

DE BELLIS ANTIQUITATIS



**SIMPLE FAST PLAY ANCIENT WARGAME AND CAMPAIGN RULES
WITH ARMY LISTS
VERSION 2.0**

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INTRODUCTION.

These rules derive from an experimental set for battles between Romans and Celts demonstrated by Phil Barker at the 1988 Society of Ancients conference. Its reception led to a more general two-page rule set called "De Bellis Societatis Antiquorum" produced for a very successful and popular competition at the 1989 conference. "De Bellis Antiquitatis", the commercial version of this, extended the combat system, added a few extra troop types, included fuller explanation of procedures and philosophy than proved possible in two pages and incorporated set-up information, a campaign system by Richard Bodley Scott and suggested compositions for all important armies between 3000 BC and 1485 AD. We hoped it would prove acceptable both as an introduction for new players and as a tonic for the jaded. In fact, it has proved the most influential wargames rule set of recent times and, despite the introduction of its more complex large army derivative "De Bellis Multitudinis" in 1993, still competes with DBM for pole position as the most popular competition rules in the USA. Indeed, some experts maintain that despite or because of its simplicity, its better exponents demonstrate greater tactical skill than those of DBM!

Our 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 work. It should not be tampered with.

The average player has memorised 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. 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 all battles end in outright victory, the organiser's work is minimised. Campaigns for up to six historically opposed armies can also be completed in a single day if desired.

This version 2.0 introduces new terrain rules improving both variety and realism, increases some troops mobility in particular circumstances to provide extra opportunities for generalship, and changes some wording to eliminate all possible ambiguity. As well as the basic battle rules, it includes campaign rules, 59 suggested mini campaigns, 310 army lists based on those of DBM, many with alternatives, and battle rule variations for larger armies.

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PLAYING EQUIPMENT AND REPRESENTATIONAL SCALES

CHOICE OF FIGURE AND MODEL SCALE

These rules can be used with any scale of figure or model. 15mm is the most usual scale and combines cheapness with convenience. 25mm is ideal for public demonstration games at conventions, where its easier visibility for spectators and the opportunities for more detailed painting are valuable. 10mm, 6mm and 2mm are also used by a few groups of players.

PLAYING AREA AND GROUND SCALE

The standard playing area, "the battlefield", is 600mm or 24" square for 15mm or smaller figures and 1,200mm or 48" square for 25mm. It is usually assembled from separate terrain features placed on a flat base, but a single integral terrain block, or grouped 300mm or 12" square blocks can be used instead.

The ground scale varies with the size of army represented, but for convenience 100 paces in real life is taken to be equivalent to 25mm or 1" measured in the game if using 15mm or smaller figures, or to 40mm if using 25mm.

Measure distances on the table with a strip of card or similar material 600 paces long marked at 100 pace intervals. Any distance can be measured whenever a player wishes.

ARMY SIZE AND TROOP REPRESENTATION

An army consists of 12 elements, one of which includes its only general. Unless sallying after standing siege in a campaign, otherwise having a built-up area or including more than one war wagon, it must also have an on-table camp which can be garrisoned either by one of the 12, or by an extra element of camp follower foot that cannot leave it, or left undefended.

An element consists of a thin rectangular base, usually of card, to which is fixed figures (or the equivalent 6mm or 2mm blocks) usually representing 6 to 8 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. They have the same size and number of figures as DBM (and the obsolete WRG 7th) elements. The number of men represented by an element varies according to the size of army simulated, but at a nominal ground scale would be 1,000-1,200 if it consists of 25mm/15mm figures mounted 4 to a base, 750-900 if 3, 5 or 6 to a base, 500-600 if 2 to a base. Elements consisting of a single model represent up to 25 elephants or 50 chariots, war wagons or artillery pieces.

Although each element 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.

TIME SCALE

Play is in alternate bounds, simulating approximately 15 minutes in real life.

DICE

All dicing uses a single ordinary 1 to 6 dice.

DESIGN PHILOSOPHY

The DBA command system is 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 differences in arms than did real commanders. Surviving ancient manuals lump all foot skirmishers as psiloi whether armed with javelins, sling or bow, in effect 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, all knights are rash, all warbands fierce but brittle, all skirmishers 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 as playing pieces, by using them historically, and by resisting the temptation to break formation for short-term advantage.

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 some troops with greatly disparate armour can be rationalised as the disparity being compensated by other factors, such as ferocity or skill, and are unobtrusive if the army fights only opponents of its own era.

Mounted troops can be: Elephants, Knights, Cavalry, Light Horse, Scythed Chariots or Camelry.

Foot troops can be: Spears, Pikes, Blades, Auxilia, Bows, Psiloi, Warband, Hordes, Artillery or War Wagons.

Camp followers and denizens of BUAs (Built-Up Areas) are not troops, but also count as foot.

A few army lists permit some of their mounted elements to be exchanged for a related foot element during the game as part of a tactical move. They cannot remount.

ELEPHANTS, of any breed or crew complement. These were used to charge solid 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.

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 cataphracts, Macedonian companions, Sarmatians, Gothic horse and Norman or medieval knights, and also those unscythed heavy chariots (HCh) with more than two horses or crew. 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, forcing them to retire to charge again. 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. They were rarely caught, but the charge would give a temporary respite. However, an over-rash pursuit risked being surrounded and shot down in detail. Knights were not well suited to dodging elephants or scythed chariots.

CAVALRY, representing the majority of ancient horsemen, primarily armed with javelins, bows or other missile weapons but combining these with sword or lance, (and also light chariots (LCh) with up to two crew). They usually started combat with close range shooting, more intense but less continuous than that of light horse, using rapid archery or circulating formations to concentrate a mass of missiles in space and time, 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 than these from light horse, elephants or scythed chariots.

LIGHT HORSE, including all light horsemen (2LH) or camel riders (2Cm) 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 outranged 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.

SCYTHED CHARIOTS, with four horses and a single crewman. These were intended to charge into enemy formations early in a battle to break up or destroy them. Since they 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, 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 a superior enemy's horses. They were vulnerable to archery and to troops closing on foot.

SPEARS, 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. An advantage could be gained against some opponents by increasing formation depth, provided the reduced frontage did not cause them to be overlapped. 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.

PIKES, 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 them even better than spears at holding off charging mounted troops, while in deep formations they could roll over most foot, but the long shafts also made formation keeping more difficult, so that gaps resulting from movement or the stress of combat could be exploited by blades or warband. Less effective shields made them more vulnerable than spears to bows and psiloi.

BLADES, 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 of any period, huscarls, galloglaich, dismounted knights, halberdiers, billmen or later samurai. They often had better armour or shields than other foot, weapons that could more readily defeat armour or added supplementary missile weapons, or were taught to close 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.

AUXILIA, representing foot able to fight hand-to-hand but emphasising agility and flexibility rather than cohesion; such as Hellenistic peltasts or thureophoroi, Thracians, Spanish scutarii, Early or Late Imperial Roman auxilia or Irish bonnachts. These were used to chase off or support psiloi, to take or hold difficult terrain, as a link between heavier foot and mounted troops, occasionally as a mobile reserve, and often as the main troop type of mountain peoples. Outclassed in open country by other close fighting foot and vulnerable to cavalry, they made up for this by increased mobility, flexibility and insensitivity to difficult terrain.

BOWS, representing foot who fought in formed bodies with bow, longbow or crossbow and relied on dense shooting, light spears, stakes, or sometimes (8Bw) front ranks of pavise or shield bearers, spearmen or pikemen for survival at close quarters instead of skirmishing or evasion; such as Egyptian archers, Achaemenid immortals, Indian foot, English longbowmen, or Chinese or Italian crossbowmen. They shot at longer range than psiloi, often in volleys at command. They were especially effective against mounted troops, but if these got into contact without being checked by the shooting, would often be swept away.

PSILOI, 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 dribble of missiles and running away 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 hold or dispute difficult terrain, to co-operate with cavalry, to support heavier foot by shooting from behind them, and to counter elephants or scythed chariots. Unsupported psiloi in the open were in great danger from cavalry.

WARBAND, including all wild irregular foot that relied more on a ferocious impetuous charge than on mutual cohesion, individual skills or missiles; such as Galatians, Gauls, early Germans, Dacians, Britons or Galwegians. Enemy foot that failed to withstand the first impact of their charge were swept away, but they lacked staying power and were sensitive to harassment by psiloi and to mounted attack.

HORDES, representing unskilled and unenthusiastic foot conscripted from the peasantry to bulk out numbers and perform the menial work of sieges and camps. They typically huddle in dense masses that are an ideal target for archery and artillery but whose inertia gives them staying power against other attack, but may also pursue rashly.

ARTILLERY, 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 immobile and vulnerable to close attack.

WAR WAGONS, including Hussite mantletted wagons for shooters, mobile towers, the standard-bearing carrioco with guards of the Khazars and Italian city states and other wagons that fought mainly by shooting and that could manoeuvre during battle, also generals carried in litters surrounded by non-shooting bodyguards (Lit), but not transport wagons utilised to laager camps. They had great resisting power to blunt an enemy attack, but could not themselves charge and were vulnerable to artillery.

BASING YOUR FIGURES AND MODELS

All figures must be combined into elements of several figures, or an elephant, chariot or artillery model, fixed to a thin rectangular base. Base size is not critical provided that all bases have the same frontage and both armies use the same conventions. However, the basing system of DBM, and to a large extent of its competitors and predecessors, is used by nearly all DBA players, enabling gamers who normally play with more complex sets to play DBA without duplicate troops, and beginners to upgrade from DBA to DBM if they later wish to. These are:

Base width: 60mm if using 25mm scale figures. 40mm if using figures of other scales.

Troop Type:	DBA lists code:	DBM lists code:	Base depth if figure scale is 25mm:	Base depth for other figure scales:	Figures or models per base:
ELEPHANTS	EI	EI (S, O, I, X)	80mm	40mm	1 model
KNIGHTS	3Kn	Kn (S, O, F)	40mm	30mm	3
	4Kn	Kn (X)	40mm	30mm	4
	6Kn	Kn (I) DB	80mm	60mm	6
	HCh	Kn (S, O)	80mm	40mm	1 model
CAVALRY	3Cv	Cv (S, O, I)	40mm	30mm	3
	6Cv	Cv (S, O, I) DB	80mm	60mm	6
	LCh	Cv (S, O, I)	80mm	40mm	1 model
LIGHT HORSE	2LH	LH (S, O, F, I)	40mm	30mm	2
	2Cm	LH (I)	40mm	30mm	2
SCYTHED CHARIOTS	SCh	Exp	80mm	40mm	1 model
CAMELRY	3Cm	Cm (S, O, I)	40mm	30mm	3
SPEARS	4Sp	Sp (S, O, I)	20mm	15mm	4
	3Sp	Ax (X)	30mm	20mm	3
PIKES	4Pk	Pk (S, O, I, X)	20mm	15mm	4
BLADES	4Bd	Bd (S, O, I)	20mm	15mm	4
	3Bd	Bd (F, X)	30mm	20mm	3
	6Bd	Bd (X)	60mm	40mm	6
	4Ax	Reg Ax (S, O, I)	30mm	20mm	4
AUXILIA	3Ax	Irr Ax (S, O, I)	30mm	20mm	3
BOWS	4Bw, Lb, Cb	Reg Bw (S, O, I)	30mm	20mm	4
	3Bw, Lb, Cb	Irr Bw (S, O, I)	30mm	20mm	3
	8Bw, Lb, Cb	Bw (X) DB	60mm	40mm	8
PSILOI	2Ps	Ps (S, O, I, X)	30mm	20mm	2
WARBAND	4Wb	Wb (S, O)	20mm	15mm	4
	3Wb	Wb (F)	30mm	20mm	3
	5Wb	Hd (S, F)	40mm	30mm	5-6
HORDES	7Hd	Hd (O)	40mm	30mm	7-8
ARTILLERY	Art	Art (S, O, F, I)	80mm	40mm	1 model
WAR WAGONS	WWg	WWg (S, O, I)	120mm	80mm	1 model
	Lit	WWg (I)	120mm	80mm	5-6
CAMP FOLLOWERS			30mm	20mm	2-4

Where more than one basing option exists, it is because a DBA troop type represents more than one DBM type or grade or because a compulsory DBM double base (DB) is a single element in DBA. DBA has no double bases.

If your army is of individual 10mm or 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 psiloi, loose for most knights, cavalry, auxilia, bowmen or warband, and close for cataphracts, spears, pikes and most blades.

Distribute figures representing regular troops evenly along the base in level rows, and distinguish irregulars by using figures of differing type, pose and/or colour scheme placed more randomly. Depict camp followers as armed civilians. BUA denizens are not represented by an element. The general's element must be recognisable by his figure, standard or conventional white charger and be of a type specified in the army list.

CREATING THE BATTLEFIELD

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.

The battlefield is usually produced by placing separate terrain features on a flat board or cloth representing flat good going such as pasture, open arable fields, steppe grassland or smooth desert. Alternatively, the player can provide permanent terrain boards or blocks incorporating equivalent features. The battlefield is now notionally bisected twice at right angles to its edge to produce 4 equal quarters.

The types of feature that can be used depend on those of the defending army's historical home topography. Topographical categories and their compulsory and optional terrain features are:

Topography:	Compulsory features:	Optional features:
ARABLE	BUA.	River, Steep Hills, Gentle Hills, Woods, Road, Waterway.
FOREST	Woods.	River, Marsh, Gentle Hills.
HILLY	Steep Hills.	River, Woods, BUA, Road.
STEPPE	Gentle Hills.	River, Rough, BUA.
DRY	Rough.	Dunes, Steep Hills, Oasis, BUA.
TROPICAL	Woods.	River, Marsh, Rough, BUA, Road.
LITTORAL	Waterway.	Either Steep Hills or Marsh, either Woods or Dunes, BUA, River.

The battlefield must include 1-2 compulsory and 2-3 optional features. It must also comply with all the following:

- (1) At least 3 of its quarters must include at least part of a terrain feature.
- (2) At least 2 of its quarters must include a Waterway, a River or some bad going.
- (3) It cannot include more than 1 each of Waterway, River, Oasis or BUA, or more than 2 each of any optional type of feature.

AREA TERRAIN FEATURES include Steep Hills, Gentle Hills, Woods, Marsh, Rough, Dunes, Oasis, and BUA. They should vary in size, but each must fit inside a rectangle, the length plus width of which totals no more than 9 element base widths. Unless the feature is Marsh or Rough, the rectangle's length must not exceed twice the width. Features cannot be less than 1 element base width across in any direction. BUA can be polygonal, otherwise all features must be roughly oval. There must be a gap of at least 1 element base width between area features.

Steep (but not Gentle) Hills, Woods, Marsh and Rough are bad going. Dunes and Oasis are bad going except to camels (3Cm and 2Cm). An element which is partly in bad going counts as entirely in bad going for movement and close combat. All hills slope up to a centre line crest and give a close combat advantage if all an element's front edge is upslope of all of its' opponent. A Hill's crest or the edge of a Wood or Oasis blocks shooting from or at an element base edge entirely beyond it.

A BUA (Built-Up Area) represents a large palisaded or walled village, a hill fort or a walled town or castle. It is neither good nor bad going, but gives a combat advantage to a 1-element garrison or, if there is none, to its denizens. It is compulsory in ARABLE because intensive agriculture needs markets and creates exploiters. All of a BUA must be within 900 paces of 1 battlefield edge and all of it at least 900 paces from any other battlefield edge.

LINEAR TERRAIN FEATURES include Waterways, Rivers and Roads. Each must run from one battlefield edge to that opposite, crossing two only of the battlefield's quarters.

A Waterway represents the sea or a great river such as the Nile. It is impassable, and you should not get your troops where they must recoil into it! It extends 200-600 paces inwards from an entire battlefield edge and half its length must extend no more than 400 paces in from that edge. It can be bordered by a beach or flood plain extending up to 200 paces further, which is good going.

A River cannot be more than an element base width across or longer than 1½ times the distance between its ends. It must not go within 600 paces of any battlefield edge except those on which it ends. It is neither good nor bad going, but troops crossing it are often penalised in other ways. Its nature is constant along its whole length for the whole game and will not become known until the first attempt by either player to cross it off-road. An element is defending the bank if on land with its front edge or both front corners touching it.

Most Roads were simply convenient tracks by which people were in the habit of moving. Few were paved, so they can be depicted as pale brown tracks less than an element width wide, troops moving astride rather than on them. A road must run from 1 battlefield edge to another battlefield edge, bending only to avoid terrain features and crossing rivers by ford or bridge. If a BUA is also used, 1 road must contact it or pass through it. A BUA across a road can be passed through by friendly troops even if occupied, the internal distance being added to the normal road move distance. They cannot end the move inside unless it is not occupied by troops.

CAMPS

The camp is the logistical element of the army. It is not used if the army has a BUA or more than 1 war wagon. It must fit into a rectangle the length plus width of which totals no more than 6 element base widths and is depicted by a simple earthwork and/or palisade, a wagon laager, a brush boma, a group of medieval tents with interlaced guy ropes, Mongol yurts with tethered ponies, kneeling camels or anything else appropriate to the army. It must include space for a troop or camp follower element and be in good going on a battlefield, waterway or beach edge.

CAMP AND BUA GARRISONS.

A camp can be occupied by 1 only of your troop elements, which can vacate it or be replaced by another such element, or by an extra camp follower element that cannot vacate it. If neither has been provided, it has been left undefended. An undefended camp, or a camp whose defenders have been destroyed or surrendered or have vacated it, can be occupied without combat by moving a troop element into it. If troops are moved into or recoil into a camp occupied by friendly camp followers, the latter are driven out to make room and are permanently removed from the game. Surrendered camp followers are also permanently removed.

A BUA can be garrisoned by 1 only troop element, positioned roughly at its centre but representing defenders manning its perimeter, or in the absence or loss of such a garrison, by denizens not represented by an element.

Any single element can occupy an undefended BUA or camp and then defend it, but only foot other than War Wagons can garrison a BUA and get the +4 tactical factor. A garrison or other occupying element can vacate its camp or BUA voluntarily by a tactical move, but does not pursue defeated attackers as an outcome move. Occupiers of a BUA near a river counts as defending the bank against enemy elements still partly in the river. BUA occupiers cannot count as uphill of attackers since a hill incorporated in a BUA is part of its defences.

Denizens of a BUA are initially loyal to the defender. If a troop garrison element vacates or is destroyed by shooting, the denizens continue to defend the BUA. If a troop garrison is destroyed in close combat, the denizens do not continue to defend the BUA. When a garrison or denizens are destroyed in close combat, the victorious enemy element occupies the BUA and remains sacking it until its player has a PIP score of 6. It can then garrison the BUA or vacate it. Prior to that, it does not get the garrison +4 tactical factor.

If the denizens of a BUA surrender to artillery shooting, it is not sacked and they change sides and will fight for the enemy, a puppet administration being assumed to have been put in power. An appropriate enemy element that occupies it immediately becomes a garrison.

If the player that originally owned an enemy-controlled BUA that surrendered or was captured during the battle or earlier in a campaign pays 6 PIPS at the start of any of his side's bounds while it is ungarrisoned by enemy, whether because vacated or because an enemy garrison has been destroyed by shooting, denizens not already destroyed in this battle will revolt against and overthrow the puppet administration, resume their original loyalty and defend the BUA.

If the denizens of a BUA are destroyed and it is left unoccupied by the enemy or vacated, either side can move into or through it without combat.

A camp or BUA that is or has been occupied by the enemy, either during the battle or earlier in a campaign, and which has not been reoccupied by its original side or revolted is said to be under enemy control.

Some of these provisions may seem inconsistent with the time scale of a battle, but are necessary for campaigns. It should be remembered that treachery by an internal faction was the most common reason for a city's fall. The problem can be avoided by providing a garrison. Players that do not have only themselves to blame.

FIGHTING THE BATTLE

DEPLOYMENT

Each side dices and adds the army's aggression factor to the score. The side with the lower total is the defender. It places terrain of those types allowed to the army. The high scorer is the invader. It now numbers 3 battlefield edges 1,2,3 and a preferred fourth edge, which cannot be that closest to a BUA, 4,5 and 6, then dices for which edge will be its base edge. The defender's base edge is that opposite. Both sides now place their camps if needed, the defender first. The defender now deploys its troop elements within 600 paces of its base edge, or of the shore line if a waterway edge, except that 1 element of foot may be used to garrison a BUA even if this is further forward. It cannot deploy any element within 300 paces of a battlefield side edge unless in a BUA or camp. The invader then does the same, except that it has no BUA. The defender can now exchange the positions of 0-2 pairs of its elements. If any side's home topography is LITTORAL, it can reserve 0-4 elements to be placed together anywhere on an existing waterway edge (at least 2 touching it) as a 1 PIP group move in its 1st bound.

SEQUENCE OF PLAY

The invader takes 1st bound, then the two sides alternate bounds. During each side's bound:

- (1) It dices for player initiative points (PIPs).
- (2) It uses these PIPs to make tactical moves.
- (3) Any Artillery, War Wagons or Bows elements of both sides that are eligible to do so, shoot once each in the order it 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 it decides and make or inflict outcome moves.

PLAYER INITIATIVE POINT DICING.

The side starts its bound by dicing. The score is the number of PIPs that can be used for tactical moves this bound. Any unused PIPs are lost, not kept for future bounds. Each single element or group tactical move uses up 1 PIP.

Except in the side's 1st bound, a move uses up an extra PIP for each of the 3 cases following that apply:

- (a) If it includes any Elephants, Hordes, War Wagons or Artillery, or dismounting.
- (b) If all the element or group to be moved starts more than 1,200 paces away from the general's element, or both starts 600 paces away and also either beyond the crest of a Hill, beyond a BUA or a camp, or in or beyond a Wood, Oasis or Dunes, or if the general has been lost.
- (c) If the general's element is in a BUA, camp, Wood, Oasis or Marsh.

TACTICAL MOVES

A tactical move is a voluntary move that uses up PIPs and happens before shooting and close combat. It can be by a single element or a group of elements. It must not be confused with outcome moves (recoils, flees and pursuits), which are compulsory, do not use up PIPs, usually follow distant shooting or close combat and are always by a single element. A legal tactical move cannot be taken back once the element has been placed.

A tactical move by a single element can be in any directions, even diagonal or oblique, can pass through any gap as wide as its leading edge, and can end facing any way.

Elements are a group if facing in the same direction with each in both edge and corner contact with another. To move as a group, each element must move parallel to, or follow, the first of them that moves and must move the same distance or wheel through the same angles. None can start in contact with an enemy element's front edge.

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 individual elements. Conversely, a group or single element can move to join other elements and make its next move as a group including these.

A group move by road, or across bad going or across any but a paltry river, must be in a single element wide column. A group move can include reducing frontage to form such a column or to pass through a gap between terrain features or troops of at least 1 element base width, following a road, or moving up to half an element base width sideways to line up with enemy within 1 element base width ahead. Otherwise a group can only move straight ahead or wheel by pivoting around a front corner. No other reductions or increases in frontage or changes in direction or facing can be made.

An element or group whose move includes dismounting moves the distance of and ends as the foot type. It cannot end in edge or corner contact with enemy.

RIVER CROSSING

Troops that enter a river must continue crossing at the same angle or line up in close combat with an enemy element that is defending the opposite bank. The first element to try to cross a river off-road during the game must dice. A score of 1 or 2 indicates that the river is paltry, too shallow and easy banked to aid defence, 3, 4 or 5 that it slows crossing and its bank aids defence, 6 that it slows crossing, its bank aids defence and each element crossing it off-road must dice separately and score 3 or more to cross successfully, 1 or 2 causing it to use up a PIP but remain on the near bank and preventing any further element attempting to cross the river anywhere this bound.

INTERPENETRATING FRIENDLY TROOPS

If making a tactical move, or fleeing after completing recoil, mounted troops can always pass through Psiloi and Psiloi pass through any friends, but in both cases only if the troops passed through are facing in exactly the same or exactly the opposite direction and there is room available beyond and enough move to occupy it.

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

CROSSING AN ELEMENT'S FRONT

No element can move across the front of an enemy element or enemy-controlled BUA or camp within 1 element base width distance and not at least partially separated from it by another element, except to contact or face 1 such element or contact that BUA or camp, or to retire directly to its own rear, or as an outcome move.

MOVING INTO CONTACT WITH ENEMY

Artillery or War Wagons cannot move into edge or corner contact with an enemy element or an enemy-controlled BUA or camp. Other troops can move into contact with enemy elements only if a single element or at least one element of a group ends in both front edge and front corner-to-front corner, or full front edge to rear edge, contact with an enemy element or overlaps enemy already in close combat. If there is a gap between enemy elements less than an element base width wide, some may be in edge but not corner-to-corner contact, so will not take part in combat this bound. Psiloi in good going or Light Horse which are contacted by an enemy group conform to it unless themselves part of a group. In all other cases, the moving side conforms. Elements attacking a BUA or camp must be in front edge contact with it.

BREAKING-OFF FROM CLOSE COMBAT

A single element tactical move can be used by an element to break-off from enemy in contact with its front, but only if it has no enemy front edge in contact with its flank or rear and will not change direction or meet either friends it cannot pass through or enemy. The element retires at least 200 paces directly to its rear and ends facing that broken-off from.

TACTICAL MOVE DISTANCES

Movement is not measured when an element pivots from overlapping an enemy element in close combat against friends to line up in close combat with that enemy element's flank, or moves on- or off-road between the centre of a BUA and immediately outside its edge. Otherwise the maximum distance between the starting point of any front base corner of a single element or any element of a group and that corner's final position is:

500 paces	If Light Horse moving only in good going or on a road.
400 paces	If Cavalry, Camelry or Scythed Chariots moving only in good going, or if any troops except Light Horse and moving only on a road.
300 paces	If Knights or Elephants moving only in good going, or if Auxilia or Psiloi off-road.
200 paces	If other foot moving off-road, or if mounted troops moving off-road in bad going.
100 paces	While the front edge of a single element or of a column is in a non-paltry river.

Artillery or War Wagons cannot move off-road in bad going.

SECOND OR SUBSEQUENT TACTICAL MOVES DURING THE SAME BOUND

Elements that have already moved this bound, either as part of a group or alone, can make a 2nd or subsequent move, either as part of a group or alone, but only if they did not retire to their own rear or dismount and are:

- Light Horse that do not start or go within an element base width of the enemy.
- Psiloi in their side's 1st bound.
- Scythed Chariots or Warband, if their 2nd move will end in close combat with an enemy front, flank or rear edge, or acting as an overlap or rear support.
- Troops whose leading or only element is in column moving along a road and will not contact enemy.

DISTANT SHOOTING

Distant shooting is limited to troops intended to shoot at long range, namely Artillery up to 500 paces and Bows and War-Wagons (except Lit) up to 200 paces. These can shoot at any 1 enemy element edge, which is within 360 degrees if the shooters are garrisoning a BUA, or within an element base width of directly forward if not, but not if either shooters or target are in close combat or currently providing rear support or counting as an overlap, or if another element is even partly between the shooting edge and the target edge. Elements of different sides that can shoot at each other must do so. Artillery shoot only in their own side's bound or if they are themselves shot at by the target and then only if they did not move. A 2nd or 3rd element that shoots at the same target element, BUA or camp aids the shooting of the nearest instead of being treated separately. Any more elements shooting at that target this bound have no effect. Shooting at or from a BUA or camp is treated as at or from its edge.

CLOSE COMBAT

In addition to hand-to-hand fighting, close combat includes all shooting by mounted troops or foot skirmishers or during a charge or melee. It occurs when elements move into, or remain in, both front edge and front corner-to-corner contact with an enemy element or front edge contact with a camp or BUA. When an element is contacted to front and to flank or rear, its opponents use only 1 dice and the combat factor of the element in front. Elements not in mutual front edge contact with an enemy element but contacted to flank or rear by an enemy front edge turn to face the first to so contact at the end of the movement phase, the contactor making room. If an element so contacts the flanks of 2 enemy elements, both these turn, the 2nd moving to behind the 1st. If a 3rd element is contacted, it recoils. An element not in close combat to its front but in mutual right-to-right or left-to-left corner contact with an enemy element overlaps it. Any enemies in mutual flank edge contact overlap each other whether in close combat or not. An element can overlap 2 enemy elements on opposite flanks, or elements exposed by frontal opponents having recoiled, fled or been destroyed that bound. Only 1 overlap or flank contact can be counted on each flank. A BUA can be attacked by up to 3 enemy elements fighting separately, combats ceasing if its defenders are destroyed. A camp can be attacked by only 1 enemy element. A BUA or camp cannot be overlapped or overlap.

RESOLVING SHOOTING OR CLOSE COMBAT

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

	If against foot:	If against mounted:
Blades.	+5	+3
Elephants.	+4	+5
Spears, Scythed Chariots, War-Wagons or Artillery.	+4	+4
Knights or Pikes.	+3	+4
Cavalry.	+3	+3
Auxilia, Warband or Hordes.	+3	+2
Bows or Camelry.	+2	+4
Light Horse or Psiloi	+2	+2
Camp followers or BUA denizens.	+1	+1

Rear support factors:

Pikes add +3 and Warband +1 when in frontal close combat against any enemy except Cavalry, Light Horse, Scythed Chariots, Bows or Psiloi, and Spears add +1 if in frontal close combat against Knights or Spears, if in either case they are supported by a friendly element of the same type lined up directly behind and facing the same direction, and neither supported nor supporting element is in bad going or attacking a BUA.

Spears, Blades or Auxilia add +1 if fighting mounted troops while supported by a single friendly element of Psiloi lined up in contact directly behind them or directly behind a friendly element of the same type in side edge and front corner-to- front corner contact with them.

Tactical Factors:

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

- +4 If foot garrisoning a BUA or its denizens; and either in close combat or being shot at.
- +2 If camp followers or other foot occupying their own camp; and either in close combat or being 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-corner contact with flank or rear, or for each 2nd or 3rd enemy element aiding an opposing element's shooting.
- 2 If any but Auxilia, Bows or Psiloi and in close combat in, or mounted in close combat with enemy in, bad going on or off-road, or if mounted attacking a BUA unless elephants.

COMBAT OUTCOME

An element whose total is less than that of its opponent must 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. Elements shooting without being shot back at disregard an unfavourable outcome. An element that added +1 (but not +3) in rear support of a destroyed element directly to its front is also destroyed. Elements in combat with an enemy flank or rear recoil if a friendly element in combat with the front recoils, flees or is destroyed.

If its total is equal to that of its opponent:

Scythed Chariots. Destroyed.

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

Elephants. Destroyed by Psiloi, Auxilia, Light Horse or Artillery shooting. If not, recoil.

Scythed Chariots. Destroyed.

Knights. Destroyed by Elephants, Scythed Chariots or Light Horse, or by Bows whose front edge they have moved into contact with this bound, or if in bad going. If not, recoil.

Cavalry or Camelry. 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.

Pikes or Spears. Destroyed by Elephants, Knights, Light Horse or Scythed Chariots if in good going or by Warband not garrisoning a BUA. If not, recoil.

Blades. Destroyed by Knights or Scythed Chariots if in good going or by Warband not garrisoning a BUA. 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 in going these count as good. If not, flee.

Warband. Destroyed by Elephants, Knights or Scythed Chariots if in good going. If not, recoil.

Hordes. Destroyed if garrisoning a BUA, or by Elephants, Knights or Scythed Chariots if in good going, or by Warband not garrisoning a BUA, or if shot at. If not, no effect.

Artillery. Destroyed by any if in close combat. If not, recoil.

War Wagons. Destroyed by Artillery shooting or by Elephants. If not, no effect.

Camp followers or BUA denizens. If shot at by artillery, surrender. If in close combat, destroyed. If not, no effect.

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

Cavalry. Flee from Pikes, Spears or Hordes if in good going, or Artillery in close combat. If not, destroyed.

Light Horse. Destroyed by any mounted, Artillery shooting, Bows or Psiloi, or if in bad going. If not, flee.

Psiloi. Destroyed by Knights, Cavalry, Camelry or Light Horse if in going these count as good or by Bows, Auxilia or Psiloi. If not, flee.

All others. Recoil from Artillery in close combat. If not, destroyed.

A recoiling element moves its own base depth to its rear without turning. If it is Elephants, any friends it meets are destroyed. If not, and it meets friends facing in the same direction, it interpenetrates if allowed, otherwise pushes back any except Elephants or War Wagons. A recoiling element starting with enemy in any front edge contact with its flank or rear, or that recoils from shooting entirely on its rear edge, or that meets enemy, impassable terrain, friends that it could not pass through or push back, or a troop-garrisoned friendly BUA or camp, or that is in a BUA or camp, is destroyed. Enemy contacted on their rear edge by the recoiling element's rear edge or rear corner, or contacted on a side edge by its rear corner only are also destroyed.

A fleeing element recoils its own base depth, then turns 180 degrees and moves an additional full tactical move distance towards its original rear. It changes direction only by the minimum needed to avoid enemy, friends it cannot pass through, a garrisoned BUA or camp, impassable terrain or, unless Psiloi or Light Horse, bad going except Marsh or Rough. It halts if it cannot move at all. It cannot avoid a river, which destroys it unless paltry.

An element of Knights, Scythed Chariots, Warband or Hordes whose close combat opponents recoil, break-off, flee or are destroyed and any element providing it with rear support immediately pursues its own base depth unless currently garrisoning a camp or BUA or it would cross a battlefield edge or enter bad going other than Marsh or Rough. An element that destroys the defenders of a BUA or camp in close combat immediately occupies this.

WINNING AND LOSING

The first side that at the end of any bound has lost either its general or 4 elements not including Scythed Chariots, camp followers or denizens and has also lost more such elements than the enemy, loses the battle. A camp or BUA occupied by enemy during the battle and still under enemy control counts as 2 extra elements lost. Elements that recoil, flee or otherwise move across a battlefield edge count as lost, but reappear in the next turn of a campaign.

COMBAT EXAMPLES.

CLOSE COMBAT:

A line of four elements of Roman legionaries (classed as BLADES) are moved into contact with four elements two deep of Macedonian pike men (classed as PIKES). Each element must be lined up exactly with its opponent with no part-element overlaps. BLADES (3) includes the Roman general.

	PIKES (3)	PIKES (4)	
	PIKES (1)	PIKES (2)	
BLADES (1)	BLADES (2)	BLADES (3)	BLADES (4)

Since it is the Roman player's turn, he can choose which of his two elements in contact fight first. He decides on BLADES (3). BLADES (1) and (4) will not fight, but can count as overlaps. Both sides now dice. BLADES (3) scores 4. It adds its combat factor against foot of +5 and a further +1 for the general. PIKES (2) scores 4. It adds its combat factor against foot of +3 and a further +3 because it is supported to its rear by pikes. However, it must deduct -1 for being overlapped by BLADES (4). PIKES (2) has scored less than BLADES (3), but more than half as many, so immediately recoils its own base depth, pushing back PIKES (4).

		PIKES (4)	
	PIKES (3)	PIKES (2)	
	PIKES (1)		
BLADES (1)	BLADES (2)	BLADES (3)	BLADES (4)

BLADES (2) and PIKES (1) now dice.

BLADES (2) scores 6 and adds its combat factor of +5.

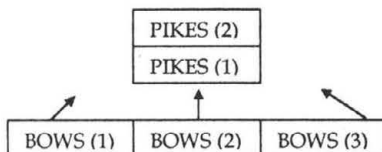
PIKES (1) scores 1, adds its combat factor of +3 and a further +3 for support by pikes, but must deduct -2, since it is now overlapped by both BLADES (1) and BLADES (3).

PIKES (1)'s score is half or less that of its opponent, so it is destroyed. PIKES (3) is not destroyed.

It is now the Macedonian player's bound, and he can move PIKES (2), (3) and (4) back into contact if he wishes to, and if he does not first use up his move dice score with other moves.

DISTANT SHOOTING:

Two elements of English longbowmen (classed as BOWS) shoot at a Scots schiltron (classed as PIKES).



BOWS (2) shoots at PIKES (1), assisted by BOWS (1) and (3). Both dice.

BOWS (2) scores 2 and adds +2 for its combat factor against foot.

PIKES (1) scores 5 and adds +3 for its combat factor. It receives no support from PIKES (2), and must deduct -1 for each of the two elements supporting its opponent.

BOWS (2) has scored less than its opponent, so does not destroy it or force it to recoil, but escapes penalty itself because it is not shot back at.

Had the dice scores been reversed, PIKES (1) would have been destroyed. PIKES (2) would not be destroyed with it, since it does not count as supporting against shooting.

CAMPAIGN RULES

INTRODUCTION

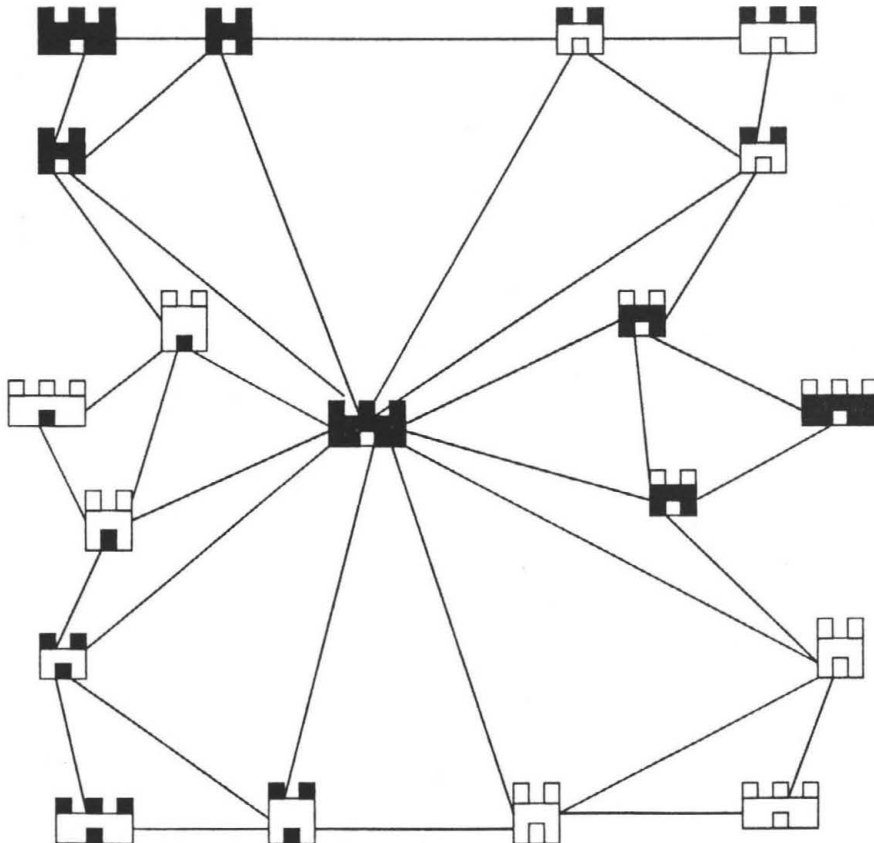
This section contains procedures for a simple mini-campaign for 3 to 6 players, capable if desired of being played to a conclusion in one day, and using the battle rules of the previous section. The battle rules can equally be used to decide battles for larger military/political campaigns, or for Richard Bodley Scott's computer moderated campaign system.

MAPS

A stylised circular map for a six-player campaign is shown below. Movement is by marked routes between nodal points representing cities or provinces, ownership of which can conveniently be shown by coloured counters. The circular form can be substituted by others that correspond better to the historical geography and/or modified by eliminating some routes or specifying them as sea movement, but it must not be possible to attack a player's capital without first attacking another of his cities.

"The Penguin Atlas of Ancient History" and "The Penguin Atlas of Medieval History" are excellent easily available cheap sources for geographical relationships.

STYLISTED MAP FOR SIX-PLAYER MINI-CAMPAIGN



RESOURCES

Each player starts with three cities or provinces, one of which is his capital, and a field army of 12 troop elements corresponding to his nation's army list, plus a camp follower element if desired. One player also controls the entire city in addition to his normal three.

All elements that are lost through battle or siege are placed in a reserve, and all elements that are recruited are taken from that reserve, so the field army can never exceed 12 troop elements. Any element of the field army can be nominated at the start of a battle to include the general.

If a player does not take part in a battle or siege during a campaign year, the maximum size of his field army next year is reduced to 10 troop elements, it being assumed that the profound peace has led him to economise and indulgently neglect his defences.

THE CAMPAIGN YEAR

There are three seasonal campaigning rounds per year - SPRING, SUMMER and AUTUMN. Each player dices at the beginning of each year. The highest scorer plays first. Play then proceeds clock-wise to the left. Each player has a turn in each round.

Before the spring round, all players simultaneously write down the location of their field army. Each must locate his entire field army in any one city currently under his control. Its location is revealed and marked at the start of his first turn of the year, or if his territory is invaded or he sends a contingent to assist another player. Declarations of war are also written down and read out together.

At the end of the autumn round, the armies retire into winter quarters until the following spring, dicing for each sea movement stage necessary to reach their own or an ally's territory if no land route is available. Each player then transfers 1 troop element from his reserve to his field army for each city now under his control, other than his capital, and 2 for his capital, this simulating new recruitment.

MOVEMENT

Each time troops move, they can travel a maximum of 2 movement stages along the designated routes. They cannot pass a city they do not control unless granted passage by the controlling player.

A field army that moves by a sea route, other than in summer, must dice for each sea movement stage. A score of 1 indicates that it has been caught in a storm and must dice again for the number of troop elements the player must transfer to his reserve as lost to shipwreck. The first element lost must be of mounted troops if any are present. An advancing player then decides whether to continue to his destination, to halt, or to return to his starting point without dicing again.

INVASION

On his turn, a player who has not yet sent a contingent that season to help an ally may attack a city of a player with whom he is at war. Before deciding to do so, he may solicit allies to assist him. If he then decides to proceed with his attack, the defender may also solicit allies.

The defender can then choose either: (a) to engage the attacker in battle, moving up his field army if it is not already present; or (b) to stand a siege, moving up his field army or retreating it away if he so wishes. He can do either of these even if he has earlier that season himself attacked or sent an allied contingent, surviving elements of such contingents having by then returned.

The field armies of players allied or tributary to the attacker or defender are not moved to their aid, but send allied contingents. The only circumstance in which two allied field armies can be at the same location is if one is standing siege and the other is attempting to relieve it, in which case the besieged army provides only a contingent for the battle.

Instead of moving to invade, a player may use his turn to move his field army to another of his or an ally's cities in readiness for further movement in future turns.

SUPPLY

A player's field army is in supply if it is either at, or next to, a city controlled either by himself or by another player who permits him to be supplied and which is not under siege. A field army that ends its move or the autumn round out of supply dices for the number of troop elements lost to hunger, disease and desertion before entering battle or undertaking a siege, or during its return to winter quarters. A field army that starts its turn out of supply can retreat into supply even if it has previously provided an allied contingent.

GIVING BATTLE

If an invaded player decides to give battle, this is fought between the opposing players' field armies, using the standard battle rules. Terrain is chosen by the current owner of the city, but from those types permitted to the original owner at the start of the campaign. If a BUA is used, it represents the city.

PARTICIPATION BY ALLIED CONTINGENTS

A player whose field army has not already made an attack that season can send an allied contingent to assist an invader or defender, provided it can move from his own field army's location to the foreign city under attack and is granted free passage through any intermediate city by the controlling player. If two contingents are sent in a single season, they must be of different elements.

An allied contingent consists of up to 3 elements from the player's own field army, one of which must be nominated to include a general.

Allied contingent(s) move in sequence after the second of the main protagonists. They use their own separate dice to determine how many elements/groups they can move each turn. They do not arrive until they score 6, then arrive in a single 1-element frontage column at that battlefield edge best representing their map route to the battlefield relative to the main protagonists, and measure their first move from that edge. They may sometimes have a choice of edge. They do not have a camp on the battlefield. They cannot leave the battlefield intentionally or change sides and attack their supposed ally, but the eagerness with which they assist him is a matter for their own conscience!

An element can affect combat in an allied player's bound only by providing tactical factors. Artillery shoot only in the contingent's own bound, or if shot at by enemy.

An allied contingent:

- (a) Cannot be sent to aid a player with whom its nation, overlord or tributary is at war.
- (b) Cannot be sent to aid an invasion of the territory of a player with whom its nation or overlord is not at war.
- (c) Can be sent to aid defence against an invader with whom its nation is not at war.

RESULTS OF A BATTLE

The battle is fought until ended as specified in the battle rules. The losses of allied players are added together when determining whether their side is defeated. Loss of an allied contingent's general requires its remaining elements to attempt to march off and leave the table, starting with its next bound.

Elements destroyed by combat are transferred from the players' field armies to their reserves. Elements that leave the table return to their field army after the battle, as do camp followers.

Loss of a main protagonist's general and/or camp is penalised by the transfer of 2 extra troop elements from his field army to his reserve at the end of the battle in addition to those destroyed during the battle. This simulates desertion by demoralised troops.

If the player controlling the city fought over is defeated, the city is captured by the other main protagonist without a siege. A defeated field army or contingent must retreat to another of its own cities. If it cannot, it is destroyed.

After a battle, each player gains 1 prestige point for each enemy troop element his troops have destroyed or forced to recoil or flee across a battlefield edge in excess of those of his own troop elements that have been destroyed or forced to so recoil or flee. A player who was the first to capture the enemy camp or occupy an enemy-controlled BUA or whose troops destroyed the main enemy protagonist's general gains an additional 2 prestige points for each such instance.

STANDING A SIEGE

If the defender elects not to fight a battle, the city is besieged. If he has a field army at the city, this must either retreat to another of his cities or stand siege. The attacker now dices. He must score 6 to capture a city in which the enemy field army is standing siege, or 5 or 6 if the enemy field army is not present. If a captured city contains the defender's field army, the whole army is lost. If a besieger fails to capture the city, he loses 1 element of his choice, which he transfers from his field army to his reserve. His allies suffer no losses. The siege continues next season unless winter intervenes or the besieging army moves or is defeated in battle. The score needed for capture reduces by 1 each season the siege lasts.

A field army that is being besieged can sally out in its next turn to give battle, but not to retreat without battle.

An allied contingent assisting a besieger is automatically recalled if its own nation is invaded.

TRIBUTARY RULERS

Any player can ask at any time to become a tributary of another, who, if he agrees, becomes his overlord. A player whose capital is taken automatically becomes a tributary of the conqueror, retaining control of his capital and any other cities yet remaining to him. If a tributary's capital is subsequently captured by a different player, he becomes a tributary of that player instead. A tributary cannot declare war without the consent of his overlord and must provide an allied contingent if ordered to do so by his overlord. Neither can attack the other while the relationship lasts. A player who himself is or becomes tributary can retain or acquire tributaries of his own, and can order these to provide a contingent to support his own field army or provide a substitute contingent for his own overlord. A player cannot have 2 overlords. A player whose overlord loses his own capital or loses two consecutive battles can renounce tributary status and regain his independence.

CONQUEST

When the time limit has been reached, each player counts as his score the prestige points he has gained in battles, 3 points for each city now under his personal control, and 2 points for each of his direct tributaries' cities.

COMPUTER MODERATED CAMPAIGNS

PBM UMPIRE is a computerised system (IBM PC compatibles) for moderating and automatically generating player reports for more complex campaigns with up to 30 players. A trial version, including a fully functional 20 player Medieval scenario, is available free by email downloaded from <http://www.byzant.demon.co.uk>. On registration, which costs £25.00, the scenario editor will be supplied. This enables scenarios to be created or modified, and permits battles to be fought either automatically or using DBA or other table-top rules. Orders or enquiries to: Richard@byzant.demon.co.uk

SUGGESTED SIX-PLAYER HISTORICAL CAMPAIGNS

The armies are listed here in sequence, usually clockwise, with that holding the central city in bold type. Where the last army is followed by a //, this means that there is no single link connecting it directly with the first army other than at the central city if either possesses this.

Campaign:	Participating armies:
Sumer 3000BC:	Martu I/6a, Kish I/1a, Isin I/1a, Larsa I/1a, Lagash I/1a , Elam I/5a//.
Fall of Akkad 2193BC:	Amurru I/6a, Akkad I/11a , Gutu I/4b, Lullubi I/4b, Elam I/5b, Sumer I/11a.
Theban Revolt 2046BC:	Elam I/5c, Ur I/11b, Amurru I/6a, Herakleopolis I/2a , Thebes I/2a, Nubia I/3//.
Hyksos Invasion 1645BC:	Hatti I/16, Syria I/15, Hyksos I/17a, Lower Egypt I/2a , Upper Egypt I/2a, Nubia I/3//.
Ahmose' Rebellion 1543BC:	Nubians I/3, Upper Egypt I/22a, Hyksos I/17b , Syria I/20b, Hatti I/16, Mitanni I/19//.
Hittite Empire 1274BC:	Mycenaeans I/18, Gargans I/4d, Hatti I/24b , Mitanni I/19, Assyria I/25a, Egypt I/22a//.
Sea Peoples 1180BC:	Sea People I/28, Hatti I/24b , Gargans I/4d, Ugarit I/20a Egypt I/22b, Libyans I/7b.
Neo-Assyrian 745BC:	Egypt I/38, Hebrews I/34c, Phoenicia I/35b, Assyria I/45 , Babylonia I/44a, Elam I/42//.
Hoplite Dawn 669BC:	Argos I/52a, Sparta I/30c, Thrace I/48, Lydia I/50, Kimmerians I/43a, Tyre I/35c .
Babylonian Empire 560BC:	Egypt I/53, Ionians I/52g, Lydia I/50, Babylonia I/44b , Medes I/40c, Skythians I/43a//.
Persian Empire 547BC:	Skythians I/43a, Persia I/60a , Babylonia I/44b, Egypt I/53, Ionians I/52g, Lydia I/50.
Greeks in Peril 480BC:	Persia I/60a , Thebes I/52d, Athens I/52f, Sparta I/52b, Sicily I/52i, Carthage I/61a//.
Rise of Rome 358BC:	Etruscans I/57b, Celts II/11, Rome II/10 , Hill Tribes I/36, Lucanians II/8a, Italiot Greeks II/5g.
Alexander the Great 334BC:	Greeks II/5b, Macedon II/12, Thrace I/48, Persia II/7 , Skythians I/43a, Indians II/3//.
Diadochi 320BC:	Antipatros II/18a, Lysimachos II/17, Antigonos II/16a , Eumenes II/16d, Seleukos II/19a, Ptolemaios II/20a.
Chinese Warring States 300BC:	Northern Barbarians I/14b, Ch'in II/4a, Wei II/4e , Chao II/4c, Ch'i II/4e, Ch'u II/4d.
Pyrrhus in Italy 280BC:	Rome II/10, Lucanians II/8a, Epiros II/27b, Apulia II/8c , Syracuse II/9, Carthage I/61b.
Galatian Invasion 279BC:	Athens II/5b, Aitolia II/5e , Thebes II/5c, Galatians II/30a, Macedon II/18d, Seleucids II/19b.
Bactrian Empire 250BC:	Parthians II/37, Seleucids II/19b, Bactria II/36a , Hsiung-nu II/38a, Saka I/43b, India II/3.

1st Punic War 264BC:	Gauls II/11, Rome II/33, Syracuse II/9, Siciliot II/5h, Carthage II/32 , Libya I/7c//.
2nd Punic War 218BC:	Carthage II/32, Spain II/39a, Gauls II/11, Rome II/33 , Italy II/8a, Syracuse II/9.
Rome Expands 190BC:	Rome II/33, Macedonia II/35, Greece II/31j , Pergamum II/34, Seleucids II/19c, Egypt II/20b//.
Parthian Empire 170BC:	Seleucids II/19c, Parthia II/37 , Saka I/43b, Bactria II/36a, Graeco-Indian II/36b, India II/3.
Optimates or Populares 87BC:	Spain II/39a, Gaul II/11, Rome (Populares) II/49 , Greece (Optimates) II/49, Pontus II/48, Armenia II/28b//.
Caesar or Pompey 49BC:	Spain II/39a, Rome (Caesar) II/49, Greece (Pompey) II/49 , Egypt II/20d, Nabataea II/22a, Parthia II/37//.
Year of Four Emperors 69AD:	Batavi II/47c, Gaul (Vitellius) II/56, Rome (Otho) II/56 , Illyricum II/56, Syria (Vespasian) II/56, Jewish Revolt II/59//.
Trajan's Wars 101AD:	Caledones II/60, Rome II/56 , Germans II/47g, Dacia II/52, Sarmatians II/26, Parthia II/37//.
Three Kingdoms 220AD:	Wei II/63 , Shu II/63, Vietnamese I/49c, Kushan II/46b, Wu II/63, Hsiung-nu II/38a.
Aurelianic Revival 271AD:	Germans II/72d, Gallic Empire II/64a, Rome (Aurelian) II/64a , Goths II/65b, Palmyra II/74b, Sassanid Persia II/69//.
Carausius' Britain 296AD:	Scots II/54a, Picts II/68a, Britain (Carausius) II/64a , Saxons II/73, Franks II/72d, Roman Gaul (Constantius) II/64a//.
Divided Empire 394AD:	Franks II/72d, Western Roman Empire II/78a, Goths in Illyricum II/65b, Huns II/80d , Eastern Roman Empire II/78b, Sassanid Persia II/69//.
Fall Of Rome 451AD:	Vandals II/84, Rome II/83a , Visigoths II/82a, Franks II/72d, Huns II/80a, Eastern Empire II/83b.
Justinian Revival 533AD:	Vandals II/84, Franks III/5a, Ostrogoths III/3, Byzantine Empire III/4a , Huns II/80d, Sassanid Persia II/69//.
Rise of Islam 633AD:	Lombards III/21a, Byzantine Empire III/17 , Slavs III/1c, Khazars III/16, Sassanid Persia II/69, Arabs III/25a//.
Charlemagne 770AD:	Avars III/13a, Saxons II/73, Franks III/28 , Lombards III/21a, Andalusia III/34b, Christian Spanish III/35a//.
Troubled T'ang 800AD:	Khitans II/61d, Uighurs III/11b, Korea II/77b, T'ang China III/39 , Vietnam I/49d, Tibet III/15.
Byzantine Resurgence 963AD:	Franks III/52, Bulgars III/14c, Russ III/48, Byzantine Empire III/64 , Hamdanids III/53, Iqshidid Egypt III/49//.
Rise of the Seljuks 1037AD:	Serbia III/26a, Byzantine Empire III/64, Buyids III/57c, Seljuks III/73b , Ghaznavids III/63b, Fatimids III/65//.
Norman Conquest 1066AD:	Welsh III/19a, England III/71 , Scots III/45b, Vikings III/40b, Normans III/51, French III/51//.

First Crusade 1097AD:	Crusaders IV/7, Byzantine Empire IV/1a, Seljuks III/73b, Armenians IV/2, Syria IV/6, Fatimid Egypt III/65.
Saladin 1174AD:	Byzantine Empire IV/1b, Seljuks III/73b, Zangid Syria IV/20 , Kingdom of Jerusalem IV/17, Ayyubid Egypt IV/20, Abbasid Caliphate IV/6/ /.
Franks in Greece 1223AD:	Empire of Nikaia IV/31, Latin Empire IV/32 , Bulgaria IV/25, Despotate of Epiros IV/33, Frankish Greece IV/32, Venetians III/72b/ /.
Northern Crusade 1226AD:	Poland III/62b, Teutonic Order IV/30, Prussians IV/28, Lithuanians IV/18, Estonians IV/27, Denmark III/40d .
Mongol Terror 1236AD:	Hungary III/67b, Poland III/62b, Russia III/78, Mongolia IV/35 , China III/61, Khwarizm IV/24/ /.
Feudal Britain 1275AD:	England IV/23 , Welsh III/19c, Irish Pale IV/21a, Wild Irish III/46, Isles III/77, Scotland IV/16.
Kublai Khan 1279AD:	Sung China III/61 , Yuan Mongol IV/48, Korea III/56, Japan III/54, Vietnam III/59, Burma III/9b.
Chola Empire 1279AD:	Burma III/9b, Hindu India III/10c, Pandayas II/42b, Chola II/42b , Ceylon II/42d Sumatra IV/37a. (Can be linked at Burma with that above as 11 nation campaign.)
100 Years War 1369AD:	Scotland IV/16, England IV/62, France IV/64b , Low Countries IV/57b, Burgundy IV/76, Spain IV/68a/ /.
Catalan Twilight 1388AD:	Morea IV/51b, Latin Empire IV/61, Duchy of Athens IV/60, Serbia IV/22, Bulgaria IV/25, Ottoman Sultanate IV/55b .
India 1398AD:	Timur IV/75, Sultanate of Delhi IV/36b, Malwa III/10c , Burma III/9b, Vijayanagar III/10c, Bahmani Sultanate IV/36b/ /.
Tamerlane 1400AD:	Hungary IV/43c, Lithuania IV/18, Golden Horde IV/47, Timur IV/75, Ottoman Sultanate IV/55b , Mamluk Egypt IV/45/ /.
Fall of Khmer 1400AD:	Burma III/9b, Vietnam III/59, Champa III/23, Khmer III/23, Siam IV/40 , Java IV/37c/ /.
Christendom in Peril 1420AD:	Holy Roman Empire IV/13b, Venice IV/61, Hungary IV/43c, Poland IV/66, Golden Horde IV/77, Ottoman Sultanate IV/55b/ / .
Italy 1422AD:	Holy Roman Empire IV/13b, Swiss IV/79, Milan IV/61 , Venice IV/61, Naples IV/61, Aragon IV/5c/ /.
Louis the Spider 1471AD:	Lancaster IV/83a, York IV/83a, France IV/82b , Burgundy IV/84, Swiss IV/79, Holy Roman Empire IV/13d/ /.
Sengoku-jidai 1477AD:	China IV/73, Korea IV/78, Imagawa IV/59b , Hojo IV/59b, Takeda IV/59b, Uesugi IV/59b/ /.
Imperial Ottoman 1478AD:	Venice IV/61, Hungary IV/43c, Poland IV/66, Ottoman Sultanate IV/55b , White Sheep Turks IV/77, Mamluk Egypt IV/45.
Aztec Empire 1492AD:	Dog Peoples III/41, Tarascans IV/19, Aztecs IV/63 , Tlaxcala IV/19, Mixtecs & Zapotecs IV/53, Maya III/22d/ /.
Pacific 1500AD:	Sumatra IV/37a, Malacca IV/37a, Moluccas IV/37b , Polynesia IV/12a, Melanesia IV/12b, Hawaii IV/12c/ /.

ARMY LISTS

The armies listed below have now been completely renumbered to be compatible with the current army lists for DBM. They are organised into four sections, one corresponding to each volume of the DBM Army Lists. 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. Such foreign mercenaries or subject races as were habitually used are included, but allied troops serving under their own generals are usually not, since they are provided for in the campaign rules and by the allies listed for Big Battle DBA. Since an army needs less than 50 figures, we hope that players will produce armies in opposing pairs or sets rather than fight unhistorical opponents.

The DBM lists provide more detailed descriptions of the troops and notes on the armies. In many cases, additional information on the armies is given in the WRG "Armies and Enemies" series of handbooks and where this is the case, a reference to the appropriate book is included, using the following codes:

AAANE =	<i>Armies of the Ancient Near East 3000 - 539BC.</i>	N. Stillman & N. Tallis.
AMPW =	<i>Armies of the Macedonian and Punic Wars 359 - 146BC.</i>	D. Head.
AEIR =	<i>Armies and Enemies of Imperial Rome 150BC - 600AD.</i>	P. Barker.
ADA =	<i>Armies of the Dark Ages 600 - 1066 AD.</i>	I. Heath.
AFE =	<i>Armies of Feudal Europe 1066 - 1300 AD.</i>	I. Heath.
AEC =	<i>Armies and Enemies of the Crusades 1096 - 1291 AD.</i>	I. Heath.
AMA1 =	<i>Armies of the Middle Ages 1300 - 1487 AD (W. Europe).</i>	I. Heath.
AMA2 =	<i>Armies of the Middle Ages 1300 - 1500 AD (E. Europe).</i>	I. Heath.

Other references are to books which are not published by WRG, but which have been written by contributors to our lists. These are:

APA =	<i>The Achaemenid Persian Army.</i>	D. Head (Montvert Publications).
ATC =	<i>The Army of Tang China.</i>	K.H. Ranitzsch (Montvert Publications).
ACA =	<i>Ancient Chinese Armies 1500 - 200BC.</i>	C. Peers (Osprey).
ICA1 =	<i>Imperial Chinese Armies 200BC - 589AD.</i>	C. Peers (Osprey).
ICA2 =	<i>Imperial Chinese Armies 590-1260AD.</i>	C. Peers (Osprey).
MCA =	<i>Chinese Medieval Armies 1260-1520AD.</i>	C. Peers (Osprey).
ASC2 =	<i>Armies of the 16th Century: 2.</i>	Ian Heath (Foundry Books).

Each entry consists of a number identifying the army, its name, its dates, its home terrain type and its aggression factor, plausible contemporary enemies "E" identified by their section and number, allies "A" that can be used in Big Battle DBA similarly identified, references where available, and the army's composition in number and type of elements, using the codes given on page 5 to designate the number and type of figures making up each element.

A single slash between numbers means that either number of figures per element can be used. The word "or" between type codes means either kind of element can be used, but that chosen must be used for the whole of a one-off game or all games of a competition or campaign. The form "3x4Sp or 3x2Ps" means that all 3 elements must be the same. The form "3x4Sp or 2Ps" means that any combination of 4Sp and 2Ps can be used. A double slash between type codes, as in List I/42 "2xLCh//3Bw", means that the foot type can be substituted for the mounted type during the game as part of a tactical move but cannot change back during the remainder of the game.

Where potential Big Battle DBA allies are separated by "or", this means that either one or neither can be used. If separated by "and/or", one, both or neither can be used. If separated by "and", both or neither must be used.

SECTION ONE - THE CHARIOT PERIOD - 3000BC TO 500BC.

I/1. Early Sumerian. 3000BC-2334BC, and the "Great Revolt" circa 2250BC.

Arable. Ag: 2. E = (a) I/1a, 4a, 5a, 6a. (b) I/1b, 4a, 5ab, 6a, 9. (c) I/1c, 4a, 5b, 6a, 9, 11a. (d) I/11a. A = (a) I/4a or I/5a or I/6a. (b) I/4a or I/5ab or I/6a. (c) I/4a or I/5b or I/6a or I/9. (d) I/10. Ref: AANE.
 (a) 3000-2800BC: 1x3Bd (Gen), 8x4Bw, 3x2Ps.
 (b) 2799-2500BC: 1xHCh (Gen), 6x4Pk, 2x4Pk or 3Bd, 3x2Ps.
 (c) 2500-2334BC: 1x4Pk or HCh (Gen), 1xHCh, 6x4Pk, 1x4Pk or 3Bd, 1x3Ax or 2Ps, 2x2Ps.
 (d) 2250BC: 1x4Pk or HCh (Gen), 1xHCh, 4x4Pk, 1x4Pk or 3Bd, 2x7Hd, 1x3Ax or 2Ps, 2x2Ps.

I/2. Early Egyptian. 3000BC-1543BC.

Littoral. Ag: 1. E = (a) I/2a, 3, 6a, 7a, 9, 15, 17a. (b) I/2b, 3, 17b. Ref: AANE.
 (a) 3000-1640BC: 1x4Bd or Lit (Gen), 5x4Bw, 2x3Bd, 1x3Bd or 3Bw, 1x7Hd, 2x2Ps.
 (b) 1639-1543BC: 1xLCh (Gen), 4x4Bw, 3x3Bd, 1x3Bd or 3Bw, 1x7Hd, 2x2Ps.

I/3. Nubian. 3000BC-1480BC.

Dry. Ag: 1. E = I/2ab, 3, 7a, 22a. Ref: AANE.
 1x3Bw (Gen), 2x3Wb, 9x2Ps or 3Bw.

I/4. Zagros and Anatolian Highlanders. 3000BC-950BC.

Hilly. Ag: 3. E = (a) I/1abc, 4a, 5ab, 9, 11a. (b) I/5b, 9, 11ab. (c) I/4c, 5cd, 12, 15, 16, 19, 20ab, 21a, 24a, 25a, 31a. (d) I/16, 24ab, 28, 31a. A = (b) I/5b and I/10 or I/9 or I/11a. Ref: AANE.
 (a) Any 3000-2251BC: 1x3Bd or 3Bw (Gen), 5x3Ax, 6x2Ps.
 (b) Gutti 2250-2112BC: 1xLCh (Gen), 2x3Ax or 3Sp or 4Pk, 3x3Ax, 6x2Ps.
 (c) Hurrians, Kassites, Nairi 1780-950BC: 1xLCh (Gen), 5x3Ax, 6x2Ps.
 (d) Gasgans 1650-950BC: 1xLCh (Gen), 5x3Wb, 6x2Ps.

I/5. Early Susiana and Elam. 3000BC-800BC.

Arable. Ag: 3. E = (a) I/1ab, 4a, 10. (b) I/1bc, 4ab, 10, 11ab. (c) I/4c, 10, 11b, 12, 15, 19, 21a, 23a. (d) I/4c, 21ab, 23ab, 25ab, 37a, 40a. A = (a) I/4a. (b) I/4a. (c) I/4c or I/6a and/or I/10. Ref: AANE.
 (a) 3000-2601BC: 1x3Bw (Gen), 11x3Bw or 2Ps.
 (b) 2600-2101BC: 1x4Bw or HCh (Gen), 1x3Bd or 3Sp, 2x4Pk, 8x3Bw or 2Ps.
 (c) 2100-1401BC: 1x4Bw or LCh (Gen), 1x3Bd or 4Bw, 10x3Bw or 2Ps.
 (d) 1400-800BC: 1xLCh (Gen), 1xLCh, 10x3Bw or 2Ps.

I/6. Early Bedouin. 3000BC-312BC.

Dry. Ag: 3. E = (a) I/1abc, 2a, 6a, 8a, 9, 11ab, 12, 15, 17ab, 20b, 21a, 22a. (b) I/6b, 8abc, 19, 20ab, 21a, 22ab, 24a, 25a, 27, 29ab, 31a. (c) I/6c, 8bc, 20b, 21ab, 25b, 29b, 31ab, 34abc, 38, 44ab, 45, 46b, 51, 53, 60ac, II/7, 12, 16a, 19a. A = (a) I/9 or I/11ab or I/12. (c) I/51. Ref: AANE.
 (a) 3000-1500BC: 1x3Wb or 3Ax (Gen), 6x3Ax, 5x2Ps.
 (b) 1499-1000BC: 1x3Ax or LCh or 3Cm (Gen), 6x3Ax, 5x2Ps.
 (c) 999-312BC: 1x3Cm (Gen), 2x3Cm, 1x2Cm, 4x3Ax, 4x2Ps.

I/7. Early Libyan. 3000BC-70AD.

Dry. Ag: 4 until 660BC, then 0. E = (a) I/2a, 3, 17ab, 22a. (b) I/22ab, 28, 35b, 46b. (c) I/46b, 52b, 53, 56ab, 60ac, 61ab, II/7, 20ab, 32, 40. (d) I/56b, II/20cd, 40, 49, 56. A = (b) I/28. Ref: AANE.
 (a) 3000-1251BC: 1x3Ax or 3Wb (Gen), 9x3Ax or 2Ps, 2x2Ps.
 (b) 1250-660BC: 1xLCh (Gen), 3x3Wb, 3x3Bw, 5x2Ps.
 (c) 659-200BC: 1xLCh (Gen), 11x2Ps.
 (d) 200BC-70AD: 1x2LH (Gen), 11x2Ps.

I/8. Makkan, Dilmun, Saba, Ma'in and Qataban. 2800BC-312BC.

Littoral. Ag: 1. E = (a) I/6ab, 8a, 10, 11a. (b) I/6bc, 8bc, 60ac. (c) I/6bc, 8bc. A = (c) I/6c or I/21a. Ref: AANE.
 (a) 2800-1301BC: 1x3Bd (Gen), 1x3Bd or 3Ax, 6x3Ax, 4x2Ps.
 (b) Makkan 1300-312BC: 1x3Wb or 3Cv (Gen), 5x3Wb, 2x3Wb or 3Cm, 2x3Bw, 2x2Ps.
 (c) Others 1300-312BC: 1x3Bd or 3Cv (Gen), 2x3Cm, 2x3Bd, 4x3Ax, 3x2Ps.

I/9. Early Syrian. 2700BC-2200BC.

Arable. Ag: 2. E = I/1bc, 2a, 4ab, 6a, 9, 11a. A = I/1bc or I/6a. Ref: AANE.
1xHCh or 3Bd (Gen), 2x4Pk, 4x3Ax, 5x2Ps.

I/10. Melukkhkhan and Pre-Vedic Indian. 2700BC-1500BC.

Tropical. Ag: 0. E = I/5abc, 8a, 10, 11a, 23a. Ref: AANE.
1x3Sp (Gen), 3x3/4Sp, 4x4Bw, 4x2Ps.

I/11. Akkadian 2334BC-2193BC & 3rd Dynasty of Ur 2112BC-2004BC.

Arable. Ag: (a) 4, (b) 2. E = (a) I/1cd, 4ab, 5b, 6a, 8a, 9, 10, 11a. (b) I/4b, 5bc, 6a, 12. A = (a) 0-2 of I/1c, I/5b, I/9. (b) I/6a. Ref: AANE.
(a) 2334-2193BC: 1xHCh (Gen), 2x3Sp or 4Pk, 4x4Pk, 4x2Ps, 1x7Hd.
(b) 2112-2004BC: 1xLCh or 4Bw (Gen), 2x3Sp, 4x4Pk, 2x3Ax or 2Ps, 3x2Ps.

I/12. Sumerian Successor States. 2028BC-1460BC.

Arable. Ag: 2. E = I/4c, 5c, 6a, 11b, 12, 15, 21a. A = I/5c or I/6ab or I/15. Ref: AANE.
1xLCh or 4Bw (Gen), 4x3Sp or 4Pk, 1x3Bw, 2x3Ax, 4x2Ps.

I/13. Hsia and Shang Chinese. 2000BC-1017BC.

Arable. Ag: 2. E = (a) I/13a, 14a. (b) I/13b, 14a, 32a. A = (a) I/14a. (b) I/14a and/or I/32a. Ref: ACA.
(a) 2000-1300BC: 1x4Bw (Gen), 3x4Bd, 2x3/4Ax or 3Bw, 6x3/4Bw or 2Ps.
(b) 1299-1017BC: 1xHCh or LCh (Gen), 3x4Bd, 2x3/4Ax or 3Bw, 6x3/4Bw or 2Ps.

I/14. Early Northern Barbarians. 2000BC-315BC.

Arable. Ag: (c) 0, others 3. E = (a) I/13ab, 14a, 32ac, 43a, II/4ae. (b) I/14b, 43a, II/4c. (c) I/14c. (d) I/14d, 24ab, 26a, 33ab. (e) I/14e, 47, II/11. A = (a) I/32ac.
(a) Chinese border tribes 2000-401BC: 1x3/4Wb or LCh (Gen), 8x3Wb, 3x2Ps.
(b) Chinese border tribes 400-315BC: 1x3Cv or 2LH (Gen), 1x2LH, 7x3Wb, 3x2Ps.
(c) Europe 2000-1401BC: 1x3/4Wb (Gen), 9x3Bw, 2x2Ps.
(d) Europe 1400-701BC: 1xLCh or 4Bd (Gen), 2x4Bd, 1x3Cv or 3Sp, 6x3Sp, 1x2Ps or 3Cv, 1x2Ps.
(e) Europe 700-315BC: 1xLCh (Gen), 1xLCh, 1x3Cv or 3Wb, 8x3Wb, 1x2Ps.

I/15. Later Amorite. 1894BC-1595BC.

Arable. Ag: 2. E = I/2a, 4c, 5c, 6a, 12, 15, 16, 17a, 19. Ref: AANE.
1xLCh or 4Bw (Gen), 4x3Bd, 2x4Ax, 2x2Ps, 2x3Ax, 1x7Hd or 2Ps.

I/16. Hittite Old and Middle Kingdom. 1680BC-1380BC.

Arable. Ag: 3. E = I/4cd, 15, 18, 19. Ref: AANE.
1xLCh (Gen), 1xLCh or 3Sp, 1x3Bd or 3Sp, 6x3Sp, 2x2Ps, 1x7Hd or 2Ps.

I/17. Hyksos. 1645BC-1537BC.

Littoral. Ag: 2. E = (a) I/2a, 6a, 7a, 15. (b) I/2b, 6a, 7a, 20b, 22a. A = (a) I/2ab. (b) I/2b. Ref: AANE.
(a) 1645-1591BC: 1xLCh (Gen), 4x3Bd, 1x4Ax, 4x3Ax, 2x2Ps.
(b) 1590-1537BC: 1xLCh (Gen), 3xLCh, 4x3Bd, 1x4Ax, 2x2Ps, 1x7Hd or 2Ps.

I/18. Minoan & Early Mycenaean. 1600BC-1250BC.

Littoral. Ag: 2. E = I/16, 18, 24ab. Ref: AANE.
1xHCh (Gen), 3xHCh or LCh, 4x4Pk, 1x3Ax or 2Ps, 3x2Ps.

I/19. Mitanni. 1595BC-1274BC.

Arable. Ag: 3. E = I/4c, 5c, 6b, 15, 16, 20b, 21a, 22a, 24a, 25a. A = 0-2 of I/6ab, I/20b, I/24a. Ref: AANE.
1xLCh (Gen), 5xLCh, 2x3Ax, 3x2Ps, 1x7Hd.

I/20. Syro-Canaanite or Ugaritic. 1595BC-1100BC.

Littoral if (a), Arable if (b). Ag: 2. E = (a) I/4c, 6b, 20b, 22b, 24b, 25a, 27, 28. (b) I/4c, 6abc, 17b, 19, 20ab, 21a, 22ab, 24ab, 25a, 27, 28, 29a. A = (a) I/24b. (b) I/19 or I/22ab. Ref: AANE.
(a) Ugarit 1274-1176BC: 1xHCh (Gen), 3xHCh or LCh, 1x3Bd, 1x3Ax or 4Bd, 3x3Ax, 3x2Ps.
(b) Others: 1xLCh (Gen), 3xLCh, 1x4Bw or 3Bd, 4x3Ax, 3x2Ps.

I/21. Kassite and Later Babylonian. 1595BC-747BC.

Arable. Ag: 1. E = (a) I/4c, 5cd, 6abc, 12, 19, 20b, 24ab, 25a, 31a. (b) I/5d, 6c, 25b, 42. A = (a) I/31a. (b) I/6c and/or (I/31b or I/35b). Ref: AANE.

(a) 1595-890BC: 1xLCh (Gen), 3xLCh, 5x3Ax, 3x2Ps.

(b) 889-747BC: 1xHCh (Gen), 1xHCh, 2xLCh, 1x3Cv, 5x3Ax, 2x2P

I/22. New Kingdom Egyptian. 1543BC-1069BC.

Littoral. Ag: 2. E = (a) I/3, 6ab, 7ab, 17b, 19, 20b, 24ab, 27. (b) I/6b, 7b, 20ab, 24b, 27, 28, 29ab, 31a. Ref: AANE.

(a) 1543-1200BC: 1xLCh (Gen), 3xLCh, 3x3/4Bd, 4x4Bw, 1x2Ps.

(b) 1199-1069BC: 1xLCh (Gen), 3xLCh, 3x3/4Bd, 3x4Bw, 1x3Wb, 1x2Ps.

I/23. Vedic Indian. 1500BC-512BC.

Tropical. Ag: 2. E = (a) I/5cd, 10, 23a. (b) I/5d, 23b, 25b, 43a, 60ac. Ref: AANE, AMPW.

(a) 1500-900BC: 1xLCh (Gen), 4xLCh, 5x3Bw, 1x3Bw or 7Hd, 1x7Hd.

(b) 899-512BC: 1xLCh or HCh (Gen), 1xEl, 4xLCh, 5x3Bw, 1x7Hd

I/24. Hittite Empire. 1380BC-1180BC.

Arable. Ag: 2. E = (a) I/4cd, 6b, 18, 19, 20b, 21a, 22a, 24a, 25a. (b) I/4d, 18, 20ab, 21a, 22ab, 24b, 25a, 26ab, 28. A = (a) I/19. Ref: AANE.

(a) 1380-1275BC: 1xLCh (Gen), 3xLCh, 6x3Sp, 1x2Ps, 1x7Hd or 2Ps.

(b) 1274-1180BC: 1xHCh (Gen), 2xHCh, 1xLCh, 6x3Sp, 1x2Ps, 1x7Hd or 2Ps.

I/25. Middle Assyrian & Early Neo-Assyrian. 1365BC-745BC.

Arable. Ag: 4. E = (a) I/4c, 5d, 6b, 19, 20ab, 21a, 24ab, 31a, 34ab, 37a. (b) I/5d, 6c, 21b, 23b, 31b, 34bc, 35b, 37ab, 38, 39ab, 40a, 41, 42. A = (b) I/31b. Ref: AANE.

(a) 1365-883BC: 1xLCh (Gen), 3xLCh, 2x3Bd, 4x3Ax, 2x2Ps.

(b) 882-745BC: 1xHCh (Gen), 1xHCh, 2xLCh, 2x3Bd, 4x3Ax, 2x2Ps.

I/26. Later Mycenaean & Trojan War. 1250BC-1190BC.

Littoral. Ag: 3 if Achaian, 1 if Trojan. E = (a) I/14d, 24b, 26ab, 28. (b) I/24b, 26a, 28. Ref: AANE.

(a) Achaian: 1xLCh//4Bd (Gen), 3xLCh//4Bd, 4x4Sp, 2x4Sp or 4Wb or 4Pk, 2x2Ps.

(b) Trojan: 1xLCh//4Bd (Gen), 3xLCh//4Bd, 4x4Sp, 1x3Ax, 1x4Sp or 3Bd, 2x2Ps.

I/27. Early Hebrew. 1250BC-1000BC.

Hilly. Ag: 3. E = I/6b, 20ab, 22ab, 29ab, 31a. Ref: AANE.

1x3Ax (Gen), 2x3Wb, 5x3Ax, 4x2Ps.

I/28. Sea-Peoples. 1208BC-1176BC.

Littoral. Ag: 4. E = I/4d, 7b, 20ab, 22b, 24b, 26ab. Ref: AANE.

1xLCh or 4Bd (Gen), 2x4Bd, 6x3Bd, 3x3Ax or 2Ps.

I/29. Philistine. 1166BC-600BC.

Arable. Ag: 3. E = (a) I/6b, 20b, 22b, 27, 29a. (b) I/6bc, 22b, 27, 29b, 31ab, 34abc, 35abc, 38, 45, 46b, 51, 53.

A = (a) I/20b. (b) I/31ab or I/35abc or I/38 or I/46b. Ref: AANE.

(a) 1166-1100BC: 1xLCh (Gen), 1xLCh, 6x3Bd, 2x3Ax, 2x2Ps.

(b) 1099-600BC: 1xLCh (Gen), 1xLCh, 6x4Sp, 2x3Ax, 2x2Ps.

I/30. Dark Age and Geometric Greek. 1160BC-650BC.

Arable. Ag: 2. E = (a) I/30a, 31a, 35a. (b) I/30b, 31b, 33b, 35b, 41. (c) I/30c, 31b, 33b, 35bc, 41, 43a, 48, 50, 52a. Ref: AANE.

(a) 1160-901BC: 1xLCh//4Wb (Gen), 1x3Cv, 4x3Bd, 4x3Ax, 2x2Ps.

(b) 900-725BC: 1xLCh//4Wb or 3Cv (Gen), 1x3Cv, 7x3Ax, 3x2Ps.

(c) 724-650BC: 1x3Cv (Gen), 1x3Cv, 7x4Sp, 3x2Ps.

I/31. Neo-Hittite & Later Aramaean. 1100BC-710BC.

Arable. Ag: 2. E = (a) I/4cd, 6bc, 21a, 22b, 25a, 27, 29b, 30a, 31a, 34ab, 35a. (b) I/6c, 25b, 29b, 30bc, 31b, 34bc, 35b, 39ab, 41. A = (b) I/34b and/or I/35b. Ref: AANE.

(a) 1100-901BC: 1xLCh (Gen), 5x3Ax, 6x2Ps.

(b) 900-710BC: 1xHCh (Gen), 1xLCh, 1x4Ax or 4Sp, 4x3Ax, 5x2Ps.

I/32. Western Chou and Spring & Autumn Chinese. 1100BC-480BC.

Arable. Ag: Western Chou until 770BC 3, others 0. E = (a) I/13b, 14a, 32a. (b) I/32bc, 49a. (c) I/14a, 32bc, 43a, 49a. A = (a) I/13b and/or I/14a. (c) I/14a. Ref: ACA.

(a) 1100-701BC: 1xHCh (Gen), 1xHCh, 1x3Bd, 5x4Bd, 2x3/4Bw, 1x3/4Ax, 1x2Ps.

(b) Wu or Yueh 584-480BC: 1xHCh (Gen), 1xHCh, 1x3Bd, 4x3Sp, 2x3/4Bw, 2x3Wb or 3Sp, 1x2Ps.

(c) Others 700-480BC: 1xHCh (Gen), 3xHCh, 1x3Bd, 4x3Sp, 2x3/4Bw, 1x2Ps.

I/33. Villanovan Italian. 1000BC-650BC.

Arable. Ag: 1. E = (a) I/14d, 33a, 36. (b) I/14d, 30bc, 33b, 36.

(a) 1000-800BC: 1x3Cv or LCh (Gen), 11x3Wb.

(b) 799-650BC: 1x3Cv or LCh (Gen), 1x3Cv, 5x4Wb, 4x3Ax, 1x2Ps.

I/34. Later Hebrew. 1000BC-587BC.

Hilly. Ag: 1. E = (a) I/6c, 25a, 29b, 31a. (b) I/6c, 25ab, 29b, 31ab, 38. (c) I/6c, 25b, 29b, 31b, 38, 44ab, 45, 46b, 51, 53. A = (b) I/31b and/or I/34b. (c) I/35bc or I/38 or I/46ab or I/53. Ref: AANE.

(a) 1000-969BC: 1xLCh (Gen), 1x4Ax, 1x3Ax or 4Sp, 6x3Ax, 3x2Ps.

(b) 968-800BC: 1xLCh (Gen), 1xLCh or 3Ax, 1x4Ax, 1x4Sp or 3Ax, 6x3Ax, 2x2Ps.

(c) 799-587BC: 1xHCh (Gen), 1xHCh or 3Ax, 1x4Ax, 1x4Sp or 3Ax, 6x3Ax, 2x2Ps.

I/35. Cypriot and Phoenician. 1000BC-332BC.

Littoral. Ag: 0. E = (a) I/29b, 30a, 31a, 35a. (b) I/7b, 25b, 29b, 30bc, 31b, 45. (c) I/29b, 30c, 40c, 44ab, 51, 52g, 53, 60a. (d) I/60ac, II/7, 12. A = (b) I/30c. (c) I/30c or I/52g. (d) I/52g. Ref: AANE.

(a) 1000-901BC: 1xLCh (Gen), 1xLCh, 6x4Ax, 4x2Ps.

(b) 900-680BC: 1xHCh (Gen), 1xHCh, 1x3Cv, 6x4Ax, 3x2Ps.

(c) 679-490BC: 1xHCh or 4Sp (Gen), 1xHCh, 1x3Cv, 6x4Sp, 3x2Ps.

(d) 489-332BC: 1x4Sp (Gen), 1x3Cv, 6x4Sp or 4Ax, 3x2Ps, 1xArt or 4Sp.

I/36. Italian Hill Tribes. 1000BC-290BC.

Hilly. Ag: 3. E = I/33ab, 36, 52i, 55abcde, 57ab, 59, II/8abc, 10, 13.

1x3Cv (Gen), 10x3Ax or 10x3Wb, 1x2Ps.

I/37. Mannaian and other Taurus and Zagros Highlanders. 950BC-610BC.

Hilly. Ag: 1. E = (a) I/5d, 25ab, 37a, 39ab, 40a, 42. (b) I/25b, 37b, 39b, 40abc, 41, 42, 43a, 44a, 45, 51. A = (a) I/6c or I/25a or (I/39a and/or I/40a). (b) (I/39b and/or I/40abc) or (I/43a and/or I/51). Ref: AANE.

(a) 950-750BC: 1xLCh (Gen), 2x3Cv, 5x3Ax, 4x2Ps or 3Bw.

(b) 749-610BC: 1xHCh (Gen), 1x3Cv, 1x2LH, 5x3Ax, 4x2Ps or 3Bw.

I/38. Libyan Egyptian. 946BC-712BC.

Littoral. Ag: 2. E = I/6c, 25b, 29b, 34bc, 38, 45, 46ab. Ref: AANE.

1xLCh (Gen), 2xLCh, 1x3Cv, 2x4Wb, 1x3Wb, 3x2Ps, 1x4Bd, 1x4Bw.

I/39. Urtian. 880BC-585BC.

Hilly. Ag: 3. E = (a) I/25b, 31b, 37a, 40a, 41. (b) I/25b, 31b, 37ab, 40abc, 41, 43a, 45, 51. A = (a) I/37a. (b) I/31b or I/37ab or I/40abc or I/43a. Ref: AANE.

(a) 880-780BC: 1xLCh (Gen), 1x3Cv, 9x3Ax, 1x2Ps.

(b) 779-585BC: 1xHCh (Gen), 2x3Cv, 1xLCh, 1x4Ax or 4Sp, 5x3Ax, 1x2Ps, 1x7Hd.

I/40. Medes, Zirkirtu, Andia or Parsua. 835BC-550BC.

Arable. Ag: 2. E = (a) I/5d, 25b, 37ab, 39ab, 40a, 42, 45, 51. (b) I/37b, 39b, 40b, 42, 43a, 44a, 51. (c) I/35c, 37b, 39b, 40c, 43a, 44b, 50, 51, 60a. A = (a) I/43a and/or I/51. (b) I/37b or I/43a. (c) I/43a or I/44ab. Ref: AANE.

(a) 835-670BC: 1xLCh or 3Cv (Gen), 4x3Cv, 6x3Ax, 1x2Ps.

(b) 669-621BC: 1xLCh or 3Cv (Gen), 3x3Cv, 4x4Sp, 4x2Ps.

(c) 620-550BC: 1xLCh or 3Cv (Gen), 3x3Cv, 1x2LH or 3Ax, 4x4Sp, 2x3Bw, 1x2Ps.

I/41. Phrygian. 800BC-676BC.

Arable. Ag: 1. E = I/25b, 30bc, 31b, 37b, 39ab, 43a, 45, 48, 50, 51. A = I/39ab or I/43a. Ref: AANE.

1xLCh (Gen), 1x3Cv, 8x3Ax, 2x2Ps.

I/42. Neo-Elamite. 800BC-639BC.

Hilly. Ag: 2. E = I/21b, 25b, 37ab, 40ab, 43a, 44a, 45, 51. A = I/6c or I/44a. Ref: AANE.
1xHCh or LCh//3Bw (Gen), 2xLCh//3Bw (kallapani), 1x2LH, 7x3Bw, 1x2Ps.

I/43. Kimmerian, Skythian or Early Hu. 750BC-50AD.

Steppe. Ag: 4. E = (a) I/14ab, 23b, 30c, 32c, 37b, 39b, 40bc, 41, 42, 43a, 44a, 45, 48, 50, 51, 60ac, II/2, 4ace, 5i, 7, 12, 15, 17, 19a, 21a, 24, 25, 26. (b) I/43b, 48, II/2, 3, 17, 19ab, 21a, 24, 25, 26, 28b, 36a, 37, 38a, 41ab, 46ab, 48. A = (a) I/14b or I/37b or I/39b or I/48 or I/52g or II/2. Ref: AANE, AMPW.
(a) 750BC-301BC: 1x3Cv or 2LH (Gen), 8x2LH, (2x2Ps + 1x7Hd or 3Ax) or 3x2LH.
(b) 300BC-50AD: 1x3Kn (Gen), 8x2LH, (2x2Ps + 1x7Hd or 3Ax) or 3x2LH.

I/44. Neo-Babylonian. 746BC-539BC (& 522BC-521BC, 482BC).

Arable. Ag: 1. E = (a) I/6c, 34c, 35c, 37b, 40b, 42, 43a, 45, 51, 53. (b) I/6c, 34c, 35c, 40c, 50, 51, 53, 60a. A = (a) I/6c or I/40bc or I/42. (b) I/40c. Ref: AANE.
(a) 746-605BC: 1xHCh (Gen), 1xHCh, 2x3Cv, 1x4Ax, 7x3Bw.
(b) 604-482BC: 1xHCh (Gen), 1xHCh, 1x3Cv, 1x4Sp, 4x8Bw, 2x7Hd, 1x3Cm, 1x2Ps.

I/45. Neo-Assyrian Empire. 745BC-681BC.

Arable. Ag: 4. E = I/6c, 29b, 34c, 35b, 37b, 38, 39b, 40a, 41, 42, 43a, 44a, 46b, 50. A = I/6c or I/29b or I/31b or I/34c or I/35b or I/37b or I/38 or I/40a or I/41. Ref: AANE.
1xHCh (Gen), 3xHCh, 2x3Cv, 1x4Ax, 1x3Ax, 2x2Ps, 2x7Hd.

I/46. Kushite Egyptian. 745BC-593BC.

Littoral. Ag: 3. E = (a) I/38. (b) I/6c, 7bc, 29b, 34c, 38, 45, 51, 53. A = (a) I/38. Ref: AANE.
(a) 745-728BC: 1xLCh (Gen), 1xLCh, 2x3Cv, 2x3Ax, 4x2Ps or 3Bw, 2x2Ps.
(b) 727-593BC: 1xHCh (Gen), 1xHCh or LCh, 2x3Cv, 1x3Ax, 2x2Ps or 3Bw, 2x4Sp, 1x3Ax or 2Ps, 1x4Bd, 1x4Bw.

I/47. Illyrian. 700BC-10AD.

Hilly. Ag: 3. E = I/14e, 47, 48, 52cdh, 54, 63, II/5dei, 11, 12, 15, 17, 18a, 27a, 31abcefg hij, 33, 35, 47g, 49, 52, 56. A = I/63 or II/9. Ref: AMPW.
1x2LH (Gen), 9x3Ax, 2x2Ps.

I/48. Thracian. 700BC-46AD.

Hilly. Ag: 1. E = I/30c, 41, 43ab, 47, 48, 50, 52efg, 54, 60a, 63, II/5bi, 11, 12, 15, 17, 18a, 19abc, 24, 30a, 33, 35, 49, 56. A = II/5i or II/56. Ref: AMPW.
1x3Cv (Gen), 3x2LH or 3Ax, 6x3Ax, 2x2Ps.

I/49. Early Vietnamese. 700BC-938AD.

Tropical. Ag: 1. E = (a) I/32bc, 49a, II/4abd, 29. (b) I/49b, II/4de, 29, 41a. (c) I/49c, II/41b, 63. (d) I/49d, II/63, 79b, III/9a, 20ab, 23, 39. A = (d) III/23 Khmer and III/23 Cham.
(a) 700-207BC: 1x3Wb (Gen), 4x3Wb, 3x3Bw, 1x3Ax, 3x2Ps.
(b) 206-111BC: 1xHCh (Gen), 2x3/4Sp, 2x4Cb, 3x3Wb, 2x3Bw, 2x2Ps.
(c) 135-247AD: 1x3Cv (Gen), 2x4Sp or 4Bd, 2x4Cb or 2Ps, 3x3Wb, 2x3Bw, 2x2Ps.
(d) 248-938AD: 1xEl (Gen), 2x4Sp or 4Bd, 2x4Cb or 2Ps, 3x3Wb, 2x3Bw, 2x2Ps.

I/50. Lydian. 687BC-546BC.

Hilly. Ag: 1. E = I/30c, 40c, 41, 43a, 44b, 45, 48, 51, 52g, 60ab. A = I/52g. Ref: AANE.
1xLCh or 3Kn (Gen), 2x3Kn, 2x2LH, 4x4Sp or 3Ax, 3x2Ps.

I/51. Neo-Assyrian Later Sargonic. 680BC-609BC.

Arable. Ag: 4. E = I/6c, 29b, 34c, 35c, 37b, 39b, 40abc, 41, 42, 43a, 44ab, 46b, 50, 53. A = I/6b or I/37b or I/40ab or I/42 or I/43a or I/53. Ref: AANE.
1xHCh (Gen), 1xHCh, 2x3Cv, 2x4Ax, 3x2Ps, 1x7Hd.

I/52. Early Hoplite Greek. 680BC-450BC.

Hilly if Phokian or Aitolian, Littoral if Asiatic, Italiot or Siciliot, Arable if others. Ag: 2. E = (a) I/30c, 52bef. (b) I/7c, 52acdef. (c) I/47, 52bdh, 54. (d) I/47, 52bcefh. (e) I/48, 52abd. (f) I/48, 52abd, 60ac. (g) I/35c, 48, 50, 52g, 60ac, 62. (h) I/47, 52cdh, 60a. (i) I/36, 52i, 55abc, 57a, 61a. A = 0-2 of any I/52 except I/52g or I/52i or combining I/52e with I/52f.

- (a) Argive 680-450BC: 1x4Sp (Gen), 9x4Sp, 2x2Ps.
- (b) Spartan 668-450BC: 1x4Sp (Gen), 10x4Sp, 1x4Sp or 7Hd.
- (c) Thessalian 668-450BC: 1x3Cv or 2LH (Gen), 3x2LH, 4x4Sp, 4x2Ps.
- (d) Theban 668-450BC: 1x4Sp (Gen), 1x3Cv, 9x4Sp, 1x2Ps.
- (e) Athenian 668-541BC: 1x4Sp (Gen), 9x4Sp, 2x2Ps.
- (f) Athenian 540-450BC: 1x4Sp (Gen), 1x3Cv or 2LH or 4Sp, 7x4Sp, 1x3Ax or 4Sp, 1x2Ps or 4Bw, 1x2Ps.
- (g) Asiatic Greek 668-450BC: 1x3Cv (Gen), 1x3Cv, 9x4Sp, 1x2Ps.
- (h) Phokian or Aitolian 668-450BC: 1x4Sp (Gen), 3x4Sp, 8x2Ps.
- (i) Italiot or Siciliot 668-450BC: 1x3Cv (Gen), 1x3Cv or 2LH, 8x4Sp, 2x2Ps.

I/53. Saitic Egyptian. 664BC-335BC.

Littoral. Ag: 1. E = I/6c, 7c, 29b, 34c, 35c, 44ab, 46b, 51, 56a, 58, 60ac, II/7. A = I/7c or I/51 or I/52f or I/56a. Ref: AANE.

1xHCh or 3Cv (Gen), 1x2LH, 6x4Sp, 2x4Bw, 2x2Ps.

I/54. Early Macedonian. 650BC-355BC.

Arable. Ag: 0. E = I/47, 48, 52c, 60a, 63, II/5abdi. A = I/52a or I/52c. Ref: AMPW.

1x3Kn (Gen), 1x3Kn, 2x4Sp or 3Ax, 6x3Ax, 2x2Ps.

I/55. Latin, Early Roman, Early Etruscan & Umbrian. 650BC-290BC.

Arable. Ag: 2. E = (a) I/36, 52i, 55abcde. (b) I/36, 52i, 55acde, 57a. (c) I/36, 52i, 55abe, 57a, 59. (d) I/36, 55abe, 57b, II/8abc, 10, 11, 13. (e) I/36, 55abcd, 57ab, 59, II/10, 11, 13. A = (c) I/36 or I/52i. (d) I/36 or I/52i or II/8b or II/9 or II/11. Ref: AMPW.

- (a) Etruscan 650-600BC: 1xLCh (Gen), 2x3Cv, 6x4Sp, 1x4Bd or 4Sp, 2x2Ps.
- (b) Roman 650-578BC: 1x3Cv (Gen), 10x4Sp, 1x2Ps.
- (c) Latin 650-401BC: 1x3Cv (Gen), 1x3Cv, 7x4Sp, 3x2Ps.
- (d) Latin 400-338BC: 1x3Cv (Gen), 1x3Cv, 2x4Bd, 4x4Sp, 4x2Ps.
- (e) Umbrian 650-290BC: 1x3Cv (Gen), 1x3Cv, 2x4Sp, 6x3Ax, 2x2Ps.

I/56. Kyrenean Greek. 630BC-74BC.

Littoral. Ag: 0. E = (a) I/7c, 53, 60ac, 61a, II/7, 12, 20a. (b) I/7cd, 60c, 61b, II/20bcd. A = (a) I/7c or I/61b.

(b) I/7cd. Ref: AMPW.

(a) 630-314BC: 1xLCh or 3Cv or 4Sp (Gen), 2xLCh, 2x2LCh//4Sp, 4x4Sp, 3x2Ps.

(b) 313-74BC: 1x3Kn (Gen), 2x4Pk or 4Ax, 6x4Sp, 3x2Ps.

I/57. Etruscan League. 600BC-280BC.

Arable. Ag: 3. E = (a) I/36, 52i, 55bce, 59. (b) I/36, 55de, II/8abc, 9, 10, 11, 13. A = (a) I/36 or I/52i or I/55ce or I/59 or II/5g or II/11. (b) I/36 or I/55cde or II/5g or II/11 or II/13. Ref: AMPW.

- (a) 600-400BC: 1x3Cv (Gen), 1x3Cv, 1x4Bd or 4Sp, 7x4Sp, 1x2Ps, 1x7Hd or 2Ps.
- (b) 399-280BC: 1x3Cv (Gen), 1x3Cv, 4x4Bd, 4x4Sp, 1x2Ps, 1x7Hd or 2Ps.

I/58. Meroitic Kushite. 592BC-350AD.

Dry. Ag: 1. E = I/53, 60ac, II/20abcd, 55ab, 56, 62, 64b. A = II/55ab.

1x3Cv or 3Bw or El (Gen), 3x3Bw, 5x4Sp, 2x4Bd, 1x2Ps.

I/59. Tullian Roman. 578BC-400BC.

Arable. Ag: 3. E = I/36, 55ce, 57a, II/8abc. A = I/36. Ref: AMPW.

1x3Cv or 4Sp (Gen), 1x3Cv, 7x4Sp, 1x4Ax or 2Ps, 2x2Ps.

I/60. Early Achaemenid Persian. 550BC-420BC.

Arable. Ag: 3. E = (a) I/6c, 7c, 8b, 23b, 35cd, 40c, 43a, 44b, 48, 50, 52fgh, 53, 54, 56a, 58, 62, 63, II/1, 2, 3. (b) I/50. (c) I/6c, 7c, 8b, 23b, 35d, 43a, 52fg, 53, 56ab, 58, II/1, 2, 3, 5b, 6. A = (a) I/40c or I/43a or I/62. (c) I/62. Ref: APA.

(a) 550-466BC: 1xLCh or 3Cv (Gen), 1x3Cv, 1x2LH, 4x8Bw, 1x3Bw, 1x3Ax, 1x2Ps or 4Sp, 1x2Ps, 1x7Hd.

(b) 546BC: 1x3Cv (Gen), 1x3Cv, 1xSCH, 1xWWg (towers), 1x3Cm, 5x8Bw, 1x3Ax, 1x2Ps.

(c) 465-420BC: 1xLCh or 3Cv (Gen), 1x3Cv, 1x2LH, 2x8Bw, 2x4Bw or 3/4Ax, 1x3Bw, 1x3Ax, 2x2Ps, 1x7Hd.

I/61. Early Carthaginian. 550BC-275BC.

Littoral. Ag: 3. E = (a) I/7c, 52i, 56a. (b) I/7c, 56b, II/5h, 9, 15, 27b. A = (a) I/7c or I/52i or II/5h. (b) II/5h. Ref: AMPW.

(a) 550-410BC: 1xHCh or 3Cv (Gen), 1xHCh, 1x3Cv, 6x4Sp, 1x3Ax, 2x2Ps.

(b) 409-275BC: 1xHCh or 3Cv (Gen), 1xHCh, 1x3Cv, 1x2LH or 3Ax, 4x4Sp, 1x3Ax, 1x4Wb, 2x2Ps.

I/62. Lykian. 546BC-300BC.

Hilly. Ag: 1. E = I/52g, 60a, II/5b, 12, 16ab, 19a. A = I/52g or II/5i. Ref: AMPW, APA. 1x3Cv (Gen), 8x3Ax, 1x3Bd, 2x2Ps.

I/63. Paionian. 512BC-284BC.

Hilly. Ag: 3. E = I/47, 48, 54, 60a, II/12, 17, 18ab, 30a. A = I/47 or II/18c. Ref: AMPW. 1x2LH or 3Ax (Gen), 1x2LH, 8x2Ps or 3Ax, 2x2Ps.

SECTION TWO – THE CLASSICAL PERIOD - 500BC TO 476AD

II/ 1. Republican Indian. 500BC-321BC.

Tropical. Ag: 0. E = I/60ac, II/1, 2, 3, 15. Ref: AMPW.
1xHCh (Gen), 2x3Cv, 1x3/4Bd or 3Lb, 8x3Lb.

II/ 2. Mountain Indian. 500BC-170BC.

Hilly. Ag: 1. E = I/43ab, 60ac, II/1, 2, 3, 15, 19ab, 36ab. Ref: AMPW.
1x2LH or El (Gen), 2x2LH, 1x4Bd or 3Ax, 4x3Ax, 4x2Ps.

II/ 3. Classical Indian. 500BC-545AD.

Tropical. Ag: 0. E = I/43b, 60ac, II/1, 2, 3, 15, 19ab, 36ab, 37, 42ab, 46b, 80cd. Ref: AMPW.
1xEl (Gen), 2xEl, 2xHCh or 2LCh or 3/4Lb, 2x3Cv, 1x4Bd or 3/4Lb or 2Ps, 4x3/4Lb.

II/ 4. Warring States and Ch'in Chinese. 480BC-202BC.

Arable. Ag: (a) 3, others 1. E = (a) I/14a, 43a, 49a, II/4bcde, 21a, 29, 38a. (b) I/49a, II/4acde. (c) I/14b, 43a, II/4abe, 38a. (d) I/49ab, II/4abe, 21a, 29. (e) I/14a, 43a, 49b, II/4abcde, 21a, 38a. Ref: ACA.
(a) Ch'in 350-221BC: 1xHCh (Gen), 1xHCh, 1x3Cv, 4x4Wb, 3x4Cb, 1x2Ps or 2LH, 1x2Ps.
(b) Yueh 480BC-333BC: 1xHCh (Gen), 4x4Sp, 2x4Sp or 3Wb, 4x4Cb, 1x2Ps.
(c) Chao 307BC-202BC: 1xHCh (Gen), 1xHCh, 2x2LH, 4x4Sp, 3x4Cb, 1x2Ps.
(d) Ch'u 480-202BC: 1xHCh (Gen), 1xHCh, 1x3Cv or 2LH or 4Sp, 2x4Sp, 2x4Sp or 3Wb, 4x4Cb, 1x2Ps.
(e) Others: 1xHCh (Gen), 1xHCh, 1x3Cv or 2LH or 2Ps, 1x3Bd, 4x4Sp, 3x3Cb, 1x2Ps.

II/ 5. Later Hoplite Greek. 450BC-275BC (235BC if Italiot or Siciliot).

Littoral if (b), (g) or (h), Hilly if (e), Arable if others. Ag: (a) 3, (b) 2, others 1. E = (a) I/54, II/5bcdi, 6, 7, 12, 16b, 17, 27b. (b) I/48, 54, 60c, 62, II/5acdefhi, 7, 9, 12, 15, 16b, 17, 18ac, 30a. (c) II/5abdefi, 12, 16b, 30a. (d) I/47, 54, II/5abcdef, 12, 15, 17, 30a. (e) I/47, II/5bcdi, 15, 18abc, 30a. (f) II/5bcd, 12, 30a. (g) II/5gh, 8ab, 9, 10, 13, 33. (h) I/61b, II/5bgh, 9, 33. (i) I/43a, 47, 48, 54, II/5abce, 12, 15, 16b, 18c, 27a. A = 0-2 of any II/5 except II/5a or II/5g or II/5h. Ref: AMPW.
(a) Spartan: 1x4Sp (Gen), 8x4Sp, 1x4Sp or 4Ax, 1x4Sp or 3Cv, 1x2Ps.
(b) Athenian: 1x4Sp (Gen), 1x3Cv, 1x2LH, 7x4Sp, 1x4Sp or 3/4Ax, 1x2Ps.
(c) Theban: 1x4Sp (Gen), 2x3Cv, 6x4Sp, 1x4Sp or 4Ax, 2x2Ps.
(d) Thessalian: 1x3Cv (Gen), 3x2LH or 3x3Cv, 6x4Sp, 2x2Ps or 4Ax.
(e) Aitolian or Akarnanian: 1x4Sp (Gen), 3x4Sp, 7x2Ps, 1x2LH.
(f) Phokian: 1x4Sp (Gen), 1x4Sp, 4x4Ax, 3x2Ps, 1x3Cv, 2xArt or 2Ps.
(g) Italiot: 1x4Sp (Gen), 1x3Cv or 2LH, 2x2LH, 7x4Sp, 1x2Ps.
(h) Siciliot: 1x4Sp (Gen), 1x3Cv, 7x4Sp, 3x2Ps.
(i) Others: 1x4Sp (Gen), 1x3Cv or 4Sp, 7x4Sp, 2x4Sp or 4Ax or 2Ps, 1x2Ps.

II/ 6. Bithynian. 435BC-74BC.

Arable. Ag: 1. E = I/60c, II/5a, 6, 7, 12, 14, 15, 16a, 17, 30a, 34, 48. Ref: AMPW.
1x3Cv (Gen), 1x2LH, 7x3Ax, 1x4Wb or 3Ax, 2x2Ps.

II/ 7. Later Achaemenid Persian. 420BC-329BC.

Arable. Ag: 1. E = I/6c, 7c, 35d, 43a, 53, 56a, II/5ab, 6, 7, 12. A = I/43a or I/62. Ref: AMPW, APA.
1xLCh or 3Cv (Gen), 2x3Cv, 2x2LH, 1xSch or 2Ps, 2x2Ps, 4x4Sp or 3Ax.

II/ 8. Campanian, Apulian, Lucanian or Bruttian. 420BC-203BC.

Hilly if Bruttian, Arable if not. Ag: 1. E = (a) I/36, 55d, 57b, 59, II/5g, 8abc, 10, 13, 33. (b) I/36, 55d, 57b, 59, II/5g, 8ac, 10, 13, 33. (c) I/36, 55d, 57b, 59, II/8ab, 10, 13, 33. A = (a) II/8a or II/10 or II/32. (b) II/13. Ref: AMPW.
(a) Bruttian or Lucanian: 1x3Cv (Gen), 9x4Ax, 2x2Ps.
(b) Campanian: 1x3Cv (Gen), 1x3Cv, 4x4Sp, 4x4Ax, 2x2Ps.
(c) Apulian: 1x3Cv (Gen), 2x3Cv, 7x4Ax, 2x2Ps.

II/ 9. Syracusan. 410BC-210BC.

Littoral. Ag: 4 if 310BC-307BC, 2 if not. E = I/57b, 61b, II/5bgh, 27b, 32, 33. A = II/32 or 310-307BC only (I/7c and either I/56b or II/40). Ref: AMPW.
1x3Cv or 4Sp (Gen), 6x4Sp, 1x4Sp or 3Wb, 1x4Ax or 3Cv, 1x3/4Ax or Art, 1x2LH, 1x2Ps.

II/10. Camillan Roman. 400BC-275BC.

Arable. Ag: 1. E = I/36, 55de, 57b, II/5g, 8abc, 11, 13, 27b, 28b. A=II/13. Ref: AMPW.
1x3Cv (Gen), 1x3Cv, 3x4Bd, 5x4Sp, 2x2Ps.

II/11. Gallic. 400BC-50BC.

Arable. Ag: 3 until 225BC, then 0. E = I/14e, 47, 48, 55de, 57b, II/10, 11, 13, 32, 33, 39abc, 47abefg, 49, 52.
A= II/39a or II/47b. Ref: AMPW, AEIR.
1x3/4Wb or LCh (Gen), 2xLCh or 3Cv, 8x3Wb, 1x2Ps.

II/12. Alexandrian Macedonian. 355BC-320BC.

Arable. Ag: 4. E = I/6c, 35d, 43a, 47, 48, 56a, 62, 63, II/5abcfi, 6, 7. A= II/5d. Ref: AMPW.
1x3Kn (Gen), 1x3Cv, 1x2LH, 1x4Ax, 6x4Pk, 1x2Ps, 1x4Sp or 4Ax or 2Ps or Art.

II/13. Samnite. 355BC-272BC.

Hilly. Ag: 1. E = I/36, 55de, 57b, II/5g, 8abc, 10, 11. A= I/36 or I/55e or I/57b or II/8bc or II/10 or II/11.
Ref: AMPW.
1x3Cv (Gen), 11x4Ax.

II/14. Ariarathid Kappadokian. 330BC-322BC & 300BC-17AD.

Hilly. Ag: 0. E = II/6, 15, 17, 19abcd, 28ab, 30abc, 33, 34, 44, 48, 49, 56. A= II/28b.
1x3Cv (Gen), 2x3Cv, 2x2LH, 5x3Ax, 2x2Ps.

II/15. Alexandrian Imperial. 328BC-320BC.

Arable. Ag: 4. E = I/43a, 47, 48, 61b, II/1, 2, 3, 5bdei, 6, 14. A= II/2 or II/3. Ref: AMPW.
1x3Kn (Gen), 1x3Kn, 1x2LH, 6x4Pk, 1xArt or El, 1x3/4Ax or 2Ps, 1x2Ps.

II/16. Asiatic Early Successor. 320BC-285BC.

Arable if (a), (c), (d), Littoral, if (b). Ag: 3. E = (a) I/6c, 62, II/6, 16cd, 17, 18ac, 19a, 20a, 22f. (b) I/62, II/5abci, 17, 18c, 19a, 20a, 27a. (c) II/16a. (d) II/16a, 18a. Ref: AMPW.
(a) Antigonos 320-301BC: 1x4Pk (Gen), 1x3Kn, 1x3Cv, 1x2LH, 5x4Pk, 1xEl, 2x2Ps.
(b) Demetrios 315-285BC: 1x3Kn (Gen), 1x2LH, 6x4Pk, 1x4Ax, 2x4Sp or (1x3Cv + 1xEl), 1x4Sp or WWg (tower) or Art.
(c) Alketas 320 BC: 1x3Kn (Gen), 4x4Pk, 3x3Ax, 4x2Ps.
(d) Eumenes 320- 316BC: 1x3Kn (Gen), 1x3Cv, 6x4Pk, 2xEl, 2x2Ps.

II/17. Lysimachid. 320BC-281BC.

Arable. Ag: 2. E = I/43ab, 47, 48, 63, II/5abd, 6, 14, 16ab, 18c, 19a, 27a. A= (301BC only) II/18c and II/19a.
Ref: AMPW.
1x3Kn (Gen), 1x2LH, 4x4Pk, 4x3Ax, 1x2Ps, 1x4Sp.

II/18. Macedonian Early Successor. 320BC-260BC.

Arable. Ag: 1. E = (a) I/47, 48, 63, II/5be, 16ad, 19a, 20a. (b) I/63, II/5e, 18c. (c) II/5bei, 16ab, 17, 18b, 27a. (d) II/20a, 30a. (e) II/27b, 30a, 31a. A= (b) II/5e. (e) II/31c and II/31i. Ref: AMPW.
(a) Antipatros 320-319BC: 1x3Kn (Gen), 1x3Cv, 6x4Pk, 1x4Ax, 1xEl, 2x2Ps.
(b) Polyperchon 319-310BC: 1x3Kn (Gen), 1x3Cv, 6x4Pk, 1x4Sp, 1xEl, 2x2Ps.
(c) Kassandros 318-298BC: 1x3Kn (Gen), 1x3Cv, 4x4Pk, 4x4Ax, 1xEl or 4Sp, 1x2Ps.
(d) Ptolemy Keraunos 280-279BC: 1xEl (Gen), 1x3Kn, 1x3Cv, 6x4Pk, 2x4Ax, 1x2Ps.
(e) Antigonos Gonatas: 277-260BC: 1x3Kn (Gen), 1x3Cv, 4x4Pk, 2x4Ax, 2x4Wb or 4Ax, 1xEl, 1x2Ps.

II/19. Seleucid. 320BC-83BC.

Arable. Ag: 2. E = (a) I/6c, 43ab, 48, 62, II/2, 3, 14, 16ab, 17, 18a, 20a, 22f, 23a, 28b. (b) I/43b, 48, II/2, 3, 14, 19b, 20ab, 22af, 23a, 28b, 30ab, 34, 35, 36a. (c) I/48, II/14, 20b, 22af, 23a, 28b, 30b, 33, 34, 35, 37, 43. (d) II/14, 19d, 20c, 22aef, 23a, 28b, 33, 34, 35, 37, 43, 44, 50. A= (c) II/31j. (d) (II/37 or II/43 or II/50. Ref: AMPW.
(a) 320-280BC: 1x3Kn (Gen), 1x3Kn, 1x2LH, 4x4Pk, 1xSch or 3/4Ax, 2xEl, 2x2Ps.
(b) 279-205BC: 1x3Kn (Gen), 1x3Kn, 4x4Pk, 1xSch or 3/4Ax, 1xEl, 1x 4Ax, 1x2Ps or 4Wb, 2x2Ps.
(c) 204-167BC: 1x3/4Kn (Gen), 1x4Kn, 4x4Pk, 1xSch, 1xEl, 1x3Cm or 3Cv or 3Ax, 1x2Ps or 4Wb, 2x2Ps.
(d) 166-83BC: 1x4Kn (Gen), 1x4Kn, 1x2LH or 3Cv, 1x4Bd, 4x4Pk, 1x4Ax or El, 1x2Ps or 4Ax, 2x2Ps.

II/20. Ptolemaic. 320BC-30BC.

Littoral. Ag: 1. E = (a) I/7c, 56a, 58, II/16ab, 18ad, 19ab. (b) I/7c, 56b, 58, II/19bc. (c) I/7d, 56b, 58, II/19d, 49. (d) I/7d, 56b, 58, II/20d, 49, 51. Ref: AMPW.

(a) 320-275BC: 1x3Kn (Gen), 1x3Kn, 1x2LH, 6x4Pk, 1x3/4Ax, 1xEl or 2Ps, 1x2Ps.

(b) 274-167BC: 1x3Kn (Gen), 1x3Kn, 1x2LH, 6x4Pk, 1x4Ax, 1xEl, 1x2Ps.

(c) 166-54BC: 1x3Kn (Gen), 1x3Kn, 1x2LH, 4x4Pk, 2x4Bd or 4Ax, 1xEl, 1x4Ax, 1x2Ps.

(d) 53-30BC: 1x3Kn (Gen), 1x2LH, 2x4Pk, 2x4Ax, 2x4Bd or 4Ax, 1x3Cv or 4Wb, 2x5Wb or 4Bd, 1x2Ps.

II/21. Ch'iang and Ti. 315BC-417AD.

Hilly. Ag: 3. E = (a) I/43ab, II/4ade, 21a, 29, 38a, 41ab, 61a, 63. (b) II/21b, 38b, 61abc, 63, 79ab. (c) II/38bc, 61abc, 79ab. A = (a) II/38a. (c) II/38b and/or II/61c.

(a) 315BC-302AD: 1x3Cv or 2LH or 3Ax (Gen), 1x2LH or 3Cv, 7x3Ax, 3x3Bw or 2Ps.

(b) 301-417AD: 1x3/4Kn (Gen), 1x2LH, 7x3Ax, 3x3Bw or 2Ps.

(c) Former Ch'in 351-394AD: 1x3/4Kn (Gen), 1x3Kn, 1x2LH, 2x4Sp, 2x4Cb, 3x3Ax, 1x3Bw or 2Ps, 1x2Ps.

II/22. Arabo-Aramean. 312BC-240AD.

Hilly if (a), Dry if others. Ag: 0. E = (a) II/19bcd, 22b, 23a, 37, 43, 50, 51, 56, 59. (b) II/22ae, 23a, 37, 43, 51, 56, 59. (c) II/23a, 37, 64b, 69. (d) II/23a, 37, 64b. (e) II/19d, 22b, 23a, 44, 56, 69. (f) II/16a, 19abcd, 23a, 37. A = (c) II/37. (d) II/23a and/or II/37. (e) II/37.

(a) Nabataea 250BC-106AD: 1x3Kn or 3Cv (Gen), 1x2LH, 1x4Bd, 2x3Ax or 2Ps, 2x4Bw, 5x3Bw or 2Ps.

(b) Emesa 51BC-72AD: 1x4Kn (Gen), 2x2LH, 1x4Ax, 2x3Ax or 2Ps, 6x3Bw.

(c) Hatra 126BC-240AD: 1x4Kn (Gen), 1x2LH, 1x4Bd, 2x3Ax or 2Ps, 6x3Bw, 1x3Cm or Art.

(d) Characene 126BC-222AD: 1x4Kn (Gen), 1x2LH, 1x4Bd, 2x3Ax or 2Ps, 6x3Bw, 1x2Cm.

(e) Edessa, Singara or Adiabene 126BC on: 1x4Kn (Gen), 2x2LH, 1x4Bd, 2x3Ax or 2Ps, 6x3Bw.

(f) Any above if earlier: 1x3Cv (Gen), 2x2LH, 1x4Bd, 2x3Ax or 2Ps, 6x3Bw or 2Ps.

II/23. Later Pre-Islamic Arab. 312BC-633AD.

Dry. Ag: 3 if (a), 0 if not. E = (a) II/19abcd, 22abcde, 23abc, 37, 49, 56, 62, 69, 74ab, III/4ab, 17, 25a. (b) II/23ab, III/25a. (c) II/23a, 56, 62, 69, III/25a. A = (a) II/69 or III/17. (b) II/23a. (c) II/69.

(a) Nomad: 1x2LH (Gen), 1x2LH, 1x2Cm, 4x3Cm or 4Bd, 3x4Bd, 1x3Bw or 2Ps, 1x2Ps.

(b) City: 1x3Cv (Gen), 1x2LH, 1x2Cm, 6x4Bd, 2x3Bw, 1x2Ps.

(c) Yemeni: 1x3Cv (Gen), 1x2LH, 1x2Cm or 2Ps, 1x4Bd or 3Ax, 7x3Ax, 1x3Bw or 2Ps.

II/24. Early Rhoxolani Sarmatian. 310BC-100AD.

Steppe. Ag: 3. E = I/43ab, 48, II/25, 26, 37, 48, 56. A = I/43a or I/43b. Ref: AMPW, AEIR.

1x3Kn (Gen), 7x3Cv, 3x3Kn or 3Cv or 2Ps, 1x2LH or 3Cv.

II/25. Bosphoran. 310BC-107BC & 46BC-375AD.

Arable. Ag: 0. E = I/43ab, II/24, 25, 26, 48, 56, 58, 67b. A = I/43a or II/26 or II/58. Ref: AMPW, AEIR.

1x3Kn (Gen), 3x3Kn, 4x4Ax, 1x2Ps, 1x2Ps or Arty, 2x2Ps or 3Bw.

II/26. Siracae, Iazyges, Later Rhoxolani Sarmatian. 310BC-375AD.

Steppe. Ag: 3. E = I/43ab, II/24, 25, 26, 37, 47g, 48, 52, 56, 58, 64a, 65b, 67b, 70b, 78b. A = II/58 or II/67b or II/70b or II/72a. Ref: AMPW, AEIR.

1x3Kn (Gen), 8x3Kn, 1x2LH or 3Kn, 2x2Ps or 3Kn.

II/27. Pyrrhic. 300BC-272BC.

Arable. Ag: 4. E = (a) I/47, II/5i, 16b, 17, 18c. (b) I/61b, II/5a, 9, 10, 18e, 31c. Ref: AMPW.

(a) 300-281BC: 1x3Kn (Gen), 1x3Cv, 6x4Pk, 2x4Sp, 2x2Ps.

(b) 280-272BC: 1x3Kn or 3Cv (Gen), 1x3Cv or 2LH, 1x2LH, 1xEl, 4x4Pk, 2x4Sp, 1x4Ax, 1x2Ps.

II/28. Early Armenian and Gordyene. 300BC-627AD.

Hilly. Ag: 3 if (a), 1 if not. E = (a) II/14, 28d, 37, 44, 49. (b) I/43b, II/10, 14, 19abcd, 28bd, 37, 44, 49, 56, 58, 64b, 69. (c) II/28c, 58, 64b, 69, 78b, 80bd. (d) II/28ab, 37, 69. A = (a) II/28d and/or II/37. (b) II/37 and/or II/58. (c) II/80d. Ref: AEIR.

(a) Tigranes 83-69BC: 1x4Kn (Gen), 1x4Kn, 2x2LH, 1x4Bd, 2x4Pk, 3x3Ax, 2x2Ps.

(b) Other Armenian 300BC-244AD: 1x4Kn (Gen), 1x4Kn, 4x2LH, 4x3Ax, 2x2Ps.

(c) Armenian 245-627AD: 1x3Cv (Gen), 1x3Cv, 4x2LH, 4x3Ax, 2x2Ps.

(d) Gordyene 147BC-225AD: 1x4Kn (Gen), 1x4Kn, 4x2LH, 4x3Ax, 1x2Ps, 1xArt or 2Ps.

II/29. Tien and K'un-ming. 295BC-45AD.

Arable. Ag: 0. E = I/49ab, II/4ad, 21a, 29, 41ab.

1x3Cv (Gen), 1x4Bd or 2LH or 3Wb, 2x4Bd, 6x4Pk, 1x4Bd or 3Cb, 1x2Ps.

II/30. Galatian. 280BC-25BC.

Arable. Ag: 4 before 189BC, 1 after. E = (a) I/48, 63, II/5bcdef, 6, 14, 18de, 19b. (b) II/14, 19bc, 33, 34, 48, 49. (c) II/14, 49. Ref: AMPW, AEIR.

(a) 280-273BC: 1xLCh or 4Wb (Gen), 1xLCh, 1x3Cv, 8x4Wb, 1xSch or LCh or 3Cv.

(b) 272-48BC: 1xLCh or 3Cv or 4Wb (Gen), 2x3Cv, 8x4Wb, 1x2Ps.

(c) 47-25BC: 1x3Cv (Gen), 2x3Cv, 2x4Bd, 6x4Wb, 1x2Ps.

II/31. Hellenistic Greek. 275BC-146BC.

Arable. Ag: 0. E = (a) I/47, II/18e, 31cfhij. (b) I/47, II/31cdefghij. (c) I/47, II/27b, 31abfhij. (d) II/31bfhij. (e) I/47, II/31bfghij, 35. (f) I/47, II/31abcdehij. (g) I/47, II/31behij, 33. (h) I/47, II/31abcdeghij. (i) I/47, II/31abcdeghij, 33. (j) I/47, II/31abcdeghij, 33, 35. A = (i) II/33. Ref: AMPW.

(a) Boiotian 275-246BC: 1x3Cv (Gen), 1x2LH, 8x4Ax, 2x2Ps.

(b) Boiotian 245-146BC: 1x3Cv (Gen), 1x2LH, 6x4Pk, 2x4Ax, 2x2Ps.

(c) Spartan 275-225BC: 1x4Sp (Gen), 5x4Sp, 2x4Sp or 4Ax, 1x3Cv, 1x2LH, 2x2Ps.

(d) Spartan 224-223BC: 1x4Pk (Gen), 1x4Pk, 4x4Sp, 1x3Cv, 1x2LH, 2x4Ax, 2x2Ps.

(e) Spartan 222-149BC: 1x4Pk (Gen), 5x4Pk, 1x3Cv, 1x2LH, 2x4Ax, 2x2Ps.

(f) Achaian 275-208BC: 1x3Cv (Gen), 1x2LH, 7x4Ax, 1x3/4Ax, 2x2Ps.

(g) Achaian 207-146BC: 1x3Kn (Gen), 1x2LH, 6x4Pk, 1x4Ax, 1x3/4Ax, 2x2Ps.

(h) Athenian 275-146BC: 1x3Kn (Gen), 1x2LH, 4x4Sp, 4x4Ax, 2x2Ps.

(i) Eleian 275-146BC: 1x3Cv (Gen), 1x2LH, 4x4Sp, 2x4Ax, 4x2Ps.

(j) Aitolian 275-146BC: 1x2LH (Gen), 1x2LH, 4x4Ax or 2Ps, 6x2Ps.

II/32. Later Carthaginian. 275BC-146BC.

Littoral. Ag: 3. E = I/7c, II/9, 11, 33, 39abc, 40. A = II/5h or (II/8a and/or II/8b) or II/9 or II/39ac. Ref: AMPW.

1x3Cv (Gen), 1x2LH, 3x4Sp, 1x3/4Ax, 3x3Wb or 2Ps, 1xEl or 3Cv, 1xEl or 2LH, 1x2Ps.

II/33. Polybian Roman. 275BC-105BC.

Arable. Ag: 1 before 202BC, then 4. E = I/47, 48, II/5gh, 8abc, 9, 11, 14, 19cd, 30b, 31gij, 32, 34, 35, 39abc, 40, 44, 45a. A = II/11 or (II/31j and/or II/34) or II/39ab or II/40. Ref: AMPW.

1x3Cv (Gen), 1x3Cv, 6x4Bd, 2x4Sp, 2x2Ps.

II/34. Attalid Pergamene. 263BC-129BC.

Arable. Ag: 1. E = II/6, 14, 19bcd, 30b, 33, 35. A = II/14 or II/31g. Ref: AMPW.

1x3Kn (Gen), 1x2LH, 1x3Cv, 6x4Ax or 6x2Ps, 2x2Ps, 1x4Wb or 4Ax.

II/35. Later Macedonian. 260BC-148BC.

Arable. Ag: 1. E = I/47, 48, II/19bcd, 31ej, 33, 34. A = II/31fg. Ref: AMPW.

1x3Cv (Gen), 1x2LH, 6x4Pk, 2x4Ax, 1x3Ax or 4Wb or 2Ps, 1x2Ps.

II/36. Graeco-Bactrian 250BC-130BC & Graeco-Indian 170BC-55BC.

Steppe if (a), Tropical if (b). Ag: 1. E = (a) I/43b, II/2, 3, 19b, 36ab, 37, 46a. (b) II/2, 3, 36ab, 46a. A = (a) I/43b. (b) II/3 and/or II/46a. Ref: AMPW.

(a) Graeco-Bactrian: 1x3Kn (Gen), 1x3/4Kn, 2x2LH, (4x4Pk + 2x3/4Ax + 1x2Ps or El + 1x2Ps or 3Bw) or (3x3/4Kn + 5x2LH).

(b) Graeco-Indian: 1x3Cv (Gen), 1x2LH, 4x4Pk, 2xEl, 2x3Bw, 1x4Bd, 1x2Ps or 3Bw.

II/37. Parthian. 250BC-225AD.

Steppe until 126BC, then Arable. Ag: 2. E = I/43b, II/3, 19cd, 22abcd, 23a, 24, 26, 28abd, 36a, 37, 44, 46ab, 48, 49, 51, 56, 58, 64b, 69. A = I/43b or II/22ce or II/23a or II/26 or II/28b or II/44. Ref: AMPW, AEIR.

1x4Kn (Gen), 1x4Kn, 2x4Kn or 2LH or 2Ps, 1x4Kn or 2LH or 3Ax, 7x2LH.

II/38. Hsiung-nu or Juan-juan. 250BC-555AD.

Steppe. Ag: 2. E = (a) I/43b, II/4ace, 21a, 38a, 41ab, 46ab, 61a, 63. (b) II/21bc, 38b, 61abc, 63, 79b. (c) II/21c, 38c, 61abc, 63, 79a, 80d, III/8, 11b. A = (a) II/21a and/or II/41a. (c) III/11b.
(a) Hsiung-nu 250BC-304AD: 1x3Cv (Gen), 2x3Cv, 8x2LH, 1x2LH or 2Ps.
(b) Southern Hsiung-nu 304-439AD: 1x4Kn (Gen), 1x4Kn, 6x2LH, 3x3Ax, 1x2Ps.
(c) Juan-juan 308-555AD: 1x3Cv (Gen), 1x3Cv, 9x2LH, 1x2LH or 2Ps.

II/39. Ancient Spanish. 240BC-20BC.

Arable if (a) or (c), Hilly if (b). Ag: 0. E = (a) II/11, 32, 33, 39bc, 47a, 49. (b) II/11, 32, 33, 39ac, 47a, 49. (c) II/11, 32, 33, 39ab, 49. Ref: AMPW, AEIR.
(a) Iberian: 1x3Cv (Gen), 1x2LH, 6x3Ax, 4x2Ps.
(b) Celtiberian: 1x3Cv (Gen), 1x2LH, 6x3Wb, 4x2Ps.
(c) Lusitanian: 1x3Cv (Gen), 1x2LH, 3x3Ax, 6x2Ps, 1x3Wb or 4Bd or 2Ps.

II/40. Numidian or Early Moorish. 215BC-25AD.

Hilly. Ag: 1. E = I/7cd, II/32, 33, 40, 49, 56. A = II/56. Ref: AMPW.
1x3Cv or 2LH (Gen), 4x2LH, 5x2Ps or 3Ax, 1x2Ps or El, 1x2LH or 3/4Ax or 4Bd.

II/41. Han Chinese. 202BC-189AD.

Arable. Ag: 3. E = (a) I/43b, 49b, II/21a, 29, 38a, 41a, 46ab. (b) I/43b, 49c, II/21a, 29, 38a, 41b, 46b, 61a. A = (b) II/38a and/or II/61a. Ref: ICA1.
(a) 202BC-9AD: 1xHCh or 3Cv (Gen), 2x3Cv, 2x2LH, (3x4Cb + 3x4Sp + 1x2Ps) or (3x3Cv + 4x2LH).
(b) 10-189AD: 1x3Cv (Gen), 2x3Cv, 2x2LH, 3x4Cb, 3x4Sp, 1x2Ps.

II/42. Tamil Indian and Sinhalese. 175BC-1515AD.

Tropical. Ag: Tamils 980-1279AD 3, others 0. E = (a) II/3, 42ac. (b) II/3, 42bd, III/10ac, IV/37a. (c) II/42ac, III/10c. (d) II/42bd, III/9b, IV/37a, 73. A = (b) II/42d or III/10c.
(a) Tamil 175BC-300AD: 1xEl (Gen), 2xEl, 1x3Cv, 4x3Wb, 2x3Bw, 2x2Ps.
(b) Tamil 301- 1370AD: 1xEl (Gen), 2xEl, 1x3Cv, 4x3Bd, 2x3Bw, 2x2Ps.
(c) Sinhalese 175BC-300AD: 1xEl (Gen), 1xEl, 2x3Wb, 6x3Bw, 2x2Ps.
(d) Sinhalese 301-1515AD: 1xEl (Gen), 1xEl, 2x3Bd, 6x3Bw, 2x2Ps.

II/43. Maccabean Jewish. 168BC-104BC.

Hilly. Ag: 1. E = II/19cd, 22ab. Ref: AMPW.
1x3Kn (Gen), 2x2LH, 4x4Ax or 4x4Pk, 2x3Ax, 3x2Ps.

II/44. Commagene. 163BC-17AD & 38AD-72AD.

Hilly. Ag: 1. E = II/14, 19d, 22e, 28ab, 33, 37, 49, 56, 59.
1x4Kn or 4Pk (Gen), 1x4Kn or 4Pk, 2x2LH, 2x4Pk, 4x3Bw, 1x3Bw or 4Ax or 2Ps, 1x2Ps.

II/45. Sicilian and Italian Slave Revolts. 135BC-71BC.

Arable. Ag: 0. E = (a) II/33. (b) II/49. (c) II/49.
(a) 1st Servile War 135BC-132BC: 1x3Ax (Gen), 3x3Ax, 5x5Wb, 3x2Ps.
(b) 2nd Servile War 103BC-99BC: 1x3Cv (Gen), 1x2LH, 2x4Bd, 1x3Ax, 5x5Wb, 2x2Ps.
(c) Spartacus 74BC-71BC: 1x3Cv or 4Bd (Gen), 4x4Bd, 5x5Wb, 2x2Ps.

II/46. Kushan. 135BC-477AD.

Steppe if (a), Arable if (b), Hilly if (c). Ag: 2. E = (a) I/43b, II/36ab, 37, 38a, 41a. (b) I/43b, II/3, 37, 38a, 41ab, 63, 69, 80cd. (c) II/69, 79a, 80d. A = (a) I/43b. (b) I/43b or II/37 or II/80d.
(a) 135-51BC: 1x4Kn (Gen), 2x4Kn, 4x2LH, 1xEl or 2LH, 2x4Pk or 2LH, 1x3Ax, 1x2Ps.
(b) 50BC-410AD: 1x4Kn (Gen), 1x4Kn, 4x2LH, 1xEl, 1x3Cv, 2x3Lb, 1x3Ax, 1x2Ps.
(c) 411-477AD: 1x4Kn (Gen), 2x4Kn, 6x2LH, 1xEl or 2LH, 1x3Ax, 1x2Ps.

II/47. Early German. 115BC-250AD.

Littoral if (c) or (d), Forest if others. Ag: 4 if (a) or (b), 2 others. E = (a) II/11, 39ab, 47g, 49. (b) II/11, 47g, 49. (c) II/56. (d) II/47efg. (e) II/11, 47dfg, 56, 64a. (f) II/11, 47deg, 56, 64a. (g) I/47, II/11, 26, 47abdefg, 56, 64a, 66. A = (a) II/11. (c) II/47g. (defg) 0-2 other II/47defg. Ref: AEIR.

- (a) Cimbri & Teutones 113-102BC: 1x3Cv (Gen), 1x3Cv, 9x4Wb, 1x2Ps.
- (b) Ariovistus's in 58BC: 1x4Wb (Gen), 2x3Cv, 8x4Wb, 1x2Ps.
- (c) Batavi in 69AD: 1x3Cv (Gen), 2x4Ax, 8x3Wb, 1x2Ps.
- (d) Other Batavi: 1x3Cv (Gen), 9x3Wb, 2x2Ps.
- (e) Cherusci: 1x3Cv or 3Wb (Gen), 9x3Wb, 2x2Ps.
- (f) Tencteri: 1x3Cv or 4Wb (Gen), 1x2LH, 9x4Wb, 1x2Ps.
- (g) Others: 1x3Cv or 4Wb (Gen), 10x4Wb, 1x2Ps.

II/48. Mithridatic. 110BC-47BC.

Arable. Ag: 3. E = I/43b, II/6, 14, 24, 25, 26, 30b, 37, 49. A = II/28ab. Ref: AEIR.
1x3Cv (Gen), 1x3Kn or 3Cv or 2LH, 1x2LH, (1xSch + 4x4Pk) or (5x4Bd), 1x4Ax, 2x3Ax or 2Ps, 1x2Ps.

II/49. Marian Roman. 105BC-25BC.

Arable. Ag: 3. E = I/7d, 47, 48, II/11, 14, 20cd, 23a, 28ab, 30bc, 37, 39abc, 40, 44, 45bc, 47ab, 48, 49, 51, 52, 53. A = II/6 or (II/23a and/or II/51) or II/28b or II/30bc or II/40 or II/49. Ref: AEIR.
1x3Cv or 4Bd (Gen), 1x3Cv or 2LH, 8x4Bd, 1x3/4Ax or 2Ps, 1x2Ps.

II/50. Hasmonean Jewish. 103BC-63BC.

Hilly. Ag: 1. E = II/19d, 22a, 50. A = II/22a.
1x3Kn (Gen), 1x2LH, 4x4Ax or 4x4Pk, 1x4Ax, 5x2Ps.

II/51. Late Judean. 63BC-6AD.

Hilly. Ag: 1. E = II/20d, 22ab, 37, 49, 51, 56. A = II/37 or II/49 or II/56.
1x4Kn or 4Ax (Gen), 1x3Cv or 2LH, 4x4Ax or 4Bd, 1x3/4Ax, 5x2Ps.

II/52. Dacian. 60BC-106AD and Carpi 106AD-380AD.

Hilly. Ag: 1. E = I/47, II/11, 26, 49, 52, 56, 64b, 78b. A = II/26. Ref: AEIR.
1x3/4Wb or 3Cv (Gen), 1x2LH, 6x3Wb, 1x3Bd, 2x2Ps, 1x3Bd or 3Kn or 2Ps or Art.

II/53. Ancient British. 55BC-75AD.

Arable. Ag: 0. E = II/49, 53, 54a, 56, 60. A = II/56. Ref: AEIR.
1xLch or 3/4Wb (Gen), 2x2LH, 3xLch or 2Ps or 3Wb, 5x3Wb, 1x3Wb or 2Ps.

II/54. Scots-Irish. 55BC-846AD.

Littoral. Ag: 3. E = (a) II/53, 54a, 56, 60, 64a, 68a, 78a, 81ab. (b) II/54b, 68ab, 81bcd, III/19a, 40ab. Ref: AEIR, ADA.

- (a) 55BC-432AD: 1xLch (Gen), 2xLch, 1xLch or 4Wb or 3Ax, 6x3Ax, 2x2Ps.
- (b) 433-846AD: 1xLch or 3Ax or 3Wb (Gen), 9x3Ax, 2x2Ps.

II/55. Nobades, Blemmye or Beja. 30BC-1500AD.

Dry. Ag: 2. E = (a) I/58, II/55a, 56, 62, 64b. (b) I/58, II/55b, 62, 64b, 78b, III/4ab, 12, 17, 25b, 31, 37a. (c) II/55c, 62, III/12, 31, 37ab, 49, 65, IV/20, 45. A = (c) III/12. Ref: AEIR.

- (a) 30BC-200AD: 1x3Cv (Gen), 1x3Cv, 2x3Cv or 3Ax, 4x3Bw, 4x4Sp or 3Ax.
- (b) 201-831AD: 1x3Cv (Gen), 2x3Cv or 3Ax, 1x2Cm, 2x3Cm or 4Sp or 3Ax, 2x4Sp or 3Ax, 4x3Bw.
- (c) 832-1500AD: 1x3Cv or 2LH (Gen), 3x2LH, 2x3Cm or 3Ax, 2x3Bd, 3x3Bw, 1x2Ps.

II/56. Early Imperial Roman. 25BC-197AD.

Arable. Ag: 3. E = I/7d, 47, 48, 58, II/14, 22abe, 23ac, 24, 25, 26, 28b, 37, 40, 44, 47cef, 51, 52, 53, 54a, 55a, 56, 57, 58, 59, 60, 64b. A = (II/22abe and/or II/44) or II/28b or II/47d or II/51. Ref: AEIR.
1x3Cv or 4Bd (Gen), 1x3Cv, 1x3Cv or 2LH or 4Bw or 2Ps, 4x4Bd, 4x4Ax, 1xArt.

II/57. Later Moorish. 25AD-696AD.

Hilly. Ag: 1. E = II/56, 64a, 78a, 84, III/4ab, 17, 25b, 29, 31. Ref: AEIR.
1x2LH or 3Cv (Gen), 5x2LH, 6x2Ps.

II/58. Alan. 50AD-1500AD.

Steppe until 400AD, then Arable. Ag: 1. E = II/25, 26, 28bc, 37, 56, 65b, 66, 67b, 69, 78ab, 80bd, III/13b, 14a, 16, 31, 47, 53, 70abc, 73b, 79, IV/24, 31, 34, 35, 46, 47, 50, 55ab, 60, 75, 77. Ref: AEIR, ADA.
1x3Kn or 2LH (Gen), 5x2LH, 3x2LH or 3Kn, 2x2LH or 4Bd, 1x2LH or 2Ps.

II/59. Jewish Revolt. 66AD-70AD & 132AD-135AD.

Hilly. Ag: 0. E = II/22ab, 44, 56, 59. Ref: AEIR.
1x3/4Ax or 3Wb (Gen), 2x4Ax or 3Wb, 4x5Wb or 3Ax, 2x5Wb, 3x2Ps.

II/60. Caledonian. 75AD-211AD.

Arable. Ag: 1. E = II/53, 54a, 56, 64a. Ref: AEIR.
1xLCh or 3/4Wb (Gen), 2xLCh, 8x3Wb, 1x3Wb or 2Ps.

II/61. Hsien-pi, Wu-huan, Pre-dynastic Khitan or Hsi. 90AD-1000AD.

Steppe if (a), (c) or (d), Arable if (b). Ag: 1 if Wu-huan, 3 if Hsien-pi, 2 if Khitan or Hsi. E = (a) II/21abc, 38abc, 41b, 61ab, 63, 76. (b) II/21bc, 38bc, 61acd, 63, 76, 79a. (c) II/21bc, 38bc, 61bcd, 63, 76, 79a. (d) II/61bcd, 76, 79a, III/11b, 20ab, 39, 42ab, 55. A = (b) II/21c.
(a) Wu-huan or Hsien-pi 90-316AD: 1x3Cv (Gen), 10x2LH, 1x2Ps.
(b) Mu-jung Hsien-pi 300-431AD: 1x6Kn (Gen), 2x6Kn, 4x2LH, 2x4Sp, 2x4Cb, 1x2Ps.
(c) Other Hsien-pi 317-431AD: 1x3/4Kn (Gen), 3x3/4Kn, 7x2LH, 1x2Ps.
(d) Khitan or Hsi 350-1000AD: 1x3Cv (Gen), 2x3Cv, 8x2LH, 1x2Ps.

II/62. Abyssinian & Horn of Africa. 100AD-1529AD.

Hilly. Ag: 3. E = I/58, II/23ac, 55abc, III/12, 31, 37ab, 65. A = (II/23a and/or II/23c) or (I/58 and/or II/55b).
1x2LH or El (Gen), 1x2LH or 3Wb, 1x3Bd, 6x3Wb, 2x3Bw, 1x2Ps.

II/63. Three Kingdoms & Western Ts'in Chinese. 189AD-316AD.

Arable. Ag: 1. E = I/49cd, II/21ab, 38abc, 46b, 61abc, 63, 75, 76, 77a. A = II/21ab or (II/38a and/or II/61a). Ref: ICA1.
1x3Cv (Gen), 1x3Cv, 1x2LH, 1x3Bd or 4Cb, 3x4Sp, 2x4Cb, 1x4Ax, 1x2Ps, 1xArt or 2LH.

II/64. Middle Imperial Roman. 193AD-324AD.

Arable. Ag: 1 if (a), 2 if (b). E = (a) II/26, 47efg, 54a, 57, 60, 64ab, 66, 68a, 70a, 72abcd, 73, 78a. (b) I/58, II/22cd, 28bc, 37, 52, 55ab, 56, 64ab, 65b, 66, 69, 71, 74b, 78a. A = (a) II/72d. (b) (II/23a and/or II/28bc) or II/65b. Ref: AEIR.
(a) West: 1x3Cv (Gen), 1x3Cv or 3Kn, 1x2LH, 1x3Bd, 3x4Bd, 3x4Ax, 1x4Ax or 4Bw or 2Ps, 1xArt.
(b) East: 1x3Cv (Gen), 1x3Cv or 4Kn, 1x2LH, 1x3Bd, 3x4Bd, 3x4Ax, 1x4Ax or 4Bw or 2Ps, 1xArt or 2LH.

II/65. Early Visigothic. 200AD-419AD.

Arable. Ag: 3. E = (a) II/78b. (b) II/26, 58, 64b, 65b, 66, 67b, 71, 72d, 78ab, 80ad, 81c. A = (II/52 and/or II/67b) or II/78a. Ref: AEIR.
(a) 378 AD only: 1x4Wb (Gen), 2x3Kn, 1x2LH, 7x4Wb, 1x2Ps.
(b) Other times: 1x3Kn or 4Wb (Gen), 1x3Kn, 8x4Wb, 2x2Ps.

II/66. Early Vandal. 200AD-442AD.

Arable. Ag: 3. E = II/47g, 58, 64ab, 65b, 71, 72acd, 78a, 82a, 83a. A = II/57 or (II/58 and/or II/72c). Ref: AEIR.
1x3Kn (Gen), 9x4Wb, 1x2LH or 2Ps, 1x2Ps.

II/67. Early Ostrogothic, Herul, Sciri or Taifali. 200AD-493AD.

Arable. Ag: 3. E = (a) II/78a. (b) II/25, 26, 58, 65b, 71, 72d, 78ab, 80ad, 83ab, III/2. A = (b) (II/52 and II/80d) or (II/71 and/or II/72d). Ref: AEIR.
(a) Radagaesus 401-406AD: 1x3Kn (Gen), 4x3Kn, 1x2LH, 4x4Wb, 2x2Ps.
(b) Others: 1x3Kn (Gen), 5x3Kn, 6x2Ps.

II/68. Pictish. 211AD-846AD.

Littoral if (a), Arable if (b). Ag: 3. E = (a) II/54ab, 64a, 68a, 73, 78a, 81abc. (b) II/54b, 73, 81cd, III/24ab, 40ab. A = (a) II/54a and/or II/73. Ref: AEIR, ADA.
(a) 211-499AD: 1xLCh (Gen), 2x2LH, 5x3Sp, 1x3Sp or 3/4Wb, 3x2Ps.
(b) 500-846AD: 1x3Cv or 3Sp (Gen), 2x2LH, 6x3Sp, 3x2Ps.

II/69. Sassanid Persian. 220AD-651AD.

Arable. Ag: 3. E = II/22ce, 23ac, 28bcd, 37, 46bc, 58, 64b, 69, 74a, 78b, 80abd, 83b, III/4ab, 11b, 16, 17, 25ab.
A = II/23b or II/28c or II/46b or II/58 or II/80bd or III/11b. Ref: AEIR, ADA.
1x3Cv (Gen), 1x4Kn or 3Cv, 4x3Cv, 1x2LH, 1xEl or 3Cv, 1x3Ax or 3Cv, 2x7Hd, 1x2Ps.

II/70. Burgundi or Limigantes. 250AD-534AD.

Forest until 436AD, then Arable. Ag: 3. E = (a) II/64a, 72bcd, 78a, 80a, 82a, III/3, 5a. (b) II/26, 78b.
(a) Burgundi 250-534AD: 1x3Cv (Gen), 9x3Wb, 2x2Ps.
(b) Limigantes 250-359AD: 1x4Wb (Gen), 1x2LH, 8x4Wb, 2x2Ps.

II/71. Gepid. 250AD-566AD.

Steppe. Ag: 3. E = II/64b, 65b, 66, 67b, 71, 72acd, 80d, 83ab, III/1c, 2, 3, 4ab, 13a. A = II/66 or (II/67b and/or II/73). Ref: ADA.
1x3Kn (Gen), 3x3Kn, 4x4Wb, 4x2Ps.

II/72. Early Frankish, Alamannic, Quadi, Suevi, Rugian or Turcilingi. 250AD-496AD, 506AD, 406AD, 584AD, 487AD & 493AD.

Forest until 406AD, then Arable. Ag: 3. E = (a) II/64a, 66, 71, 72d, 78ab, 80d. (b) II/64a, 70a, 72d, 73, 78a, 83a. (c) II/64a, 66, 70a, 71, 72d, 78a, 82a, 83a. (d) II/64a, 65b, 66, 67b, 70a, 71, 72abcd, 73, 78a, 80ad, 82a, 83a, III/1c, 2, 3. A = (a) II/26. (b) (II/58 and/or II/66) or (II/67b and/or II/70a) or II/72ad. (c) II/67b or II/78a. (d) II/72b. Ref: AEIR, ADA.
(a) Quadi 250-406AD: 1x3Kn (Gen), 10x4Wb, 1x2Ps.
(b) Alamanni 250-506AD: 1x3Cv or 4Wb (Gen), 7x4Wb, 3x3Bw, 1x2Ps.
(c) Suevi 250-584AD: 1x3Kn (Gen), 8x4Wb, 2x3Bw, 1x2Ps.
(d) Others: 1x3Cv or 4Wb (Gen), 10x4Wb, 1x2Ps.

II/73. Old Saxon 250AD-804AD, Frisian 250AD-690AD, Bavarian 250AD-788AD, Thuringian 250AD-531AD or Early Anglo-Saxon 428AD-617AD.

Arable if Old Saxon or Anglo-Saxon, Littoral if Frisian, Forest if Bavarian or Thuringian. Ag: 2. E = II/64a, 68ab, 72bd, 73, 78a, 81abcd, 83a, III/1a, 2, 3, 5a, 13b, 19a, 21ab, 28. Ref: AEIR, ADA.
1x4Wb(Gen), 10x4Wb, 1x2Ps.

II/74. Palmyran. 260AD-273AD.

Dry. Ag: 1. E = (a) II/23a, 69. (b) II/23a, 64b. A = (ab) II/23a. Ref: AEIR.
(a) 60-271AD: 1x4Kn (Gen), 2x4Kn, 1x2LH, 3x4Bw, 2x3Bw or 2Ps, 1x3Cv, 1x4Bd, 1x4Ax.
(b) 271-273AD: 1x4Kn (Gen), 3x4Kn, 2x2LH, 4x4Bw, 2x3Bw or 2Ps.

II/75. Paekche and Kaya Korean. 300AD-660AD.

Hilly. Ag: 0. E = II/63, 76, 77ab, 79a, III/20ab. A = II/76 or II/77ab or III/7ab.
1x4Kn or 3Cv (Gen), 1x3Cv or 4Kn, 1x2LH or 3Cv, 4x4Sp, 4x3Bw, 1x2Ps.

II/76. Koguryo Korean. 300AD-668AD.

Arable. Ag: 0. E = II/61abcd, 63, 75, 77ab, 79a, III/20ab. A = II/38b or II/61c or II/75 or II/77ab or III/7b.
1x4Kn (Gen), 1x3/4Kn, 1x4Kn or 2LH or 3Bw, 2x2LH, 4x4Sp, 2x3Bw, 1x2Ps.

II/77. Silla Korean. 300AD-935AD.

Hilly. Ag: 0. E = (a) II/63, 75, 76, 79a, III/7a. (b) II/75, 76, 79a, III/7ab, 20ab, 39, 54, 55, 56. A = (a) II/75 or II/76. (b) II/75 or II/76 or III/20b.
(a) 300-520AD: 1x4Kn or 3Cv (Gen), 1x4Kn or 3Cv, 1x2LH, 4x4Sp, 4x3Bw, 1x2Ps.
(b) 521-935AD: 1x4Kn or 3Cv (Gen), 1x4Kn or 3Cv, 1x2LH, 3x4Sp, 3x3Bw, 2x4Pk, 1x2Ps.

II/78. Late Imperial Roman. 307AD-425AD.

Arable. Ag: 1 if (a), 2 if (b). E = (a) II/54a, 57, 58, 64ab, 65b, 66, 67ab, 68a, 70a, 72abcd, 73, 78ab, 80d, 82a. (b) II/26, 28c, 52, 55b, 58, 65ab, 67b, 69, 70b, 72a, 78a, 80d. A = (a) II/58 or II/65b or II/72d. (b) II/23a or II/28c or II/65b. Ref: AEIR.
(a) West: 1x3Cv (Gen), 1x3Cv, 2x2LH, 2x4Bd, 3x4Ax, 2x2Ps, 1x4Kn or Art or 4Bd.
(b) East: 1x3Cv (Gen), 2x4Kn, 2x2LH, 3x4Bd, 2x4Ax, 2x2Ps.

II/79. Chinese Northern & Southern Dynasties. 317AD-589AD.

Arable. Ag: 2 if (a), 1 if (b). E = (a) II/21bc, 38c, 46c, 61bcd, 75, 76, 77ab, 79ab, III/8, 11b. (b) I/49d, II/21bc, 38b, 79ab. A = (a) II/38c. Ref: ICA1.

(a) North: 1x3/4Kn (Gen), 2x3/4Kn, 2x2LH, (1x3Bd, 3x4Bd or 4Sp, 3x4Cb or 2Ps) or (2x3/4Kn, 2x3Cv, 3x2LH).

(b) South: 1x3/4Kn (Gen), 1x3Cv, 1x2LH, 1x3Bd or 4Cb or 2Ps, 3x4Bd or 4Sp, 3x4Cb or 2Ps, 1x3Bw or 2Ps, 1x3Wb or 4Bd or 4Sp or El.

II/80. Hunnic. 356AD-570AD.

Steppe if (a) or (d), Hilly if (b), Tropical if (c). Ag: 4 if (a), 3 if (b) or (d), 1 if (c). E = (a) II/65b, 67b, 69, 70a, 72d, 82a, 83ab. (b) II/28c, 58, 69, 80d, 83b. (c) II/3, 46b, III/10c. (d) II/3, 28c, 38c, 46bc, 58, 65b, 67b, 69, 71, 72ad, 78ab, 80bd, 83ab, III/8, 11b. Ref: AEIR.

(a) Attila's army 433-453AD: 1x3Cv or 2LH (Gen), 7x2LH, 1x3Kn, 2x4Wb, 1x2Ps.

(b) Sabir 463-558AD: 1x3Cv or 2LH or 4Wb (Gen), 6x2LH, 5x4Wb.

(c) Hephthalites in India 470-570AD: 1x3Cv (Gen), 8x2LH, 1xEl, 2x3Bw.

(d) Others 356-553AD: 1x3Cv or 2LH (Gen), 11x2LH.

II/81. Sub-Roman British. 407AD-945AD.

Arable. Ag: 1. E = (a) II/54a, 68a, 73, 81a. (b) II/54ab, 68a, 73, 81b. (c) II/54b, 65b, 68ab, 73, 81c, 82a. (d) II/54b, 68b, 73, 81d, III/19a, 24ab, 40ab, 45a. A = (a) II/78a. (b) II/73 or II/83a. (d) III/40ab. Ref: ADA.

(a) 407-428AD: 1x3Cv (Gen), 1x3Cv, 1x4Ax or 2LH, 8x4Ax, 1x2Ps.

(b) 429-441AD: 1x3Cv (Gen), 1x3Cv, 1x4Ax or 2LH, 5x4Ax or 4Sp, 3x4Wb (Saxons) or 4Ax or 4Sp, 1x2Ps.

(c) 442-539AD: 1x3Kn or 3Cv (Gen), 2x3Cv, 1x4Sp or 2LH, 7x4Sp, 1x2Ps.

(d) 540-945AD: 1x3Cv (Gen), 2x3Cv, 1x4Sp or 2LH, 7x4Sp, 1x2Ps.

II/82. Later Visigothic. 419AD-720AD.

Arable. Ag: 1. E = (a) II/66, 70a, 72cd, 78a, 80a, 81c, 82a, 83a, III/4b, 5ab, 17. (b) II/82b, III/5b, 17, 28, 31, 34a. A = (a) II/70a or II/72c or III/3 or III/4b. Ref: ADA.

(a) 419-621AD: 1x3Kn (Gen), 3x3Cv, 4x4Wb, 4x2Ps or 3Bw.

(b) 622-720AD: 1x3Kn (Gen), 2x3Cv, 1x2LH, 4x4Sp, 2x3Bw or 2Ps, 2x2Ps.

II/83. Patrician Roman. 425AD-493AD.

Arable. Ag: 0 if (a), 1 if (b). E = (a) II/66, 67b, 71, 72bcd, 73, 80ad, 82a, 83ab, 84, III/2. (b) II/67b, 69, 71, 80abd, 83ab, 84, III/1c. A = (a) II/58 or (II/72d and/or II/82a) or II/80d or II/81c or II/83b. (b) II/23a or II/67b. Ref: AEIR.

(a) West: 1x3Cv or 3Kn (Gen), 1x3Cv or 2LH, 1x4Bd, 2x4Ax, 2x3Kn, 4x4Wb or 4Ax, 1x2Ps.

(b) East: 1x3Cv or 3Kn (Gen), 1x3/4Kn, 1x3Kn, 2x2LH, 2x4Bd, 2x4Ax, 2x4Wb or 4Ax or 2Ps, 1x2Ps.

II/84. African Vandal. 442AD-535AD.

Littoral. Ag: 3. E = II/57, 83ab, III/4a. A = II/57. Ref: ADA.

1x3Kn (Gen), 10x3Kn, 1x2LH or 3Kn.

SECTION THREE - THE EARLY MEDIEVAL PERIOD - 476AD TO 1071AD

III/1. Early Slav. 476AD-1218AD.

Littoral if (a), Arable if (b), Forest if (c). Ag: 1. E = (a) II/73, III/40abcd, 52, 62ab, IV/13a. (b) III/28, 30b, 52, 62a, 67a. (c) II/71, 72d, 83b, III/2, 4ab, 5a, 13ab, 14abc, 16, 17, 21a, 26ab, 28, 29, 30ab, 32, 40a, 47, 48, 52, 62a. A = (ac) II/73. (b) III/30b or III/47. Ref: ADA.

(a) Wends 580-1218AD: 1x3Cv (Gen), 1x3Cv, 7x3Ax, 1x4Bd or 3Cv or 3Kn, 2x2Ps or 3Bw.

(b) Bohemians 830-1003AD: 1x3Cv (Gen), 1x3Cv or 3Kn, 8x4Sp, 2x2Ps or 3Bw.

(c) Others 476-985AD: 1x3Cv or 3Ax (Gen), 9x3Ax, 2x2Ps.

III/2. Early Lombard. 489AD-584AD.

Arable. Ag: 2. E = II/67b, 71, 72d, 73, 83a, III/1c, 2, 3, 4ab, 5a, 13ab, 17. A = II/72c or II/73 or (III/5a and/or III/13b) or III/14a. Ref: ADA.

1x3Kn (Gen), 6x3Kn, 2x3Kn or 4Wb, 3x3Bw or 2Ps.

III/3. Italian Ostrogothic. 493AD-561AD.

Arable. Ag: 0. E = II/70a, 71, 72d, 73, III/2, 4ab, 5a. A = II/70a or III/5a. Ref: ADA.

1x3Kn (Gen), 5x3Kn, 2x3Kn or 4Sp, 4x2Ps or 3Bw.

III/4. Early Byzantine. 493AD-578AD.

Arable. Ag: 3. E = (a) II/23a, 55b, 57, 69, 71, 84, III/1c, 2, 3, 5a. (b) II/23a, 55b, 57, 69, 71, 82a, III/1c, 2, 3, 5a, 13ab, 14a. A = (a) II/23a. (b) III/2. Ref: AEIR, ADA.

(a) 493-549AD: 1x3Cv (Gen), 1x3Cv, 5x2LH or 5x3Cv, 1x3Kn or 2LH or 3Ax, 2x4Bd, 2x2Ps.

(b) 550-578AD: 1x3Cv (Gen), 1x2LH or 3Cv, 5x3Cv, 1x3Kn // 4Sp or 3Ax or 4Wb, 2x4Bd, 2x2Ps.

III/5. Middle Frankish. 496AD-639AD.

Arable. Ag: 3. E = (a) II/70a, 73, 82a, III/1c, 2, 3, 4ab, 5ab, 13ab, 17, 18, 21a. (b) II/82ab, III/5a, 18, 21a. A = (a) II/70a or II/82a. (b) II/82a. Ref: AEIR, ADA.

(a) Austrasian or Burgundian: 1x3Kn or 3Cv (Gen), 1x3Kn or 3Cv, 6x4Wb, 3x4Sp or 3Wb, 1x2Ps.

(b) Neustrian, Aquitanian or Provencal: 1x3Kn or 3Cv (Gen), 1x3Kn or 3Cv, 6x4Sp, 3x4Sp or 3Wb, 1x2Ps.

III/6. Emishi. 500AD-1100AD.

Hilly. Ag: 0. E = (a) III/7ab. (b) III/7b, 54.

(a) 500-699AD: 1x3Bw(Gen), 11x2Ps or 3Bw.

(b) 700-1100AD: 1x2LH or 3Cv (Gen), 9x2LH, 2x2Ps or 3Bw or 2LH.

III/7. Pre-Samurai Japanese. 500AD-900AD.

Arable. Ag: 3. E = (a) II/77ab, III/6a, 7a, 20ab. (b) II/77b, III/6ab, 7b, 20b.

(a) 500-644AD: 1x3Cv or 4Bw (Gen), 2x3Cv, 6x3Bw, 1x3Bw or 2Ps, 2x3Ax.

(b) 645-900AD: 1x3Cv or 4Bw (Gen), 3x3Cv, 6x4Bw, 1x4Ax, 1xArt.

III/8. Central-Asian City States. 500AD-1000AD.

Steppe. Ag: 0. E = II/38c, 79a, 80d, III/8, 11b, 15, 20ab, 25b, 31, 39, 43c. A = III/11b or III/31.

(1x3Kn (Gen) + 5x3Kn) or (1x3Cv (Gen) + 5x3Cv), 1x2LH, 4x3Bw or 2Ps, 1x7Hd or 2Ps.

III/9. Burmese. 500AD-1526AD.

Tropical. Ag: 2. E = (a) I/49d, III/9a, 15, 20ab, 23, 36, 59. (b) II/42d, III/9b, 10c, 23, 59, IV/40, 48, 73. A = (b) IV/48.

(a) 500-1043AD: 1xEl (Gen), 1x3Cv, 6x3Ax, 4x3Cb.

(b) 1044-1526AD: 1xEl (Gen), 2xEl, 1x3Cv, 5x3Ax, 3x3Cb.

III/10. Hindu Indian. 545AD-1510AD.

Tropical. Ag: 2. E = (a) II/42b, III/10c. (b) III/10bc, 15, 31, 38, 43ab, 63ab, IV/8, 36a. (c) II/42bc, 80c, III/9b, 10abc, 15, 31, 37a, 38, 43b, IV/36ab, 75. A = (b) III/10c. (c) II/42b or II/80c or (III/10b and/or III/38) or III/15 or IV/36a. Ref: AMA2.

(a) Harsha 606-647AD: 1xEl (Gen), 2xEl, 2x3Cv, 1x3Bd, 3x3Bw, 3x4Sp.

(b) Rajputs 747-1300AD: 1xEl or 3Kn (Gen), 3x3Kn, 2x3Bd, 4x3Bw, 2x2Ps.

(c) Others: 1xEl (Gen), 1xEl, 2x3Cv, 1x3Bd, 4x3Bw, 2x2Ps, 1xEl or Art.

III/11. Central Asian Turkish. 550AD-1330AD.

Steppe. Ag: 3. E = (a) III/11b, 15, 39, 42ab, 44, 55, 66, IV/15, 35, 48, 52. (b) II/38c, 61d, 69, 79a, 80d, III/8, 11ab, 13b, 14a, 15, 16, 20ab, 31, 32, 37a, 43abc, 44, 47, 63a, 73b, 79, IV/8, 15, 24, 35. A = (a) III/11b or III/15. (b) (III/8 and/or III/14a) or III/15 and/or III/31) or III/55. Ref: ADA.
(a) Uighurs 860-1330AD: 1x3Cv (Gen), 2x3Cv, 3x2LH, 3x3Bw or 2Ps, 3x4Sp.
(b) Others: 1x3Cv (Gen), 2x3Cv, 6x2LH, 1x2Ps or 2LH, 2x7Hd or 2LH.

III/12. Christian Nubian. 550AD-1500AD.

Dry. Ag: 1. E = II/55bc, 62, III/12, 25b, 31, 37ab, 49, 65, 68, IV/20, 45. A = II/55bc. Ref: ADA.
1x3Cv (Gen), 2x3Cm, 2x2LH, 4x3Wb, 3x3Bw or 2Ps.

III/13. Avar. 553AD-826AD.

Steppe. Ag: 3. E = (a) II/71, III/1c, 2, 4b, 5a, 14abc, 17, 21ab, 26ab, 28. (b) II/58, 73, III/1c, 2, 4b, 5a, 11b, 14a, 17, 21a, 26ab. A = (a) III/14b. (b) II/69. Ref: ADA.
(a) 553-558AD & 631-826AD: 1x3Cv (Gen), 9x3Cv, 2x2LH or 3Cv.
(b) 558-631AD: 1x3Cv (Gen), 4x3Cv, 2x2LH, 4x3Ax, 1x2Ps.

III/14. Early Bulgar. 559AD-1018AD.

Steppe. Ag: 1 before 675, then 3. E = (a) II/58, III/1c, 4b, 11b, 13ab, 16, 17, 26a, 29, 30a. (b) III/1c, 13a, 16, 26a, 29, 30ab. (c) III/1c, 13a, 26a, 29, 30b, 47, 48, 64, 67a. A = (c) III/47. Ref: ADA.
(a) 559-674AD: 1x3Cv (Gen), 1x3Cv or 2LH, 10x2LH.
(b) 675-812AD: 1x3Cv (Gen), 2x3Cv, 4x2LH, 4x3Ax, 1x2Ps.
(c) 813-1018AD: 1x3Cv (Gen), 2x3Cv, 4x2LH, 4x4Sp, 1x2Ps.

III/15. Tibetan. 560AD-1065AD.

Hilly. Ag: 3. E = III/8, 9a, 10bc, 11ab, 15, 20b, 31, 36, 37ab, 39, 61, 66. A = III/8 or III/11b or III/36.
1x4Kn (Gen), 7x4Kn, 1x4Kn or 3/4Sp, 1x4Kn or 3Bw or 2Ps or 2LH, 2x2LH or 3Cv.

III/16. Khazar. 568AD-1083AD.

Steppe. Ag: 1. E = II/58, 69, III/1c, 11b, 14ab, 25b, 29, 30a, 31, 32, 37ab, 43abc, 47, 63ab, 70a. A = III/11b.
Ref: ADA.
1xWWg (Gen), 2x3Cv, 4x2LH, 2x7Hd, 2x2Ps, 1xArt or 2LH.

III/17. Maurikian Byzantine. 575AD-650AD.

Arable. Ag: 1. E = II/23a, 55b, 57, 69, 82ab, III/1c, 2, 5a, 13ab, 14a, 21a, 25ab, 26ab, 27. A = II/23a or II/57 or II/69 or III/16. Ref: ADA.
1x6Cv (Gen), 3x6Cv, 3x2LH, 1x3Kn, (2x6Cv + 2x2LH) or (2x4Bd + 2x2Ps).

III/18. Breton. 580AD-1072AD.

Arable. Ag: 1. E = III/5ab, 28, 40ab, 51. A = III/28 or III/40ab. Ref: ADA.
1x3Cv (Gen), 5x3Cv, 3x2LH, 1x2LH or 2Ps, 2x3Cv or 2x7Hd or (1x4Wb + 1x7Hd).

III/19. Welsh. 580AD-1420AD.

Hilly. Ag: 1. E = (a) II/54b, 73, 81d, III/19a, 24ab, 40ab, 51, 71, IV/3. (b) III/19bc, 40b, IV/3, 23. (c) III/19bc, 40b, IV/3, 9, 23, 62. A = (a) III/40ab or III/46 or III/71. (b) III/46 or IV/23. (c) III/46 or IV/23 or IV/64b. Ref: AFE, AMA1.
(a) 580-1099AD: 1x3Cv or 3xWb (Gen), 9x3Wb, 2x2Ps.
(b) 1100-1294AD (South): 1x3Cv or 3Kn (Gen), 2x3Wb, 8x3Lb, 1x2Ps.
(c) 1100-1420AD (North): 1x3Cv or 3Kn (Gen), 8x3Sp, 3x3Lb or 3Sp or 2Ps.

III/20. Sui and Early T'ang Chinese. 581AD-755AD.

Arable. Ag: 3. E = (a) I/49d, II/61d, 75, 76, 77b, III/7a, 8, 9a, 11b, 20ab, 23. (b) I/49d, II/61d, 75, 76, 77b, III/7ab, 8, 9a, 11b, 15, 20ab, 23, 31, 36, 37a. A = (a) III/11b. (b) II/61d or II/77b or III/8 or III/11b. Ref: ICA1, ICA2, ATC.
(a) Sui 581-623AD: 1x3/4Kn (Gen), 1x3/4Kn, 1x3Cv, 1x2LH, 2x4Sp or 8Bw, 2x4Bw or 2Ps, 4x7Hd.
(b) T'ang 618-755AD: 1x3Cv (Gen), 1x3/4Kn or 3Cv, 2x3Cv, 2x2LH, (1x4Cb + 3x4Sp or 8Bw + 2x4Bw or 2Ps) or (2x3Cv + 4x2LH).

III/21. Italian Lombard. 584AD-1076AD.

Arable. Ag: 1. E = (a) II/73, III/1c, 5ab, 13ab, 17, 28, 29. (b) II/73, III/13a, 21b, 28, 29, 30b, 33, 51, 52, 64, 75.
A = (a) III/1c or III/13b. (b) III/33 or III/51 or III/52. Ref: ADA.
(a) 584-774AD: 1x3Kn (Gen), 7x3Kn, 3x3Bw or 2Ps, 1x3Kn or 4Sp.
(b) 775-1076AD: 1x3Kn (Gen), 4x3Kn, 4x4Sp, 2x3Bw or 2Ps, 1x7Hd.

III/22. Maya. 600AD-1546AD.

Arable until 987, then Tropical. Ag: 0. E = (a) III/22a. (b) III/22b, 58. (c) III/22c, IV/19, 63. (d) III/22d, IV/63.
(a) 600-987AD: 1x3Ax (Gen), 10x3Ax, 1x2Ps.
(b) 988-1282AD: 1x4Bd (Gen), 1x4Bd, 9x3Ax, 1x2Ps.
(c) 1283-1461AD: 1x4Bd (Gen), 1x4Bd, 8x3Ax, 1x4Bw, 1x2Ps.
(d) 1462-1546AD: 1x3Ax (Gen), 8x3Ax, 3x2Ps.

III/23. Khmer and Cham. 605AD-1400AD.

Tropical. Ag: 2. E = I/49d, III/9ab, 20ab, 23, 36, 39, 59, IV/37ac, 40, 48. A = III/9ab or III/23 or III/59.
1xEI (Gen), 1xEI, 1x3Cv, 4x4Ax, 2x4Bw, 2x2Ps, 1xArt or 3Bd or 3Ax.

III/24. Middle Anglo-Saxon. 617AD-1014AD.

Arable. Ag: 2. E = (a) II/68b, 81d, III/19a, 24a. (b) II/68b, 81d, III/19a, 24b, 40ab, 45a. A = (a) III/19a. (b) III/40b. Ref: ADA.
(a) 617-700AD: 1x4Wb (Gen), 1x4Wb, 6x4Sp, 2x4Sp or 7Hd, 1x2Ps, 1x3Cv or 4Wb.
(b) 701-1014AD: 1x4Sp (Gen), 8x4Sp, 2x4Sp or 7Hd, 1x2Ps.

III/25. Arab Conquest. 622AD-660AD.

Dry. Ag: 4. E = (a) II/23abc, 69, III/17. (b) II/55b, 57, 69, III/8, 12, 16, 17, 27, 29. Ref: ADA.
(a) 622-638AD: 1x3Cv or 4Wb (Gen), 2x2LH, 7x4Wb, 2x3Bw or 2Ps.
(b) 639-660AD: 1x3Cv (Gen), 4x3Cv, 1x2LH, 4x4Wb, 2x3Bw or 2Ps.

III/26. Early Serbian 627AD-1089AD or Croatian 627AD-1180AD.

Hilly if Serbian, Littoral if Croatian. Ag: 1. E = (a) III/1c, 13ab, 14abc, 17, 26b, 29, 64, 67ab, 75, IV/1ab. (b) III/1c, 13ab, 17, 26a, 28, 29, 64, 67a, 72a, 75. Ref: AFE.
(a) Serbian: 1x3Kn (Gen), 2x3Kn, 7x3Ax, 1x3Bw, 1x2Ps.
(b) Croatian: 1x3Cv (Gen), 2x3Cv, 8x3Ax, 1x2Ps.

III/27. Rshtuni Armenian. 639AD-717AD.

Hilly. Ag: 0. E = III/17, 25b, 29, 31. A = III/25b or III/29 or III/31.
1x6Cv (Gen), 2x6Cv, 2x2LH, 5x3Ax, 2x2Ps.

III/28. Carolingian Frankish. 639AD-888AD.

Arable. Ag: 3. E = II/73, 82b, III/1bc, 13a, 18, 21ab, 26b, 28, 29, 33, 34ab, 35a, 40ab. A = II/73 or III/1c or III/21b. Ref: ADA.
1x3Kn (Gen), 5x3Kn, 4x4Sp, 1x2Ps, 1x2Ps or 2LH or 7Hd.

III/29. Thematic Byzantine. 650AD-963AD.

Arable. Ag: 0 until 744AD, then Ag: 1. E = II/57, III/1c, 14abc, 16, 21ab, 25b, 26ab, 27, 28, 31, 33, 37ab, 47, 48, 50, 52. A = II/40 or III/1c. Ref: ADA.
1x3Cv (Gen), 3x3Cv, 3x2LH, 2x6Cv, 2x4Pk or 3Cv, 1x2Ps or 4Bw.

III/30. Magyar. 650AD-997AD.

Steppe. Ag: 3. E = (a) III/1c, 14ab, 16, 47, 48. (b) III/1bc, 14bc, 21b, 48, 52. A = (b) III/1b. Ref: ADA.
(a) 650-895AD: 1x3Cv (Gen), 1x3Cv, 10x2LH.
(b) 896-997AD: 1x3Cv (Gen) 1x3Cv, 5x2LH, 3x4Sp, 1x3Ax, 1x2Ps.

III/31. Umayyad Arab. 661AD-750AD.

Dry. Ag: 3. E = II/55bc, 57, 58, 62, 82b, III/8, 10bc, 11b, 12, 15, 16, 20b, 27, 29, 31, 37a. A = II/57 or III/8 or III/15. Ref: ADA.
1x3Cv (Gen), 3x3Cv, 1x2LH, 1x4Ax or 2LH, 3x4Bw or 2Ps, 3x4Sp.

III/32. Volga Bulgar. 675AD-1237AD.

Forest. Ag: 1. E = III/1c, 11b, 16, 47, 48, 78, 79, IV/35. A = III/79.
1x3Cv (Gen), 4x3Cv, 3x2LH, 2x3Bw, 2x7Hd.

III/33. Early Muslim North Africa & Sicily. 696AD-1160AD.

Littoral. Ag: 1. E = III/21b, 28, 29, 33, 34ab, 35ab, 37a, 49, 51, 52, 65, 69, 72a, 74, IV/4ab, 5a. A = III/33 or III/34b or III/64.
1x3Cv (Gen), 1x3Cv, 3x2LH, 3x2Ps, 3x2Ps or 3Ax or 4Sp, 1x2Ps or 4Sp.

III/34. Andalusian. 710AD-1172AD.

Arable. Ag: 3 until 765AD, then 1. E = (a) II/82b, III/28, 33, 34a, 35a. (b) III/28, 33, 34b, 35ab, 40ab, 51, 74. A = III/35ab or III/74. Ref: ADA, AFE.
(a) 711-765AD: 1x3Cv (Gen), 2x3Cv, 1x2LH, 8x2Ps.
(b) 766-1172AD: 1x3Cv (Gen), 1x3Cv, 2x2LH, 6x2Ps, 2x4Sp.

III/35. Feudal Spanish. 718AD-1340AD.

Arable. Ag: 2. E = (a) III/28, 33, 34ab, 35a. (b) III/33, 34b, 35b, 51, IV/4ab. (c) III/35c, 72b, 74, IV/4b, 5c, 38, 39ab. A = (b) III/34b. (c) III/74 or IV/38. Ref: ADA, AFE.
(a) 718-950AD: 1x3Kn or 4Bd (Gen), 3x3Kn, 1x2LH, 2x4Sp, 5x2Ps.
(b) 951-1200AD: 1x3Kn or 4Bd (Gen), 3x3Kn, 1x3Cv, 1x2LH, 2x4Sp, 4x2Ps.
(c) 1201-1340AD: 1x3Kn (Gen), 3x3Kn, 2x2LH, 1x3/4Cb, 2x4Sp, 1x3Ax or 2Ps, 2x2Ps.

III/36. Nan-chao. 728AD-1253AD.

Hilly. Ag: 3. E = III/9a, 15, 20b, 23, 39, 61, IV/35. A = I/49d or III/9a or III/15 or III/20b.
1x3Cv (Gen), 2x3Cv, 1x4Cb, 3x4Bw or 2Ps, 4x4Pk, 1x3Wb.

III/37. Abbasid Arab. 747AD-945AD.

Arable. Ag: 1. E = (a) II/55bc, 62, III/10c, 11b, 12, 15, 16, 20b, 29, 31, 33, 37a, 38. (b) II/55c, 62, III/12, 15, 16, 29, 37b, 43b, 49, 50, 53, 57a. A = (b) III/53. Ref: ADA.
(a) 747-835AD: 1x3Cv (Gen), 3x3Cv, 3x3Bw or 2Ps, 3x4Sp, 1x3Wb or 3Cv, 1x4Ax or 2LH.
(b) 836-945AD: 1x3Cv (Gen), 3x3Cv, 3x6Bw, 2x6Bw or (1x4Bw or 2Ps + 1x4Sp), 1x2LH, 1x3Wb or 3Cv, 1x4Ax or 2LH.

III/38. Arab Indian. 751AD-1206AD.

Tropical. Ag: 3. E = III/10bc, 37a, 38, 43bc, 63ab, IV/8, 36a. Ref: AMA2.
1x3Cv (Gen), 3x3Cv, 2x4Sp, 3x2Ps, 1x3Bd, 2x3Bw.

III/39. Late T'ang and Five Dynasties Chinese. 755AD-979AD.

Arable. Ag: 1. E = I/49d, II/61d, 77b, III/8, 11a, 15, 23, 36, 39, 42a, 44, 55, 56, 59, 61. A = II/61d or (III/11a and/or III/15) or III/36 or III/42ab or III/55. Ref: ICA2, ATC.
1x3Cv (Gen), 1x3Cv, 1x4Cb, 2x3/4Bd, 3x4Sp, 3x4Bw or 2Ps, 1x3Wb or 2LH or 7Hd.

III/40. Norse Viking and Leidang. 790AD-1280AD.

Littoral. Ag: 4 if Viking, 1 if Leidang. E = (a) II/54b, 68b, 81d, III/1ac, 18, 19a, 24b, 28, 34b, 40ac, 45a, 46. (b) II/54b, 68b, 81d, III/1a, 18, 19abc, 24b, 28, 34b, 40bcd, 45ab, 46, 51, 52, 71, 77, 78, IV/9, 13ab, 16, 27, 28. (c) III/1a, 40abc, 52, IV/13a. (d) III/1a, 40bd, 52, IV/13ab, 27, 28. A = (b) III/18 or (III/45b and III/71) or III/46. (c) III/1a. (d) IV/13ab. Ref: ADA, AFE.
(a) Viking 790-849AD: 1x4Bd (Gen), 2x4Bd, 8x3Bd, 1x3Bd or 3Wb or 2Ps.
(b) Viking 850-1280AD: 1x4Bd (Gen), 10x4Bd, 1x3Bd or 3Wb or 2Ps or 3Bw.
(c) Leidang 790-1070 AD: 1x4Bd (Gen), 8x4Bd or 3Ax, 2x2Ps or 3Bw, 1x3Wb or 7Hd.
(d) Leidang 1070-1280AD: 1x3Kn (Gen), 8x4Bd or 3Ax, 2x2Ps or 3Bw, 1x4Sp or 7Hd.

III/41. Dog Peoples & Pueblo Cultures. 800AD-1500AD.

Dry. Ag: 3. E = III/41, 58, IV/10, 11, 19, 53, 63.
1x2Ps or 3Bw or 3Wb (Gen), 1x3Wb, 8x2Ps or 3Bw, 2x2Ps.

III/42. Sha-t'o Turkish. 808AD-951AD.

Steppe until 883AD, then Arable. Ag: 3. E = (a) II/61d, III/11a, 39, 42a, 44. (b) II/61d, III/11a, 42b, 44, 55. A = (a) III/44. (b) III/44 or III/55.
(a) 808-883AD: 1x3Cv (Gen), 3x3Cv, 4x2LH, 4x3Bw or 2Ps.
(b) 884-951AD: 1x3Cv (Gen), 2x3Cv, 3x2LH, 1x3/4Bd, 1x4Sp, 1x4Cb, 3x3Bw or 2Ps.

III/43. Khurasanian. 821AD-1003AD.

Dry. Ag: 1. E = (a) III/10b, 11b, 16, 43ab. (b) III/10bc, 11b, 16, 37b, 38, 43abc. (c) III/8, 11b, 16, 38, 43b, 57ac, 63a. A = (a) III/37b. (b) III/38. (c) (III/11b and/or III/57c) or III/38 or III/43b or III/63a.

(a) Tahirids 821-873AD: 1x3Cv (Gen), 1x3Cv, 2x2LH, 3x4Sp, 3x4Bw or 2Ps, 1x4Ax, 1x3Wb.

(b) Saffarids 861-1003AD: 1x3Cv (Gen), 1x3Cv, 2x2LH, 2x4Sp, 2x4Bw or 2Ps, 2x3Wb, 1x4Ax or 3Bd, 1x3Bw.

(c) Samanids 900-999AD: 1x3Cv (Gen), 2x3Cv, 1x2LH, 1xEl, 3x4Sp, 3x4Bw or 2Ps, 1x4Ax.

III/44. Tribal Mongolian. 840AD-1218AD.

Steppe. Ag: 2. E = III/11ab, 39, 42ab, 44, 55, 61, 66, IV/14ab, 15, 35. A = IV/15.

1x3Cv (Gen), 1x3Cv or 2LH, 10x2LH.

III/45. Pre-Feudal Scots. 846AD-1124AD.

Arable. Ag: 1. E = (a) II/81d, III/24b, 40ab, 45a, 71. (b) III/40b, 45b, 51, 71, 77, IV/3. A = (a) II/81d or III/71. Ref: ADA.

(a) 846-1051AD: 1x3Cv or 4Wb (Gen), 1x2LH, 1x4Wb, 5x3Sp, 2x3Sp or 3Wb, 2x2Ps.

(b) 1052-1124AD: 1x3Cv or 3Kn (Gen), 1x2LH, 1x4Wb, 5x3Sp, 2x3Sp or 3Wb, 2x2Ps.

III/46. Norse Irish. 846AD-1300AD.

Littoral. Ag: 1. E = III/40ab, 46, 51, 77, IV/3, 16, 21a. A = III/40b or IV/3. Ref: ADA.

1x3Ax (Gen), 5x3Ax, 4x2Ps, 2x3Ax or 4Bd.

III/47. Pecheneg. 850AD-1122AD.

Steppe. Ag: 2. E = II/58, III/1c, 11b, 14c, 16, 29, 30a, 32, 47, 48, 64, 67ab, 75, 78, 79, IV/1a. Ref: ADA.

1x3Cv (Gen), 9x2LH, 2x3Bw or WWg.

III/48. Rus. 860AD-1054AD.

Forest. Ag: 3. E = III/1c, 14c, 29, 30ab, 32, 47, 48, 62a, 64, 67a, 75, 78. A = III/14a or III/40ab or III/47 or III/62a. Ref: ADA.

1x4Bd or 3Cv (Gen), 7x4Sp, 2x2Ps or 4Sp, 2x4Sp or 3/4Bd or 2LH.

III/49. Tulunid or Iqshidid Egyptian. 868AD-905AD & 935AD-969AD.

Littoral. Ag: 1. E = II/55c, III/12, 33, 37b, 53, 64, 65. Ref: ADA.

1x3Cv (Gen), 3x3Cv, 1x2LH, 4x8Bw, 1x8Bw or 2LH, 2x2Ps.

III/50. Bagratid Armenian. 885AD-1045AD.

Hilly. Ag: 1. E = III/29, 37b, 50, 53, 57a, 60, 64, 70a, 75. A = III/29 or III/70a.

1x3Kn (Gen), 1x3Kn, 2x3Cv, 2x2LH, 2x4Sp, 2x4Sp or 5Wb, 2x2Ps.

III/51. West Frankish or Norman. 888AD-1072AD.

Arable. Ag: 2 if Frankish, 3 if Norman. E = III/18, 19a, 21b, 33, 34b, 35b, 40b, 45b, 46, 51, 52, 64, 65, 71, 72a, 75, 76. A = III/18 or III/33 or III/40b. Ref: ADA.

1x3Kn (Gen), 5x3Kn, 1x3Kn or 3Cv or 2LH, 1x3Kn or 3Cv, 2x4Sp, 2x2Ps or 3Bw.

III/52. East Frankish. 888AD-1106AD.

Arable. Ag: 3. E = III/1abc, 21b, 29, 30b, 33, 40bcd, 51, 52, 62a, 64, 67a, 72a, 75, IV/1a, 4a. A = III/1c or III/21b or III/51 or III/62a or III/72a or III/76. Ref: ADA.

1x3Kn (Gen), 3x3Kn, 2x3Kn//4Bd, 1x3Kn or 3Cv, (2x4Sp + 2x4Sp or 7Hd + 1x2Ps) or 5x3Kn.

III/53. Dynastic Bedouin. 890AD-1150AD.

Dry. Ag: 1. E = II/58, III/37b, 49, 50, 53, 57ac, 60, 64, 65, 70abc, 73b, 75, IV/1a. A = III/60.

1x3Cv (Gen), 1x3Cv, 5x2LH, 1x2Cm, 1x4Bd or 7Hd or 8Bw, 2x2Ps, 1x4Ax or 2LH.

III/54. Early Samurai. 900AD-1300AD.

Hilly. Ag: 1. E = II/77b, III/6b, 54, 56, 61, IV/48.

1x3Cv or 4Bw (Gen), 3x3Cv, 3x3Bw or 3Bd, 5x3Ax.

III/55. Khitan-Liao. 907AD-1125AD.

Steppe. Ag: 2. E = II/61d, 77b, III/11a, 39, 42b, 44, 56, 61, 66, IV/14a. A = III/39 or III/44 or III/66.

1x3Kn (Gen), 1x3Kn, 3x3Cv, 3x2LH, (1x3/4Bd + 1x4Cb + 2x7Hd) or (1x3Kn + 1x3Cv + 2x2LH).

III/56. Koryo Dynasty Korean. 918AD-1392AD.

Hilly. Ag: 1. E = II/77b, III/39, 54, 55, 61, IV/14ab, 35, 48, 59a. A = IV/14b or IV/48.
1x3Cv (Gen), 1x3Cv, 1x2LH, 4x4Sp, 4x3/4Bw, 1x3Cv or 3Sp or Art or 2Ps.

III/57. Buyid or other Dailami Dynasties. 927AD-1090AD.

Hilly. Ag: 3. E = (a) III/37b, 43c, 50, 53, 57bc, 60. (b) III/57ac. (c) III/43c, 53, 57ab, 60, 63ab, 70a. A = (a) III/53 or III/60. (c) III/43b or III/60. Ref: ADA.

(a) Baghdad 946-975AD: 1x3Cv or 4Ax (Gen), 4 x3Cv or 5Wb, 4x4Ax, 2x2Ps, 1x3Bd.

(b) Dailami tribal rebels: 1x3Ax (Gen), 6x3Ax, 3x2Ps, 2x3Ax or 2Ps.

(c) All others: 1x3Cv or 3/4Ax (Gen), 1x2LH, 6x3/4Ax, 1x3Cv or El, 3x2Ps.

III/58. Toltec. 930AD-1168AD.

Arable. Ag: 2. E = III/22b, 41, 58.
1x4Bd (Gen), 10x4Bd, 1x4Bd or 2Ps.

III/59. Medieval Vietnamese. 939AD-1527AD.

Tropical. Ag: 2. E = III/9ab, 23, 39, 61, IV/40, 48, 73. A = III/23.

1xEl or 3Cv (Gen), 1xEl, 1x3/4Bd, 1x4Cb, 4x3/4Ax, 3x2Ps, 1x3Wb or 3Ax or Art.

III/60. Dynastic Kurdish. 950AD-1085AD.

Hilly. Ag: 1. E = III/50, 53, 57ac, 60, 73b. A = III/57ac.

1x3Cv (Gen), 8x3Cv, 1x2LH or 3Cv, 2x5Wb or 7Hd or 2LH.

III/61. Sung Chinese. 960AD-1279AD.

Arable. Ag: 3 until 1126AD, then 0. E = III/15, 36, 39, 44, 54, 55, 56, 59, 66, IV/14ab, 35, 48. A = II/61d. Ref: ICA2.

1x3Cv (Gen), 1x3Cv or Art, 1x3Bd or 2Ps, 4x3/4Cb, 2x4Bd, 2x4Bd or (1x3Bw + 1x7Hd), 1xArt.

III/62. Early Polish. 960AD-1335AD.

Forest. Ag: 2. E = (a) III/1abc, 48, 52, 67ab, 78, IV/13a, 18. (b) III/1a, 67b, 78, IV/13ab, 18, 28, 30, 35, 43a, 44a, 47, 54d. A = (a) III/1c or III/40b or III/48 or III/67b or IV/13a. (b) III/67b or IV/13a or IV/30. Ref: ADA, AFE, AMA2.

(a) 960-1200AD: 1x3Cv (Gen), 2x3Cv, 4x4Sp, 4x3Bw, 1x2Ps.

(b) 1201-1335AD: 1x3Kn (Gen), 2x3Kn, 1x2LH, 3x4Sp, 1x4Bd, 3x3Bw, 1x2Ps.

III/63. Ghaznavid. 962AD-1186AD.

Dry. Ag: 3. E = (a) III/10b, 11b, 16, 38, 43c, 57c. (b) III/10b, 16, 38, 57c, 73b, IV/8. A = (b) III/10b or III/11b. Ref: ADA.

(a) 962-1001AD: 1x3Cv (Gen), 5x3Cv, 1xEl or 3Cv, 1x2LH, 2x4Sp or 4Bw, 1x4Ax or 3Sp, 1x2Ps.

(b) 1002-1186AD: 1x3Cv or El (Gen), 1xEl, 3x3Cv, 1x2LH, 2x4Sp or 4Bw, 1x4Ax or 2LH or El, 1x3Bd or 2Ps, 2x3Bw.

III/64. Nikephorian Byzantine. 963AD-1042AD.

Arable. Ag: 4. E = III/14c, 21b, 26ab, 47, 48, 49, 50, 51, 52, 53, 64, 65, 67a, 70a. A = III/48 or (III/50 and/or III/53) or III/70a. Ref: ADA.

1x3Cv (Gen), 1x6Kn, 4x3Cv, 1x2LH, 3x8Bw, 1x8Bw or 4Bd, 1x2Ps.

III/65. Fatimid Egyptian. 969AD-1171AD.

Dry. Ag: 1. E = II/55c, 62, III/12, 33, 49, 51, 53, 64, 73b, 74, 75, IV/6, 7, 17. A = IV/6 or IV/17. Ref: ADA, AEC.

1x3Cv (Gen), 3x3Cv, 1x2LH, 3x8Bw, 1x4Ax or 4Bd or 3/5Wb, 2x3Cv or 3Bw, 1x2Ps.

III/66. Hsi-Hsia. 982AD-1227AD.

Steppe. Ag: 2. E = III/11a, 15, 44, 55, 61, IV/14ab, 35. A = III/15 or IV/14b.

1x4Kn (Gen), 2x3Kn, 2x2LH, 3x4Bd, 3x3Bw or 2Ps, 1x2LH or 7Hd.

III/67. Early Hungarian. 997AD-1245AD.

Steppe. Ag: 2. E = (a) III/1b, 14c, 26ab, 47, 48, 52, 62a, 64, 72a, 75, 78, IV/1a. (b) III/26a, 47, 62ab, 72ab, 78, 79, IV/1ab, 13ab, 22, 25, 35. A = (b) III/62a or III/79. Ref: AFE.

(a) 997-1102AD: 1x3Kn (Gen), 1x3Cv, 5x2LH, 2x4Sp, 2x3Ax or 3Bw, 1x2Ps.

(b) 1103-1245AD: 1x3Kn (Gen), 1x3Kn, 1x3Cv, 3x2LH, 3x4Sp, 2x3Ax or 3Bw, 1x2Ps.

III/68. West Sudanese. 1000AD-1591AD.

Steppe. Ag: 0. E = III/12, 68, 69, 74. A = III/69.

1x3Kn or 3Bd (Gen), 2x3Cv or 2LH, 2x3Bw, 5x3Bw or 5x3Ax, 1x3Ax or 4Sp or 3Bd or 2Ps, 1x2Ps.

III/69. Tuareg. 1000AD-1880AD.

Dry. Ag: 1. E = III/33, 68, 69, 74.

1x3Cm (Gen), 8x3Cm, 1x2/3Cm, 2x3Wb or 3Cm or 2Ps or 3Ax.

III/70. Georgian. 1008AD-1683AD.

Hilly. Ag: 2. E = (a) II/58, III/16, 50, 53, 57c, 64, 70a, 73b, 75. (b) II/58, III/53, 70b, 73b, IV/6. (c) II/58, III/53, 70c, 73ab, IV/6, 20, 24, 34, 35, 47, 49, 67, 75, 77. A = (c) III/53. Ref: AEC.

(a) 1008-1089AD: 1x3Kn (Gen), 3x3Kn, 2x2LH, 3x4Sp, 3x2Ps or 3Bw.

(b) 1090-1120AD: 1x3Kn (Gen), 3x3Kn, 4x2LH, 2x4Sp, 2x2Ps or 3Bw.

(c) 1121-1683AD: 1x3Cv (Gen), 3x3Cv, 4x2LH, 2x4Sp, 2x2Ps or 3Bw.

III/71. Anglo-Danish. 1014AD-1075AD.

Arable. Ag: 1. E = III/19a, 40b, 45ab, 51, 71, IV/3. A = III/19a or III/40b or III/45ab. Ref: ADA.

1x4Bd (Gen), 2x4Bd, 8x4Sp, 1x2Ps or 4Sp.

III/72. Communal Italian. 1029AD-1320AD.

Arable. Ag: 2. E = (a) III/26b, 33, 51, 52, 67ab, 72a, 76, IV/4ab, 5ab, 13a. (b) III/35c, 67b, 72b, 76, IV/4b, 5b, 13ab. A = (a) III/52 or III/72a or IV/13a. (b) III/72b or IV/13ab. Ref: AFE, AMA1.

(a) 1029-1199AD: 1x3Kn (Gen), 1xWWg, 1x3Kn, 5x4Sp, 2x4Cb or 2Ps, 2x7Hd.

(b) 1200-1320AD: 1x3Kn (Gen), 1xWWg, 1x3Kn, 1x3/6Kn or 2LH, 2x4Sp, 2x4Sp or 4Ax, 2x4/8Cb or 2Ps, 2x7Hd.

III/73. Seljuk Turk. 1037AD-1276AD.

Steppe. Ag: 3. E = (a) III/70c, 73b, IV/1b, 2, 6, 20, 24, 26, 31, 32, 34, 35. (b) II/58, III/11b, 53, 60, 63b, 65, 70abc, 73ab, 75, 79, IV/1ab, 2, 6, 7, 8, 15, 17, 20, 24, 45, 46, 47, 49, 50, 51a. A = (a) IV/24. (b) III/11b or III/47 or (III/63b and/or IV/8) or IV/46. Ref: AEC.

(a) Rum 1200-1243AD: 1x3Cv (Gen), 1x3Cv, 1x3Kn, 6x2LH, 1x4Sp, 1x3/4Bw or 2Ps, 1x2Ps or 3Bw or 3Ax.

(b) Others: 1x3Cv (Gen), 1x3Cv or 2LH, 8x2LH, 1x2Ps or 3Bw or 3Ax or 2LH, 1x2Ps or 3Bw or 3Ax or 2LH.

III/74. Fanatic Berber. 1039AD-1529AD.

Arable. Ag: 4. E = III/33, 34b, 35c, 65, 68, 69, 74, IV/5abc, 38, 68ab. A = III/34b. Ref: AFE.

1x3Cv or 2LH (Gen), 3x2LH, 3x4Sp, 3x2Ps, 2x2LH or 3Cm or (1x3Kn + 1x3Cb).

III/75. Konstantinian Byzantine. 1042AD-1071AD.

Arable. Ag: 1. E = III/21b, 26ab, 47, 48, 50, 51, 52, 53, 65, 67a, 70a, 73b, 75. A = III/70a. Ref: ADA.

1x3Cv (Gen), 2x3Cv, 1x3Kn, 1x2LH, 1x4Sp, 3x8Bw, 2x2Ps, 1x2LH or 4Bw or Art.

III/76. Papal Italian. 1049AD-1320AD.

Arable. Ag: 3. E = III/51, 72ab, IV/5abc, 13ab. A = III/21b or III/51 or III/52 or (III/72a and/or III/72a) or (III/72b and/or III/72b) or III/75. Ref: AFE.

1x3Kn or 4Sp (Gen), 2x3Kn, 3x4Sp, 2x4Cb, 3x2Ps, 1x7Hd.

III/77. Scots Isles & Highlands. 1050AD-1493AD.

Littoral. Ag: 3. E = III/40b, 45b, 46, 77, IV/16, 58. A = III/40b. Ref: AFE.

1x4Bd(Gen), 8x4Bd, 3x4Bd or (2x3Bw + 1x3/5Wb).

III/78. Early Russian. 1054AD-1246AD.

Forest. Ag: 0. E = III/32, 40b, 47, 48, 62ab, 67ab, 78, 79, IV/18, 27, 28, 30, 35. A = III/62ab or III/67ab or III/79. Ref: AFE.

1x3Cv (Gen), 4x3Cv, 2x2LH, 2x4Sp, 2x2Ps, 1x7Hd or 3Ax or 3/6Kn.

III/79. Cuman (Kipchak). 1054AD-1394AD.

Steppe. Ag: 3. E = II/58, III/11b, 32, 47, 67b, 73b, 78, IV/1ab, 15, 24, 25, 35, 44ab, 47. A = II/58. Ref: AFE, AMA2.

1x3Cv (Gen), 9x2LH, 1x2LH or 3Cv, 1x2LH or 7Hd or 2Ps.

SECTION FOUR - THE HIGH MEDIEVAL PERIOD - 1071AD TO 1500AD

IV/ 1. Komnenan Byzantine. 1071AD-1204AD.

Arable. Ag: 1. E = (a) III/26a, 47, 52, 53, 67ab, 73b, 79, IV/2, 5a, 7, 17. (b) III/26a, 67b, 73ab, 79, IV/2, 6, 17, 20. A = (a) III/73b and/or III/79. (b) III/73b or IV/17. Ref: AEC.

(a) 1071-1149AD: 1x3Cv or 3Kn (Gen), 1x4Bd, 3x3Cv, 3x2LH, 1x3Kn or 2LH, 2x2Ps or 4Bw, 1x4Sp or 4Bw or 3Ax.

(b) 1150-1204AD: 1x3Kn (Gen), 3x3Kn, 4x2LH, 3x2Ps or 4Bw, 1x4Sp or 4Bd.

IV/ 2. Cilician Armenian. 1071AD-1375AD.

Hilly. Ag: 1. E = III/73ab, IV/1ab, 6, 7, 17, 20, 26, 45, 46, 49, 55ab, 67, 75. A = III/73a or IV/7 or IV/17 or IV/46. Ref: AEC, AMA2.

1x3Kn (Gen), 2x3Kn, 6x3Ax or 4Sp, 3x2Ps.

IV/ 3. Anglo-Norman. 1072AD-1181AD.

Arable. Ag: 2. E = III/19abc, 45b, 46, 71, IV/3, 4ab, 16, 39a. A = III/19c or IV/4ab. Ref: AFE.

(1x3Kn//4Sp (Gen) + 3x3Kn//4Sp) or (1x3Kn//4Bd + 3x3Kn//4Bd), 4x4Sp, 3x2Ps or 3Bw, 1xWWg or 3Cv or 3Sp.

IV/ 4. Feudal French. 1072AD-1330AD.

Arable. Ag: 1. E = (a) III/33, 35b, 52, 72a, IV/3, 4a, 13a. (b), III/33, 35bc, 72ab, IV/3, 4b, 5c, 13ab, 20, 23, 39ab, 57a, 62. A = (b) III/35c or III/72b or IV/17. Ref: AFE, AMA1.

(a) 1072-1150AD: 1x3Kn (Gen), 4x3Kn, 4x4Sp, 2x2Ps, 1x7Hd.

(b) 1151-1330AD: 1x3Kn (Gen), 3x3Kn, 1x3Kn or 3Cv, 1x4Cb, 3x3/4Sp, 2x2Ps, 1x7Hd.

IV/ 5. Sicilian. 1072AD-1442AD.

Littoral. Ag: 3. E = (a) III/33, 72a, 74, 76, IV/1a, 13a. (b) III/72ab, 74, 76, IV/13ab. (c) III/35c, 72b, 74, 76, IV/4b, 13bc, 61. A = (c) III/35c or IV/17 or IV/68a. Ref: AFE, AMA1.

(a) 1072-1194AD: 1x3Kn (Gen), 3x3Kn, 6x2Ps, 1x3Ax or 4Sp, 1x4Cb or 2LH.

(b) 1195-1235AD: 1x3Kn (Gen), 3x3Kn, 1x2LH, 5x2Ps, 1x8Cb, 1x7Hd.

(c) 1236-1442AD: 1x3Kn (Gen), 1x3Kn, 2x6Kn, 1x2LH, 1x8Cb, 6x3Ax or 2Ps.

IV/ 6. Syrian. 1092AD-1286AD.

Arable. Ag: 1. E = III/65, 70bc, 73ab, IV/1b, 2, 6, 7, 17, 20, 24, 35, 45, 46. A = IV/7 or IV/17 or IV/24. Ref: AEC.

1x3Cv (Gen), 3x3Cv, 3x2LH, 1x3Wb, 1x2LH or 3Wb or 3Ax, 2x2Ps, 1x7Hd.

IV/ 7. Early Crusader. 1096AD-1128AD.

Arable. Ag: 4 until 1100AD, then 1. E = III/65, 73b, IV/1a, 2, 6. A = III/53 or IV/1a or IV/2 or IV/6. Ref: AEC.

1x3Kn (Gen), 3x3Kn or 4Bd, 5x4Sp, 1x2Ps or 3Bw, 1x2Ps or 3Cb, 1x5Wb or 2Ps.

IV/ 8. Ghurid. 1100AD-1215AD.

Hilly. Ag: 3. E = III/10b, 11b, 38, 63b, 73b, IV/15, 24.

1x3Cv (Gen), 6x3Sp or 4Pk, 3x3Bw or 2Ps, 2x2LH.

IV/ 9. Eastern Forest American. 1100AD-1620AD.

Forest. Ag: 1. E = III/19c (Welsh colonists), 40b (Vinlanders), IV/9, 10. Ref: ASC2.

1x3Wb (Gen), 8x3Wb, 3x2Ps.

IV/10. Mound Builder American. 1100AD-1701AD.

Arable. Ag: 1. E = III/41, IV/9, 10, 11, 63. Ref: ASC2.

1xLit (Gen), 1x4Bd, 4x3Bw, 2x2Ps or 3Bw, 4x5Wb.

IV/11. North-Western American. 1100AD-1770AD.

Littoral. Ag: 2. E = III/41, IV/10, 11, 12c, 63, 71. Ref: ASC2.

1x3Bw (Gen), 9x3Bw, 2x2Ps.

IV/12. Polynesian or Melanesian. 1100AD-1785AD.

Littoral. Ag: 1. E = (a) IV/12abc. (b) IV/12abc, 37d. (c) IV/11, 12abc. (d) IV/12d.

(a) Polynesian: 1x3Bd (Gen), 9x3Bd, 2x2Ps.

(b) Melanesian: 1x3Sp (Gen), 9x3Sp, 2x2Ps.

(c) Hawaii: 1x3Bd (Gen), 2x4Pk, 6x3Bd, 3x2Ps.

(d) Maori: 1x3Bd (Gen), 11x3Bd.

IV/13. Medieval German. 1106AD-1519AD.

Arable. Ag: 1. E = (a) III/1a, 40bcd, 62ab, 67b, 72ab, 76, IV/4ab, 5ab, 13a, 26, 43a. (b) III/40bd, 62b, 67b, 72b, 76, IV/4b, 5bc, 13b, 41, 43ac, 54ab, 57abc, 61, 64abc, 66, 76, 79, 80, 82a. (c) IV/5c, 13c, 43c, 54b, 55b, 57c, 61, 66, 76, 79, 80, 82ab, 84. (d) IV/13d, 43c, 54b, 55b, 61, 66, 79, 82b. A = (a) III/40d or III/62ab or III/72ab.

(b) III/72b or IV/41 or IV/43a. Ref: AFE, AMA1.

(a) 1106-1235AD: 1x3Kn (Gen), 4x3Kn/4Bd, 1x4Cb, 2x4Sp, 2x3Ax or 4Sp or 4Pk, 2x2Ps.

(b) 1236-1450 AD: 1x3Kn (Gen), 1x3Kn, 2x6Kn, 1x4Cb, 1x4Bd, 2x4Sp, 2x3Ax or 4Sp or 4Pk, 2x2Ps.

(c) 1450-1478AD: 1x6Kn (Gen), 2x6Kn, 1x3Cv, 2x4Pk, 2x3/4Sp, 1x4Cb or 2Ps, 2xWWg or 4Cb, 1xArt.

(d) 1479-1519AD: 1x4Pk or 3Kn (Gen), 1x3Kn, 2x6Kn, 1x3Cv, 3x4Pk, 1x2Ps, 2xWWg, 1xArt.

IV/14. Jurchen-Chin. 1114AD-1234AD.

Forest until 1125AD, then Arable. Ag: 3. E = (a) III/44, 55, 56, 61, 66. (b) III/44, 56, 61, 66, IV/35. A = (b) III/44.

(a) 1114-1125AD: 1x3Cv (Gen), 9x3Cv, 1x4Kn, 1x2LH.

(b) 1126-1234AD: 1x3Cv (Gen), 5x3Cv, 2x3/4Bd, 2x4Bw, 1x7Hd, 1xArt.

IV/15. Qara-Khitai. 1124AD-1211AD.

Steppe. Ag: 2. E = III/11ab, 44, 73b, 79, IV/8, 24, 35. A = III/11ab, III/44 or IV/24.

1x3Kn (Gen), 2x3Kn, 3x3Cv, 4x2LH, 1x2LH or 7Hd, 1x2LH or 2Ps.

IV/16. Scots Common Army. 1124AD-1512AD.

Arable. Ag: 3. E = III/40b, 46, 77, IV/3, 16, 21abc, 23, 58, 62, 83a. Ref: AFE.

1x3Kn (Gen), 6x4Pk, 2x4Pk or (1x3Bw + 1x5Wb), 2x4Pk or 3Wb, 1x2Ps.

IV/17. Later Crusader. 1128AD-1303AD.

Littoral. Ag: 1. E = III/65, 73b, IV/1ab, 2, 6, 20, 24, 45, 46. A = III/65 or IV/1b or IV/2 or (IV/4a and IV/13a) or IV/6. Ref: AEC.

1x3Kn (Gen), 2x3Kn, 1x3Cv or 3Kn, 5x4Sp, 2x3/4Cb, 1x3Bw.

IV/18. Lithuanian or Samogitian. 1132AD-1435AD.

Forest. Ag: 2. E = III/62ab, 78, IV/18, 27, 28, 30, 44ab, 47, 55b, 65, 66. A = IV/30 or IV/44ab or IV/47 or IV/66. Ref: AFE, AMA2.

1x3Cv or 2LH (Gen), 1x3Cv or 2LH, 6x2LH, 2x3Ax, 2x2Ps.

IV/19. Tarascan or Toltec-Chichimec. 1168AD-1521AD.

Hilly. Ag: 1. E = III/22c, 41, IV/19, 63. Ref: ASC2.

1x4Bd (Gen), 2x4Bd, 7x3Bw, 1x2Ps, 1x3Wb or 3Bw.

IV/20. Ayyubid Egyptian. 1171AD-1250AD.

Dry. Ag: 2. E = II/55c, III/12, 70c, 73ab, IV/1b, 2, 4b, 6, 17, 24. A = IV/6 or IV/24. Ref: AEC.

1x3Cv (Gen), 5x3Cv, 2x2LH, 1x3Ax or 3Wb or 7Hd, 2x4Bw or 2Ps, 1x2LH or 2Ps.

IV/21. Anglo-Irish. 1172AD-1489AD.

Arable. Ag: 1. E = (a) III/46, IV/16. (b) IV/16, 58. (c) IV/16, 58. Ref: AFE.

(a) 1172-1300AD: 1x3Kn (Gen), 1x3Kn, 4x4Lb, 1x4Bd or 3Ax, 3x3Ax, 2x2Ps.

(b) 1301-1394AD: 1x3Kn or 3Cv (Gen), 1x3Kn or 2LH, 2x3Cv, 2x4Lb, 1x4Bd, 3x3Ax, 2x2Ps.

(c) 1395-1489AD: 1x3Kn or 3Cv (Gen), 2x3Cv, 2x4Lb, 2x4Bd, 3x3Ax, 2x2Ps.

IV/22. Serbian Empire. 1180AD-1459AD.

Hilly. Ag: 1. E = III/67b, IV/25, 33, 43ac, 50, 55b, 69. A = IV/55b or IV/69. Ref: AFE.

1x3Kn (Gen), 3x3Kn, 2x3Kn or 2LH, 4x2Ps or 3Bw, 1x4Sp or 3Ax, 1x7Hd or 2Ps.

IV/23. Feudal English. 1181AD-1322AD.

Arable. Ag: 3. E = III/19bc, IV/4b, 16, 23, 39a. A= III/19c or III/35b or III/46. Ref: AFE.
1x3Kn (Gen), 3x3Kn, 4x3Bw, 1x3/4Sp, 2x7Hd, 1x3Cv//3Sp or 2Ps or 4Cb.

IV/24. Khwarizmian. 1186AD-1246AD.

Arable. Ag: 1. E = II/58, III/11b, 70c, 73ab, 79, IV/6, 8, 15, 17, 20, 35. A= III/11b or IV/15. Ref: AEC.
1x3Cv (Gen), 3x3Cv, 4x2LH, 1x2LH or El, 1x3Bw, 1x3Cv or 7Hd, 1x5Wb or 2LH.

IV/25. Later Bulgar. 1186AD-1395AD.

Arable. Ag: 2. E = III/67b, 79, IV/22, 31, 32, 33, 43a, 50, 55ab. A= IV/22 or IV/47. Ref: AFE, AMA2.
1x3Kn (Gen), 3x3Kn, 6x2LH, 1x4Sp or 2LH, 1x2Ps or 2LH.

IV/26. Lusignan Cypriot. 1192AD-1489AD.

Littoral. Ag: 2. E = III/73a, IV/2, 13a, 45, 49, 61. A= IV/45. AMA2.
1x3Kn (Gen), 1x3Kn, 1x3Cv or 3Kn or 2LH, 4x4Cb, 2x4Sp, 2x2Ps, 1x7Hd or 2LH.

IV/27. Estonian. 1200AD-1227AD.

Forest. Ag: 3. E = III/40bd, 78, IV/18, 27, 28, 30, 54abd. A= III/78. Ref: AFE.
1x4Wb (Gen), 9x3Wb, 2x2Ps.

IV/28. Prussian. 1200AD-1283AD.

Forest. Ag: 1. E = III/40bd, 62b, 78, IV/18, 27, 28, 30, 54d. A= III/62b. Ref: AFE.
1x3Cv (Gen), 1x3Cv, 4x3Wb, 4x3Wb or 3Ax, 2x2Ps.

IV/29. Tupi. 1200AD-1601AD.

Tropical. Ag: 2. E = IV/29, 68b, 72. Ref: ASC2.
1x3Wb (Gen), 6x3Bw, 5x3Wb.

IV/30. Teutonic Orders. 1201AD-1522AD.

Arable. Ag: 4. E = III/62b, 78, IV/18, 27, 28, 35, 44ab, 54abcd, 66. A= III/62b or IV/13abcd. Ref: AFE, AMA2.
1x3Kn (Gen), 3x3Kn, 1x3Cv, 2x2LH, 2x4Cb, 1x4Sp, (1x3Ax + 1x2Ps) or 2x7Hd.

IV/31. Nikaian Byzantine. 1204AD-1261AD.

Arable. Ag: 1. E = II/58, III/73a, IV/25, 32. A= III/73b or III/79 or IV/25 or IV/33. Ref: AEC, AMA2.
1x3Cv (Gen), 1x3Cv, 2x3Kn, 4x2LH, 1x4Sp, 1x4Bw, 2x2Ps.

IV/32. Romanian Frank. 1204AD-1311AD.

Arable. Ag: 1. E = III/73a, IV/25, 31, 32, 33, 50, 51a, 60. A= III/73b or IV/33 or IV/60. Ref: AEC, AMA2.
1x3Kn (Gen), 4x3Kn, 1x3Cv, 1x3Cb, 1x4Sp, 4x2Ps.

IV/33. Epirot Byzantine. 1204AD-1340AD.

Arable. Ag: 1. E = IV/22, 25, 32, 50, 60, 69. A= IV/5c or IV/32 or IV/50. Ref: AEC, AMA2.
1x3Cv (Gen), 2x3Cv, 2x3Kn, 2x2LH, 1x2LH or 6Kn or 2Ps, 1x4Sp or 2Ps, 3x2Ps or 3/4Bw.

IV/34. Trapezuntine Byzantine. 1204AD-1461AD.

Littoral. Ag: 1. E = II/58, III/70c, 73a, IV/49, 55ab, 75. A= III/70c or IV/49. Ref: AEC, AMA2.
1x3Cv(Gen), 1x3Cv, 2x2LH, 1x4Sp, 3x2Ps, 2x3Ax, 2x3Bw.

IV/35. Mongol Conquest. 1206AD-1266AD.

Steppe. Ag: 4. E = II/58, III/11ab, 32, 36, 44, 56, 61, 62b, 66, 67b, 70c, 73a, 78, 79, IV/6, 14b, 15, 24, 30, 35, 36a, 44a, 46, 48. A= III/56 or III/61. Ref: AEC.
1x3Cv (Gen), 2x3Cv, 8x2LH, 1x2LH or Art.

IV/36. Later Muslim Indian. 1206AD-1526AD.

Tropical. Ag: 2. E = (a) III/10bc, 38, IV/35, 36a, 46. (b) III/10c, IV/36b, 75. Ref: AMA2.
(a) 1206-1315AD: 1x3Cv (Gen), 3x3Cv, 2xEl, 1x2LH, 1x3Bd, 3x3Bw, 1x7Hd or 2Ps.
(b) 1316-1526AD: 1x3Cv (Gen), 2x3Cv, 1x3Cv or 3Kn, 2xEl, 1x2LH, 1x3Bd, 2x3Bw, 1xArt, 1x7Hd.

IV/37. Indonesian or Malay. 1222AD-1511AD.

Littoral. Ag: 1. E = (a) II/42bd, III/23, IV/37abcd, 40, 68b, 73. (b) IV/37abcd, 68b. (c) III/23, IV/37abcd, 48, 68b, 73. (d) IV/12b, 37abcd, 68b. A = (a) II/42d or IV/37c or IV/73. (c) III/23 or IV/37a.

(a) Malay or Sumatran: 1xEl (Gen), 1xEl, 6x4Wb, 2x3Bw, 1x2Ps, 1x2LH.

(b) Moluccan: 1x3Wb (Gen), 8x3Wb, 2x3Bw, 1x2Ps.

(c) Javanese: 1xLCh or El (Gen), 7x4Wb, 2x3Bw, 1x2Ps, 1x2LH.

(d) Others: 1x3Wb (Gen), 7x3Wb, 2x3Bw, 1x2Ps, 1x2LH.

IV/38. Granadine. 1232AD-1492AD.

Arable. Ag: 0. E = III/35c, 74, IV/38, 68a. A = III/74. Ref: AFE, AMA1.

1x3Kn or 3Cv (Gen), 4x2LH, 2x4Sp, 1x4Cb, 4x2Ps or 3Cb.

IV/39. Navarrese. 1234AD-1430AD.

Hilly. Ag: 1. E = (a) III/35c, IV/3, 4b, 23, 62. (b) III/35c, IV/4b, 62, 64ab, 68a. (c) IV/51b, 55b, 60, 61, 69. Ref: AFE, AMA1.

(a) 1234-1327AD: 1x3Kn (Gen), 6x3Ax, 1x3Cb, 1x3Sp, 3x2Ps.

(b) 1328-1378AD: 1x3Kn (Gen), 1x3Kn, 3x3Ax, 2x3Ax or 4Lb, 1x3Cb, 1x3Sp, 3x2Ps.

(c) 1379-1430AD: 1x3Kn (Gen), 2x3Kn, 4x3Ax, 2x4Cb, 1x4Cb or 2LH, 2x2Ps.

IV/40. Siamese. 1238AD-1518AD.

Tropical. Ag: 3. E = III/9b, 23, 59, IV/37a, 40, 48, 73. A = III/9b and/or IV/37a.

1xEl (Gen), 1xEl, 1x3Cv, 1x4Ax, 6x3Wb or 6x3Ax, 2x2Ps or 3Bw.

IV/41. Early Swiss. 1240AD-1400AD.

Hilly. Ag: 1. E = IV/13b, 41, 61, 76. Ref: AMA1.

1x6Bd (Gen), 1x2LH or 2Ps, 8x6Bd, 2x2Ps.

IV/42. Islamic Persian. 1245AD-1393AD & 1499AD-1520AD.

Dry. Ag: 0. E = IV/42, 46, 52, 55a, 67, 75, 77. Ref: AMA2.

1x3Cv (Gen), 7x3Cv, 1x2LH, 2x3Bw, 1x7Hd.

IV/43. Later Hungarian. 1245AD-1526AD.

Steppe. Ag: 2. E = (a) III/62b, IV/13ab, 22, 25, 43a, 61, 65, 66. (b) IV/55b. (c) IV/13bcd, 22, 55b, 61, 65, 66, 80. A = (a) (IV/13b and/or IV/65) or IV/47 or IV/66. (b) IV/64b. (c) IV/22 or IV/66. Ref: AMA2.

(a) 1245-1395AD: 1x3Kn (Gen), 1x3Kn, 7x2LH, 1x4Sp, 2x2Ps or 3Bw.

(b) 1396AD: 1x3Kn (Gen), 2x3Kn, 1x6Kn, 4x2LH, 1x4Cb, 1x4Sp, 2x2Ps or 3Bw.

(c) 1397-1526AD: 1x3Kn (Gen), 2x6Kn, 3x2LH, 1x4Cb, 1x4Sp or 4Bd or 5Wb, 2x2Ps or 3Bw, 2x2Ps or WWg.

IV/44. Post-Mongol Russian. 1246AD-1533AD.

Forest. Ag: 1. E = (a) III/62b, 79, IV/18, 30, 35, 44a, 47, 66. (b) III/79, IV/18, 30, 44b, 47, 66. A = (a) IV/18 and/or IV/47. Ref: AFE, AMA2.

(a) 1246-1380AD: 1x3Cv (Gen), 8x3Cv, 1x4Sp, 1x3Bw, 1x3Cv or WWg.

(b) 1381-1533AD: 1x3Cv (Gen), 5x3Cv, 2x2LH, 1x4Sp, 1x3Bw, 1x2Ps, 1x3Cv or WWg.

IV/45. Mamluk Egyptian. 1250AD-1517AD.

Dry. Ag: 2. E = II/55c, III/12, 73b, IV/2, 6, 17, 26, 45, 46, 49, 55b, 56a, 67, 75, 77. A = IV/6. Ref: AEC.

1x3Cv (Gen), 6x3Cv, 2x2LH, 1x2Ps, 1x2Ps or 3Wb or 3Ax, 1x7Hd or 2LH.

IV/46. Ilkhanid. 1251AD-1355AD.

Steppe. Ag: 3. E = II/58, III/73b, IV/2, 6, 17, 35, 36a, 42, 45, 47, 49, 52, 67. A = IV/2 or (IV/6 and/or IV/47). Ref: AEC.

1x3Cv (Gen), 1x3Cv, 9x2LH, 1x3Ax or Art or 2LH or 3Kn.

IV/47. Golden Horde & Successors. 1251AD-1556AD.

Steppe. Ag: 2. E = II/58, III/62b, 70c, 73b, 79, IV/18, 44ab, 46, 47, 52, 65, 66, 75. A = IV/44ab or IV/55b. Ref: AEC, AMA2.

1x3Cv (Gen), 3x3Cv, 6x2LH, 1x3Bw, 1x4Bw or 4Cb or 3Wb or 2LH.

IV/48. Yuan Chinese. 1260AD-1368AD.

Arable. Ag: 2. E = III/9b, 11a, 23, 54, 56, 59, 61, IV/35, 37c, 40, 52, 73. A = III/11a or III/56 or IV/35 or IV/37c. Ref: MCA.

1x3Cv (Gen), 4x3Cv, 2x2LH, 1x3Bd, 1x4Cb, 1x2Ps, (2x3Ax or 5Wb) or (1x4Bd or 8Bw + 1x3Cb).

IV/49. Anatolian Turkoman. 1260AD-1515AD.

Arable. Ag: 2. E = III/70c, 73b, IV/2, 26, 34, 45, 46, 49, 50, 55ab, 56a, 60, 61, 67, 77. A = IV/34 or IV/45 or IV/55b.

1x3Cv (Gen), 6x2LH, 2x3Ax, 2x2Ps or 3Bw, 1x7Hd.

IV/50. Palaiologan Byzantine. 1261AD-1384AD.

Arable. Ag: 1. E = II/58, III/73b, IV/22, 25, 32, 33, 49, 55ab, 60. A = II/58 or IV/22 or IV/47 or IV/49 or IV/55ab. Ref: AEC, AMA2.

1x3Cv (Gen), 1x2LH, 1x4Ax, 1x3Kn, 4x3Cv, 1x4Sp, 1x4Bw, 2x2Ps.

IV/51. Morean Byzantine. 1262AD-1460AD.

Arable. Ag: 1. E = (a) III/73b, IV/32, 60, 69. (b) IV/39c, 55b, 60, 69. A = (a) IV/49 or IV/50. (b) IV/55b. Ref: AEC, AMA2.

(a) 1262-1346AD: 1x3Cv (Gen), 2x3Cv, 1x4Sp, 2x4Bw, 5x2Ps, 1x3Ax or 2Ps.

(b) 1347-1460AD: 1x3Cv (Gen), 1x3Cv, 2x2LH, 1x4Sp, 1x4Bw, 1x3Ax, 5x2Ps.

IV/52. Later Nomadic Mongol. 1266AD-1508AD.

Steppe. Ag: 3. E = III/11a, IV/42, 46, 47, 48, 52, 73, 75, 78. A = IV/42 or IV/46.

1x3Cv (Gen), 4x3Cv or 2LH, 6x2LH, 1x7Hd or 2LH.

IV/53. Mixtec or Zapotec. 1280AD-1523AD.

Hilly. Ag: 1. E = III/41, IV/53, 63. A = IV/19. Ref: ASC2.

1x3/4Ax (Gen), 2x3/4Ax, 6x3Ax, 3x2Ps.

IV/54. Medieval Scandinavian. 1280AD-1523AD.

Littoral. Ag: 3 if (a) or (b), 1 if (c) or (d). E = (a) IV/13b, 27, 30, 54d. (b) IV/13bcd, 27, 30, 54cd. (c) IV/30, 54bd. (d) III/62b, IV/27, 28, 30, 54abc. A = (b) IV/13bcd. (d) IV/13ab. Ref: AFE.

(a) Danish 1350-1390AD: 1x3Kn (Gen), 1x3Kn, 2x3Bd, 1x4Cb, 4x4Sp, 2x2Ps, 1xArt.

(b) Union 1391-1523AD: 1x3Kn (Gen), 1x3Kn, 1x6Kn, (1x3Bd + 1x3Cb) or (2x4Pk), 2x3Bd, 1x4Cb, 2x4Sp, 1x2Ps, 1xArt.

(c) Swedish 1391-1523AD: 1x3Kn (Gen), 5x4Bd, 5x3Cb, 1xArt or 2Ps.

(d) Others: 1x3Kn (Gen), 1x3Kn, 1x3Cv, 6x4Bd, 3x3Bw or 2Ps.

IV/55. Ottoman. 1281AD-1512AD.

Arable. Ag: 4. E = (a) II/58, IV/2, 25, 34, 42, 49, 50, 60, 61. (b) II/58, IV/2, 13cd, 18, 22, 25, 34, 39c, 43bc, 45, 49, 50, 51b, 56ab, 60, 61, 65, 66, 69, 75, 77. A = (b) IV/22 or IV/47 or IV/49 or IV/65 or IV/69. Ref: AMA2.

(a) 1281-1361AD: 1x3Cv (Gen), 1x3Cv, 7x2LH, 1x3Ax or 4Sp or 7Hd or 2LH, 2x2Ps.

(b) 1362-1512AD: 1x3Cv (Gen), 3x3Cv, 4x2LH, 1x4Bw, 2x2Ps, 1xArt.

IV/56. Order of St John. 1291AD-1522AD.

Littoral. Ag: 1. E = (a) IV/45, 49, 55b. (b) IV/55b. A = (a) IV/2. Ref: AEC.

(a) 1291-1450AD: 1x3Kn or 4Bd (Gen), 1x3Kn or 4Bd, 2x4Cb, 2x4Sp, 2x3Cb, 4x2Ps.

(b) 1451-1522AD: 1x3Kn or 4Bd (Gen), 1x3Kn or 4Bd, 2x4Cb, 1x4Bd, 1x4Sp, 1x3Cb, 5x2Ps.

IV/57. Low Countries. 1297AD-1478AD.

Arable. Ag: 0. E = (a) IV/4b, 13b. (b) IV/13b, 57b, 64ab, 76. (c) IV/13bc, 64bc, 76, 84. Ref: AMA1.

(a) 1297-1329AD: 1x3Kn or 4Pk (Gen), 1x3Kn or 4Pk, 1x4Cb, 6x4Pk, 1x3Bd or 4Pk, 1x3Bd, 1x2Ps.

(b) 1330-1410AD: 1x3Kn or 4Pk (Gen), 1x3Kn or 4Pk, 1x4Cb, 5x4Pk, 1x3Bd, 1x5Wb, 1x2Ps, 1xArt.

(c) 1411-1478AD: 1x3Kn or 4Pk (Gen), 1x3Kn or 4Pk, 1x4Cb, 6x4Pk, 1x4Bd or 4Pk, 1x2Ps, 1x4Pk or Art.

IV/58. Medieval Irish. 1300AD-1487AD.

Forest. Ag: 1. E = III/77, IV/16, 21bc, 58. Ref: AMA1.

(1x2LH (Gen) + 1x2LH or 3Cv + 1x4Bd) or (Scots 1x3Kn (Gen) + 2x4Pk), 1x4Bd or 2LH, 4x3Ax, 4x2Ps.

IV/59. Post-Mongol Samurai. 1300AD-1542AD.

Hilly. Ag: 0. E = (a) III/56, IV/59a, 73, 78. (b) IV/59b, 73, 78.

(a) 1300-1464AD: 1x3Cv or 4Bd (Gen), 1x3Cv, 6x4Bd, 3x3Ax, 1x3Bw.

(b) 1465-1542AD: 1x3Cv or 4Bd (Gen), 1x3Cv, 5x4Bd, 1x3Sp, 4x5Wb or 4x7Hd or 4x3Sp.

IV/60. Catalan Company. 1302AD-1388AD.

Arable. Ag: 4. E = II/58, IV/32, 33, 39c, 49, 50, 51ab, 55ab, 61. A = II/58. Ref: AMA1.

1x4Kn (Gen), 1x2LH, 6x4Ax, 2x2Ps, 2x4Ax or 2LH.

IV/61. Italian Condotta. 1320AD-1495AD.

Littoral if Venice or Genoa, Arable if not. Ag: 1. E = IV/5c, 13bcd, 26, 39c, 41, 43ac, 49, 55ab, 60, 61, 64bc, 69, 74, 79, 82ab. A = IV/61 or IV/69 or IV/74 or IV/79. Ref: AMA1.

1x3Kn (Gen), 4x3Kn, 1x2LH, 2x8Cb or 2Ps, 2x4Sp or 4Pk, 1x4Cb or 4Ax or 3Bd or 2LH, 1x2Ps or Art.

IV/62. 100 Years' War English. 1322AD-1455AD.

Arable. Ag: 3. E = III/19c, IV/4b, 16, 39ab, 64abc, 68ab, 76, 82a. Ref: AMA1.

1x3Kn//4Bd (Gen), 2x3Kn//4Bd, 6x4Lb, 1x3Sp or 2Ps, 1x4Lb or 4Bd, 1x3Cb or Art.

IV/63. Aztec. 1325AD-1521AD.

Arable. Ag: 3. E = III/22cd, 41, IV/10, 11, 19, 53, 63. A = IV/19. Ref: ASC2.

1x4Bd (Gen), 1x4Wb, 2x4Bd, 6x5Wb, 1x2Ps, 1x3Wb or 4Bw or 2Ps.

IV/64. Medieval French. 1330AD-1445AD.

Arable. Ag: 1. E = (a) IV/13b, 39b, 57b, 62, 64a. (b) IV/13b, 39b, 57bc, 61, 62, 64b, 74, 76, 79. (c) IV/13b, 57c, 61, 62, 64c, 76, 79. A = (c) IV/16. Ref: AMA1.

(a) 1330-1345AD: 1x3Kn (Gen), 5x3Kn, 3x3Bw or 4Cb, 2x3Sp, 1x3Sp or 7Hd.

(b) 1346-1418AD: 1x3Kn//4Bd (Gen), 5x3Kn//4Bd or 5x5Wb, 1x4Bd or 4Cb, 1x3Cv or 4Cb, 2x4Cb, 2x3Sp or 3Bw or 7Hd.

(c) 1419-1445AD: 1x3Kn//4Bd (Gen), 4x3Kn//4Bd, 1x4Bd, (4x4Pk Scots - not if ally) or (2x3Sp + 2x4Cb), 1x4Cb, 1x3Sp or 7Hd or Art.

IV/65. Wallachian or Moldavian. 1330AD-1504AD.

Forest. Ag: 1. E = IV/18, 43ac, 47, 55b, 65, 66. A = IV/43ac or IV/47 or IV/55ab or IV/65 or IV/66. Ref: AMA2.

1x3Cv (Gen), 3x2LH, 2x3Bw, 5x2Ps, 1x5Wb.

IV/66. Later Polish. 1335AD-1510AD.

Forest. Ag: 1. E = IV/13bcd, 18, 30, 43ac, 44ab, 47, 55b, 65, 66, 80. A = IV/18 or IV/43ac. Ref: AMA2.

1x3Kn (Gen), 3x3Kn, 4x3Cv, 1x2LH, 1x3Bd or 2LH, 1x8Cb, 1xWWg or 8Cb.

IV/67. Jalayirid. 1336AD-1432AD.

Steppe. Ag: 1. E = III/70c, IV/2, 42, 45, 46, 49, 75, 77. A = III/70c or IV/77.

1x3Cv (Gen), 2x3Cv, 8x2LH, 1x7Hd or 2LH.

IV/68. Medieval Spanish or Portuguese. 1340AD-1485AD.

Arable. Ag: 3. E = (a) III/74, IV/38, 39b, 62, 68ab, 74, 82ab. (b) III/74, IV/29, 37abcd, 62, 68ab. Ref: AMA1.

(a) Spanish: 1x3Kn (Gen), 2x3Kn, 1x3Kn//4Bd or 4Lb or 2LH, 2x2LH, 1x4Sp, 2x3Ax, 1x4Cb, 2x2Ps.

(b) Portuguese: 1x3Kn//4Bd (Gen), 3x3Kn//4Bd, 1x2LH, 1x4Sp, 2x3Ax, 2x2Ps or 4Cb, 2x4Lb or 4Cb.

IV/69. Albanian. 1345AD-1430AD & 1443AD-1479AD.

Hilly. Ag: 1. E = IV/22, 33, 39c, 51ab, 55b, 61. A = IV/61. Ref: AMA2.

1x2LH (Gen), 4x2LH, 4x2Ps, 1x3Cb, 1x3Ax, 1x4Bd or 5Wb or 3/6Kn.

IV/70. Chanca. 1350AD-1440AD.

Hilly. Ag: 3. E = IV/71, 81. Ref: ASC2.

1x3Sp or Lit (Gen), 5x3Sp, 2x3Sp or 3Wb, 1x3Sp or 3Ax, 3x2Ps.

IV/71. Chimu. 1350AD-1464AD.

Dry. Ag: 1. E = IV/11, 70, 81. Ref: ASC2.

1x3Wb (Gen), 8x3Wb, 3x2Ps.

IV/72. Amazonian. 1350AD-1662AD.

Tropical. Ag: 0. E = IV/29, 81. Ref: ASC2.
1x3Bw (Gen), 9x3Bw, 2x2Ps.

IV/73. Ming Chinese. 1356AD-1598AD.

Arable. Ag: 2. E = II/42d, III/9b, 59, IV/37ac, 40, 48, 52, 59ab, 73, 78. A = III/9b or IV/52 or IV/78. Ref: MCA.
1x3Cv (Gen), 1x3Cv, 2x2LH, 1x3Bd or 2Ps, 2x4Bd, 2x3Bw, 1x3Ax or 3Cv, 2xArt.

IV/74. Free Company or Armagnac. 1357AD-1410AD & 1444AD.

Arable. Ag: 4. E = IV/61, 64b, 68a, 79. Ref: AMA1.
1x3Kn (Gen), 3x3Kn//4Bd, 2x3Kn//4Bd or 3Kn//4Sp or 3Sp, 1x3/6Kn, 4x4Lb, 1x4Cb or 2Ps or Art.

IV/75. Timurid. 1360AD-1506AD.

Steppe. Ag: 4. E = II/58, III/10c, 70c, IV/2, 34, 36b, 42, 45, 47, 52, 55b, 67, 77. A = IV/52 or IV/77. Ref: AMA2.
1x3Cv (Gen), 5x3Cv, 2x2LH, 1xEl or 4Bw, 1x3Bw, 1x2Ps, 1x3Sp or 3Ax.

IV/76. Early Burgundian. 1363AD-1471AD.

Arable. Ag: 2. E = IV/13bc, 41, 57bc, 62, 64bc, 82ab. Ref: AMA1.
1x3Kn or 4Bd (Gen), 5x3Kn//4Bd, 1x3Kn//4Bd or 3Cv, 2x4Pk or 4Lb, 1x4Cb, 1x4Lb, 1xArt.

IV/77. Black Sheep & White Sheep Turkoman. 1378AD-1504AD.

Steppe. Ag: 2. E = II/58, III/70c, IV/42, 45, 49, 55b, 67, 75, 77. A = III/70c or IV/34 or IV/49 or IV/77. Ref: AMA2.
1x3Cv (Gen), 5x3Cv, 2x2LH, 2x3Bw, 1x2Ps or 2LH, 1x7Hd.

IV/78. Yi Dynasty Korean. 1392AD-1598AD.

Hilly. Ag: 0. E = IV/52, 59ab, 73. A = IV/73.
1x3Cv (Gen), 2x3Cv, 2x2LH, 2x4Bw, 2x4Pk, 1x7Hd, 1x2Ps, 1xArt.

IV/79. Later Swiss. 1400AD-1522AD.

Hilly. Ag: 3. E = IV/13bcd, 61, 64bc, 74, 84. Ref: AMA1.
1x4Pk (Gen), 1x6Kn or 6Bd, 7x4Pk, 2x2Ps, 1x2LH or Art.

IV/80. Hussite. 1419AD-1434AD & 1464AD-1471AD.

Arable. Ag: 1. E = IV/13bc, 43c, 66, 80. Ref: AMA2.
1x3Kn or 4Bd (Gen), 1x2LH, 5xWWg, 4x4Bd, 1xArt.

IV/81. Inca. 1438AD-1534AD.

Hilly. Ag: 2. E = IV/70, 71, 72, 81. Ref: ASC2.
1xLit (Gen), 4x4Ax, 2x3/4Ax, 3x2Ps, 2x5Wb.

IV/82. French Ordonnance. 1445AD-1503AD.

Arable. Ag: 2. E = (a) IV/13bc, 61, 62, 68a, 76, 83a. (b) IV/13cd, 61, 68a, 76, 83a, 84. A = (a) IV/61 (b) IV/61 or IV/79. Ref: AMA1.
(a) 1445-1464AD: 1x3Kn//4Bw (Gen), 4x3Kn//4Bd, 1x4Cb, 1x4Bw, 2x3Bw, 1x4Bd or Art, 1x2Ps, 1xArt.
(b) 1465-1503AD: 1x3Kn (Gen), 4x3Kn, 1x3Cv//4Bw, 1x4Cb, 2x4Pk (Swiss – only if not ally) or 3Bw, 2x2Ps, 1xArt.

IV/83. Wars of the Roses English. 1455AD-1487AD.

Arable. Ag: 1. E = (a) IV/16, 82ab, 83a. (b) IV/83b. A = IV/16. Ref: AMA1.
(a) 1455-1485AD: 1x3Kn or 4Bd (Gen), 1x3Kn or 3Cv or 4Bd, 3x4Bd, 6x3/4Lb, 1xArt or 3Sp.
(b) 1487AD: 1x3Kn or 4Bd (Gen), 1x3Kn or 3Cv or 4Bd, 2x4Bd, 1x4Bd or 3Lb, 1xArt or 2Ps, 6x3/4Lb or (2x4Pk + 2x3Ax + 2x2Ps).

IV/84. Burgundian Ordonnance. 1471AD-1477AD.

Arable. Ag: 4. E = IV/13c, 57c, 79, 82b. A = IV/83a. Ref: AMA1.
1x3Kn (Gen), 1x3Kn, 3x3Kn//4Bd, 2x4Lb, 1x4Cb, 2x4Pk or 8Bw, 1x2Ps, 1xArt.

BIG BATTLE D.B.A

INTRODUCTION

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 added detail and complexity of DBM. This differs from the standard version only as described below.

ARMY COMPOSITION

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 the same number but a different letter, which are always full 12-element independent armies from those lists. 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 the troop type specified by their list as general. Other generals can be any element of their list except Scythed Chariots, Psiloi or Artillery.

BATTLEFIELD SIZE AND TERRAIN

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 3-4, not more than 3 of which can be of the same type. There still cannot be more than 1 each of Waterway, River, Oasis or BUA.

CAMPS

An allied command must be provided with its own camp; otherwise the whole army has 1 normal-size camp unless it has a BUA or more than 1 War Wagon.

DEPLOYMENT

The defender places the terrain and the invader chooses which long side will be his base edge, the defender taking the opposite edge. The defender deploys 2 commands including that of his C-in-C, then the invader deploys all his commands, then the defender deploys his remaining command.

DICING

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 and which the lowest scoring dice. He discloses this when he first dices for PIPs.

A command's PIPs cease to be diced for when all its elements have been lost or left the battlefield.

COMBAT

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

LOSSES

An element is lost if it is destroyed or crosses a battlefield edge, but not if only demoralised. An allied command whose camp is currently controlled by the enemy counts as 2 elements extra loss to that command. Any other camp or BUA currently controlled by the enemy counts as 2 elements extra loss to each non-allied command.

DEMORALISATION

A command that at the start of any of its bounds has lost its general or whose lost elements other than Scythed Chariots, camp followers or denizens total a third of its original troop elements is demoralised. It can use tactical moves only to turn and hold in place elements or to hold groups. Other elements not in close combat immediately flee directly towards the nearest point on the army's base edge without first recoiling, 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 BUA or camp deduct -2 in close combat.

WINNING AND LOSING

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 and has also lost more such elements in that bound than the enemy, or an army whose C-in-C's command is demoralised, has lost the battle.

GIANT D.B.A

INTRODUCTION

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

HISTORICAL BATTLES

Research the number of commands and troops actually used, then divide the number of troops of each type in each command by the ratios on page 2 to calculate the number of elements. 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.

OTHER MULTI-PLAYER BATTLES

A separate player controls each general. 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 of the same type.

RELATED RULE SETS

Since its publication, DBA has been joined by derivatives for fantasy battles "Hordes of the Things", for larger armies "De Bellis Multitudinis", for the Renaissance period "De Bellis Renationis" and these are being followed up with derivatives covering other eras.

CONTACT ADDRESSES AND ACKNOWLEDGEMENTS

QUERIES AND SUGGESTIONS

If you have any queries or suggestions, you are welcome to phone Phil Barker on 0121-472-6207, preferably during normal office hours.

OTHER W.R.G PUBLICATIONS

For details of other WRG wargames rules, army lists and reference books, send a stamped and addressed envelope if in the U.K. or 2 international reply coupons if not, to: W.R.G, The Keep, Le Marchant Barracks, London Rd, Devises SN10 2ER, U.K, email keepwrg@talk21.com or phone 01380-724558.

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: The Membership Secretary, "Mabar", Blackheath Lane, Womersley, Guildford, GU5 0PN, or <http://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: The Treasurer, 84 Eglinton Hill, Shooters Hill, London SE18 3DY, UK, or <http://www.wargamedevelopments.org/>

D.B.A ON-LINE

Wargaming.Net, working with the authors, has produced DBA Online. DBAOL has excellent graphics and can be played on a computer on- or off-line against human opponents at www.dbaol.com or at home. Email contact@dbaol.com. A fan site for DBA as well as DBAOL can be found at <http://fanaticus.org/>

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