk), 1 x mercenaries (3Kn or 4Cb), 2 x archers (Ps), 1 x bidet, bidower or Breton javelinmen (Ps) or peasant levies (7Hd) or ribauds (5Hd) or Frisian sailors (3Pk) or dardiers (4Ax).
Terrain Type: Arable. Aggression: 1. Enemies: III/33, III/35b, III/53, III/73a, IV/3, IV/4a, IV/13a, IV/13b, IV/23.

IV/4b Feudal French Army 1200-1330 AD: 1 x General (3Kn), 3 x knights (3Kn), 2 x communal militia (Sp), 2 x feudal spearmen (Sp) or mixed weapon foot (4Bd) or Low Countries mercenaries (4Pk), 1 x mercenaries (3Kn or 4Cb), 2 x archers (3Bw or Ps), 1 x bidet, bidower or Breton javelinmen (Ps) or peasant levies (7Hd) or ribauds (5Hd) or Frisians (3Pk) or dardiers (4Ax) or stone-throwers or springalds (Art).
Terrain Type: Arable. Aggression: 1 until 1214, then 4 if with IV/17 allies, 2 if not. Enemies: III/35b, III/35c, III/73b, IV/4b, IV/5c, IV/13b, IV/20, IV/23, IV/39a, IV/39b, IV/57a, IV/62a. Allies: III/73b or IV/17.

IV/5 SICILIAN 1072 AD - 1266 AD & 1282 AD - 1442 AD

This list covers Sicily from its conquest from the Arabs by the Normans of the Dukedom of Apulia in southern Italy and the combination of the two as the Kingdom of Naples, through its acquisition by the Swabian Hohenstaufen dynasty in 1198, until the death in battle at Benevento in 1266 of Manfred (natural son of the 4 times excommunicated Holy Roman Emperor Frederick II) fighting the French army of Charles of Anjou (brother of the King of France and invading on behalf of the Pope); then from the "Sicilian Vespers" revolt of 1282 that called in Pere III of Aragon and ended in 1302 with him as King of Sicily and Charles and his successors ruling in Italy as Kings of Naples. In 1409 Sicily became part of the Kingdom of Aragon, then in 1442 Sicily and Naples were united under Alfonso V of Aragon as the Kingdom of the Two Sicilies and becomes covered by IV/61. German mercenary sergeants used by Manfred in 1266 were very heavily armoured, wearing the new "coats of plates" over full mail, but were clumsy and un-enterprising, so can be 4Kn. **References:** *Armies of Feudal Europe I*. Heath, *Armies of the Middle Ages Vol 1* L. Heath.

IV/5a Sicilian Army 1072-1193 AD: 1 x General (3Kn), 3 x knights (3Kn), 6 x Saracen archers (Ps), 1 x Griffon javelinmen (3Ax) or Italian communal spearmen (Sp), 1 x crossbowmen (4Cb) or Berbers (LH).
Terrain Type: Littoral. Aggression: 3. Enemies: III/33, III/73a, III/73b, III/75, III/77, IV/1a.

IV/5b Sicilian Army 1194-1266 AD: 1 x General (3Kn), 3 x knights (3Kn), 1 x Saracen mounted archers (Mtd-4Bw) or Berbers (LH) or Germans (4Kn), 5 x Saracen archers (Ps), 1 x Italian communal spearmen (Sp), 1 x Griffons (7Hd).
Terrain Type: Littoral. Aggression: 3. Enemies: III/73b, III/75, III/77, IV/13a, IV/13b. Allies: IV/17.

IV/5c Sicilian Army 1282-1442AD: 1 x General (3Kn), 3 x knights (3Kn), 1 x Aragonese cavalry (Cv), 1 x Aragonese crossbowmen mixed with shield-men (4Cb), 5 x Catalans (3/4Ax), 1 x Italian communal crossbowmen (8Cb).
Terrain Type: Littoral. Aggression: 3. Enemies: III/35c, III/73b, III/75, III/77, IV/4b, IV/13b, IV/13c, IV/61. Allies: III/35c or (IV/32 & IV/60) or IV/68a.

IV/6 SYRIAN 1092 AD - 1286 AD

This list covers the Muslim armies of Syria and the shrunken Abbasid Khalifate of Baghdad following the relaxation of Seljuk control after the death of Malik Shah in 1092. The rulers of Syrian cities became semi-independent. The most important were the Turkish rulers of Damascus and Aleppo. Antioch and Jerusalem also had Turkish rulers, but fell during the first Crusade to Crusaders and later to the Fatimids. The smaller Syrian cities of Hama, Homs, Tripoli and Shaizar were ruled until the Zankid conquest by Arab dynasties. The list also covers the armies of Mosul from Zanki's acquisition of Aleppo in 1128. He took Edessa in 1145, then sent his Kurdish general Shirkuh to conquer Egypt. Shirkuh was succeeded in Egypt in 1171 by his nephew Saladin, who later took over the whole Zankid territory founding the Ayyubid dynasty. The list then covers local Ayyubid dynasties in Syria from Saladin's death in 1193 until the Mamluks absorbed Kerak in 1286. The Abbasid Khalifate had little access to Turkomans, but could call on large numbers of volunteers. Ghazi were inspired by religion, mutatawwi'a by loot. Syrian armoured cavalry had lance, sword and shield, but no bow. They also had ghulam slave troops armed with bow, sword or mace and shield, and sometimes lance or spear. **Reference:** *Armies and Enemies of the Crusades* I. Heath.

IV/6a Turkish-ruled and Ayyubid remnant Syrian states 1092-1286 AD: 1 x General with ghulams (Cv), 3 x Syrian or Kurdish cavalry (Cv), 2 x Turkoman horse archers (LH), 2 x Turkoman horse archers or Bedouin (LH), 1 x ghulams (Cv) or ghazis (3Wb), 1 x Ahdath militia (7Hd), 1 x archers (Ps), 1 x archers (Ps) or javelinmen (3Ax) or mutatawwi'a (5Hd). Terrain Type: Arable. Aggression: 1. Enemies: III/66, III/74a, III/74b, IV/1b, IV/2, IV/6a, IV/6b, IV/6c, IV/7, IV/17, IV/20, IV/24b, IV/35, IV/45, IV/46. Allies: IV/2 or IV/7 or IV/17 or IV/24b.

IV/6b Abbasid Iraq 1092-1258 AD: 1 x General with ghulams (Cv), 3 x Arab cavalry (Cv), 2 x Bedouin (LH), 3 x ghazis (3Wb), 2 x Ahdath militia (7Hd), 1 x archers (Ps). Terrain Type: Arable. Aggression: 0. Enemies: III/74a, III/74b, IV/1b, IV/2, IV/7, IV/17, IV/20, IV/35, IV/45, IV/46.

IV/6c Arab dynasties 1092-1172 AD: 1 x General (Cv), 3 x Syrian cavalry (Cv), 2 x Bedouin (LH), 1 x ghazis (3Wb), 2 x Ahdath militia (7Hd), 1 x archers (Ps), 2 x archers (Ps) or mutatawwi'a (5Hd). Terrain Type: Arable. Aggression: 1. Enemies: III/66, III/74a, III/74b, IV/1b, IV/2, IV/6a, IV/6c, IV/7, IV/17, IV/20, IV/35, IV/46. Allies: IV/2 or IV/7 or IV/17.

IV/7 EARLY CRUSADER 1096 AD - 1128 AD

This list covers Crusader armies from the arrival at Constantinople of the first Crusade until the formation of the military orders of the Hospitaliers and Templars. It includes initial battles against the Seljuk Turks at Nicaea and Dorylaeum in Anatolia, the taking of Antioch and Jerusalem and the establishment of the Kingdom of Jerusalem, the Principality of Antioch and the Counties of Edessa and Tripoli; and then the initial defence of the Kingdom against the Fatimids and failed attempts to capture Aleppo and Damascus. Although able to charge through most enemy cavalry, Crusader knights who charged too rashly were vulnerable to horse archers. This made Turkish armies more dangerous opponents than the Fatimids, whose cavalry fought with the lance but wore less armour than Crusaders and charged less fiercely. In the latter part of the first Crusade, severe losses of horses due to lack of forage forced many knights to fight on foot. A small Byzantine contingent under Tatikios (who usually commanded tourkopouloi horse-archers) accompanied the army as far as Antioch hopefully to protect the emperor's interests. The fiercely charging Norman and French knights that provided the army with its punch now wore mail hauberts extending to the wrist and the richer ones that fought in the front rank had mail trousers. Long kite shields and acorn helmets were still in use, but not yet closed helmets, heraldic shield emblems and horse caparisons. The pilgrims providing the foot included some effective crossbowmen but most others provided only mass and indiscriminate looting until disciplined by danger. **References:** *Armies and Enemies of the Crusades* I. Heath, *Victory in the East* J. France, *Knight with Armour* A. Duggan (novel), *Count Bohemond* A. Duggan (novel).

IV/7 Early Crusader Army: 1 x General (3Kn), 3 x knights (3Kn or 4Bd), 4 x spearmen (Sp or 7Hd), 2 x crossbowmen (4Cb), 1 x archers (3Wb), 1 x pilgrims (5Hd or 7Hd) or Byzantine tourkopouloi horse archers (LH). Terrain Type: Arable. Aggression: 4 until 1100AD, then 1. Enemies: III/66, III/74b, IV/1a, IV/2, IV/6a, IV/6b, IV/6c.

IV/8 GHURID 1100 AD - 1222 AD

The mountainous region of Afghanistan west of Ghazni was ruled by local chieftains including the Sultan of Ghur. They were vassals, first of the Samanids and then of the Ghaznavids, who converted them to Islam. In 1192 they conquered much of northern India, but their Indian possessions broke away in 1206 to form the Delhi Sultanate. In 1215, the Ghurid kingdom became subject allies of the Khwarizmians. Ghurid armies were originally infantry with only a few cavalry, but they later hired Khurasanians and Turkish horse archers and from 1174 used ghulams. Some battles in India were won by massed cavalry. Ghur was noted for the export of mail, "jawshan" lamellar armour and weapons, so at least some troops were well-armed. The front rank of the pikemen was protected by the "karwah" (or pavise), of rawhide padded with cotton wadding and covered with "figured" cotton cloth, hung from the shoulders to leave the hands free and "looking like a wall". **Reference:** *Al-Hind: The Making of the Indo-Islamic World* Vol.1 A. Wink.

IV/8 Ghurid Army: 1 x General with nobles or ghulams (Cv) or on elephant (El), 1 x Ghurid tribal cavalry or Khurasanian mercenaries (Cv or LH) or ghulams (Cv), 2 x Turkish horse archers (LH), 2 x Turkish horse archers (LH) or Ghurid pikemen (4Pk), 4 x Ghurid pikemen (4Pk), 2 x Ghurid archers or slingers (Ps). Terrain Type: Hilly. Aggression: 3. Enemies: III/10b, III/11b, III/38, III/64b, III/74b, IV/15, IV/24a. Allies: III/10b or III/11b or III/74b.

IV/9 EASTERN FOREST AMERICAN circa 1100 AD - 1620 AD

The forest people of the Atlantic coast of North America were more culturally advanced than previously supposed, living in palisaded agricultural villages with substantial wooden buildings and combining in large leagues. Their legends include migrating from the south-west and learning forest warfare from earlier inhabitants. Only romantics would oppose them to Vinland Vikings and the legendary Welsh colonists of Prince Madoc. The start date is arbitrary and the end date is that of the introduction of firearms. Before firearms and population loss to European diseases, their main weapon was the bow (described as "quick but not strong"), supplemented by wooden or stone-headed clubs and sometimes spears, shields and/or wooden armour. In pitched battles, both sides lined up and shot at each other until one fled or charged. **References:** *Armies of the 16th Century Vol 2* I. Heath, *North American Indians* G. Catlin, *The Skulking Way of War* P.M. Malone, *Indian America* Eagle/Walking Turtle.

IV/9 Eastern Forest American Army: 1 x General (3Wb), 1 x warriors (3Bw) or heroes (3Wb), 7 x warriors (3Bw), 3 x skirmishing archers (Ps).

Terrain Type: Forest. **Aggression:** 0. **Enemies:** III/19c (Welsh colonists), III/40b (Vinlanders), IV/9, IV/10.

IV/10 MOUND BUILDER AMERICAN circa 1100 AD - 1701 AD

This list covers the last of the Mound-builder cultures of the Mississippi basin; from the earliest possible contact with Mexico to the south-west or the Forest Leagues to the north-east until the destruction of the Natchez. Each nation had a capital town containing massive mounds supporting temples and council houses and surrounded by palisades and was a rigid theocracy ruled by a "Great Sun", who was not allowed to touch the ground, so was carried in a litter. Nobles fought with spear and club, were heavily tattooed and wore thick rawhide armour. Most of the army used bows of man-height, which the French reported sometimes penetrated mail but never steel plate. The centre of the army was formed in solid bodies and scouted for and supported on the flanks by young men in more open formation wearing red war-paint. Society was stratified into three classes, "Noble", "Honoured" and "Stinkard" and military prowess could earn promotion. Stinkards were replenished by recruitment from conquered peoples. **References:** *Armies of the 16th Century Vol 2* I. Heath, *North American Indians* George Catlin, *Indian America* Eagle/Walking Turtle.

IV/10 Mound Builder American Army: 1 x General ("Great Sun" in Lit or 4Bw), 1 x noble warriors (4Bd), 5 x honoured men (3Bw), 2 x young men (Ps), 3 x stinkards (5Hd).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** III/41a, III/41b, IV/9, IV/10, IV/11, IV/63.

IV/11 NORTH-WESTERN AMERICAN circa 1100 AD - 1770 AD

This covers the north-western coast culture from the start of long distance voyaging (allegedly even reaching Hawaii) until the first contacts with Europeans. It was a highly stratified society where chiefs had absolute power and each man was of a different class and knew exactly how he ranked compared to all others. Warfare differed from elsewhere in America in that its aim was to destroy an opposing people and take its land. Villages were protected by palisades of large vertical wooden logs. Most warriors fought with bows but some with club or spear in the right hand and dagger in the left. Wooden rod armour was worn over rawhide armour and some closed-face wooden helmets were used. **References:** *A Guide to the Indian Tribes of the Pacific North-West* R.H. Ruby, J.A. Brown & C.C. Collins, *North American Indians* G. Catlin, *Indian America* Eagle/Walking Turtle.

IV/11 North-Western American Army: 1 x General (3/4Bw or 4Bd), 2 x warriors (4Bd), 2 x warriors (3Bw or 4Bd), 5 x warriors (3Bw), 2 x skirmishing archers (Ps).

Terrain Type: Littoral. **Aggression:** 2. **Enemies:** III/41a, III/41b, IV/10, IV/11, IV/12d, IV/63, IV/71a.

IV/12 POLYNESIAN & MELANESIAN circa 1100 AD - 1785 AD

This list covers those peoples of the Pacific who fielded substantial armies; from the settlement of the last islands until the introduction of firearms. In Hawaii, chiefs wore crested helmets and patterned red and yellow feather cloaks and their army had a core of warriors with 15 foot pikes expected to fight to the last man. Fijians, Tongans and Samoans charged fiercely with short two-handed clubs behind a hail of spears and throwing clubs. Other Melanesians had long spears, clubs and sometimes small shields, while Polynesians typically fought individual duels with clubs. Coconut fibre armour was sometimes used. Maori wore an apron or kilt and broad belt of flax, chiefs adding a dog skin or dark feather cape, tattooed faces and often thighs in dense linear patterns and fought with 2-handed weapons such as the taiaha (a hardwood sword with a spear point and feather distracter at the butt end, making it suitable for "bayonet and butt stroke" type fencing), with a shorter whalebone or wooden patu or greenstone mere tucked in the back of the belt. **References:** *Slingshot 203*, *Ancient Hawaii* H. Kane.

IV/12a Fijian, Samoan or Tongan Armies: 1 x General (3Bd), 9 x warriors (3Wb), 2 x slingers or archers (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** IV/12a, IV/12b, IV/12c, IV/12d.

IV/12b other Melanesian Armies: 1 x General (3Bd or 4Ax), 9 x warriors (3Ax/3Pk), 2 x slingers or archers (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** IV/12a, IV/12b, IV/12c, IV/12d, IV/37d.

IV/12c other Polynesian Armies: 1 x General (3Bd), 9 x warriors (3Bd), 2 x slingers (Ps).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** IV/12a, IV/12b, IV/12c, IV/12d

IV/12d Hawaiian Army: 1 x General (4Pk), 1 x alapa and pii pii guard pikemen (4Pk), 2 x papa-kaua pikemen (4Pk) or warriors (3Bd), 5 x warriors (3Bd), 2 x huna-lewa skirmishing javelinmen (Ps), 1 x maka'ainana levies (7Hd).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** IV/11, IV/12a, IV/12b, IV/12c, IV/12d.

IV/12e Maori Army: 1 x General (3Bd), 11 x warriors (3Bd).

Terrain Type: Littoral. **Aggression:** 0. **Enemies:** IV/12e.

IV/13 MEDIEVAL GERMAN 1106 AD - 1518 AD

This list covers the core of the "Holy Roman Empire" from the accession of Heinrich V until the union with Spain after the death of Maximilian I. Before 1150, German knights fought better on foot with swords than mounted with lance, but then improved and became reluctant to join common foot. The full plate armour used from 1440 was only affordable by the richest knights, others less armoured on worse horses forming the rear of a deep wedge or "spitz". Crossbow-armed cavalry supported the spitz' right flank and armoured petronel cavalry firing primitive armour-piercing handguns while mounted covered the pikemen's left flank, with light lancers in support. Maximilian created the flamboyant "landsknecht" pikemen, sometimes fighting in their front rank, and replaced feudal knights with Burgundian-style gendarmes. The armies of the Free Cantons of Frisia, Stedingen and Dithmarschen were tough farmers with long spears. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages Vol 1 & Vol 2* I. Heath.

IV/13a Medieval German Army 1106-1150 AD: 1 x General (3Kn), 4 x Feudal knights (3Kn/4Bd), 1 x crossbowmen (4Cb), 2 x Feudal retainers (7Hd) or city militia spearmen (Sp), 2 x heerban with glaives or mercenary axemen or 2-handed swordsmen or halberdiers (4Bd), 2 x archers (Ps).

Terrain Type: Arable. **Aggression:** 1 if city militia spearmen are used, otherwise 2. **Enemies:** III/1a, III/40b, III/40c, III/40d, III/63a, III/68b, III/73a, III/77, IV/5a, IV/13a, IV/13e. **Allies:** III/40d or III/63a or III/73a.

IV/13b Medieval German Army 1151-1439 AD: 1 x General (3Kn), 3 x knights (3Kn), 1 x mercenary knights (3Kn) or Hungarian horse archers (LH) or Teutonic knights (6Kn) or crossbow cavalry (Cv), 1 x crossbowmen (4Cb), 2 x Feudal retainers (7Hd) or city militia spearmen (Sp), 2 x heerban with glaive or goedendag or mercenaries with axe or 2-handed sword or halberd (4Bd) or Brabantian pikemen (4Pk), 2 x archers (Ps).

Terrain Type: Arable. **Aggression:** 1 if city militia spearmen are used, otherwise 2. **Enemies:** III/40b, III/40d, III/63a, III/63b, III/68b, III/73a, III/73b, III/77, IV/4a, IV/4b, IV/5b, IV/5c, IV/13b, IV/13e, IV/41, IV/43a, IV/43c, IV/54a, IV/54b, IV/57a, IV/57b, IV/57c, IV/61, IV/64a, IV/64b, IV/64c, IV/66, IV/76, IV/79a, IV/79b, IV/80, IV/82a. **Allies:** III/63b.

IV/13c Medieval German Army 1440-1493 AD: 1 x General (6Kn), 2 x knights (6Kn), 1 x crossbow cavalry (Cv), 1 x petronels (Cv) or crossbowmen (4Cb), 2 x mercenary pikemen (4Pk), 2 x crossbowmen (4Cb) or war wagons (WWg), 1 x city militia crossbowmen with pavises (4Cb) or Feudal retainers (7Hd), 1 x archers (Ps), 1 x archers (Ps) or bombard (Art).

Terrain Type: Arable. **Aggression:** 1 if city militia crossbowmen are used, otherwise 2. **Enemies:** IV/5c, IV/13c, IV/13e, IV/43c, IV/54b, IV/55b, IV/57c, IV/61, IV/66, IV/76, IV/79b, IV/80, IV/82a, IV/82b, IV/85a. **Allies:** IV/79b.

IV/13d Medieval German Army 1494-1518 AD: 1 x General with "Burgundian" guard (3Kn) or with landsknechts (4Pk), 1 x "Burgundian" gendarmes (3Kn) or Landsknechts (4Pk or 3Bd), 2 x knights (6Kn), 1 x crossbow cavalry (Cv), 4 x landsknechts (4Pk), 2 x handgunners (Ps), 1 x bombard (Art).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** IV/13d, IV/13e, IV/43c, IV/54b, IV/55b, IV/61, IV/66, IV/79d, IV/82b.

IV/13e Free Canton Army: 1 x General (3Kn/3Pk), 8 x spearmen (3Pk), 1 x Frisian dardiers (4Ax) or javelinmen (Ps), 2 x archers (Ps).

Terrain type: Littoral. **Aggression:** 0. **Enemies:** III/40d, IV/13a, IV/13b, IV/13c, IV/13d, IV/54a, IV/54b, IV/54d. **Allies:** III/40d or IV/13a.

IV/14 JURCHEN-CHIN 1114 AD - 1234 AD

The Jurchen were tribes of the Manchurian forest, not themselves nomads, but heavily influenced by nomadic military techniques. The Jurchen chieftain Wan-yen Akuta rebelled against the Liao and founded the Chin (or Jin) dynasty that replaced the Liao and the Sung in northern China, but failed in several attempts to conquer the river-crossed and densely cultivated lands of the southern Sung (not a good environment for cavalry). They were eventually conquered by the Mongols after a hard fight. Early armies were entirely mounted, but were later supplemented by Chinese foot. Following the move of the capital to Peking (Beijing) and a reorganization curbing the power of the nobility, Jurchen horsemen formed regular units with heavily armoured lancers in front and lighter archers behind, best represented by cavalry elements with 1 lancer figure between 2 archer figures. **References:** *Soldiers of the Dragon* C. Peers, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Watson.

IV/14a Jurchen-Chin Army 1114-1125 AD: 1 x General (3Kn), 2 x Jurchen lancers (3Kn), 3 x Jurchen horse archers (LH), 1 x Khitans (Cv) or Jurchen horse archers (LH), [2 x Jurchen lancers (3Kn) + 3 x Jurchen horse archers (LH)] or [1 x swordsmen (3/4Bd) + 1 x swordsmen (4Bd) + 2 x crossbowmen (4Cb) + 1 x peasant levies (7Hd) or bolt or stone-throwers (Art)].

Terrain Type: Forest. **Aggression:** 3. **Enemies:** III/44, III/56, III/57, III/62a, III/62b, III/67.

IV/14b Jurchen-Chin Army 1126-1234 AD: 1 x General (Cv), 4 x Jurchen cavalry (Cv), 1 x swordsmen (3/4Bd), 2 x swordsmen (4Bd), 3 x crossbowmen (4Cb), 1 x peasant levies (7Hd) or bolt or stone-throwers (Art).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/44, III/57, III/62b, III/67, IV/35. **Allies:** III/44.

IV/15 QARA-KHITAN 1124 AD - 1211 AD

The Qara-Khitans or Western Liao state was formed by Khitan refugees fleeing the Jurchen conquest. Yeh-lu Ta-shi collected Khitan garrison units and allied tribesmen in Mongolia, moved west, defeated the eastern Seljuks and the Qarakhanids and founded an empire south of Lake Balkhash with its capital at Balasagun, taking the title of Gur-khan "universal ruler". Tribal cavalry were actually a disciplined standing army recruited from nomad tribes. One large army had every cavalryman with bow, lance, sword, mace and armour, but only a tenth on armoured horses. There is no evidence of effective Qara-Khitans infantry or artillery, but vassals may have provided militia. Kuchluk (leading Naimans fleeing the Mongols) seized the last Gur-khan in 1211, but then failed to impose his own rule. **References:** *Soldiers of the Dragon* C. Peers, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson, *The Empire of the Qara Khitai in Eurasian History* Michal Biran.

IV/15 Qara-Khitans Army: 1 x General (Cv), 6 x tribal cavalry (Cv), 3 x tribal cavalry (Cv) or Qarlug horse archers (LH), 1 x tribal cavalry (Cv) or city militia (4Bw), 1 x scouting horse archers (LH) or subject levies (7Hd).
Terrain Type: Steppe. Aggression: 2. Enemies: III/11a, III/11b, III/44, III/74b, III/80, IV/8, IV/14b, IV/24a, IV/35. Allies: III/11a or III/11b or IV/24a.

IV/16 SCOTS COMMON ARMY 1124 AD - 1513 AD

This list covers Scots "Common" (meaning national) armies based in Scotland (but not forces employed in Ireland or France) from the introduction of the feudal system until after the Battle of Flodden. Although Scottish mythology like "Braveheart" focuses on the Wars of Independence against Edward I & II 1297-1314, Scots armies mainly fought on plundering rampages into England. A lowland Scots army's strength was in its abundance of yeomen spearmen, worth £5 and required to have long spear, iron cap and habergeon. These did not wear tartan kilts, but "hodden grey" suits of un-dyed wool from a proportion of 12 white fleeces to 1 dark brown, the result being a brownish grey. Their language was not Gaelic, but varieties of English now called "Lallans" and "Doric". The Norman-Scots nobility's armour lagged behind English contemporaries and they were initially often of uncertain loyalties. At Flodden in 1513, they were destroyed fighting as the front rank of the pikemen. In his "Testament", Robert the Bruce (Scotland's most successful leader, who unlike William Wallace actually achieved independence) advised that all battles should be fought on foot making use of hills, marshes and woods, surprises by night and ambushes by day. Instead, Scots armies persisted in massed frontal attacks against dismounted English men-at-arms and longbows which never quite succeeded. Longer pikes were imported for the Flodden campaign. After 1456, they used artillery, which at Flodden was badly positioned and had difficulty redeploying. An attempt in 1429 to replace spears with longbows failed. Archers were mainly highlanders. The Isles and Highlands were independent until 1265, then a semi-independent lordship until 1493 (see III/78), but provided contingents once described as "3,000 of the most outrageous people in the country". **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 1 I. Heath, *England Versus Scotland* R. Matthews, *Stingshot* 273, 274.

IV/16 Scots Common Army: 1 x General (3Kn/4Pk), 1 x Norman-Scots nobles (3Kn/4Pk) or [from 1456] bombard or "cartis of weire" or culverins (Art), 1 x feudal archers (3Bw or Mtd-3Bw) or French (3Kn) or hobilar (Cv) or Islesmen (4Bd) or yeomen (4Pk), 5 x yeomen (4Pk), 2 x Galwegians (3Wb) or yeomen (4Pk), 1 x Highland archers (3Bw), 1 x "small folk" (7Hd) or Highland rabble (5Hd).

Terrain Type: Arable. Aggression: 3. Enemies: III/40b, III/46, III/78, IV/3, IV/16, IV/21a, IV/21b, IV/21c, IV/23, IV/58, IV/62a, IV/62b, IV/62c, IV/62d, IV/83a.

IV/17 LATER CRUSADER 1128 AD - 1303 AD

This list covers the defensive phase of the Crusader states in Palestine; from the granting of Papal protection to the Templars in 1128, until the fall of the last Crusader stronghold (the off-shore Templar fortress of Tortosa) to the Mamluks in 1303. It includes the second Crusade of 1148 (ruined by dissension between French and German leaders), the disaster of Hattin in 1187 and the fall of Jerusalem to Saladin, the inconclusive third Crusade that featured the English contingent under Richard I "Lion-Heart", but not the 4th Crusade of 1204 diverted by Venetian perfidy against Byzantine Constantinople, nor St. Louis' Crusade against Egypt in 1250, both of which armies were mainly French. Full mail, closed helms and short "heater-shaped" shields were now normal for knights. The True Cross was used as a standard until lost at Hattin, where it was carried by a Bishop in knightly armour. **References:** *Armies and Enemies of the Crusades* I. Heath, *Warfare in the Latin East 1192-1201* C. Marshall, *Knight Crusader* R. Welch (novel).

IV/17 Later Crusader Army: 1 x General (3Kn), 2 x knights (3Kn), 1 x Turcopoles (LH) or knights (3Kn), 5 x foot sergeants (Sp), 2 x crossbowmen (4Cb), 1 x Syrian archers (3Bw) or knights (3Kn).

Terrain Type: Arable. Aggression: 1. Enemies: III/66, III/74b, IV/1a, IV/1b, IV/2, IV/6a, IV/6b, IV/6c, IV/20, IV/24b, IV/45, IV/46. Allies: III/66 or IV/1b or IV/2 or IV/6a or IV/6c.

IV/18 LITHUANIAN & SAMOGITIAN 1132 AD - 1515 AD

This list covers Lithuanian and Samogitian armies from the invasion of Lithuania by Mstislav of Kiev in 1132. The destruction of Kiev by the Mongols in 1240 allowed expansion into western Russia and acquisition of Russian foot. Even after unification with Poland in 1386 by marriage of the Grand Duke to the Polish heiress, the Lithuanian royal army continued an independent existence and Grand Dukes sometimes fought independently, as at Kletsk in 1506. Most Lithuanians remained pagans, providing an excuse for aggression by the Teutonic Knights. Their even more obstinately pagan Samogitian neighbours were conquered by the Teutonic knights in 1406, but rebelled in 1409 and joined Lithuania in 1411. Until 1386, horsemen were mainly unarmoured skirmishers, who carried bows for fighting on foot, but fought mounted with an 8-9 foot light lance. From 1386, many nobles wore "silver-coloured shirts of mail". **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath.

IV/18 Lithuanian or Samogitian Army: 1 x General (Cv), 3 x horsemen (Cv//3Bw or LH//3Bw), 5 x horse (LH//3Bw), 2 x horse (LH//3Bw) or spearman (3Ax), 1 x horse (LH//3Bw) or foot archers (Ps) or bombard (Art).
Terrain Type: Forest. **Aggression:** 2. **Enemies:** III/63a, III/63b, III/79, IV/18, IV/27, IV/28, IV/30, IV/44a, IV/44b, IV/47, IV/55b, IV/65, IV/66. **Allies:** IV/30 or IV/47 or IV/66 or IV/80.

IV/19 TARASCAN, TOLTEC-CHICHIMEC & CHINANTEC 1168 AD - 1521 AD

The Tarascans and Toltec-Chichimecs of modern Mexico both fought in a similar manner emphasizing the bow, although separated geographically by the Aztecs. The Tarascans (meaning "distant relatives", a mistaken Spanish name for people who actually called themselves "Purempecha") lived west of the Aztecs and fought them to an expensive standoff. To the east of the Aztecs were a number of Toltec-Chichimec city states, of which the most important were Huexotzingo, Cholula and Tlaxcala (a Spanish mistake, for Texcala "crags"), which often allied against the Aztecs. The Tlaxcalans provided most of Cortez' "Spanish" army from 1518. The Spanish thought they manoeuvred "marvellously well". They liked to envelop an enemy army's flanks with massed archers before assaulting its centre. The "suit-wearers" (Bd) were orders such as Eagle, Jaguar and especially Coyote "knights", in appropriate costumes and armed with maquahuil and shield. Archers had textile armour and side arms and were sometimes stiffened by warriors with maquahuil and protected by their shields. White cotton was rare and replaced by dingy maguay or hemp, or for rich men, a mixture. The Chinantec lived in the mountainous south. Their upper classes fought with bows and hand weapons, while the commoners used "long poles like lances" tipped with long stone cutting edges and leather or fibre shields. They were described as "marching two-by-two" with an archer between each pair of spearmen. **Reference:** *Armies of the 16th Century* Vol 2 I. Heath.

IV/19a Tarascan or Toltec-Chichimec Army: 1 x General (4Bw/3Bd/4Bd), 2 x suit-wearers (3/4Bd), 3 x archers and shield bearers (4Bw), 4 x archers (3Bw), 1 x archers (3Bw) or Otomi mercenaries (3Wb), 1 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/22c, III/41a, III/41b, IV/19a, IV/19b, IV/63.

IV/19b Chinantec Army: 1 x General (4Bw), 1 x nobles (4Bw), 6 x commoners (3Pk), 4 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/41a, III/41b, IV/19a, IV/53, IV/63.

IV/19c Spanish & Tlaxcalan Army 1518-1521 AD: 1 x Spanish General (3Kn), 1 x Spanish sword-and-buckler men (4Bd), 1 x Spanish crossbowmen and arquebusers (4Cb), 1 x cannon (Art), 2 x suit-wearers (3Bd or 4Bw), 1 x archers and shield bearers (4Bw), 4 x archers (3/4Bw), 1 x archers (Ps).

Terrain Type: Hilly. **Aggression:** 4. **Enemies:** IV/63.

IV/20 AYYUBID EGYPTIAN 1171 AD-1250 AD

This list covers the armies of the Ayyubid Sultanate established by Saladin from the end of the Fatimids until the Ayyubid dynasty was overthrown by its mamluks. It does not cover the armies of the provincial Ayyubids in Syria after the death of Saladin in 1193, which are covered by the Syrian list (IV/6). The core of the army was the mamluks, picked Turks and Kipchaks bought as slaves, then rigorously trained into a professional corps of armoured horse archers, half of whom also had lance and horse armour. Halqa were elite non-mamluk cavalry. Qaraghulams were probably Berbers and Sudanese armed with lance, but not bow. Infantry were now used only in a supporting role. The Sudanese archers were new regiments which do not seem to have included spearmen. A Crusader source describes agile black archers with shields. **Reference:** *Armies and Enemies of the Crusades* I. Heath.

IV/20 Ayyubid Egyptian Army: 1 x General with ghulams (Cv), 3 x ghulams (Cv), 1 x halqa (Cv), 3 x qaraghulams or Kurdish or Syrian askaris (Cv), 1 x qaraghulams (Cv) or Kurdish javelinmen (3Ax) or ghazis (3Wb), 1 x Bedouin (LH) or Syrian adhath town militia (7Hd) or Cairo mob (5Hd), 2 x Turkoman horse archers (LH) or Sudanese archers (4Bw) or Syrian Druze with mixed sling, bow or crossbow (Ps).

Terrain Type: Dry. **Aggression:** 2. **Enemies:** III/55c, III/12, III/71c, III/74a, III/74b, IV/1b, IV/2, IV/4b, IV/6a, IV/6b, IV/6c, IV/17, IV/24b. **Allies:** IV/6a or IV/6b or IV/6c or IV/24b.

IV/21 ANGLO-IRISH 1172 AD - 1515 AD

This list covers the English in Ireland from the take-over by Henry II of a land subdued by free-lance Anglo-Norman adventurers, such as Richard FitzGilbert "Strongbow", until the shift to more direct control from London after the death of Gerald of Kildare in 1513. The general represents the royal official known successively as the Justiciar, Lieutenant or Lord Deputy. He could be an English import, out of his depth and baffled by the locals, but more often of a prominent Anglo-Irish family that understood the locals all too well but at blood feud with many of them. He had a small force of men-at-arms, archers and hobiliars, but mainly depended on Anglo-Irish lords "more Irish than the Irish", English colonists, and friendly Irish kerns with javelins. Anglo-Irish cavalry discarded lances for Irish javelins, but wore more armour and willing to charge home. Galloglaich (or "galloglasses") were a hereditary guild of mercenary foot from the Scottish Isles in helmet, long mail shirt or quilted "cotun" and by 1400 armed with a long axe and javelins. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 1 I. Heath, *Irish Battles* G.A. Hayes-McCoy.

IV/21a Anglo-Irish Army 1172-1299 AD: 1 x General (3Kn), 1 x men-at-arms (3Kn), 2 x colonist archers (3/4Lb), 2 x colonist foot sergeants (Sp), 1 x mercenary axemen (4Bd) or kerns (3Ax), 3 x kerns (3Ax), 2 x kerns (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: III/46, IV/16. Allies: III/40b, III/46, III/78 (Islesmen)

IV/21b Anglo-Irish Army 1300-1403 AD: 1 x General (3Kn), 1 x hobiliars (Cv), 1 x Anglo-Irish horse (Cv) or Irish horse (LH), 2 x colonist archers (4Lb), 1 x colonist foot sergeants (Sp), 1 x Galloglaich (4Bd) or mounted longbowmen (Mid-4Lb or 4Lb), 2 x kerns (3Ax), 1 x kerns (Ps), 1 x kerns or Irish archers (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: IV/16, IV/58. Allies: IV/58.

IV/21c Anglo-Irish Army 1404-1515 AD: 1 x General (3Kn), 1 x Anglo-Irish horse (Cv) or Irish horse (LH), 1 x Irish horse (LH), 2 x colonist archers (4Lb), 2 x colonist billmen (4Bd), 2 x Galloglaich (4Bd) or kerns (3Ax), 2 x kerns (3Ax or Ps), 1 x kerns or Irish archers (Ps).
Terrain Type: Arable. Aggression: 1. Enemies: IV/16, IV/58.

IV/22 SERBIAN EMPIRE 1180 AD - 1459 AD

This list covers the Greater Serbian empire from its foundation until its final absorption by the Ottomans. It only became a real empire under Stephan Dushan from 1334 to 1355, extending over most of Byzantine-ruled Greece and seriously threatening Constantinople. After his death, it subsided into factionalism and in 1390 became a vassal state of the Ottomans. Vlastela were nobility serving as armoured cavalry. At first, Byzantine-style equipment predominated, the cavalry primarily using the lance but also having bows. Later the full western knightly panoply became widespread. The Serbian charge was greatly feared. At Kosovo Pole in 1389 it broke the Ottoman left flank, at Nicopolis in 1396 it won the battle for the Ottomans, and at Ankara in 1402 it three times broke through Timur's best cavalry. Voynuks were upper-class peasants serving as armoured infantry with spears or later other pole-weapons, but the majority of the infantry were unarmoured archers provided by the vlastela's servants. Krayishnici were Serbian, Bosnian or Croat mountaineers serving border lords and given to raiding. Gussars or usars were lance-armoured light cavalry who later developed into hussars. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath.

IV/22 Serbian Imperial Army: 1 x General (3Kn), 3 x vlastela (3Kn), 2 x vlastela (3Kn) or Hungarian, Cuman, Turkoman or Wallachian horse archers or gussars (LH) or krayishnici (3Ax), 1 x voynuks (Sp/4Bd) or bombard (Art), 4 x archers (Ps or 3Bw), 1 x levies (7Hd) or archers (Ps).
Terrain Type: Hilly. Aggression: 1. Enemies: III/68b, IV/25, IV/33, IV/43a, IV/43c, IV/50, IV/55b, IV/69. Allies: IV/55b or IV/69.

IV/23 FEUDAL ENGLISH 1181 AD - 1322 AD

This list covers the period from Henry II's assize of arms until the introduction of dismounted tactics, recruitment by indenture and the perfection of the English longbowmen. This includes squabbles in France and England 1173-1216 involving Henry, his heirs Henry, Richard, Geoffrey, John (not a nice man, but a brilliant strategist who won his battles in advance by moving fast) and Arthur, and the French, the civil war battles in England of Lincoln 1217, Lewes 1264 and Evesham 1265, the battles in Wales of Orewin Bridge 1282 and Maes Moydog 1295 and in Scotland of Stirling 1297, Falkirk 1298 and Bannockburn 1314. All English knights now wore complete mail armour, supplemented by 1300 by a coat-of-plates for the torso and plate armour for the limbs, and usually closed-face helmets. Heraldic designs decorated a (usually short) textile jupon worn over the torso and the short "heater-shaped" shields. English knights still charged vigorously on horseback, even into Scots schiltrons. Hobiliars were Anglo-Irish scouting cavalry imported for the Scots wars; and muntatores were similar English cavalry from the Welsh Marches employed against the Welsh. English levy infantry were generally unwilling and prone to desert, or more often fail to attend the muster, the exception being those from counties accustomed to service against the Welsh. English armies of this period usually won if they softened up the enemy with arrows before charging and lost if the knights charged prematurely or were pinned against an obstacle. By the end of the period, South Welsh archers often provided most of the foot. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 1. I. Heath, *Deril's Brood* A. Duggan, *Normans and Plantagenets - An Alternative History of Britain* T. Venning, *The Taming of the Dragon* W.B. Bartlett, *Bannockburn 1314 - A New History* C. Brown, *Leopards and Lilies* A. Duggan (novel).

IV/23 Feudal English Army: 1 x General (3Kn), 3 x knights (3Kn), 2 x archers (3Bw) or Marcher foot or city militia (Sp), 2 x English or Welsh archers (3Lb), 2 x levies (7Hd), 1 x hobiliars or muntatores (Cv) or mercenary crossbowmen (4Cb), 1 x archers or slingers or Irish or Welsh javelinmen (Ps) or North Welsh (3Pk).
Terrain Type: Arable. Aggression: 3. Enemies: III/19b, III/19c, IV/4a, IV/4b, IV/16, IV/23, IV/39a. Allies (only if a rebel, not a royal army): III/19c or IV/4b.

IV/24 KHWARIZMIAN 1186 AD - 1246 AD

This list covers the Khwarizmi state from its founding by dissident vassals of the Seljuqs until the final defeat of the heroic Jela' al-Din by the Mongols in 1231. It then covers the continuation of his army as a "Free Company" in Syria that supplied 10,000 horsemen to the Ayyubid sultan in 1244 and captured Jerusalem for him. Later that year, with 5,000 of the sultan's own troops under Baybars, they defeated the combined forces of the rulers of Homs, Damascus, Kerak and the Crusaders at La Forbie. Unrewarded for this, they changed sides in 1246 to join Ismail of Damascus, but were largely annihilated by the sultan's forces. The state's army consisted of the ruler's professional armoured cavalry with horse armour, lance and bow and a few elephants; armoured cavalry provided by the emirs; city militia (who provided infantry but rarely ventured far from the city); hill-dwelling farmers, herdsmen and bandits who provided poorly-armed horsemen (plentiful only when winning and paid) and tribal confederations of nomads such as the Qangli (a Cuman tribe who provided fierce but unreliable mercenaries, who after changing sides were massacred by the Mongols as just too unreliable). **Reference:** *Armies & Enemies of the Crusades* I. Heath.

IV/24a Khwarizmi state Army 1186-1231 AD: 1 x General (Cv), 3 x lancers (Cv), 2 x hillman, herdsman or bandit horse archers (LH), 1 x archers on camels (Mtd-3Bw), 1 x militia archers (3Bw) or Persian cavalry (Cv), 1 x elephants (El) or Turkomans (LH), 2 x Qangli horse archers (LH), 1 x Qangli foot (5Hd) or Persian or Tajik levies or slaves (7Hd).
Terrain Type: Arable. Aggression: 1. Enemies: II/58, III/11b, III/71c, III/74a, III/74b, III/80, IV/8, IV/15, IV/35. Allies: III/11b or IV/8 or IV/15.

IV/24b Khwarizmi refugee Army 1232-1246 AD: 1 x General (Cv), 3 x lancers (Cv), 1 x archers with camels (Mtd-3Bw) or Kurds (3Kn), 1 x Persian cavalry (Cv), 6 x Turkoman horse archers (LH).
Terrain Type: Arable. Aggression: 3. Enemies: IV/6a, IV/17, IV/35. Allies: IV/6a.

IV/25 LATER BULGAR 1186 AD - 1395 AD

The "Second Bulgarian Empire" arose from an uprising in 1189 by 2 Vlach (Wallachian) chieftain brothers who refused to pay a tax to celebrate the marriage of the Byzantine emperor. They were checked in a battle near the Danube, were joined by the Cumans, re-crossed the Danube enthusiastically approved by the Bulgar population, then allied with Serb leaders against the Byzantines. After the deaths of the brothers (by Byzantine assassin and angry husband), a third brother was recognized by the Pope as "Emperor of the Bulgars and Vlachs". The rejuvenated "Bulgarian" empire was a constant nuisance to the Byzantines, prospered after the Latin conquest of Constantinople, and was finally annexed by the Ottomans. It was a basically feudal society with land-holding boyars leading personal followers and levies from their estates, plus a Greek element from the cities in Thrace and Macedonia until estranged by harsh treatment. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath.

IV/25 Later Bulgar Army: 1 x General (3Kn), 2 x boyars and retinues (3Kn), 4 x Bulgar or Vlach horse archers (LH), 2 x Tartar or Cuman horse archers (LH) or Greek militia (Sp) or Bulgar foot (Sp), 3 x Bulgar or Vlach archers (Ps).
Terrain Type: Arable. Aggression: 2. Enemies: III/68b, III/80, IV/1b, IV/22, IV/31, IV/32, IV/33, IV/43a, IV/50, IV/55a, IV/55b. Allies: IV/31, IV/32 or IV/47.

IV/26 LUSIGNAN CYPRIOT 1192 AD - 1489 AD

This list covers Frankish Cyprus from Guy de Lusignan's purchase of the island from Richard Coeur de Lion until the last Lusignan Queen sold it to Venice. A classic feudal system was set up with fiefs for knights and mailed turcopole horse archers. Infantry were a mixture of Frankish settlers, local Greeks, Lebanese Maronite and Armenian archers, and later Catalan and Bulgar mercenaries. The Knights Hospitaller of St John moved to the island after the fall of Acre in 1291 and even after they moved their headquarters to Rhodes in 1310 retained a presence until at least 1426. A partial Genoese occupation 1373-1464 is covered in IV/61. **Reference:** *Armies of the Middle Ages* Vol 2 I. Heath.

IV/26 Lusignan Cypriot Army: 1 x General (3Kn), 1 x knights (3Kn), 1 x knights (3Kn) or detached turcoples (LH), 4 x crossbowmen (4Cb), 2 x spearmen (Sp) or Catalans (4Ax), 2 x Maronite or Armenian archers (3Bw or Ps), 1 x arriere-ban (7Hd) or Turkoman or Bulgar horse archers (LH).
Terrain Type: Littoral. Aggression: 2. Enemies: III/74a, IV/2, IV/45, IV/49, IV/61. Allies: IV/45 or IV/74.

IV/27 ESTONIAN 1200 AD - 1227 AD

This list covers Estonian armies from the start of the Northern Crusades until the completion of their subjection by the Germans and Danes in 1227. Estonians were among the fiercest fighters of the heathen of the southern Baltic coast, armed with spear, long sword or axe and several javelins and protected only by probably rectangular shields. Their horsemen always dismounted to fight. **Reference:** *Armies of Feudal Europe* I. Heath

IV/27 Estonian Army: 1 x General (4Wb), 9 x warriors (3Wb), 1 x archers (Ps), 1 x archers or crossbows (Ps or 3Cb).
Terrain Type: Forest. Aggression: 3. Enemies: III/40b, III/40d, III/79, IV/18, IV/27, IV/28, IV/30. Allies: III/79.

IV/28 PRUSSIAN 1200 AD - 1283 AD

This list covers Prussian armies from the start of the Northern Crusade until their final subjection by the Teutonic Order and also the Livs and Letts living between the Estonians and the Lithuanians. The Prussian tribes never achieved unity. The most enthusiastic part of the army were the noble horsemen and their immediate followers, who they sometimes dismounted to join in berserk charges from woods and fight doggedly until overwhelmed. These were supplemented by much less valorous peasant farmers who tended to melt away into the trees in face of superior numbers. Arms were narrow-bladed thrusting spears, swords, light axes (some thrown) and almond-shaped shields. Prussians were ruddy-faced, with long blonde hair. Clothing was bleached un-dyed linen or wool, leading the Teutonic to condemn white clothes as "heathen" (despite their own white habit). Chieftains wore gold or silver plaque belts. **Reference:** *Armies of Feudal Europe* I. Heath.

IV/28 Prussian Army: 1 x General (Cv/4Wb), 1 x horsemen (Cv/4Wb), 4 x warriors (3Wb), 4 x warriors (3Wb) or peasants (3Ax), 2 x archers (Ps).

Terrain Type: Forest. **Aggression:** 1. **Enemies:** III/40b, III/40d, III/63b, III/79, IV/18, IV/27, IV/28, IV/30, IV/54d.

IV/29 TUPÍ circa 1200 AD - 1601 AD

The Tupi of coastal Brazil had migrated from further inland and resisted the Portuguese until the final defeat of their largest tribe in 1601. Europeans described them in armies of several thousand ferocious cannibals fighting mainly for revenge and for sacrificial victims to eat. They fought with long powerful bows, shooting in mass though not in volleys, then with a paddle-shaped club wielded two-handed with which they charged "like bulls" led by their chiefs. Some tribes used shields of bark or hide. Warriors were accompanied by women carrying baskets with food and hammocks, so providing an interesting addition to the camp. This is a colourful army, with bright feathers and face paint replacing clothes; and is feared by many warriors. Hans Staden's account of 1557 has many woodcuts of Tupi life, some reproduced by Heath. **References:** *Armies of the 16th Century* Vol 2 I. Heath, *Hans Staden's True History: An Account of Cannibal Captivity in Brazil* N.I. Whitehead & M. Harbison (trans).

IV/29 Tupi Army: 1 x General (3Wb), 6 x archers (3/4Lb), 4 x warriors (3Wb), 1 x warriors (3Wb) or archers (3/4Lb) or scouts (Ps).

Terrain Type: Tropical. **Aggression:** 1. **Enemies:** IV/29, IV/72.

IV/30 TEUTONIC ORDERS 1201 AD - 1525 AD

This list covers the Teutonic Orders in the Baltic, first the Livonian "Knights of the Sword" founded by the Bishop of Riga from 1200, then from 1226 the Teutonic Knights. It ends with the secularization of the Duchy of Prussia in 1525. Armies usually included 1 or 2 "spitz" wedges with the best armoured knights in front. Note that ritterbruder "brother knights" were fully armoured men with heavy lances riding destriers similar to western knights, but knechte were not. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath, *The Teutonic Knights* W. Urban, *The Northern Crusades* E. Christiansen.

IV/30 Teutonic Order Army: 1 x General (3Kn or 6Kn), 1 x ritterbruder (3Kn or 6Kn), 1 x knechte with crossbow (Cv), 3 x crusaders or adventurers (3Kn), 1 x crusaders or adventurers (3Kn) or "Old Prussians" (3Wb), 1 x local turkopolen (LH), 1 x spearman (Sp), 2 x crossbowmen (4Cb), 1 x Prussian or Livonian levy foot (3Ax or 7Hd).

Terrain Type: Arable. **Aggression:** 4. **Enemies:** III/63b, III/79, IV/18, IV/27, IV/28, IV/35, IV/44a, IV/44b, IV/54a, IV/54b, IV/54c, IV/54d, IV/66.

IV/31 NIKAIAN BYZANTINE 1204 AD - 1261 AD

The capture of Constantinople by the Fourth Crusade and founding of the Latin empire split the remaining Byzantine possessions into the two large states of Nikaia (Nicaea) and Epiros (IV/33) and some smaller. This list covers the Nikaian army from then until the recapture of Constantinople (by passing Cuman raiders who found an open gate). Despite reduced resources, it was an effective army which rarely lost a battle. Varangians were now axemen and recruited entirely from English. Stratiotai were reservist skirmishing lancers of mixed quality (some depicted without armour) supported by pronoiai (grants of rents from specific land) and called up to serve anywhere. Latinikon were Frankish knights mainly recruited from Constantinople (the Latin emperor being poor and Byzantine pay generous). Skythikon were Pechenegs or Cumans, tourkopouloi Christianized Turks and vardariotai guards recruited from Magyar settlers; all were regular horse archers. Infantry were mainly archers from Anatolia. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath, *The Late Byzantine Army* M.C. Bartusis.

IV/31 Nikaian Byzantine Army: 1 x General (Cv), 1 x stratiotai (Cv), 2 x latinikon (3Kn), 3 x regular horse archers (LH), 4 x archers (4Bw or Ps) or Cuman refugee horse archers (LH), 1 x stratiotai (Cv) or Varangian guard (4Bd) or kontaratoi (Sp).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** II/58, III/74a, IV/25, IV/32. **Allies:** III/74b or IV/25 or IV/33.

IV/32 ROMANIAN FRANK 1204 AD - 1432 AD

This list covers the armies of the Latin empire and Frankish Greece from the capture of Constantinople until their last Peloponnesian territories were absorbed by the Despotate of Morea. The Crusader and Venetian army which captured Constantinople is not included since it fought no field battles. Thessalonika and Anatolia were lost in 1224, leaving only Constantinople and its surroundings until the city fell by surprise in 1261. Southern Greece remained under Frankish control, fought off several Byzantine invasions, but succumbed to its own unpaid mercenaries, the Catalan Company (list IV/60), at Kephissos in 1311. The Catalans took over Athens and Thebes, but much of southern Achaia remained in Latin hands and only fell slowly to the Morean Byzantines in the following century. The feudal knights of Achaia were considered by Frankish contemporaries to be the best anywhere. Archontes were former Byzantine Pronoia holders, regarded by the Franks as feudal gentry. The army also contained Frankish spearmen, crossbowmen and archers. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath, *Lord Geoffrey's Fancy* A. Duggan (novel).

IV/32 Romanian Frankish Army: 1 x General (3Kn), 4 x knights (3Kn), 1 x archontes (Cv), 1 x Franks (4Cb), 1 x Franks (Sp), 3 x Greek archers (Ps), 1 x Slav javelinmen (3Ax or Ps).
Terrain Type: Arable. **Aggression:** 1. **Enemies:** III/74a, IV/25, IV/31, IV/32, IV/33, IV/50, IV/51a, IV/60. **Allies:** III/74b or III/80 or IV/33 or IV/39c or IV/60 or IV/61 (Venice).

IV/33 EPIROT BYZANTINE 1204 AD - 1340 AD

This was the second (with Nikaia) large Byzantine state created when the Fourth Crusade took Constantinople and founded the Latin empire. The list covers the Despotates of Epiros, Thessalonika and Thessaly. Epiros was organized from Byzantine remnants in Albania and western Greece. It destroyed the Latin kingdom of Thessalonika in 1224, proclaimed the Empire of Thessalonika; and was moving on Constantinople when defeated by the Bulgarians at Klokotnitsa in 1230. The Bulgarians seized Thrace and Macedonia and the remainder of the empire split into Epiros, Thessaly and Thessalonika. Thessalonika fell to Nikaia in 1246, Thessaly was only nominally subordinate to Epiros and both were absorbed in 1340 by the revived Palaiologan Byzantine empire centred on recaptured Constantinople. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath, *The Despotate of Epiros* D.M. Nicol.

IV/33 Epirot Byzantine Army: 1 x General (Cv), 2 x Byzantine stratigoi (Cv), 1 x Frankish knights (3Kn), 2 x Vlach horse archers (LH), 1 x Albanian light horse (LH), 2 x Byzantine archers (3/4Bw or Ps), 1 x Byzantine spearmen (Sp) or Albanian or Vlach archers (Ps), 2 x Albanian or Vlach archers (Ps).
Terrain Type: Arable. **Aggression:** 1. **Enemies:** IV/22, IV/25, IV/32, IV/50, IV/60. **Allies:** IV/5c or IV/25 or IV/32 or IV/50.

IV/34 TRAPEZUNTINE BYZANTINE 1204 AD - 1461 AD

This list covers the "Empire" of Trebizond (in modern Turkey on the south shore of the Black Sea); from its establishment with Georgian help by Alexios Komnenos following the fall of Constantinople to the 4th Crusade, until its conquest by the Ottomans. It was never a great military power, but relied on its wealth and its troop's reputation to discourage aggression. Trapezuntine cavalry were "heroes, like terrible lions that never let their prey escape". Lancers are depicted with helmet, quilted leather armour, large "heater" shield and long pennoned lance. They were supported and then replaced by Turkish-style horse archers, mostly Laz or Tzani from Georgia. Border passes were held by Greco-Laz frontier lords, with garrisons described "as brigands and evil folk". **References:** *Armies of the Middle Ages Vol 2* I. Heath.

IV/34 Trapezuntine Army: 1 x General (3Kn or LH), 1 x Trapezuntine lancers (3Kn) or horse archers (LH), 3 x Laz or Tzan horse archers (LH), 1 x Trapezuntine or mercenary spearmen (Sp) or horse archers (LH), 2 x Trapezuntine archers (4Bw), 2 x Laz or Tzan archers (3Bw or Ps), 2 x Laz or Tzan javelinmen (3Ax).
Terrain Type: Hilly. **Aggression:** 0. **Enemies:** II/58, III/71c, III/74a, IV/49, IV/55a, IV/55b. **Allies:** III/71c or IV/49.

IV/35 MONGOL CONQUEST 1206 AD - 1266 AD

This list covers all Mongolian armies based in Central Asia from Temuchin's assumption of the title of Qaghan (under the name of Chinggis/Genghis Khan) until the foundation of the Yuan and Ilkhanid successor dynasties and the breakdown of the Golden Horde. Unlike previous steppe empires they combined an ideology and discipline. They believed that there was only one God in heaven, and so there should be only one ruler on earth (themselves). They beat the Jurchen-Chin of northern China 1211-1214, but then withdrew. In 1220-21 they conquered Khwarizm and raided into Europe. In 1231 they destroyed Khwarizm, in 1239 conquered Georgia and in 1243 the Seljuks, making them vassals. In 1236, they returned to Europe, conquering the Volga Bulgars in 1237, the Alans in 1239, and Southern Russia in 1238 and 1240, then split 1241-2 to inflict crushing defeats on the Poles and Teutonic in the north and the Hungarians in the south, before withdrawing to choose a new khan. In 1256 their Ilkhanid branch destroyed the Assassins of Alamut and in 1258 the Abbasid Caliphate of Baghdad, but were defeated in 1260 by the Mamluks at Goliath's Spring in Palestine. They were organized on a decimal basis up to the toman of 10,000. Military service was due from all fit men from 20 to 61, but boys of 13+ might manage herds of spare mounts. Western sources say 60-90% of fighters were unarmoured horse archers dressed in blue and brown in summer or furs in winter. These enveloped flanks and prepared the advance of a reserve line of heavy cavalry in mostly leather armour. Conquered peoples provided extra numbers. Winter was favoured for invasion because frozen rivers through difficult terrain froze almost into roads. Unlike western chargers, Mongol ponies could dig through heavy snow to find dried grass underneath. Spring was the famine time, before the new grass shoots appeared. Dense terrain was more of

a problem and the mountains and bamboo forests of Sichuan foiled a Mongol invasion in 1259. Baggage was carried on Bactrian 2-humped camels. **References:** *Armies and Enemies of the Crusades* I. Heath, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson, *The History of the Mongol Conquests* J.J. Saunders, *Until The Sun Falls* C. Holland (novel).

IV/35 Mongol Conquest Army: 1 x General (Cv), 2 x Mongol armoured cavalry (Cv) or horse archers (LH), 5 x Mongol horse archers (LH), 1 x Mongol horse archers (LH) or rope-pull stone throwers (Art), 3 x Uighur, Khitan, Khwarizmanian or Chinese cavalry (Cv) or Uighur, Cuman, Kipchak, Turkoman or Mongol horse archers (LH).
Terrain Type: Steppe. Aggression: 4. Enemies: II/58, III/11a, III/11b, III/32, III/36, III/44, III/57, III/62b, III/63b, III/67, III/68b, III/71c, III/74a, III/79, III/80, IV/6a, IV/6b, IV/14b, IV/15, IV/24a, IV/24b, IV/30, IV/35, IV/36a, IV/44a, IV/46, IV/48. Allies: III/62b.

IV/36 LATER MUSLIM INDIAN 1206 AD - 1526 AD

This list covers Muslim Indian states from the establishment of the Delhi Sultanate until that of the Mogul empire. Unlike Hindu armies, cavalry was the main arm. Elephants with howdahs advanced in the centre to disrupt enemy cavalry, accompanied by escort infantry to prevent enemy foot interfering. Muslim cavalry used a long light lance and Turkish bow and are depicted riding horses in Persian-style bards, but there are references to jagirdar cavalry on horses with bards as "worth 100 Mongols" or without them as "worth 10". **References:** *Armies of the Middle Ages Vol 2* I. Heath, *Al-Hind: The Making of the Indo-Islamic World Vol.2* A. Wink.

IV/36a Muslim Indian Army 1206-1315 AD: 1 x General (Cv), 1 x mamluks (Cv), 2 x ex-Ghurids (Cv), 2 x Turks (LH), 1 x elephants (El), 1 x Hindu swordsmen (3Bd), 3 x Hindu archers (3Bw), 1 x massed followers (7Hd) or javelinmen (Ps).
Terrain Type: Tropical or Dry. Aggression: 2. Enemies: III/10b, III/10c, III/38, IV/35, IV/36a, IV/46. Allies: III/10c.

IV/36b Muslim Indian Army 1316-1526 AD: 1 x General (Cv), 4 x Muslim jagirdars (Cv), 1 x Rajputs (3Kn), 1 x elephants (El), 1 x Hindu swordsmen (3Bd), 2 x Hindu archers (3Bw), 1 x grenade and firework throwers or handgunners (Ps) or hand-thrown rocket men or bombards (Art), 1 x massed armed followers (7Hd).
Terrain Type: Tropical or Dry. Aggression: 2. Enemies: III/10c, IV/36b, IV/75. Allies: III/10c.

IV/37 INDONESIAN & MALAY 1222 AD - 1511 AD

This list covers the Javanese empires of Singhasari and Majapahit, the Malay sultanate of Malacca, the Moluccas (or "Spice Islands") and other states of Indonesia, Malaysia and the Philippines, from the founding of Singhasari until the fall of Malacca to the Portuguese. Horsemen skirmished with javelins and shield, foot attacked fiercely "as though conscious of no peril" with sword or kris, shield and throwing spears. Gunpowder weapons were used from 1400. **References:** *Early Mapping of Southeast Asia* T. Suarez, *A Short History of Indonesia* C. Brown.

IV/37a Malay or Sumatran Army: 1 x General (El), 1 x elephants (El), 6 x warriors (4Wb), 2 x archers (3Bw or Ps), 1 x skirmishers with blowpipe or javelins or handgun (Ps), 1 x warriors (4Wb) or noble cavalry (LH) or cannon (Art).
Terrain Type: Littoral. Aggression: 1. Enemies: II/42b, II/42d, III/23a, IV/37a, IV/37b, IV/37c, IV/37d, IV/40, IV/73. Allies: II/42d.

IV/37b Moluccan Army: 1 x General (3Wb), 8 x warriors (3Wb), 2 x archers (3Bw or Ps), 1 x skirmishers with blowpipe or javelin (Ps).
Terrain Type: Littoral. Aggression: 1. Enemies: IV/37a, IV/37b, IV/37c, IV/37d.

IV/37c Javanese Army: 1 x General in ceremonial chariot with foot guards (CWg) or on elephant (El), 1 x noble cavalry (LH), 7 x warriors (4Wb), 2 x archers with "huge" bows (3Lb), 1 x skirmishers with blowpipe or javelins or bow (Ps).
Terrain Type: Littoral. Aggression: 1. Enemies: III/23a, III/23b, IV/37a, IV/37b, IV/37c, IV/37d, IV/48, IV/73. Allies: IV/37a.

IV/37d Other Armies: 1 x General (3Wb), 7 x warriors (3Wb), 2 x archers (3Bw or Ps), 1 x skirmishers with blowpipe or javelin (Ps), 1 x warband (3Wb) or noble cavalry (LH).
Terrain Type: Littoral. Aggression: 1. Enemies: IV/12b, IV/37a, IV/37b, IV/37c, IV/37d.

IV/38 MURCIAN & GRANADINE 1228 AD - 1492 AD

This list covers the armies of the Islamic Spanish states of Murcia (founded when its governor revolted against the Almohades in 1228 and lasting until he was murdered by a subordinate in 1238), then Granada (founded in 1232) which inherited its power; and lasted because, although small, it was rich, densely populated, had mountainous borders and had inhabitants cunning, resourceful, brave and better organised than the Christian Spanish. Nearly every peasant was said to own a crossbow. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages Vol 1* I. Heath.

IV/38 Murcian or Granadine Army: 1 x General (3Kn or Cv), 3 x javelin-armed jinetes (LH), 1 x horse crossbowmen (LH), 2 x town militia or mercenary spearmen (Sp), 1 x crossbowmen (4Cb) or staff-slingers (Ps), 4 x peasants with crossbow (3Cb or Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: III/35c, III/75, IV/38, IV/68d. Allies: III/75.

IV/39 NAVARRESE 1234 AD - 1430 AD

This list covers the armies of the Kingdom of Navarre from its transfer from the Spanish to the (nominally) French sphere of influence, until loss of his Norman possessions in 1378 and lack of money to pay mercenaries forced Charles the Bald to submit to the French crown. It then covers the mercenary Navarrese Company that controlled much of Greece 1378-1430. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages Vol 1* I. Heath.

IV/39a Navarrese Army 1234-1327 AD: 1 x General (3Kn), 6 x Navarrese javelinmen (3/4Ax), 2 x Gascon crossbow-men (3Cb), 2 x Gascon bidet javelinmen (Ps), 1 x Navarrese slingers (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: III/35c, IV/4b, IV/23, IV/62a

IV/39b Navarrese Army 1328-1378 AD: 1 x General (3Kn), 1 x Norman men-at-arms (3Kn), 3 x Navarrese javelinmen (3/4Ax), 2 x Gascon brigands (Sp) or English longbowmen (4Lb), 2 x Gascon crossbowmen (3Cb) or Navarrese slingers (Ps), 3 x Gascon bidets (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: III/35c, IV/4b, IV/62a, IV/62b, IV/64a, IV/64b, IV/68d.

IV/39c Navarrese Company in Greece 1378-1430 AD: 1 x General (3Kn), 2 x Italian elmetti (3Kn), 4 x Catalans (4Ax), 2 x Italian crossbowmen (4Cb), 1 x Gascon crossbowmen (3Cb) or Turkish horse archers (LH), 2 x Greek archers (Ps).

Terrain Type: Hilly. Aggression: 2. Enemies: IV/51b, IV/55b, IV/60, IV/61, IV/69. Allies: IV/32 or IV/55b.

IV/40 SIAMESE 1234 AD - 1518 AD

This list covers the Siamese (or Thai) armies ("Thailand" has no real meaning before the 20th century); firstly of their initial city states and then the kingdoms of Sukhothai (1238-1438), Lan Na (1292-1558), Ayutthaya (1350-1767) and Lan Xang (1353-1779). It ends with the first employment of Portuguese advisers. Elephants carried a warrior astride the neck using pole-arms, an assistant in a chair high on its back handing him weapons and acting as a signaler, and the driver sitting on the rump and controlling it with a long goad. Each leg was often protected by foot guardsmen "against cowardly and dishonest enemy". Elephants usually deployed on the flanks of the infantry, accompanied by archers and hand-guns. Khmer reliefs depict Siamese foot with long skirts, bolo jackets, elaborate helmets, long shields and short thrusting spears. **References:** *Slingshot* 229, *The Armies of Angkor* M.J. Hergouak'h.

IV/40 Siamese Army: 1 x General (El), 1 x elephants (El), 1 x noble cavalry (Cv) or retinue (3Bd), 6 x warriors (3Wb) or levies (3Ax) or soldiers (3Bd), 2 x archers (3Bw or Ps), 1 x archers or handgunners (Ps).

Terrain Type: Tropical. Aggression: 1. Enemies: III/9b, III/23a, III/60, IV/37a, IV/40, IV/48, IV/73. Allies: III/9b or IV/37a or III/23a.

IV/41 EARLY SWISS 1240 AD - 1400 AD

This list covers the Swiss armies from the revolt of Schwyz, Unterwalden, Uri and Lucerne against Count Rudolf of Habsburg in 1240 and continues until the introduction of large numbers of pikes to replace halberds around 1400 AD. An overall commander was sometimes elected by the Confederate Council, but more often command was vested in a council of war in which no one was supreme. This is therefore an army that has a general's element but no general figure! The halberd was by far the most common weapon, but axes, two-handed swords and even spears were also used. The standard tactic was a rapid rush in deep formation with crossbowmen skirmishing ahead. The "enfants perdus" used by Berne at Laupen in 1339 were not a success, disordering the halberdiers on fleeing. **References:** *Armies of the Middle Ages Vol 1* I. Heath, *Slingshot* 245.

IV/41 Early Swiss Army: 1 x General (6/4Bd), 1 x mounted crossbowmen (LH) or stone-throwing enfants perdus (Ps), 8 x halberdiers (6/4Bd), 2 x crossbowmen (Ps).

Terrain Type: Hilly. Aggression: 1. Enemies: IV/13b, IV/41, IV/61, IV/76.

IV/42 ISLAMIC PERSIAN 1245 AD - 1393 AD & 1499 AD - 1520 AD

This list covers the Iranian dynasties who ruled Persia as vassals of the Ilkhanid Mongols or emerged following the fall of the Ilkhanate, including the Injuids of Fars 1245-1353, the Sarbadarids of Sabzawar 1337-1381, the Muzaffarids of Fars (who conquered and replaced the Injuids) and of Isfahan 1353-1393, and the Karts of Herat in Afghanistan 1245-1389, all of which fell to Timur (see IV/75); then from 1499 the new Safavid Persian dynasty that rose to supplant the White Sheep Turks. All Persian cavalry were depicted with spired helmets with camail, long iron or leather lamellar or mail armour, bow, scimitar and, if a noble or hero, a mace. Some had lance and others a conical cane shield, but rarely both. Lancers usually, and others sometimes, rode horses in full lamellar or chequer-patterned quilted silk bards. Only Karts can use Afghans. **References:** *Armies of the Middle Ages Vol 2* I. Heath, *Persian Paintings* B. Gray.

IV/42 Islamic Persian Army: 1 x General (Cv), 1 x lance and bow cavalry (Cv), 2 x bow-only (or if Safavid from 1489 lance and bow) cavalry (Cv), 4 x bow-only cavalry (Cv), 1 x Turcoman horse archers (LH), 2 x Persian or Afghan archers (3Bw or Ps), 1 x levies (7Hd) or Afghan spearmen (3Pk) or Persian bow-only cavalry (Cv).

Terrain Type: Dry. Aggression: 0. Enemies: IV/42, IV/46, IV/52, IV/55a, IV/67, IV/75, IV/77.

IV/43 LATER HUNGARIAN 1245 AD - 1526 AD

This list covers Hungarian armies from the aftermath of the disaster of Mohi inflicted by the Mongols until the disaster of Mohacs inflicted by the Ottomans. IV/43b is the army of the Crusade of Nicopolis; and IV/43c covers the great Janos Hunyadi, his son Matthias Corvinus and the famous "Black Army" of mercenaries. The Hungarians became the main shield of Christian Europe against the Turks and their combination of plate-armoured European-style knights and traditional horse archers was well suited to this role. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath.

IV/43a Hungarian Army 1245-1395 AD: 1 x General (3Kn), 1 x Hungarian nobles (3Kn), 7 x Cuman or Hungarian horse archers (LH), 1 x Hungarian spearmen (Sp), 2 x archers (Ps or 3Bw).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** III/63b, IV/13b, IV/22, IV/25, IV/43a, IV/61, IV/65, IV/66

Allies: IV/13b or IV/65 or IV/47 or IV/61 or IV/66.

IV/43b Hungarian Army for the Crusade of Nicopolis 1396 AD: 1 x General (3Kn), 1 x Hungarian nobles (3Kn), 4 x horse archers (LH), 2 x crusader knights (3Kn), 1 x crusader crossbows (Mid-4Cb/4Cb), 1 x spearmen (Sp) or crusader ribauds (5Hd), 2 x archers (Ps or 3Bw).

Terrain Type: Steppe. **Aggression:** 2. **Enemy:** IV/55b. **Allies:** IV/64b.

IV/43c Hungarian Army 1397-1526AD: 1 x General (3Kn), 2 x German or Bohemian armigeri (6Kn) or Hungarian nobles (3Kn), 2 x horse archers (LH), 1 x horse archers or Serbian hussars (LH), 1 x armati (4Bd), 2 x peasant spearmen or clipeati (Sp) or marauding peasants (5Hd), 1 x Hungarian crossbowmen (Ps), 2 x German or Bohemian handgunners (Ps) or war wagons (WWg) or German or Italian pikemen (4Pk) or Bosnian archers (Ps or 3/4Bw).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** IV/13b, IV/13c, IV/13d, IV/22, IV/55b, IV/61, IV/65, IV/66, IV/80.

Allies: IV/22 or IV/65 or IV/66.

IV/44 POST-MONGOL RUSSIAN 1246 AD - 1533 AD

This list covers the armies of Russia from the Mongol conquest until the accession of Ivan the Terrible. It includes the victory of Kulikovo against the Tartars in 1380. Dvor (Cv) were the paid troops of the prince and important boyars, but most cavalry were lesser nobles and retainers. They had spired helmets, body armour, light lance, bow, straight or curved swords and at first round, then almond-shaped shields. Infantry were provided by town militia in separate bodies with spear and shield or bows and crossbows, or by Cossacks (not yet horsemen). The famous, but actually rarely used, gulya gorod or "walking fort" was a protected wagon containing pavise sections to be set up on halting and manned by the foot. **References:** *Armies of Feudal Europe* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath.

IV/44a Post-Mongol Russian Army 1246-1380 AD: 1 x General with dvor (Cv), 9 x boyars (Cv), [1 x militia (Sp) + 1 x militia (4Bw)] or 2 x gulya gorod (WWg).

Terrain Type: Forest. **Aggression:** 1. **Enemies:** III/63b, III/80, IV/18, IV/30, IV/35, IV/44a, IV/47, IV/66. **Allies:** IV/18 and/or IV/47.

IV/44b Post-Mongol Russian Army 1381-1533 AD: 1 x General with dvor (Cv), 6 x boyars (Cv), 2 x Tartar horse archers (LH), 1 x Cossacks with bow or handgun (Ps), [1 x militia (Sp) + 1 x militia (4Cb)] or 2 x gulya gorod (WWg).

Terrain Type: Forest. **Aggression:** 1. **Enemies:** III/80, IV/18, IV/30, IV/44b, IV/47, IV/66. **Allies:** IV/18.

IV/45 MAMLUK EGYPTIAN 1250 AD - 1517 AD

This list covers Egyptian armies from the overthrow of the Ayyubids until defeat at Raydaniyah in 1517 (largely by artillery) brought Egypt under Ottoman rule. Troops called ghulams "boys" and later mamluks "slaves" started as surplus boys from pagan steppe horse archer tribes, bought by entrepreneurs, converted to Islam and formed into military units of highly trained and disciplined soldiers that became self-perpetuating corporations. They were widely used by Muslim states that could afford them and prized for their efficiency and loyalty. The Abbasid caliph al-Mutawim (833-42) elevated them into a military aristocracy capable of being promoted to the highest offices of state. When the supply ran short, recruitment shifted to Kipchaks and Circassians. Becoming indispensable, the Egyptian mamluks seized power in 1250 and henceforth appointed their own sultans! The corps was now segregated into thoroughly drilled royal mamluks, and mamluks of the amirs. All had helmet, body armour, round shield (amirs' mamluks' shields with heraldic designs), bow, lance, mace and sword, but not uniforms. Some horses had Persian-style bards; all others decorated long saddle cloths. Quality fell in the late 15c, though from a high peak. Slave recruits had to be bought for cash and were getting more expensive. Halqa started as probably lance-armed cavalry recruited from Arabs, Egyptians and sons of mamluks, but by 1315 had degenerated into foot archers, then from 1490 were encouraged to re-arm as handgunners. Naffatun used incendiary projectors, but were replaced from 1450 by (initially black) handgunners. If used, handgunners were deployed in front of the cavalry as a screen. Foot were otherwise disdained. Ghazis fought for religion, mutatawwi'a for loot. Artillery were first used in a field battle in 1517. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath, *The Knights of Islam* J. Waterson, *Mongols and Mamluks* R. Amitai-Preiss.

IV/45 Mamluk Egyptian Army: 1 x General and royal mamluks (Cv), 4 x mamluks (Cv), 2 x mamluks (Cv) or halqa (Cv or 3Bw or handgunners Ps), 1 x Turkoman horse archers (LH), 1 x Turkoman horse archers (LH) or crossbowmen (4Cb) or mamluk mounted naffatun (3Kn) or guns (Art), 1 x Bedouin (LH) or ghazis (3Wb) or javelinmen (3Ax), 1 x Bedouin (LH) or naffatun (Ps) or handgunners (Ps), 1 x archers (Ps) or city rabble (7Hd) or mutatawwi'a (5Hd).

Terrain Type: Dry. **Aggression:** 2. **Enemies:** II/55c, III/12, III/74b, IV/2, IV/6a, IV/6b, IV/17, IV/26, IV/45, IV/46, IV/49, IV/55b, IV/56, IV/67, IV/75, IV/77. **Allies:** IV/6a.

IV/46 ILKHANDID 1251 AD - 1355 AD

This list covers armies of the Mongol Ilkhanid state from the appointment of Hülegü as viceroy of Iran with orders to destroy the assassins of Alamut and bring the Khalif of Baghdad to heel. In 1295 its rulers converted to Islam (the religion of most of their subjects), but were not fanatical about it. From 1335, it split into several rival successor states with the Jalayirids predominant. The list ends with the assassination of the last Ilkhanid pretender. The Ilkhanid army destroyed the Abbasid Khalifate, crushed the Turks and was held back from Egypt only by epic battles with the Mamluks. Its base throughout was the grasslands of Azerbaijan. Heavy cavalry became more important after failures against the Mamluks and are depicted with spiked helmet and aventail, long lamellar corslet (often covered by a heavily embroidered surcoat), lance, bow, sword and small round shield. Despite this, the army was mainly unarmoured horse archers, mostly Mongolized Kipchaks. **References:** *Armies and Enemies of the Crusades* I. Heath, *Mongols and Mamluks* R. Amitai-Preiss.

IV/46 Ilkhanid Army: 1 x General (Cv), 1 x guard cavalry (Cv), 9 x Mongol horse archers (LH), 1 x Turkoman horse archers (LH) or Kurdish javelinmen (3Ax) or stone-throwers (Art) or horse archers (LH) or Frankish knights (3Kn).
Terrain Type: Steppe. Aggression: 3. Enemies: II/58, III/74b, IV/2, IV/6b, IV/17, IV/35, IV/36a, IV/42, IV/45, IV/47, IV/49, IV/52, IV/67. Allies: III/71c or III/74b or IV/2 or IV/6 or IV/47 or IV/42.

IV/47 GOLDEN HORDE & SUCCESSORS 1251 AD - 1556 AD

The "Golden Horde" was named for the gilded tent of its first ruler, Chinggis' grandson Batu. As a result of the original Mongol conquest of the Volga Bulgars, Cumans, Alans and the southern Russian principalities and the subsequent reduction of the northern Russian principalities to vassal status, the Horde ruled an enormous territory. Although nominally part of the Mongol empire until 1266, it was for all practical purposes independent. This list covers the "Tartar" armies of the Golden Horde until its overthrow by the Crimean khanate in 1502, then the successor khanates of the Crimea 1430-1473, Kazan 1445-1552 and Astrakhan 1466-1566. The Russians called the Tartar battle tactic "khorovod" (dance). It consisted of 2 strikes by horse archers, then a charge by armoured cavalry, the best on barded horses and using lances. Foot were "Besmermen" (Muslim townsmen), "Armen" (Crimean Armenians), Italians and Siberians. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath.

IV/47 Golden Horde or Successor Armies: 1 x General (Cv), 3 x lancers (Cv), 5 x Tartar horse archers (LH), 2 x Besmermen (3Bw) or Cumans (LH), 1 x Armen (3Bw) or Italians (4Cb) or Siberians (3Bw) or Georgians (Cv).
Terrain Type: Steppe. Aggression: 2. Enemies: II/58, III/63b, III/71c, III/74b, III/80, IV/18, IV/44a, IV/44b, IV/46, IV/47, IV/52, IV/65, IV/66, IV/75. Allies: IV/44a or IV/55b.

IV/48 YUAN CHINESE 1260 AD - 1368 AD

This list covers the armies of the Yuan dynasty founded in China by Kubilai after its conquest by the Mongols until it was torn apart by rebellion and its own supporters, then overthrown by the Ming. Kubilai's dubious election was disputed until 1266; various other Mongol leaders supporting either him or his steppe rival Arik Boke. The Yuan thought they needed to expand to the limits of the known world to survive, but failed in Japan and Indonesia. Guard cavalry were mostly Chinese but included Mongols and other nationalities, all fighting with lance and bow. Other horsemen were mainly Mongols (like those of IV/35) and infantry were Chinese. **References:** *Soldiers of the Dragon* C. Peers, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson.

IV/48 Yuan Chinese Army: 1 x General (Cv), 2 x armoured cavalry (Cv), 3 x armoured cavalry (Cv) or horse archers (LH), 1 x swordsmen (3Bd) or handgunners (Ps), 1 x halberdiers and spearmen (4Bd), 2 x crossbowmen (4Cb), 1 x archers (3/4Bw or 8Bw or Ps), 1 x stone-throwers (Art) or horse archers (LH).
Terrain Type: Arable. Aggression: 2. Enemies: III/9b, III/11a, III/23b, III/55, III/57, III/60, III/62b, IV/37c, IV/40, IV/52, IV/73. Allies: III/11a and/or IV/35 or III/57 or IV/37c.

IV/49 ANATOLIAN TURKOMAN 1260 AD - 1515 AD

This list covers the Turkoman emirates of Asia Minor that emerged when the Mongols weakened the Seljuk Sultanate of Rum, were subdued by the Ottomans in the 14th century, regained independence when Timur wrecked the Ottomans, but were reconquered by the Ottomans from 1426, the last falling in 1515. Aydin, Candar after 1339, Menteshe and Saruhan were littoral; Karaman, Kastamonu until 1339, Dulgadir and Ramazonoglu were entirely inland. Many Turkoman cavalry wore leather lamellar armour, nobles substituting iron lamellar or mail, some with arm and leg defences and some on barded horses. **Reference:** *Armies of the Middle Ages* Vol 2 I. Heath.

IV/49 Anatolian Turkoman Army: 1 x General (Cv), 2 x nobles (Cv) or horse archers (LH), 4 x tribal horse archers (LH), 1 x spearmen (3Ax), 1 x spearmen (3Ax) or guns (Art) or [if home terrain is Littoral] marines (4Bw), 2 x archers (Ps or 3Bw), 1 x town militia (7Hd) or nobles (Cv).
Terrain Type: Arable or Littoral. Aggression: 2. Enemies: III/71c, III/74b, IV/2, IV/26, IV/34, IV/45, IV/46, IV/49, IV/50, IV/55a, IV/55b, IV/56, IV/60, IV/61, IV/67, IV/77. Allies: IV/34 or IV/45 or IV/55b.

IV/50 PALAIOLOGAN BYZANTINE 1261 AD - 1384 AD

This list starts with Mikhail VIII Palaiologos' reorganisation of the Byzantine army following the Nikaian recapture of Constantinople in 1261 and ends with the defeat at Chortiatas in 1384 of the last Byzantine field army outside the Morea. It does not cover the sieges ending with the fall of Constantinople to the Ottomans in 1453. Most cavalry were stratotai holding "pronoia" grants, who rode small horses, wore moderate armour and carried lance, sword or mace with either a long triangular shield or a small round one. About a 1/5 were instead called kavallarioi or kataphraktoi, added the prefix "Syr" to their names, rode destriers, were more heavily armoured and are assumed to be the descendants of Frankish knights. Infantry were now mostly light archers. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath, *The Late Byzantine Army* M.C. Bartusis.

IV/50 Palaiologan Byzantine Army: 1 x General (Cv), 1 x Varangian (4Bd) or Catalan (4Ax) or vardariotai (LH) guards, 1 x kavallarioi (3Kn), 3 x stratotai (Cv), 2 x tourkopouloi or Cuman horse archers (LH) or peasants or town militia (Ps or 7Hd), 1 x katartoi (Sp) or marines (4Ax), 3 x archers (Ps or 3/4Bw).

Terrain Type: Littoral. **Aggression:** 1. **Enemies:** II/58, III/74b, IV/22, IV/25, IV/32, IV/33, IV/49, IV/55a, IV/55b, IV/60. **Allies:** II/58 or IV/22 or IV/47 or IV/49 or IV/55a.

IV/51 MOREAN BYZANTINE 1262 AD - 1460 AD

This list covers the Byzantine armies of southern Greece from their first regaining a foothold from the Romanian Franks until the Ottoman conquest. After 1349, it represents the semi-independent Despotate of the Morea, which continued to field substantial armies after the rest of the empire had shrunk to a 20-mile radius around Constantinople. The bulk of the army consisted of pronoia cavalry and peasant infantry. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages* Vol 2 I. Heath, *The Late Byzantine Army* M.C. Bartusis.

IV/51a Morean Byzantine Army 1262-1346 AD: 1 x General (Cv), 2 x stratotai (Cv), 1 x garrison spearman (Sp) or hillmen (3Ax), 2 x garrison archers (4Bw), 5 x peasant archers (Ps), 1 x hillmen (3Ax or Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** III/74b, IV/32, IV/60, IV/69. **Allies:** IV/49 or IV/50.

IV/51b Morean Byzantine Army 1347-1460 AD: 1 x General (Cv), 1 x stratotai (Cv), 2 x Albanian stradioti (LH), 1 x garrison spearman (Sp) or hillmen (3Ax) or Burgundians or Italians (3Kn), 1 x Italians (4/8Cb) or Albanian archers (Ps), 1 x Albanian javelinmen (3Ax), 5 x peasant archers (Ps).

Terrain Type: Hilly. **Aggression:** 1. **Enemies:** IV/39c, IV/55b, IV/60, IV/69. **Allies:** IV/55b.

IV/52 LATER NOMADIC MONGOL 1266 AD - 1508 AD

This list covers all Mongol steppe-based armies after the period of the great Mongol conquests except the Golden Horde and its successors in Russia. It includes Kubilai's traditionalist Mongol rivals such as Kaidu; the "Eastern Mongols" or "Northern Yuan" after the Yuan were driven from China by the Ming in 1368; the Oirats who fought successfully against Ming China 1438-1454; the Chagatais that split off to Transoxiana and Moghulistan in 1343, lost Transoxiana to Timur in 1363, but survived in Moghulistan until chased out by the Uzbeks in 1508; the Uzbek offshoot of the Golden Horde that took Transoxiana from the Timurids 1501-1506, creating Uzbekistan; and the Turko-Mongol Kazakhs "adventurers" who separated from the Uzbeks in the 1460s. Except for possibly the Kazakhs (who were regarded as barbarous and unruly), they kept the old Mongol discipline, social organization and troop types of IV/35. Only a small minority of the armoured cavalry had lance as well as bow or had horse armour. **Reference:** *The Perilous Frontier* T.J. Barfield.

IV/52 Later Nomadic Mongol Army: 1 x General (Cv), 4 x Mongol armoured cavalry (Cv) or horse archers (LH), 5 x Mongol horse archers (LH), 2 x Mongol or Turkoman horse archers (LH) or Tajik levies or serfs (3Bw or 7Hd).

Terrain Type: Steppe. **Aggression:** 3. **Enemies:** III/11a, IV/42, IV/46, IV/47, IV/48, IV/52, IV/73, IV/75, IV/78. **Allies:** IV/42 or IV/46.

IV/53 MIXTEC, ZAPOTEC & WEST MEXICAN 1280 AD - 1521 AD

The fall around 900 to internal subversion of the Zapotec empire ruled from the city now called Monte Alban in south-eastern Mexico left a political vacuum. This was filled from 1280 by two new alliances based on the Zapotec city of Zaachila and the Mixtec city of Cuicuilan respectively. The primary weapon of the warrior classes was the atlatl dart-thrower, which (unlike the Aztecs) they used to maintain a distant combat rather than to precede a charge. The normal side-arm was a short copper axe or a stone-headed or obsidian-studded mace, but nobles could substitute an obsidian-edged spear or cutting weapon. Slings provided a dense skirmishing barrage. Mixtec armies were sometimes commanded by the priest of a major oracle dressed as his god and backed by a rigidly disciplined temple army. West Mexican (and later Mixtec and Zapotec) armies often replaced atlatl with bows. **Reference:** *Armies of the 16th Century* Vol 2. I. Heath.

IV/53 Mixtec, Zapotec or West Mexican Army: 1 x General (4Ax), 2 x nobles and veteran suit wearers (3/4Ax or 4Bw), 4 x warriors (3Ax or 3Bw), 2 x temple soldiers (4Ax) or warriors (3Ax or 3Bw), 3 x peasant slingers (Ps).

Terrain Type: Hilly. **Aggression:** 1 if Zapotec, otherwise 2. **Enemies:** III/41b, IV/19b, IV/53, IV/63. **Allies:** III/41b (Chichimec) or IV/19a or IV/19b.

IV/54 MEDIEVAL SCANDINAVIAN 1280 AD - 1523 AD

This list covers the armies of Norway, Denmark and Sweden from the institution of a feudal knighthood (of riddare nobles and lesser fraelse) until the dynastic union of the 3 kingdoms under the King of Denmark in 1389. This did not prevent dissident Swedish rulers fighting against the union; and was ended by the accession of Gustavus Vasa to the Swedish throne. Smaasvenner were unarmoured mounted attendants with lances that formed up behind the fraelse as a reserve. Skyttar were armoured crossbow cavalry. Leidang/leding had to have helmet, quilted or leather jacket, spear, sword and shield, a proportion also having bow or crossbow. Obudshaer were a rapidly-charging select levy for service abroad, armed with halberd or crossbow and a short flail pushed through the belt. Allmoge were fearsome Swedish peasant infantry depicted in kettle hat or sallet and sometimes a plate corslet, those in front with crossbows, those behind armed with a mix of halberds and sword blades with cross guard on a 5 foot pole called "svaerdstav". Landevaernet were levy not allowed to keep traditional arms at home with a short "spjud" spear. **References:** *Armies of Feudal Europe* I. Heath.

IV/54a Danish Army 1350-1390 AD: 1 x General (3Kn), 1 x fraelse (3Kn), 1 x smaasvenner and skyttar (Cv), 1 x German mercenary knights (3Kn), 2 x obudshaer (3Bd), 1 x obudshaer (3/4Cb), 4 x landevaernet (Sp), 1 x archers or crossbowmen (Ps).

Terrain Type: Littoral. Aggression: 3. Enemies: IV/13b, IV/30, IV/54d

IV/54b Union Army 1391-1523AD: 1 x General (3Kn), 1 x fraelse (3Kn), 1 x smaasvenner and skyttar (Cv), 2 x obudshaer (3Bd), 1 x obudshaer (3/4Cb), 2 x landevaernet (Sp), 2 x landevaernet (Sp) or German landsknechts (4Pk), 1 x crossbowmen or handgunners (Ps), 1 x artillery (Art) or German knights (3/6Kn).

Terrain Type: Littoral. Aggression: 3. Enemies: IV/13b, IV/13c, IV/13d, IV/30, IV/54c, IV/54d. Allies: IV/13b or IV/13c or IV/13d.

IV/54c Swedish Army 1391-1523 AD: 1 x General on horseback (3Kn) or on foot (4Bd), 1 x Fraelse (3Kn/4Bd), 1 x skyttar (Cv) or allmoge (4Cb), 4 x allmoge (4Bd), 4 x allmoge (4Cb), 1 x Finns (3Ax) or Lapp or other scouts (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: IV/30, IV/54b, IV/54d.

IV/54d Other Medieval Scandinavian Armies: 1 x General (3Kn), 1 x fraelse (3Kn), 1 x smaasvenner and/or skyttar (Cv), 6 x leidang (4Bd), 3 x leidang (4Bd) or 3Bw or Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: III/63b, IV/27, IV/28, IV/30, IV/54a, IV/54b, IV/54c, IV/54d.

IV/55 OTTOMAN 1281 AD - 1520 AD

This list covers Turkish armies from the accession of Osman I until that of Suleiman the Magnificent. Early Ottoman armies depended on ghazi religious fanatics, plus levendat for policing conquered territory. These were replaced by sipahi with bow (a few also with lance) on timariot land grants and by akinji borderers fighting for loot. Azabs with javelin, bow or sling were recruited for each campaign. Janissaries were regulars with bow and curved sword, in tall white hats and uniformed in blue, red or green. **References:** *Armies of the Middle Ages Vol 2* I. Heath, *Children of the Book* P. Carter (novel).

IV/55a Ottoman Army 1281-1361 AD: 1 x General with sipahis (Cv), 1 x feudal sipahis (Cv), 7 x ghazi horse archers (LH), 1 x spearmen (3Ax or Sp) or levendat (7Hd) or ghazis (LH), 2 x azabs with javelin, bow or sling (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: II/58, IV/2, IV/25, IV/34, IV/42, IV/49, IV/50, IV/60, IV/61.

IV/55b Ottoman Army 1362-1520 AD: 1 x General with qapukulu lancers (Cv), 3 x sipahis (Cv), 4 x akinji horse archers or Bedouin (LH), 1 x janissaries (4Bw), 2 x azabs (Ps), 1 x bombards (Art) or Iyalars (5Hd) or Serbs (3Kn).

Terrain Type: Arable. Aggression: 4. Enemies: II/58, IV/2, IV/13c, IV/13d, IV/18, IV/22, IV/25, III/71c, IV/34, IV/39c, IV/43b, IV/43c, IV/45, IV/49, IV/50, IV/51b, IV/56, IV/60, IV/61, IV/65, IV/66, IV/69, IV/75, IV/77. Allies: IV/47 or IV/49 or IV/65 or IV/69.

IV/56 ORDER OF ST JOHN 1291 AD - 1522 AD

This list covers the land forces of the Knights Hospitaller from the fall of Acre (their last possession in Palestine) to the Mamluks, through their tenure of Cyprus until 1310, then of Rhodes until it was surrendered to the Ottomans after an epic siege in 1522; following which they moved to Malta, where they were to successfully withstand an even more famous siege. They were usually known as the "Knights of St John" or the "Knights of Rhodes" or later the "Knights of Malta". They also maintained a presence in mainland Greece until 1381. While in Cyprus and Rhodes, they kept up a constant campaign of maritime and coastal piracy against the Muslim states and their low aggression factor reflects only their limited ability to wage war on land and their dependence at home on the Greek populations of Cyprus and Rhodes. **References:** *Armies and Enemies of the Crusades* I. Heath, *Armies of the Middle Ages Vol 2* I. Heath, *Rhodes Besieged: A New History* R. Smith & K. Devries.

IV/56 Knights Hospitaller Army: 1 x General (3Kn/4Bd), 1 x brother and colonist knights (3Kn/4Bd), 2 x Greek or colonist spearmen (Sp), 2 x colonist crossbowmen (3Cb) or mercenary crossbowmen (4Cb), 6 x Greek archers or crossbowmen (Ps).

Terrain Type: Littoral. Aggression: 1. Enemies: IV/45, IV/49, IV/55b. Allies: IV/39c.

IV/57 LOW COUNTRIES 1297 AD - 1478 AD

This list covers the mostly communal armies of the Low Countries (Flanders, Brabant, Hainault, Holland and the Bishopric of Liege) from their first resistance to Philip IV of France until their absorption by Burgundy after supporting Maximilian I of Austria in his struggle against France for his Burgundian inheritance. The main strength of the army was provided by the disciplined pikemen of the city guilds, supplemented by others using the fearsome plancon (a heavy club with a spiked point). Guild crossbowmen fought behind pavises carried by boys. Mounted troops were provided by rich city burghers of doubtful efficiency, but mainly by nobles, rural gentry and mercenaries. Their quality was denigrated by allies, often justly. The White Hoods of Ghent were rabelais "loving war more than peace, having nothing to lose". **References:** *Armies of the Middle Ages Vol 1* I. Heath, *The Low Countries and the Hundred Years War 1326-1347* H. S. Lucas.

IV/57a Low Countries Army 1297-1329 AD: 1 x General (3Kn/4Pk), 1 x knights (3Kn/4Pk), 6 x guildsmen (4Pk), 1 x guildsmen with plancon (3/4Bd), 1 x guild crossbowmen (4Cb), 1 x feudal levy (7Hd), 1 x archers (Ps).
Terrain Type: Arable. Aggression: 0. Enemies: IV/4b, IV/13b. Allies: IV/4b, IV/13b or IV/13c.

IV/57b Low Countries Army 1330-1410 AD: 1 x General (4Pk), 5 x guildsmen (4Pk), 1 x guildsmen with plancon (3/4Bd), 1 x guild crossbowmen (4Cb), 2 x "Whitehoods" (5Hd) or guildsmen (4Pk), 1 x archers (Ps), 1 x light or organ guns (Art).
Terrain Type: Arable. Aggression: 0. Enemies: IV/13b, IV/57b, IV/64a, IV/64b, IV/76.

IV/57c Low Countries Army 1411-1478 AD: 1 x General (4Pk), 7 x guildsmen (4Pk), 1 x guildsmen with halberd (4Bd), 1 x crossbowmen (4Cb) or handgunners (Ps), 1 x handgunners (Ps), 1 x light or organ guns (Art).
Terrain Type: Arable. Aggression: 0. Enemies: IV/13b, IV/13c, IV/76, IV/85a.

IV/58 MEDIEVAL IRISH 1300 AD - 1515 AD

This list covers Irish armies from the adoption of cavalry by the Irish until the first recorded use of firearms. Aggression is set at 0 because all battles were in Ireland. Each Irish cavalryman in helmet and mail shirt and armed with javelins was accompanied by unarmoured horseboys who fought with him. Their skirmishing mode of combat and reluctance to stand up to Anglo-Irish cavalry causes their classification as LH. The Scots option reflects Edward Bruce's attempt to make himself King of Ireland. To what extent his army of 6,000 corresponded to the types in a Scottish army at home is uncertain, but it did always fight on foot. Since the Common Army spearmen had no obligation to serve abroad, it may have been entirely feudal men-at-arms, Highland archers and Islesmen. Most Irish foot were javelin-armed kerns, some also having light axes; but hereditary families of Scots-descended "galloglaich" came to be preeminent. These wore acorn helmet and mail or a quilted cotun and were armed with a long axe, a sword and javelins. Scots can only be used with a Scots general. **References:** *Armies of the Middle Ages Vol 1* I. Heath, *Irish Battles* G.A. Hayes-McCoy, *Slingshot* 219, 263, 264, 265, 273, 274, 278, *Robert the Bruce's Irish Wars: The Invasions of Ireland* S. Duffy.

IV/58 Medieval Irish Army: 1 x Irish general (LH) or Scots general (3Kn or 4Pk), 1 x Irish horse (LH), 1 x Irish horse (LH) or Anglo-Irish (Cv), 3 x Scots (4Pk or 3Bw) or galloglaich (4Bd) or kerns with javelin and light axe (3Ax), 4 x kern javelinmen (Ps), 2 x kern slingers or archers (Ps).
Terrain Type: Forest. Aggression: 0. Enemies: III/78, IV/16, IV/21b, IV/21c, IV/58. Allies: III/78.

IV/59 POST-MONGOL SAMURAI 1300 AD - 1542 AD

This list covers Japanese armies from the aftermath of the Mongol invasions until the introduction of European firearms and drilled foot. They mostly fought each other. Samurai increasingly fought on foot with the katana sword or the glaive-like naginata. Most wore haramaki armour but later increasingly added arm and thigh armour. Others fought as nobushi foot archers. The first ashigaru "light-feet" commoner infantry were foot archers, but the Onin War 1467-1477 introduced large numbers of fierce but lightly armoured ashigaru armed instead with the 3-4m (10-12') long yari spear, who later in the 16th century were to evolve into drilled infantry. Those samurai who fought mounted continued to use bow and "tachi" sword instead of yari and were closely followed by retainers mostly armed with naginata. They are best represented as 6Cv with the foot in the back row. The naginata-wielding Sohei monks were as turbulent as before but less impetuous. Ikko Ikki were a mass revolutionary movement based among artisans from the "temple towns" around Honganji temples. Samurai opposing them were sometimes assisted by town militia that central government thought almost equally seditious. Generals often now directed their armies seated in the rear protected by bodyguards on foot and are then treated as CP. **References:** *Weapons and Fighting Techniques of the Samurai Warrior 1200-1877* AD T. D. Conlan, *Samurai Mitsuo Kure, Battles of the Samurai* S. Turnbull.

IV/59a Samurai Army 1300-1464 AD: 1 x General (6Cv/Cv or 3Bd), 1 x mounted samurai and followers (6Cv/Cv), 4 x samurai (3Bd), 1 x nobushi (4Bw), 1 x ashigaru, follower or Sohei archers (3Bw), 4 x followers mostly with naginata (3Ax) or Sohei (3Bd).
Terrain Type: Hilly. Aggression: 0. Enemies: III/57, IV/59a, IV/73, IV/78.

IV/59b Samurai Army 1465-1542 AD: 1 x General (6Cv/Cv) or if seated on chair (CP), 1 x mounted samurai and followers (6Cv/Cv), 3 x samurai (4Bd), 1 x nobushi (4Bw), 2 x ashigaru with yari (3Pk), 4 x all ashigaru (3Pk) or all Ikko Ikki (5Hd) or all town militia (7Hd) or all Sohei (3Bd).
Terrain Type: Hilly. Aggression: 0. Enemies: IV/59b, IV/73, IV/78.

IV/60 CATALAN COMPANY 1302 AD - 1388 AD

This list covers the Catalan Grand Company from its departure from Sicily until the fall to the Florentines of the last citadel of the state it founded in Greece in 1311. During the interval it fought for both Byzantines and Romanians, was short-changed by both, took a horrid revenge on both, and beat every Turkish, Byzantine and Frankish army that got in its way. It included an elite of Aragonese gentry and a bulk of Catalan almughavars and skirmishers. Almughavars were swarthy, with long black hair and wild beards, wearing tunic, leather cap and a fur jacket; and armed with thrusting spear, 3-4 heavy javelins and a short sword, but no shield. On one occasion, a single almughavar officer beat 5 mounted French men-at-arms. Despite leaving Aragonese service under a cloud after backing the wrong heir, the company continued to fight under the banner of Aragon (yellow with horizontal red stripes). After the Byzantine assassination of its great leader Roger de Flor in 1305, the general's element usually represents a quarreling committee. Alan allies (II/58) had previously been hired by the Byzantines to assist the company, but relations ranged from veiled to naked hostility. Alans cannot be used with Turks. **References:** *Armies of the Middle Ages Vol 1 & Vol 2* I. Heath, *The Catalan Vengeance* A. Lowe, *Slingshot* 230.

IV/60 Catalan Company Army: 1 x General with Aragonese men-at-arms (3Kn), 1 x Aragonese cavall alforratis (Cv), 6 x Catalan almughavars (4Ax), 2 x Catalan crossbowmen (Ps or 4Cb), 1 x piratical sailors with crossbows (3Cb) or Turkish horse archers (LH), 1 x armed dependents (7Hd) or Turkish foot (3Ax or Ps).

Terrain Type: Arable. **Aggression:** 4 until 1330, then 2. **Enemies:** II/58, IV/32, IV/33, IV/39c, IV/49, IV/50, IV/51a, IV/51b, IV/55a, IV/55b, IV/61. **Allies:** II/58.

IV/61 ITALIAN CONDOTTA 1320 AD - 1515 AD

This list covers the armies of Italian city states (primarily Milan, Florence, Pisa, Padua, Naples, Siena, Venice and Genoa) and of the Pope, from the rise of the mercenary companies until the mass use of arquebusers. Condottieri were capable mercenary leaders hired by a state to provide an army on short or (especially where rulers mistrusted political rivals) long term contracts. Their disciplined men-at-arms "elmetti" could be supported by city militias and sometimes local gentry. Their reputation was wrecked by the French at Fornovo in 1495. **References:** *Armies of the Middle Ages Vol 1 & (for Venice) Vol 2* I. Heath, *Mercenaries and their Masters* M. Mallett, *History of the Art of War in the 16th Century* C. Oman, *Hawkwwood* and the *Towers of Pisa* H. Cole (novel).

IV/61 Italian Condotta Army: 1 x General (3Kn), 4 x elmetti (3Kn), 1 x mounted crossbowmen or Hungarian horse archers or Albanian stradioti (LH), 2 x militia crossbowmen (4/8Cb or Ps), 2 x militia (Sp or 4Pk), 1 x Aragonese targeteers (4Ax) or sword-and-buckler men (3Bd) or armed peasants (7Hd), 1 x feudal elmetti (3Kn) or English (4Lb) or bombard (Art).

Terrain Type: Littoral if Venice or Genoa, Arable if not. **Aggression:** 1. **Enemies:** IV/5c, IV/13b, IV/13c, IV/13d, IV/26, IV/39c, IV/41, IV/43a, IV/43c, IV/49, IV/55a, IV/55b, IV/60, IV/61, IV/64b, IV/64c, IV/69, IV/74, IV/79a, IV/79b, IV/79d, IV/82a, IV/82b. **Allies:** IV/61 or IV/69 or IV/74 or IV/79b.

IV/62 100 YEAR'S WAR ENGLISH 1322 AD - 1455 AD

This list covers English armies from the first use of dismounted men-at-arms and recruiting by indenture until the start of the Wars of the Roses. It covers campaigning in France including the major battles of Crecy in 1346, Poitiers in 1356, Agincourt in 1415, Verneuil in 1424, Formigny in 1450 and Castillon in 1453, and also battles against invading Scots at Halidon Hill in 1333, Neville's Cross in 1346, Otterburn in 1388 and Homildon Hill in 1402, plus the battle of Shrewsbury in 1403. Men-at-arms comprised nobles, bannerets, knights, esquires and gentlemen, the proportion of knights steadily dropping with time. Only a small proportion ever fought mounted, most fighting on foot with sword or pole-axe and remounting only to pursue after the battle ended. Most infantry were longbowmen raised by indenture and who were supposed to have bow, sword, dagger, sallet and jack. Although most rode to battle, they are classed as mounted infantry only if they retained their horses during the battle to change position. The proportion of longbowmen to men-at-arms increased during the period; and towards its end the latter had to be supplemented with billmen armed with a fearsome armour defeating pole-arm. There were sometimes a few guns, whose only effect was to give the French an excuse of "the dog ate my homework" variety.

References: *Armies of the Middle Ages Vol 1* I. Heath, *The Great Warbow* M. Strickland & R. Hardy, *The English Achilles* H. Talbot, *An Alternative History of Britain: The Hundred Years War* T. Venning, *The White Company* A. Conan Doyle (novel), *A Bloody Field by Shrewsbury* E. Pargeter (Novel), *Azincourt* B. Cornwell (novel), *The Ill-Made Knight* Cameron, C (novel).

IV/62a English Army 1322-1333 AD: 1 x General (3Kn/4Bd), 3 x English men-at-arms (3Kn/4Bd), 1 x hobiliars (Cv) or mounted archers (Mtd-4Lb), 3 x archers (3/4Lb), 1 x Hainaulters (3Kn), 2 x shire levies (7Hd) or archers (3Lb) or Germans (3Kn), 1 x Gascon "bidower" javelinmen (Ps) or Gascon crossbowmen (3Cb).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/19c, IV/4b, IV/16, IV/39a, IV/39b, IV/64a. **Allies:** IV/62a.

IV/62b English Army 1334-1414 AD: 1 x General (3Kn/4Bd), 2 x English men-at-arms (4Bd), 1 x archers (4Lb/Mtd-4Lb), 5 x archers (4Lb), 1 x Gascon, Hainaulter or Brabant men-at-arms (3Kn/4Bd), 1 x Gascon brigans (Sp) or Welsh "knifemen" (3Pk), 1 x Welsh archers (3/4Lb) or Gascon crossbowmen (4Cb).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/19c, IV/16, IV/39b, IV/64a, IV/64b, IV/64c, IV/68a, IV/68d, IV/76. **Allies:** IV/13b and/or IV/57b or IV/39b.

IV/62c English Army 1415-1422 AD: 1 x General (3Kn/4Bd), 2 x men-at-arms (3Kn/4Bd), 8 x archers (4Lb), 1 x archers (4Lb) or False-French town militia (4Bd or 4Cb or 7Hd).
Terrain Type: Arable. Aggression: 3. Enemies: III/19c, IV/16, IV/64c, IV/68a, IV/68d, IV/76. Allies: IV/68a or IV/68c or IV/68d or IV/76.

IV/62d English Army 1423-1455 AD: 1 x General (3Kn/4Bd), 1 x men-at-arms (3Kn/4Bd), 8 x archers (4Lb), 1 x billmen (4Bd), 1 x archers (4Lb/Mtd-4Lb) or bombard (Art).
Terrain Type: Arable. Aggression: 3. Enemies: IV/16, IV/64c, IV/68a, IV/68d, IV/76, IV/82a. Allies: IV/68a or IV/76

IV/63 AZTEC 1325 AD - 1521 AD

"Aztec" is the usual name for a people also called "Tenocha" and "Colhua Mexica". They originated as Chichimecs that immigrated into Mexico from the north, absorbed culture from the Toltecs, Mixtecs and Zapotecs and founded the island city of Tenochtitlan in 1325. In 1428, this federated with the 2 lake side cities of Texcoco and Tlacopan to form a unitary Aztec state. This expanded aggressively under Motecuhzoma I, but was conquered by Cortez' Spaniards and his Tlaxcalan allies 1519-1521. Warriors were organized in numerical units, maintaining loose formation on the march and in battle. The army's strength lay in its huge numbers, dense showers of missiles (usually javelins thrown by atlatl) and a terrifying cacophony of hideous yells, whistles, conches and drums; but order was quickly lost when group standard-bearers fell, disrupting the command chain. The primary weapon was the maquahuilit wooden sword edged with razor-sharp obsidian volcanic glass. Taking prisoners for sacrifice was preferred to killing, but battlefields were still carpeted with dead. Military orders are jaguar and a few eagle knights, wearing distinctive suits. Macehualtin "clan warriors" wore white cotton, sometimes as quilted armour. The option chosen for them rests on whether you think rushing about or taking prisoners should be emphasized, but 5Hd produces excellent historical games enjoyed by Aztec players and challenges opponents. Macehualtin who took 5 or more prisoners became Ontontin or Cuachic "shorn ones" or "those that hurl themselves to death". **References:** *Armies of the 16th Century Vol 2* I. Heath, *Aztec Warfare* R. Hassig, *The True History of the Conquest of New Spain* B. Diaz (an eye-witness account), *Aztec* G. Jennings (novel).

IV/63 Aztec Army: 1 x General (3Bd), 2 x military orders (3Bd), 6 x clan warriors (5Hd/3Ax), 1 x Ontontin or Cuachic shock troops (3Wb), 2 x slingers or archers (Ps).
Terrain Type: Arable. Aggression: 3. Enemies: III/22c, III/22d, III/41b, IV/10, IV/11, IV/19a, IV/19b, IV/19c, IV/53, IV/63. Allies: IV/19a (Cholula).

IV/64 MEDIEVAL FRENCH 1330 AD - 1445 AD

This list covers French armies from the transition to plate armour until the institution of a standing army. After their defeat by the English at Crecy, French knights and other men-at-arms realized their horses were too vulnerable to longbows and that attacking on foot gave them a better chance. Accordingly, French and allied Scots men-at-arms can deploy dismounted from 1347, though they often left a small portion mounted on the flanks (often those with good horse armour), in the hope of disrupting English archers. Artillery later proved a better antidote. Scots contingents were men-at-arms and (mostly Highlander) feudal archers, since the Common Army pikemen did not serve overseas. They were sometimes the majority of a French army and could provide the general. Of the native French, brigands came to replace mixed pole-arms with spear and rectangular pavis; and communal militia similarly rearm as pavisiers. These fought as spearmen rather than combined with crossbowmen, but crossbowmen often carried smaller pavises. Voulgiers discarded the pavis, but were almost as well-armoured as men-at-arms and fought with short 2-handed thrusting staff-weapons such as the voule or langue de boeuf. Jacquerie were revolting peasants. Strangely, considering their hatred of the upper classes, attempts were made to harness them by ruling factions, never with happy results. **Reference:** *Armies of the Middle Ages Vol 1* I. Heath, *Operation Shepherdess* A. Guerin & J.P. White.

IV/64a Medieval French Army 1330-1346 AD: 1 x General (3Kn), 5 x men-at-arms (3Kn), 1 x archers (3Bw) or Spanish crossbowmen (Ps), 2 x Genoese crossbowmen (4Cb) or French crossbowmen (3Cb), 2 x communal militia (Sp), 1 x brigands (3Bd) or bidet or Breton javelinmen (Ps) or peasant levy (7Hd).
Terrain Type: Arable. Aggression: 1. Enemies: IV/13b, IV/39b, IV/57b, IV/62a, IV/62b, IV/64a.

IV/64b Medieval French Army 1347-1400 AD: 1 x General (3Kn/4Bd), 2 x men-at-arms (3Kn/4Bd), 3 x pavisiers (Sp), 2 x crossbowmen (4Cb), 3 x noble knights (3Kn/4Bd) or Jacquerie (5Hd), 1 x bidet or Breton javelinmen (Ps) or peasant levy (7Hd).
Terrain Type: Arable. Aggression: 1. Enemies: IV/13b, IV/39b, IV/57b, IV/61, IV/62b, IV/64b, IV/74, IV/76.

IV/64c Medieval French Army 1401-1445 AD: 1 x General (3Kn/4Bd), 1 x rich nobles on barded horses (3Kn), 4 x men-at-arms (3Kn/4Bd), 2 x archers (3Bw) or pavisiers (Sp), 1 x crossbowmen (4Cb), 1 x voulgiers (4Bd) or Scots men-at-arms (3Kn/4Bd), 1 x detached "gross varlets" (Cv) or bombard (Art) or Scots archers (4Bw), 1 x bidet or Breton javelinmen (Ps) or peasant levy (7Hd).
Terrain Type: Arable. Aggression: 1. Enemies: IV/13b, IV/61, IV/62b, IV/62c, IV/62d, IV/64c, IV/76, IV/79a, IV/79b.

IV/65 WALLACHIAN & MOLDAVIAN 1330 AD - 1517 AD

This list covers the two medieval states that ended as modern Rumania; the Wallachians from the confirmation of their break from Hungarian rule by the battle of Posada in 1330 until they became vassals of the Ottomans in 1476 after the death of Dracula (Vlad Tepes "Vlad the Impaler"); and the Moldavians from their revolt from Hungary in 1359 until the death of Bogdan the One-eyed in 1517. Outsiders thought both nations exceptionally brave, but Moldavians thought themselves better than that! Both exploited bad terrain; Wallachians preferring sudden attacks and ambush, Moldavians stubborn defence followed by a cavalry counterattack. Boyars were the nobility, initially wearing a beehive-shaped lynx fur cap, long hair and mustache, a long woolen coat over a striped tunic and long riding boots, armed with bow, curved sword, sometimes a light lance and a round or winged (rectangular extended to a point at the left top) shield; but from 1400 the richest used helmet, plate corset, heavier lance and winged shield. Viteji "strong men" were former peasants promoted to the gentry who fought as horse archers, probably dressed more like the foot. Most foot were archers depicted in white, red or green tunics, with either a tall sheepskin hat or a sheepskin over-jacket, rarely both. Some belonging to the standing army "curteni" had pavis. Rustici are peasant mobs with mixed or improvised weapons (pitchforks and flaming torches?).

Reference: *Armies of the Middle Ages Vol 2* I. Heath.

IV/65 Wallachian or Moldavian Army: 1 x General (Cv or 3Kn), 3 x boyars & viteji (LH), 2 x curteni (4Bw) or archers (3Bw), 5 x archers (Ps), 1 x rustici (5Hd) or archers (Ps) or cannon (Art) or Turkish horse archers (LH).

Terrain Type: Forest. **Aggression:** 1. **Enemies:** IV/18, IV/43a, IV/43c, IV/47, IV/55b, IV/65, IV/66. **Allies:** IV/66 or both IV/43c and IV/47.

IV/66 LATER POLISH 1335 AD - 1515 AD

This list covers the Polish armies from the reforms of Kazimierz III (Casimir the Great) until the widespread use of firearms. Rycerz were the direct equivalent of western knights, originally in full mail supplemented by a lamellar corset, but with a tall conical Lithuanian helmet and semi-rectangular shield, but from 1400 in full western plate armour. From 1454 they began to be replaced by the famous "winged hussars". Support was provided by czeladz wearing scale, helmet and mail hood and armed with lance or crossbow, sword, but no shield; then from 1400 substituting a quilted doublet over a mail haubergeon for scale, armed with crossbow and sword and often called strzelcy "shooters". These originally formed a second line, but this failed when fighting Tartars or Lithuanians, so their units afterwards deployed alternately with the rycerz in a single line; with light horsemen such as Lithuanians slightly in advance on the wings. Foot were seldom used. When they were, they formed a second line. The best were town militia of crossbowmen fronted by spear and pavis. Others with long axes were described by opponents as "murderous rustics" and were especially dangerous in woods.

Reference: *Armies of the Middle Ages Vol 2* I. Heath.

IV/66 Later Polish Army: 1 x General (3Kn), 3 x rycerz or hussars (3Kn), 3 x czeladz (Cv), 2 x Hungarian, Cuman or other horse archers, Lithuanians or Serbs (LH), 1 x murderous rustics (3Bd) or czeladz (Cv), 2 x town militia (8Cb) or war wagons (WWg) or czeladz (Cv).

Terrain Type: Forest. **Aggression:** 1. **Enemies:** IV/13b, IV/13c, IV/13d, IV/18, IV/30, IV/43a, IV/43c, IV/44a, IV/44b, IV/47, IV/55b, IV/65, IV/66, IV/80. **Allies:** IV/18 or IV/43a or IV/43c.

IV/67 JALAYIRID 1336 AD - 1432 AD

The Iraq-based Jalayirids split off from the Ilkhanids after the deaths of Abu Sa'id and Arpa Ke'un. They were conquered by Timur, but re-established themselves in 1405 before being eliminated by the Black Sheep Turks in 1432, which then controlled Iraq until destroyed and replaced in turn by the White Sheep Turks in 1467. Jalayirid armies depended heavily on ghulam slave heavy cavalry, who were considered more reliable than the regime's own Mongol tribesmen. **Reference:** *Armies of the Middle Ages Vol 2* I. Heath.

IV/67 Jalayirid Army: 1 x General (Cv), 2 x ghumans (Cv), 1 x Mongol armoured cavalry (Cv) or horse archers (LH), 7 x Mongol horse archers (LH), 1 x foot (7Hd) or Turkoman horse archers or Bedouin (LH).

Terrain Type: Arable. **Aggression:** 1. **Enemies:** III/71c, IV/2, IV/42, IV/45, IV/46, IV/49, IV/75, IV/77. **Allies:** III/71c or IV/77.

IV/68 MEDIEVAL SPANISH & PORTUGUESE 1340 AD - 1515 AD

This list covers the three main Christian armies of the Iberian peninsula (Castile, Aragon & Portugal) and that of all Spain after the union of Castile and Aragon; from the first use of plate armour until the introduction of efficient massed arquebusers. Spanish and Portuguese colonial forces in Asia, Africa and America were of settler militias and local allies or slaves, so are not covered. Men-at-arms originally wore mail with additional plate leg pieces and tabards, but by 1400 wore full plate armour, had mostly abandoned shields, but wielded light lances over-arm. By Ravenna in 1513, Spanish men-at-arms were fully equal to French and many rode barded horses. They tried to kill opponents' horses, which the French thought unfair. Jinetes/genets/genitors were light horsemen with 2-3 heavy javelins and light heart-shaped shields. From 1367, they began to acquire helmets and quilted aketons. Cavalls alforrats were a more heavily armoured Aragonese version, adding a lance and mail haubergeon and sometimes plate leg armour. **References:** *Armies of the Middle Ages Vol 1* I. Heath, *A History of Medieval Spain* J.F. O'Callaghan.

IV/68a Portuguese Army 1340-1494 AD: 1 x General (3Kn/4Bd), 3 x men-at-arms (3Kn/4Bd), 1 x ginetes (LH), 1 x spearmen (Sp) or peasants (5Hd), 1 x crossbowmen (4Cb/Ps), 4 x javelinmen (3Ax/Ps), 1 x archers (Ps).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** III/75, IV/62b, IV/62c, IV/62d, IV/68c, IV/68d. **Allies:** IV/62b.

IV/68b Portuguese Army 1495-1515 AD: 1 x General (3Kn/4Bd), 3 x men-at-arms (3Kn/4Bd), 1 x ginetes (LH), 2 x pikemen (3Pk), 2 x sword-and-buckler men (3Bd), 3 x crossbowmen or handgunners (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: III/75, IV/68e, IV/68f.

IV/68c Aragones Army 1340-1478 AD: 1 x General (3Kn), 2 x men-at-arms (3Kn), 2 x cavalls alforratts (Cv), 1 x ginetes (LH), 2 x spearmen (Sp), 2 x crossbowmen (4Cb or 8Cb), 2 x almughavars (4Ax).

Terrain Type: Arable. Aggression: 3. Enemies: III/75, IV/68a, IV/68d.

IV/68d Castilian Army 1340-1478 AD: 1 x General (3Kn), 2 x men-at-arms (3Kn), 2 x ginetes (LH), 2 x spearmen (Sp), 2 x javelinmen (3Ax/Ps), 2 x crossbowmen or archers (Ps), 1 x slingers (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: III/75, IV/38, IV/39b, IV/62b, IV/62c, IV/62d, IV/68a, IV/68e, IV/74, IV/82a. Allies: IV/64b.

IV/68e Spanish Army 1495-1503 AD: 1 x General (3Kn), 3 x men-at-arms (3Kn), 2 x ginetes (LH), 2 x pikemen (3Pk), 2 x sword-and-buckler men (3Bd), 2 x crossbowmen or handgunners (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: IV/68b, IV/74, IV/82b. Allies: IV/61.

IV/68f Spanish Army 1504-1515 AD: 1 x General (3Kn), 2 x men-at-arms (3Kn), 1 x ginetes (LH), 4 x pikemen (4Pk), 2 x sword-and-buckler men (3Bd), 2 x hand gunners (Ps).

Terrain Type: Arable. Aggression: 3. Enemies: IV/68b, IV/74, IV/82b. Allies: IV/61.

IV/69 ALBANIAN 1345 AD - 1430 AD & 1443 AD - 1479 AD

After rebelling from Serbia in 1345, Albania fought successfully against the Angevins of Naples and the Venetians before falling to the Ottomans in 1430. In 1443, John Castriot "Scanderbeg" rebelled and fought against the Turks until his death in 1468. His son then took refuge cavalry (initially unarmoured and using a double-ended light lance and light shield) into Venetian service as the notorious "stradiots". **Reference:** *Armies of the Middle Ages Vol 2* I. Heath.

IV/69 Albanian Army: 1 x General (Cv or LH), 4 x stradiots (LH), 4 x archers (Ps), 1 x archers (3Cb/Ps), 1 x javelinmen (3Ax), 1 x halberdiers (4Bd) or peasants (5Hd) or mercenary men-at-arms (3Kn).

Terrain Type: Hilly. Aggression: 1. Enemies: IV/22, IV/39c, IV/51a, IV/51b, IV/55b, IV/61. Allies: IV/61.

IV/70 CHANCA 1350 AD - 1440 AD and CANARI 1350 AD - 1470 AD

The Chanca or Chinchaysuyu were a loose confederation of Peruvian tribes that blocked the expansion of the Incas until subjugated and are included as contemporary enemies for them. They were armed with a long spear (repeatedly contrasted with shorter Inca weapons) used without a shield. The similarly armed Canari of Southern Ecuador also formed a loose confederation to resist the Inca, but submitted in 1470. Quechua were unenthusiastic allies of the Chanca, all with sling and club, but some also having a short spear. Canari can only be used by an entirely Canari army. **References:** *Armies of the 16th Century Vol 2* I. Heath, *Slingshot* 226.

IV/70 Chanca or Canari Army: 1 x General (3Pk), 6 x Chanca/Canari warriors (3Pk), 2 x Chanca/Canari warriors (3Pk) or Quechua spearmen (3Ax) or Canari with atlatl or bolas (Ps), 3 x Chanca or Quechua/Canari slingers (Ps).

Terrain Type: Hilly. Aggression: 3 if Chanca, 0 if Canari. Enemies: IV/81, Chanca only IV/71a, IV/71b, IV/72.

IV/71 CHIMU & COASTAL PERUVIAN 1350 AD - 1490 AD

The Chimu or Chimor empire in Peru occupied a dry desert plain cut through by rivers between the Pacific and the wooded foot hills of the Andes. It had replaced and absorbed the previous Mochica culture by 1200, fought and sometimes subdued coastal tribes (such as the Tallanes) also covered by this list, was conquered by a series of Inca campaigns from 1461-1475; and revolted, was crushed and disarmed in 1480. The empire was rigidly hierarchical and bureaucratic. Nobles wore textile and/or copper armour and helmets (Tallanes especially heavy and cumbersome armour of copper strips) and fought with large hardwood clubs. Ordinary warriors were lightly equipped and fought with a variety of smaller clubs and spears (to which coastal tribes added atlatl dart-throwers) and carried small round shields. Conchoco charged especially fiercely. **Reference:** *Armies of the 16th Century Vol 2* I. Heath, *Slingshot* 236.

IV/71a Chimu Imperial Army 1350-1480 AD: 1 x General (Lit/3Bd), 1 x Chimu nobles (3Bd) or warriors (3Ax), 6 x Chimu warriors (3Ax), 3 x slingers (Ps), 1 x Chimu warriors (3Ax) or Conchoco vassals (3Wb).

Terrain Type: Dry. Aggression: 3. Enemies: IV/11, IV/70, IV/71b, IV/81.

IV/71b Coastal Peruvian Army 1350-1490 AD: 1 x General (3/4Bd), 8 x warriors (3Ax), 3 x slingers (Ps).

Terrain Type: Dry. Aggression: 1. Enemies: IV/70, IV/71a, IV/81. Allies: IV/81.

IV/72 AMAZONIAN 1350 AD - 1662 AD

This list covers the well-organised riverine tribes of the Upper Amazon. It starts with the appearance of the first known external rivals they could have fought (the Chanca of the Andes) and continues until the expulsion of their Jesuit protectors led to the depopulation of most of their settlements (only recently revealed by aerial photography) by disease, migrations and Portuguese slave-raiding. One army reported by 16c conquistadores was 60,000 archers. **Reference:** *Armies of the 16th Century Vol 2* I. Heath.

IV/72 Amazonian Army: 1 x General (3Bw), 9 x archers (3Bw), 2 x spearmen (3Ax) or archers (Ps) or blowpipe men (Ps).

Terrain Type: Tropical. Aggression: 0. Enemies: IV/29, IV/70, IV/81.

IV/73 MING CHINESE 1350 AD - 1598 AD

This list covers Chinese armies from the rise to power of Chu Yuan-chang (who became the first Ming emperor in 1368) until the Korean war. Chinese cavalry mainly used the bow. Cavalry and heavy foot armour was mostly rawhide lamellar, often protected by red or black lacquer. **References:** *Soldiers of the Dragon* C. Peers, *The Perilous Frontier* T.J. Barfield, *Defending Heaven* J. Waterson.

IV/73 Ming Chinese Army: 1 x General (Cv), 2 x Chinese cavalry (Cv or LH) or Mongol or Jurchen horse archers (LH), 1 x "dare-to-die" swordsmen or halberdiers (3Bd) or javelinmen (Ps), 2 x Chinese halberdiers or similar (4Bd), 2 x Chinese crossbowmen (4Cb) or archers (3Bw), 1 x stone-throwers, bolt-shooters, light guns or bombards (Art), 1 x rocketeers (Art), 2 x southern tribesmen (3Ax or Ps) or Chinese militia (7Hd) or handgunners (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: II/42d, III/9b, III/60, IV/37a, IV/37c, IV/40, IV/48, IV/52, IV/59a, IV/59b, IV/73, IV/78. Allies: III/9b or IV/52 or IV/78.

IV/74 FREE COMPANY & ARMAGNAC 1357 AD - 1410 AD & 1444 AD

This list covers free companies made redundant by the truce of Bordeaux, the Treaty of Bretigny and later the truce of Tours. It represents army-sized accumulations assembling for major looting expeditions. Many returned to national service when war resumed, but others moved to Italy; including the English "White Company" under Hawkwood and the German "Company of the Star" under Sterz. In 1444, the French king Charles VII hired 40,000 surplus soldiers of both sides (the "Armagnacs") to Frederick II of Austria to fight the Swiss. **References:** *Armies of the Middle Ages Vol 1* I. Heath, *Hawkwood in Paris* H. Cole (novel).

IV/74 Free Company or Armagnac Armies: 1 x General (3Kn/4Bd), 3 x French or English men-at-arms (3Kn/4Bd), 2 x German or Spanish men-at-arms (3Kn), 3 x English archers (4Lb), 2 x French brigands (3Bd) or English archers (Mtd-4Lb), 1 x crossbowmen (4Cb) or Hungarian horse archers (LH) or Breton javelinmen (Ps).

Terrain Type: Arable. Aggression: 4. Enemies: IV/61, IV/64b, IV/68d, IV/79b.

IV/75 TIMURID 1360 AD - 1506 AD

This list covers Transoxanian armies from the revolt of Timur (and his fatally temporary ally Mir Hassan) against the Chagadai until the death of Husayn Bayqara. During his career Timur-i-lenk (Timur the Lame or Tamburlaine or Tamerlane) defeated the Chagadai, Karts, Jalayirids, Georgians, Black Sheep Turkomans, Golden Horde, Mazandarans, Muzaffarids, Ottomans, Mamluks and the Delhi Sultanate; though he was less good at holding territory and often had to make return visits. Since he had a large army to support by loot, he did not much mind doing this. After his death in 1405 on the way to attack Ming China, his empire split into several hostile principalities, of which the largest was Herat, initially ruled by his son Shah Rukh. Timurid armies retained Mongol organization, but used more armour and emphasized a series of controlled charges rather than traditional nomad tactics, but lances and horse armour were not universal. The exact origin of foot depicted with bow, axe, sabre and shield is unknown, but they may have been Shi'ite Sabadar urban militia, whose unusual competence was balanced by their turbulence. **References:** *Armies of the Middle Ages Vol 2* I. Heath, *The Rise and Rule of Tamerlane* B.F. Manz.

IV/75 Timurid Army: 1 x General (Cv), 5 x Timurid cavalry (Cv), 2 x Turkoman horse archers (LH), 1 x elephants (El) or Turkoman horse archers (LH), 1 x Sabadar archers (4Bw) or cavalry (Cv), 1 x cavalry (Cv) or Persian or Tajik militia archers (3Bw), 1 x Persian or Georgian nobles (Cv) or Afghans (3Pk or Ps) or other hillmen (3Ax).

Terrain Type: Steppe. Aggression: 4. Enemies: II/58, III/10c, III/71c, IV/2, IV/34, IV/36b, IV/42, IV/45, IV/47, IV/52, IV/55b, IV/67, IV/77. Allies: IV/52 or IV/77.

IV/76 EARLY BURGUNDIAN 1363 AD - 1471 AD

This list covers Burgundian armies for the period before the innovations of Charles the Bold had taken full effect. The Dukes of Burgundy owed allegiance to the King of France and the Emperor but were rich and behaved as if independent. Their territories consisted of the Duchy of Burgundy on the upper Rhine, the County of Burgundy opposite it on the Imperial bank and a gradually acquired separated and sometimes rebellious northern block eventually including Flanders, the Netherlands and Luxembourg. Its rulers during this period were Dukes Philip the Bold 1363-1404, John the Fearless 1404-1419 (assassinated by the French), Philip the Good 1419-1467 and the warlike but militarily inept Charles the Bold 1467-1477. Unsurprisingly, it was usually allied to the English from 1420 and learned to fight in English style. **Reference:** *Armies of the Middle Ages Vol 1* I. Heath.

IV/76 Early Burgundian Army: 1 x General (3Kn/4Bd), 2 x men-at-arms (3Kn/4Bd), 4 x Burgundian or Picard crossbowmen (4Cb) or English, Burgundian or Picard longbowmen (4Lb), 2 x Low Countries crossbowmen (4Cb), 2 x Low Countries pikemen (4Pk), 1 x Italian elmetti (3Kn) or light guns (Art) or village levies (7Hd) or handgunners (Ps).

Terrain Type: Arable. Aggression: 2. Enemies: IV/13b, IV/13c, IV/41, IV/57b, IV/57c, IV/62b, IV/62c, IV/62d, IV/64b, IV/64c, IV/82a.

IV/77 BLACK SHEEP 1378 AD - 1469 AD & WHITE SHEEP TURKOMAN 1387 AD - 1504 AD

These two confederations of Turkoman and Kurdish clans were successor states to the Jalayirids. The Black Sheep "Qara-Qoyunlu" took over Azerbaijan and Iraq. The White Sheep "Aq-Qoyunlu" were initially based in eastern Anatolia, but spread to control much of Persia, overthrowing the Black Sheep in 1469. They fought successfully against the Mamluks and the Ottomans, losing to the latter only at Orluk Beli in 1473, but eventually lost out to the Safavid Persians 1499-1504 after being weakened by civil war. Both the Sultan and his local leaders kept paid and trained cavalry. Pushan-push "armoured men" were probably those depicted with barded horses and lances, shield-bearing qullughchi "servants" and tirkash-band "quiver-bearers" the armoured horse archers mostly depicted, but some of the latter may have been traditional light horse. **Reference:** *Armies of the Middle Ages Vol 2.1. Heath.*

IV/77 Black Sheep or White Sheep Turkoman Armies: 1 x General (Cv), 2 x pushan-push (Cv), 1 x qullughchi (Cv), 3 x tirkash-ban (Cv), 2 x Turkoman horse archers (LH), 2 x archers (3/4Bw or Ps), 1 x levies (7Hd) or handgunners (Ps).

Terrain Type: Steppe. **Aggression:** 2. **Enemies:** II/58, III/71c, IV/42, IV/45, IV/49, IV/55b, IV/67, IV/75, IV/77. **Allies:** III/71c or IV/34 or IV/49 or IV/77.

IV/78 YI DYNASTY KOREAN 1392 AD - 1598 AD

This list covers Korean armies from the beginning of the Yi dynasty until the end of the Japanese invasion under Hideyoshi, which prompted military reforms and the increased use of hand guns. Cavalry all had helmet, brigandine armour, bow and a halberd, lance or long fil. They were all supposed to ride armoured horses, but a massive expansion in numbers made this impractical and unarmoured horses are more often depicted. The Japanese thought Korean archers better than their own and were also impressed by their use of long spears. **Reference:** *Samurai Invasion: Japan's Korean War 1592-1598 S. Turnbull.*

IV/78 Yi Dynasty Korean Army: 1 x General (Cv), 2 x armoured cavalry (Cv), 1 x armoured cavalry (Cv) or horse archers (LH), 1 x horse archers (LH), 2 x archers (4Bw), 2 x pikemen (4Pk), 1 x peasant spearmen (7Hd) or Jurchen cavalry (Cv), 1 x mixed skirmishers with sword and shield or repeating crossbow or hand-gun or grenades (Ps), 1 x small guns or rocketeers or wheeled rocket launchers (Art).

Terrain Type: Hilly. **Aggression:** 0. **Enemies:** IV/52, IV/59b, IV/73. **Allies:** IV/73.

IV/79 LATER SWISS 1400 AD - 1522 AD

This list covers the heyday of Swiss armies; from their first large scale use of pikes until the disastrous battle of Bicocca in 1522 finally ended their battlefield supremacy. It also includes the army of the League of Constance 1474-1477 under the nominal command of Duke Rene of Lorraine; in which only the vanguard was Swiss, but which won one of the greatest Swiss victories at Nancy in 1477. The general element usually represents a council of Swiss officers, but an exception is made for Rene, since he was the pay master and reason for the war. Swiss front-rank pikemen were armoured, their halberdiers generally not. **References:** *Armies of the Middle Ages Vol 1.1. Heath, Slingshot 245.*

IV/79a Swiss Army 1400-1424 AD: 1 x General (4Pk), 3 x pikemen (4Pk), 6 x halberdiers (3/4Bd), 2 x crossbowmen (Ps). **Terrain Type:** Hilly. **Aggression:** 3. **Enemies:** IV/13b, IV/61, IV/64c.

IV/79b Swiss Army 1425-1477 AD: 1 x General (4Pk), 7 x pikemen (4Pk), 2 x halberdiers (3/4Bd), 2 x crossbowmen or handgunners (Ps). **Terrain Type:** Hilly. **Aggression:** 3. **Enemies:** IV/13b, IV/13c, IV/61, IV/64c, IV/74, IV/85a.

IV/79c League of Constance Army 1474-1477 AD: 1 x General with Lorrainer horse (3Kn), 1 x alliance horse (3/6Kn), 1 x Italian elmetti or French volunteers (3Kn) or mounted crossbows (LH), 4 x Swiss pikemen (4Pk), 1 x Swiss handgunners or crossbowmen (Ps), 2 x alliance militia pikemen (4Pk), 1 x militia halberdiers (4Bd), 1 x militia handgunners (Ps). **Terrain Type:** Hilly. **Aggression:** 3. **Enemies:** IV/85a.

IV/79d Swiss Army 1478-1522 AD: 1 x General (4Pk), 9 x pikemen (4Pk), 1 x handgunners (Ps), 1 x handgunners (Ps) or light guns (Art) or halberdiers (3/4Bd). **Terrain Type:** Hilly. **Aggression:** 3. **Enemies:** IV/13d, IV/61, IV/85b.

IV/80 HUSSITE 1419 AD - 1434 AD & 1464 AD - 1471 AD

The Hussites were named after Jan Hus, a Bohemian religious reformer judicially murdered while under safe-conduct in 1415. This having failed to suppress local anti-catholic religious aspiration, a revolt broke out 1419-1424 under Jan Zizka which was to win many victories against the Catholic League's Royalist and Hungarian armies. Having defeated the initial Catholic response, they then split into mutually hostile Ultraquist, Taborite and smaller factions, though these still occasionally combined. Their strength lay in massed open-topped horse-drawn war wagons crewed by crossbowmen and some handgunners. Other wagons mounted a houfnice, which was a short light cannon, but with a large bore suitable for firing multiple small shot. A new series of crusades 1464-1471 were led by King Matthias Corvinus of Hungary against the "Hussite King" Georg Podiebrad of Bohemia. **Reference:** *Armies of the Middle Ages Vol 2.1. Heath.*

IV/80 Hussite Army: 1 x General (3Kn or 4Bd or WWg), 1 x mounted crossbowmen (LH), 4 x halberdiers and flail-men (4Bd), 5 x war wagons crewed by crossbowmen and handgunners (WWg), 1 x houfnice on specialist wagon (Art) or Polish knights (3Kn). **Terrain Type:** Arable. **Aggression:** 3. **Enemies:** IV/13b, IV/13c, IV/43c, IV/66, IV/80.

IV/81 INCA 1438 AD - 1534 AD

The Tawantinsuyu state in Peru now named for its ruler, the Inca, was founded in the 13th century AD, but until the Chanca invasion of 1438 it had been only one of several Quechua tribes. Pachacuti, the 9th Inca, unified these into a single state with his tribesmen as the aristocracy, subjugated the Chanca, and then launched an aggressive expansion culminating with conquest of the coastal Chimu empire in 1473. Civil war 1527-1532 between Huascar and Atahualpa ended with the defeat and execution (ordered while Atahualpa was a prisoner of the Spanish adventurer Pizarro but before his murder) of Huascar. Atahualpa's murder left the state leaderless and a potentially easy prey to Spaniards combined with Huascar's successors. The list ends before the introduction of horses, pikes and firearms during Manco's rebellion. Inca regulars were depicted armed with a short spear often decorated along its shaft with feathers, sling and small square shield with a cloth skirt, or with a copper-headed halberd; and dressed in alpaca or llama wool tunics of regimental colour and geometric pattern, sometimes padded with cotton, and a crested cane helmet. The favourite tactic was a wild downhill partial charge aimed at the enemy general, preceded by a dense barrage of sling-stones. Skirmishers and militia wore plain brown tunics with various head-dresses, fought with sling, shield and stone-headed mace and were described by Spaniards as "hordes adding little to the strength of the army". Even today, tribesmen are described as always moving "at a light shuffling trot", walking only when drunk! **References:** *Armies of the 16th Century* Vol 2 I. Heath, *The Incas: Lords of the Four Quarters* A. Hagen & C. Morris.

IV/81 Inca Imperial Army: 1 x General (Lit or 3Bd or 4Ax), 1 x halberdiers or coastal nobles (3Bd/4Ax), 1 x forest archers (3Bw or Ps) or Collas bolas-men (Ps), 4 x regulars (4Ax), 3 x skirmishing slingers (Ps), 2 x subject Quechua or Aymara (3Ax) or hasty levies (5Hd) or after 1470 Canari (3Pk).

Terrain Type: Hilly. **Aggression:** 2. **Enemies:** IV/71a, IV/71b, IV/72, IV/81, IV/84a, IV/84b.

IV/82 FRENCH ORDONNANCE 1445 AD - 1515 AD

This list covers French armies from the ordonnance reforms until Marignano. Gendarmes "gens d'armes" were now organised into regular "ordonnance" units, in which each man-at-arms in full plate was accompanied by a coustiller and by archers who were lesser armoured, but progressively social-climbed until they were regarded as gentlemen apprentice men-at-arms. Gendarmes rarely fought dismounted after the end of the 100 Years War in 1455. Their ordonnance archers (but not coustillers) sometimes deployed separately, initially as mounted archers, but later as cavalry. Francs "free" archer were provided by a levy of 1 man per parish. They practiced individually on holy days, but did not compete or train collectively, were held in low regard "fit only to kill chickens" and frequently ran away. Their dismal failure at Guinegate in 1479 and ill-success in training French pikemen at large camps led to the large scale employment of Swiss mercenaries. 300 culverins were used at Castillon in 1453 and cannon on wheeled mounts were a nasty surprise for Condotta armies in Italy in 1495.

References: *Armies of the Middle Ages* Vol 1 I. Heath *History of the Art of War in the 16th Century* C. Oman, *Renaissance France* at War, *Armies, Culture and Society* D. Potter.

IV/82a French Ordonnance Army 1445-1480 AD: 1 x General with gendarmes (3Kn) or Scots archer guard (Mtd-4Lb/4Lb), 3 x gendarmes (3Kn/4Bd), 1 x gendarmes (3Kn) or ordonnance archers (Mtd-4Lb), 4 x francs "free" archers (3Bw), 1 x garrison voulgiers (4Bd) or crossbowmen (4Cb) or Gascon foot (Ps), 2 x culverins or similar (Art) or arriere-ban (7Hd).

Terrain Type: Arable. **Aggression:** 2. **Enemies:** IV/13b, IV/13c, IV/61, IV/62d, IV/68d, IV/83a. **Allies:** IV/61 or IV/79b.

IV/82b French Ordonnance Army 1481-1515 AD: 1 x General (3Kn), 3 x gendarmes (3Kn), 1 x ordonnance archers (Cv or Mtd-4Lb), 1 x French or Italian mounted crossbows or Albanian stradiots (LH), 2 x Gascon crossbowmen (Ps), 1 x French pikemen (7Hd), 2 x mercenary Swiss or German lansquenets (4Pk), 1 x wheeled field guns (Art).

Terrain Type: Arable. **Aggression:** 3. **Enemies:** IV/13c, IV/13d, IV/61, IV/68e, IV/68f, IV/83a, IV/85a, IV/85b. **Allies:** IV/61.

IV/83 "WARS OF THE ROSES" & TUDOR ENGLISH 1455 AD - 1515 AD

This list covers Yorkist and Lancastrian armies of the English civil wars brought about by the incompetence of the unworlly Henry VI (and popularly known as the "Wars of the Roses") from first St Albans until the battle of Bosworth in 1485, the largely-foreign rebel armies of Henry Tudor in 1485 and Lambert Simnel in 1487, and the Tudor royal armies of Henry VII and Henry VIII. Perkin Warbeck's rebellion of 1495-7 failed because his Imperialist and French backers were busy fighting each other in Italy. Lightly-armoured billmen stiffened by dismounted men-at-arms in full plate were now as important as archers. Armies initially formed with a centre and two wings, all dismounted; but later as a vanguard of the best troops, a main body with most of the rest, a rearward of the least reliable and sometimes an elite mounted reserve. Leaders initially dismounted to fight, but Richard III charged mounted at Bosworth. Henry Tudor wore full plate and rode a war horse, but tried to avoid personal combat and at Stoke stayed a mile to the rear, which makes Kn classification untenable. Of the 5,000 men in Tudor's army at Bosworth, probably 4,000 were French and at least 1,800 of these were from the recently closed pike training camp at Pont d'Arche. Treachery was an important factor. Edward IV unwisely forgave too many enemies. Henry forgave nothing. **References:** *Armies of the Middle Ages* Vol 1 I. Heath, *The Wars of the Roses* A. Goodman, *The Military Campaigns of the Wars of the Roses* P.A. Haigh, *The Battle of Towton* A.W. Boardman, *Teukesbury* S. Goodchild, *Richard III and the Bosworth Campaign* P. Hammond, *Lambert Simnel and the Battle of Stoke* M. Bennett, *An Alternative History of Britain: The Wars of the Roses* T. Venning, *Army Royal* C.G. Cruikshank, *Sun of York* R. Welch (novel), *The Traitors of Bosworth* R. Farrington (novel); and for a competent dispelling of myth detailing all sources *The Mystery of the Princes* A. Williamson.

IV/83a Wars of the Roses Armies 1455-1485 AD or Tudor Army 1486-1515 AD: 1 x General (4Bd or 3Kn), 1 x courours (Cv) or border staves (LH) or unreliable levies (7Hd), 4 x stiffened billmen (4Bd), 4 x archers (4Lb), 1 x guns (Art), 1 x Welsh (3Pk) or Irish (3Ax) or men-at-arms (4Bd/3Kn) or mercenary handgunners (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: IV/16, IV/82a, IV/82b, IV/83a, IV/83b, IV/83c. Allies [Percy in 1485 only]: IV/83a.

IV/83b Rebel Army of Henry Tudor 1485 AD: 1 x General if Henry mounted but avoiding contact (CP) or if Oxford on foot (4Bd), 1 x exiled noble men-at-arms (4Bd), 4 x French pikemen (4Pk) or French Voulgiers (4Bd), 3 x French voulgiers (4Bd) or stiffened English or Welsh billmen (4Bd), 2 x Welsh or English archers (4Lb), 1 x guns (Art) or mercenary crossbowmen or handgunners (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: IV/83a. Allies (compulsory in BBDBA): IV/83a [Stanleys].

IV/83c Rebel Army of Lambert Simnel 1487 AD: 1 x General (4Bd), 1 x billmen (4Bd), 2 x archers (4Lb), 2 x mercenary German and Swiss pikemen (4Bd), 1 x Irish galloglaich (4Bd), 3 x Irish kerns (3Ax), 1 x Irish archers (Ps), 1 x mercenary crossbows or handgunners (Ps).

Terrain Type: Arable. Aggression: 1. Enemies: IV/83a.

IV/84 MAPUCHE 1461 AD - 1552 AD

This covers the Mapuche of modern Chile from the Inca invasion of 1461 until the southern tribes (conventionally called Araucanians) began making use of captured Spanish armour, guns and horses. The Inca called them Promauca "wild enemies" and never managed to subdue them. The Spanish initially had no better luck and on one occasion had to break a pike block with a battery of 6 guns. Records of warfare between the southern tribes and the Spanish describe them as using dense blocks of men armed with pikes which by 1556 were 15 foot long, and also as having archers who also carried a short spear or a 2-handed wooden club like a 6 foot long hockey stick called a "lonco quillquill", who in early battles skirmished ahead, but later formed groups between the pike blocks. **References:** *Armies of the 16th Century* Vol 2 I. Heath, *Slingshot* 222 & 236.

IV/84a Araucanians: 1 x General as warriors (3/4Pk), 5 x warriors (3/4Pk), 6 x archers (3Bw or Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: IV/81, IV/84b.

IV/84b Other Mapuche: 1 x General (3Ax), 6 x warriors (3Ax), 4 x warriors (3Ax) or archers (3Bw), 1 x slingers (Ps).

Terrain Type: Hilly. Aggression: 0. Enemies: IV/81, IV/84a, IV/84b.

IV/85 BURGUNDIAN ORDONNANCE 1471 AD - 1506 AD

This list covers Burgundian armies after the reforms of Charles the Bold until the early death of his grandson Philip the Handsome, son of Maximilian I and Mary of Burgundy, after which Burgundy became a possession of the Hapsburgs; from 1521 of the Spanish branch. Like too many wargamers, Charles put much more effort into creating a perfect army with all the new fashionable super troops from all over Europe than in learning how to use it, so was run-over and finally killed in 3 epic battles 1476-7 by simple-minded but aggressive and fast moving Swiss armies. He had replaced the feudal knights that had declined badly during the peaceful, benevolent and economical reign of Philip the Good with French-style ordonnance gendarmes of several nations with rear rank coustilliers assumed to be included in their elements, supported by mounted archers who were mostly longbowmen. Foot archers were English-style longbowmen, who were sometimes fronted by ordonnance pikemen. Many more pikemen were supplied by Low Countries city militia and artillery was plentiful. **References:** *Armies of the Middle Ages* Vol 1 I. Heath, *The Burgundian Army of Charles the Bold* A. Pacou.

IV/85a Burgundian Ordonnance Army 1471-1477 AD: 1 x General (3Kn/4Bd), 3 x gendarmes (3Kn/4Bd), 3 x archers (Mid-4Lb/4Lb), 1 x crossbowmen (4Cb), 2 x pikemen (4Pk) or archers (8Lb), 1 x Italian mounted crossbows or genitors (LH) or handgunners (Ps) or organ or light guns or bombard (Art) or Italian elmetti (3Kn), 1 x heavy guns (Art).

Terrain Type: Arable. Aggression: 4. Enemies: IV/13c, IV/57c, IV/79b, IV/79c, IV/82a.

IV/85b Burgundian Ordonnance Army 1478-1506 AD: 1 x General (3Kn or 4Pk), 2 x gendarmes (3Kn), 1 x archers (Mid-4Lb or 4Lb), 1 x crossbowmen (4Cb), 5 x militia or landsknecht pikemen (4Pk), 1 x handgunners (Ps), 1 x wheeled guns or organ guns (Art).

Terrain Type: Arable. Aggression: 1. Enemies: IV/13c, IV/79d, IV/82b.

RELATED PUBLICATIONS

Since its publication, DBA has been joined by other rule sets using very similar mechanisms, such as for fantasy battles HOTT "Hordes of the Things" and for larger ancient armies DBMM "De Bellis Magistorum Militum". Others are planned and the full list may be seen on www.wargamesresearchgroup.net the website of WRG Ltd. www.wrg.me.uk is Sue's website and has links to related web sites.

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THE SOCIETY OF ANCIENTS is a long established worldwide society for all interested in ancient and medieval warfare. Its bi-monthly journal SLINGSHOT balances research of a very high standard with more specifically wargaming content. Contact: www.soa.org.uk

WARGAMES DEVELOPMENTS is an association of wargames innovators centring around an annual "try it on the dog" conference, not to be missed. Contact: www.wargamedevelopments.org

HISTORY OF WARGAMES PROJECT

John Curry's "History of Wargames Project" reprints an increasing number of normally inaccessible early wargames rules and books, including (with permission) several out-of-print WRG titles, including Tony Bath's seminal "Setting up a Wargames Campaign" and earlier versions of DBA. Contact: www.wargaming.co

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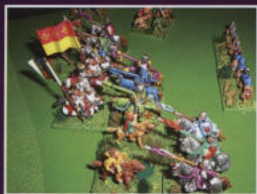
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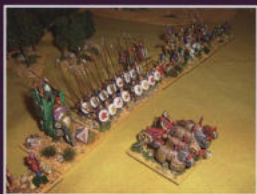
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DBA Version 3.0 updates the highly successful De Bellis Antiquitatis wargame rules for recreating ancient and medieval battles with miniature figures. The brainchild of well-known wargame designer Phil Barker and his wife Sue, the simple DBA rule system combines fast play with historical realism to produce a visually realistic and exciting contest.

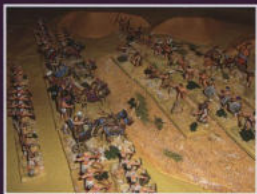


A typical DBA game is usually completed in under an hour using a minimum number of model figures, making the rules equally suitable for home, club and competition play. Although designed for two players, the rules can also be used for larger games with multiple players and for refighting historical battles.



Thoroughly revised with input from many players, competition organisers and umpires from all around the world, Version 3.0 further refines the game system. Together with the full rule set, this edition features an expanded set of army lists detailing hundreds of armies from 3000 BC to 1520 AD, supported by detailed notes to inspire and inform new and veteran DBA players alike.

www.wargamesresearchgroup.net



De Bellis Antiquitatis Version 3.0
New