

0 A.D. is Actually Before Christ
<https://github.com/0abc/0abc-a23.git>

A modification of *0 A.D. Empires Ascendant*
version 0.0.23 *Alpha XXIII*: Ken Wood

0abc@mail.com
<https://wildfiregames.com/forum/index.php?/topic/22779-0abc-mod/>

March 5, 2019



Contents

1	Introduction	3
1.1	Instructions	3
2	Units	4
2.1	Population costs	4
2.2	Counters	4
2.3	Unit types	5
2.3.1	Infantry	5
2.3.2	Camelry	6
2.3.3	Cavalry	6
2.3.4	Chariotry	7
2.3.5	Elephantry	7
2.3.6	Dogs	7
2.3.7	Siege engines	8
2.3.8	Ships	9
2.3.9	Support	9
2.3.10	Fauna	10
2.4	Unit roster	11
2.4.1	Support	11
2.4.2	Infantry	11
2.4.3	Cavalry	12
2.4.4	Exotic units	13
2.4.5	Siege engines	13
2.4.6	Ships	13
3	Structures	14
3.1	Civic	14
3.2	Economic	14
3.3	Military	15
3.4	Defensive	16
4	Technologies and auras	17
4.1	Unit auras	17
4.2	Class bonuses	17
4.3	Civilization bonuses	18
4.4	Team bonuses	18

1 Introduction

0abc is an acronym for “0 A.D. is Actually Before Christ”. This mod tweaks, rebalances, and improves upon what already exists in the game. Amongst other things, it contains a moderate bonus attack counter and penalty system, more experience promotion ranks (0–12), and a new resource (silver).

0abc serves as a showcase for what 0 A.D. easily could be at the moment, as a playground for me experimenting with modifying the game to get used to the code structure, and as a platform for including my own opinions and views to have the game the way I like it. Being a test mod of an alpha-stage game, it is inherently imperfect, unfinished, and restricted by my limited programming skills and the files available in 0 A.D.’s latest stable release.

All the content is completely open for any use: feel free to download, change, redistribute, or (re)use anything in any way you like; no asking for permission or granting credits is required for incorporating parts or all of it in your own mods (or main distribution). Have fun with it!

1.1 Instructions

- Use `git clone https://github.com/0abc/0abc-a23.git` to get the repository directly or download it as a zip via `https://github.com/0abc/0abc-a22/archive/master.zip`
- Place it in your `/0ad/mods/` folder:
 - GNU/Linux (e.g. Fedora) typically: `~/.local/share/0ad/mods/`
 - Macintosh/Apple OS X typically: `~/Library/Application\ Support/0ad/mods/`
 - Microsoft Windows typically: `~\Documents\My Games\0ad\mods\`
- Launch 0 A.D., click “Settings” and “Mod Selection”
- Select **0abc**, click “Enable” and “Save Configuration”
- Add, remove, or move up or down any other mods, click “Save Configuration” and “Start Mods”
- Click “Learn To Play” and “Structure Tree” to see the mod(s) implemented.

2 Units

2.1 Population costs

- 0: fauna, catafalques, ships
- 1: infantry, women, healers, traders
- 2: camelry, cavalry
- 3: worker elephants
- 4: bigae, battering rams, bolt-shooters, stone-throwers
- 5: –
- 6: quadrigae, war elephants, siege towers

2.2 Counters

unit	new penalties	new bonuses	restricted
war dogs	–	–	Ships, Siege, Structure
infantry stone-slingers	–	–	–
infantry lead-slingers	–	–	–
infantry longbowmen	0.5× vs Elephantry	–	–
infantry archers	0.5× vs Elephantry	–	–
infantry crossbowmen	–	–	–
infantry javelinists	–	–	–
infantry axe-throwers	–	–	–
infantry macemen	–	–	–
infantry axemen	–	–	–
infantry sabremen	–	–	–
infantry longswordsmen	–	–	–
infantry swordsmen	–	–	–
infantry spearmen	–	–	–
infantry pikemen	–	–	–
camel archers	0.5× vs Elephantry	–	–
camel javelinists	–	–	–
camel spearmen	0.5× vs Elephantry	–	–
cavalry archers	0.5× vs Elephantry	–	–
cavalry crossbowmen	–	–	–
cavalry javelinists	–	–	–
cavalry axemen	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
cavalry lancers	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
cavalry macemen	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
cavalry sabremen	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
cavalry spearmen	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
cavalry swordsmen	0.75× vs Chariotry, 0.5× vs Elephantry	–	–
biga archers	0.5× vs Elephantry	–	Ships, Siege, Structure
biga javelinists	–	–	Ships, Siege, Structure
quadriga archers	0.5× vs Elephantry	–	Ships, Siege, Structure
war elephants	–	–	–
bolt-shooter	–	–	–
stone-thrower	–	2.0× vs Ships	–
battering ram	–	2.0× vs Defensive	Organic
siege tower	–	–	–

2.3 Unit types

2.3.1 Infantry

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
infantry	1	30, 30, 0, 0, 0; 75	60/–	80	11.5	60	3, 1, 2, 1	0, 0, 4, 0	1000	80+1	
lead-slinger	(1)	(–, 50, 20, 0, 30; 10)	(100/100)	(80)	(10.8)	(50)	(10, 1, 1, –)	(1, 0, 9.5, –)	(1250)	(48)	
infantry	1	30, 30, 0, 0, 0; 55	60/–	80	10.0	60	1, 1, 1, 1	0, 0, 5, 0	1000	70+1	
longbowman	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(9.9)	(50)	(10, 1, 1, –)	(0, 0, 6, –)	(1000)	(72)	
infantry	1	30, 30, 0, 0, 0; 60	60/–	80	10.5	60	2, 1, 2, 1	0, 0, 6, 0	1000	60+1	
archer	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(9.9)	(50)	(10, 1, 1, –)	(0, 0, 6, –)	(1000)	(72)	
infantry	1	30, 30, 0, 0, 0; 50	60/–	80	9.0	60	1, 1, 1, 1	0, 0, 6, 3	1000	50+1	
crossbowman	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(9.9)	(50)	(10, 1, 1, –)	(0, 0, 6, –)	(1000)	(72)	
infantry	1	30, 30, 0, 0, 10; 70	60/–	80	11.5	60	1, 1, 1, 1	8, 0, 0, 0	1000	40+1	
stone-slinger	(1)	(–, 50, 20, 0, 30; 10)	(100/100)	(80)	(10.8)	(50)	(10, 1, 1, –)	(1, 0, 9.5, –)	(1250)	(48)	
infantry	1	30, 30, 0, 0, 0; 45	60/–	80	11.0	60	2, 1, 3, 1	0, 0, 12, 0	1000	30+1	
javelinist	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(12.6)	(50)	(10, 1, 1, –)	(0, 0, 16, –)	(1250)	(24)	
infantry	1	30, 30, 0, 0, 0; 40	60/–	80	10.5	60	3, 3, 3, 3	3, 6, 0, 0	1000	20+1	
axe-thrower	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(12.6)	(50)	(10, 1, 1, –)	(0, 0, 16, –)	(1250)	(24)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	10.0	90	4, 3, 4, 5	7, 0, 0, 0	1000	3	
maceman	(1)	(–, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, –)	(0, 5.5, 0, –)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	10.5	90	4, 4, 4, 4	2.5, 5, 0, 0	1000	3	
axeman	(1)	(–, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, –)	(0, 5.5, 0, –)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	10.5	90	5, 4, 4, 3	0, 7, 0, 0	1000	3	
sabreman	(1)	(–, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, –)	(0, 5.5, 0, –)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	9.5	90	3, 5, 3, 5	0, 6, 0, 2	1000	3	
longswordsman	(1)	(–, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, –)	(0, 5.5, 0, –)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	10.0	90	4, 4, 4, 4	0, 4, 0, 4	1000	3	
swordsman	(1)	(–, 50, 40, 10, 0; 10)	(100/100)	(80)	(9.45)	(100)	(15, 5, 5, –)	(0, 5.5, 0, –)	(750)	(3.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	10.0	90	3, 5, 4, 4	0, 0, 0, 7	1000	3	
spearman	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(8.55)	(100)	(15, 5, 5, –)	(0, 3.0, 2.5, –)	(1000)	(4.5)	
infantry	1	30, 30, 0, 0, 0; 30	60/–	80	9.0	90	5, 3, 5, 3	0, 0, 3, 3	1000	6	
pikeman	(1)	(–, 50, 50, 0, 0; 10)	(100/100)	(80)	(7.2)	(100)	(15, 10, 10, –)	(0, 1.0, 3.0, –)	(2000)	(7.0)	

2.3.2 Camelry

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
camel	2	50, 75, 0, 0, 0; 75	90/−	90	18.0	110	1, 1, 1, 1	0, 0, 6, 0	1000	60+3	
archer	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 7, −)	(1000)	(72)	
camel	2	50, 75, 0, 0, 0; 60	90/−	90	18.0	110	1, 1, 1, 1	0, 0, 15, 0	1000	30+3	
javelinist	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 18, −)	(1250)	(28)	
camel	2	50, 75, 0, 0, 0; 45	90/−	90	18.0	135	2, 2, 2, 2	0, 0, 0, 9	1000	4	
spearman	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, −)	(0, 6, 5, −)	(2000)	(4.5)	

2.3.3 Cavalry

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
cavalry	2	60, 90, 0, 0, 0; 85	120/−	85	15.0	120	1, 1, 1, 1	0, 0, 6, 0	1000	70+2	
longbowman	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 7, −)	(1000)	(72)	
cavalry	2	60, 90, 0, 0, 0; 90	120/−	85	15.0	120	1, 1, 1, 1	0, 0, 7, 0	1000	60+2	
archer	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 7, −)	(1000)	(72)	
cavalry	2	60, 90, 0, 0, 0; 80	120/−	85	15.0	120	1, 1, 1, 1	0, 0, 6, 3	1000	50+2	
crossbowman	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 7, −)	(1000)	(72)	
cavalry	2	60, 90, 0, 0, 0; 75	120/−	85	15.0	120	1, 1, 1, 1	0, 0, 15, 0	1000	30+2	
javelinist	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(17.55)	(100)	(15, 3, 1, −)	(0, 0, 18, −)	(1250)	(28)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	9, 0, 0, 0	1000	4	
maceman	(1)	(−, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, −)	(0, 6.5, 0, −)	(750)	(3.5)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	3, 6, 0, 0	1000	4	
axeman	(1)	(−, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, −)	(0, 6.5, 0, −)	(750)	(3.5)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	0, 9, 0, 0	1000	4	
sabreman	(1)	(−, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, −)	(0, 6.5, 0, −)	(750)	(3.5)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	0, 5, 0, 5	1000	4	
swordsman	(1)	(−, 100, 30, 20, 0; 15)	(130/150)	(92)	(21.06)	(160)	(15, 4, 2, −)	(0, 6.5, 0, −)	(750)	(3.5)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	0, 0, 0, 10	1000	4	
spearman	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, −)	(0, 6, 5, −)	(2000)	(4.5)	
cavalry	2	60, 90, 0, 0, 0; 60	120/−	85	15.0	150	3, 3, 3, 3	2, 0, 0, 8	1000	4	
lancer	(1)	(−, 100, 50, 0, 0; 15)	(130/150)	(92)	(19.305)	(160)	(15, 4, 3, −)	(0, 6, 5, −)	(2000)	(4.5)	

2.3.4 Chariotry

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
biga longbowman	4 (1)	120, 180, 0, 0, 0; 75 (-, 250, 100, 100, 0; 30)	180/- (150/-)	85 (96)	16.0 (20.25)	240 (240)	5, 5, 5, 5 (20, 7, 5, -)	0, 0, 7, 0 (0, 0, 14, -)	1000 (1000)	70+2 (76)	arrow count: 1-2 (-)
biga archer	4 (1)	120, 180, 0, 0, 0; 75 (-, 250, 100, 100, 0; 30)	180/- (150/-)	85 (96)	16.0 (20.25)	240 (240)	5, 5, 5, 5 (20, 7, 5, -)	0, 0, 8, 0 (0, 0, 14, -)	1000 (1000)	60+2 (76)	arrow count: 1-2 (-)
biga javelinist	4 (1)	120, 180, 0, 0, 0; 75 (-, 250, 100, 100, 0; 30)	180/- (150/-)	85 (96)	16.0 (20.25)	240 (240)	5, 5, 5, 5 (20, 7, 5, -)	0, 0, 21, 0 (0, 0, 36, -)	1000 (1250)	30+2 (32)	arrow count: 1-2 (-)
quadriga scythed	6 (1)	180, 300, 0, 0, 0; 75 (-, 250, 100, 100, 0; 30)	240/- (150/-)	85 (96)	17.0 (20.25)	360 (240)	6, 6, 6, 6 (20, 7, 5, -)	5, 10, 0, 10 0, 0, 8, 0 (0, 0, 14, -)	1000 1000 (1000)	8 60+2 (76)	[melee] [ranged] arrow count: 1-2 (-)

2.3.5 Elephantry

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
Indian elephant	6 (3)	390, 270, 0, 0, 0; 90 (-, 250, 0, 250, 0; 30)	360/- (150/-)	95 (100)	12.0 (8.45)	660 (750)	20, 5, 15, 10 (25, 10, 10, -)	66, 0, 0, 0 (150, 20, 0, -)	1000 (1500)	6 (8)	
North African elephant	6 (3)	330, 210, 0, 0, 0; 90 (-, 250, 0, 250, 0; 30)	360/- (150/-)	95 (100)	12.0 (8.45)	540 (750)	20, 5, 15, 10 (25, 10, 10, -)	54, 0, 0, 0 (150, 20, 0, -)	1000 (1500)	6 (8)	

2.3.6 Dogs

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
war dog	0 (0)	0, 30, 0, 0, 0; 15 (-, 100, 0, 0, 0; 15)	15/- (100/100)	30 (30)	14.0 (14.40)	30 (90)	1, 1, 2, 1 (1, 1, 2, -)	0, 5, 5, 0 (0, 7, 2, -)	1000 (1000)	2 (3)	

2.3.7 Siege engines

class	pop. size	construction costs (s, f, w, m, s; time)	exp. loot/up	vision range packed/unpacked	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
scorpio	2	0, 50, 50, 100, 0; 60	−/−	100	8.0	100	5, 1, 50, 2	0, 0, 40, 20	4000	10–90	un/pack (ms): 4000 (10000)
bolt-shooter	(2)	(−, 0, 250, 250, 0; 20)	(200/−)	(120)	(8.1)	(200)	(5, 1, 50, −)	(25, 0, 150, −)	(4000)	(26–80)	l. splash: − (5c+0h+75p)
polybolos	4	0, 100, 150, 150, 0; 90	−/−	100	8.0	200	5, 1, 50, 2	0, 0, 40, 20	2000	15–95	un/pack (ms): 8000 (10000)
bolt-shooter	(2)	(−, 0, 250, 250, 0; 20)	(200/−)	(120)	(8.1)	(200)	(5, 1, 50, −)	(25, 0, 150, −)	(4000)	(26–80)	l. splash: − (5c+0h+75p)
oxybeles	4	0, 100, 150, 150, 0; 80	−/−	100	8.0	200	5, 1, 50, 2	0, 0, 100, 50	5000	20–100	un/pack (ms): 8000 (10000)
bolt-shooter	(2)	(−, 0, 250, 250, 0; 20)	(200/−)	(120)	(8.1)	(200)	(5, 1, 50, −)	(25, 0, 150, −)	(4000)	(26–80)	l. splash: − (5c+0h+75p)
stone-thrower	4	0, 100, 200, 100, 0; 100	−/−	100	7.0	250	5, 1, 50, 2	120, 0, 0, 0	5000	30–90	un/pack (ms): 12000 (10000)
	(2)	(−, 0, 400, 0, 250; 25)	(300/−)	(120)	(7.2)	(250)	(5, 1, 50, −)	(100, 0, 10, −)	(5000)	(26–80)	c. splash: − (35c+0h+15p)
small battering ram	4	0, 100, 250, 50, 0; 40	−/−	40	6.0	400	5, 1, 50, 2	80, 0, 0, 0	2000	7	garrison capacity: 6 (10)
	(3)	(−, 0, 350, 200, 0; 30)	(60/−)	(80)	(8.1)	(400)	(5, 1, 50, −)	(150, 0, 0, −)	(1500)	(6.5)	
large battering ram	4	0, 100, 350, 50, 0; 50	−/−	40	6.0	500	5, 1, 50, 2	80, 0, 0, 0	2000	9	garrison capacity: 10 (10)
	(3)	(−, 0, 350, 200, 0; 30)	(60/−)	(80)	(8.1)	(400)	(5, 1, 50, −)	(150, 0, 0, −)	(1500)	(6.5)	
siege tower	6	0, 200, 500, 300, 0; 150	−/−	100	4.0	750	5, 1, 50, 2	3, 0, 9, 0	2000	10–60+12	garrison capacity: 20 (20) arrow count: 2–12 (0–10)
	(3)	(−, 0, 500, 300, 0; 60)	(60/−)	(80)	(6.3)	(500)	(5, 1, 50, −)	(2.5, 0, 12, −)	(2000)	(10–55+10)	

2.3.8 Ships

class	pop. size	construction costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
fishing boat	0 (1)	0, 15, 60, 0, 0; 20 (-, 0, 50, 0, 0; 20)	-/- (1/-)	75 (30)	12.0 (9.9)	150 (200)	2, 2, 4, 2 (2, 2, 5, -)	0, 0, 0, 10 (0, 10, 0, -)	1000 (1000)	5 (5)	garrison capacity: 1 (1) food capacity: 60 (40)
merchant ship	0 (1)	0, 30, 120, 60, 0; 40 (-, 0, 0, 100, 0; 20)	-/- (25/-)	90 (50)	11.0 (12.15)	600 (400)	3, 3, 6, 3 (2, 2, 5, -)	- (-)	- (-)	- (-)	garrison capacity: 15 (15) trade gain: 0.75 (0.75)
fireship	0 (1)	0, 0, 150, 0, 0; 15 (-, 0, 50, 0, 0; 30)	-/- (-/-)	60 (60)	13.0 (14.4)	450 (500)	4, 4, 8, 4 (5, 5, 10, -)	5, 5, 5, 5 (10, 10, 10, -)	100 (100)	10 (8)	regeneration: -5 (-6); death damage
barge (trireme)	0 (3)	0, 50, 250, 100, 0; 50 (-, 0, 150, 150, 0; 40)	-/- (100/-)	120 (90)	10.0 (14.58)	1800 (1600)	5, 5, 10, 5 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (55)	garrison capacity: 45 (40) arrow count: 0-20 (3-13)
huge barge (trireme)	0 (3)	0, 100, 400, 150, 0; 80 (-, 0, 150, 150, 0; 40)	-/- (100/-)	120 (90)	8.5 (14.58)	2700 (1600)	5, 5, 10, 5 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (55)	garrison capacity: 75 (40) arrow count: 0-30 (3-13)
triaconter (bireme)	0 (2)	0, 60, 60, 30, 0; 30 (-, 0, 125, 50, 0; 20)	-/- (75/-)	105 (90)	10.0 (13.95)	300 (800)	5, 5, 10, 5 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (45)	garrison capacity: 5 (20) arrow count: 1-3 (2-10)
penteconter (bireme)	0 (2)	0, 100, 100, 50, 0; 45 (-, 0, 125, 50, 0; 20)	-/- (75/-)	105 (90)	9.5 (13.95)	500 (800)	5, 5, 10, 5 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (45)	garrison capacity: 10 (20) arrow count: 1-5 (2-10)
trireme (trireme)	0 (3)	0, 300, 300, 150, 0; 60 (-, 0, 150, 150, 0; 25)	-/- (100/-)	100 (90)	8.5 (16.2)	1500 (1400)	6, 6, 12, 6 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (55)	garrison capacity: 20 (30) arrow count: 2-10 (3-13)
quadrireme (trireme)	0 (3)	0, 400, 400, 200, 0; 75 (-, 0, 150, 150, 0; 25)	-/- (100/-)	100 (90)	8.0 (16.2)	2000 (1400)	6, 6, 12, 6 (5, 5, 10, -)	0, 0, 6, 0 (0, 0, 35, -)	1000 (2000)	60 (55)	garrison capacity: 40 (30) arrow count: 4-20 (3-13)
quinquereme	0 (3)	0, 500, 500, 250, 0; 90 (-, 0, 350, 200, 350; 30)	-/- (150/-)	100 (110)	7.5 (16.2)	2500 (2000)	7, 7, 14, 7 (5, 5, 10, -)	0, 0, 6, 0 (100, 0, 10, -)	1000 (5000)	60 (10-72)	garrison capacity: 60 (50) arrow count: 6-30 (1-10)

2.3.9 Support

class	pop. size	training costs (s, f, w, m, s; time)	exp. loot/up	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	other stats
woman (female citizen)	1 (1)	30, 30, 0, 0, 0; 60 (-, 50, 0, 0, 0; 8)	-/- (10/-)	60 (32)	9.0 (9.0)	45 (25)	1, 1, 1, 1 (1, 1, 1, -)	5, 0, 0, 0 (0, 2, 0, -)	1000 (1000)	15 (3)	build rate: - (1.0)
slave	1 (0)	50, 0, 0, 0, 0; 60 (-, 0, 0, 50, 0; 20)	-/- (10/-)	60 (12)	9.0 (9.0)	45 (100)	1, 1, 1, 1 (1, 1, 1, -)	- (-)	- (-)	- (-)	build rate: 0.5 (0.5)
healer	1 (1)	50, 30, 0, 0, 0; 60 (-, 250, 0, 0, 0; 8)	-/- (10/150)	60 (30)	9.0 (9.0)	75 (85)	1, 1, 1, 1 (1, 1, 1, -)	heal 1 HP (heal 5 HP)	500 (2000)	12 (12)	
trader	1 (1)	0, 50, 50, 50, 0; 60 (-, 100, 0, 80, 0; 15)	-/- (10/-)	60 (60)	9.0 (9.0)	100 (100)	1, 1, 1, 1 (1, 1, 1, -)	- (-)	- (-)	- (-)	trade gain: 0.75 (0.75)
worker elephant	3 (1)	0, 150, 0, 0, 0; 60 (-, 150, 0, 0, 0; 20)	-/- (50/-)	60 (50)	5.4 (5.4)	450 (300)	9, 3, 7, 5 (10, 5, 8, -)	- (-)	- (-)	- (-)	build rate: 2.0 (2.0)

2.3.10 Fauna

class	food amount	max gatherers	exp. loot	vision range	walk speed	health	armour (c, h, p, t)	damage (c, h, p, t)	rate (ms)	range (m)	behaviour
chicken	15	1	–	10	1.5	3	1, 1, 1, 1	–	–	–	domestic
peacock	25	1	–	10	2.5	5	1, 1, 1, 1	–	–	–	domestic
goat	75	2	–	10	4.5	15	1, 1, 1, 1	–	–	–	domestic
sheep	100	2	–	10	4.0	20	1, 1, 1, 1	–	–	–	domestic
pig	150	2	–	10	3.0	30	1, 1, 1, 1	–	–	–	domestic
flaming ”	–	–	–	10	9.0	30	1, 1, 1, 1	–	–	–	domestic
zebu	300	5	–	10	5.0	60	1, 1, 1, 1	–	–	–	domestic
rabbit	20	1	–	10	3.5	10	1, 1, 1, 1	–	–	–	skittish
donkey	120	2	–	10	6.0	40	1, 1, 1, 1	–	–	–	skittish
horse	200	3	–	10	8.0	60	1, 1, 1, 1	–	–	–	skittish
pony	160	2	–	10	6.4	45	1, 1, 1, 1	–	–	–	skittish
dromedary camel	250	4	–	10	7.0	80	1, 1, 1, 1	–	–	–	skittish
deer	130	2	–	10	3.0	65	1, 1, 2, 1	–	–	–	skittish
gazelle	60	2	–	10	12.5	30	1, 1, 1, 1	–	–	–	skittish
giraffe	350	6	–	10	6.0	150	1, 1, 1, 1	–	–	–	skittish
” infant	140	2	–	10	5.4	60	1, 1, 1, 1	–	–	–	skittish
muskox	170	3	–	10	5.5	85	2, 1, 4, 1	–	–	–	skittish
wildebeast	210	3	–	10	8.5	105	2, 1, 2, 1	–	–	–	skittish
zebra	170	3	–	10	9.0	85	1, 1, 1, 1	–	–	–	skittish
African bush elephant	700	11	70	10	5.0	350	5, 3, 4, 2	100, 0, 0, 0	2000	6	defensive
” ” ” infant	280	4	–	10	4.5	140	4, 2, 3, 1	–	–	–	skittish
Asian elephant	600	10	60	10	5.0	300	5, 3, 4, 2	100, 0, 0, 0	2000	6	defensive
” ” infant	240	4	–	10	4.5	120	4, 2, 3, 1	–	–	–	skittish
North African elephant	500	9	50	10	5.0	250	5, 3, 4, 2	100, 0, 0, 0	2000	6	defensive
” ” ” infant	200	4	–	10	4.5	100	4, 2, 3, 1	–	–	–	skittish
walrus	320	6	–	10	2.0	160	4, 2, 4, 2	10, 0, 15, 25	2000	5	defensive
bear	280	4	–	10	6.0	140	4, 2, 3, 1	20, 20, 0, 0	2000	6	aggressive
boar	140	2	–	10	8.0	70	3, 1, 2, 1	8, 0, 0, 16	2000	4	aggressive
crocodile	180	3	–	10	4.0	90	7, 3, 9, 5	0, 30, 0, 0	2000	8	aggressive
rhinoceros	400	7	–	10	7.0	200	4, 2, 5, 3	20, 0, 0, 20	2000	6	aggressive
fox (red, arctic)	–	–	–	10	9.0	30	1, 1, 3, 1	0, 5, 5, 0	2000	2	defensive
dog (mastiff, wolfhound)	–	–	–	10	11.0	50	1, 1, 3, 1	0, 10, 10, 0	2000	3	aggressive
wolf (red, arctic)	–	–	–	10	12.0	70	1, 1, 3, 1	0, 15, 15, 0	2000	4	aggressive
lion(ess)	–	–	–	10	13.0	100	1, 1, 3, 1	0, 20, 20, 0	2000	5	violent
tiger	–	–	–	10	14.0	110	1, 1, 3, 1	0, 25, 25, 0	2000	6	violent
shark	–	–	–	10	9.0	180	1, 1, 1, 1	–	–	–	passive
whale (fin, humpback)	2000	5	–	10	15.0	400	7, 3, 5, 1	–	–	–	skittish

2.4 Unit roster

2.4.1 Support

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
woman	V	V	V	V	V	V	V	V	V	V	V	V
trader	V	V	V	V	V	V	V	V	V	V	V	V
healer	T	T	T	T	T	T	T	T	T	T	T	T
elephant	–	–	–	–	–	–	–	V	–	–	–	–
slave	–	–	–	–	–	–	–	–	–	–	–	–

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

2.4.2 Infantry

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
infantry lead-slinger	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	T	–	T	–	–	T	–	–	T	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
infantry longbowman	–	–	–	–	–	V	–	V	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
infantry archer	–	V	–	–	–	–	–	–	V	–	–	T
" " mercenary	–	–	–	T	–	–	T	–	–	T	–	–
" " champion	–	–	–	–	–	C	–	–	–	–	–	–
infantry crossbowman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	C	–	–	–	–	–
infantry stone-slinger	V	–	T	–	T	–	–	–	–	V	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
infantry javelinist	T	–	V	V	V	–	V	–	T	–	V	V
" " mercenary	–	T	–	T	–	T	–	–	–	T	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
infantry axe-thrower	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
infantry maceman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	T	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	C	–	–	–	–
infantry axeman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	C	–	–	–	–	–	–
infantry sabreman	–	–	–	–	V	–	–	T	–	–	V	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	C	–	–	–	–	–	–
infantry longswordsman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	C*	–	–	–	–	–	–	–	–	–	–	–
infantry swordsman	T	–	V	–	–	T	–	–	–	–	T	–
" " mercenary	–	T	–	–	–	–	–	–	–	T	–	–
" " champion	–	–	C*	–	–	–	–	–	–	–	C	C
infantry spearman	V	V	T	V	T	V	–	V	V	–	T	V
" " mercenary	–	T	–	T	–	–	T	–	–	T	–	–
" " champion	–	C	–	C	–	–	C	–	C	–	–	–
infantry pikeman	–	–	–	–	–	T	V	–	–	V	–	T
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	C	–	C

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

2.4.3 Cavalry

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
cavalry longbowman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry archer	–	–	–	–	–	–	–	–	T	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	T
" " champion	–	–	–	–	–	–	–	–	C	–	–	–
cavalry crossbowman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry javelinist	V	V	T	V	V	V	T	V	V	–	T	V
" " mercenary	–	T	–	–	–	–	–	–	–	T	–	–
" " champion	–	–	–	–	C	–	–	–	–	–	–	–
cavalry maceman	–	–	–	–	–	–	–	–	–	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry axeman	–	–	–	–	–	–	–	–	T	–	–	–
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry sabreman	–	–	–	T	–	–	–	–	–	–	–	–
" " mercenary	–	T	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry swordsman	T	–	V	–	–	–	–	T	–	–	–	–
" " mercenary	–	T	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	–	–	–	–	–	–	–	–	–	–
cavalry spearman	–	–	–	–	T	T	–	–	T	T	V	–
" " mercenary	–	T	–	–	–	–	–	–	–	–	–	–
" " champion	–	–	C	–	–	C	–	–	–	C	–	–
cavalry lancer	–	–	–	–	–	–	V	–	–	–	–	T
" " mercenary	–	–	–	–	–	–	–	–	–	–	–	–
" " champion	–	C	–	–	–	–	C	–	C	–	–	C

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

2.4.4 Exotic units

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
camel archer	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	T	T	–	T
” ” champion	–	–	–	–	–	–	–	–	–	–	–	–
camel javelinist	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	T	–	–	–	–	–	–
” ” champion	–	–	–	–	–	–	–	–	–	–	–	–
camel spearman	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	–	–	–	–	–	–	–	–	–	–	–	–
biga longbowman	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	–	–	–	–	–	–	–	C	–	–	–	–
biga archer	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	–	–	–	–	–	–	–	–	–	–	–	–
biga javelinist	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	C	–	–	–	–	–	–	–	–	–	–	–
quadriga scythed	–	–	–	–	–	–	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	–	–	–	–	–	–	–	–	C	–	–	C
Indian elephant	–	–	–	–	–	–	–	T	–	–	–	–
” ” mercenary	–	–	–	–	–	–	C*	–	C	–	–	–
” ” champion	–	–	–	–	–	–	–	C	–	–	–	C
North African elephant	–	–	–	–	–	C	–	–	–	–	–	–
” ” mercenary	–	–	–	–	–	–	–	–	–	–	–	–
” ” champion	–	C	–	–	–	–	–	–	–	C	–	–
war dog	V	–	–	–	–	–	–	–	–	–	–	–

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

2.4.5 Siege engines

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
scorpio	–	–	–	–	–	–	–	–	–	–	C	–
polybolos	–	–	–	–	–	–	–	–	–	C	–	–
oxybeles	–	C	–	C	–	–	C	–	–	–	–	–
stone-thrower	–	C	–	–	–	–	C	C	–	C	C	C
small battering ram	T	T	T	T	T	–	–	T	–	–	–	–
large battering ram	–	–	–	–	–	T	T	–	T	T	T	T
siege tower	–	–	–	–	–	–	C	–	–	C	–	C

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

2.4.6 Ships

	BRIT	CART	GAUL	GREE	IBER	KUSH	MACE	MAUR	PERS	PTOL	ROME	SELE
fishing boat	V	V	V	V	V	V	V	V	V	V	V	V
merchant ship	T	T	T	T	T	T	T	T	T	T	T	T
fireship	–	–	–	–	T	–	–	–	–	–	–	–
war barge	T	–	T	–	T	–	–	T	–	–	–	–
war barge huge	–	–	–	–	–	–	–	C	–	–	–	–
triaconter	–	–	–	–	–	–	–	–	–	–	–	–
penteconter	–	–	–	T	–	–	T	–	T	–	T	T
trireme	–	T	–	T	–	T	T	–	T	T	T	T
quadrireme	–	C	–	–	–	–	–	–	–	C	C	–
quinquereme	–	C	–	–	–	–	–	–	–	C	C	–

NB: –: not available for this faction, *V*: requires village phase, *T*: requires town phase, *C*: requires city phase, *M*: requires metropolis phase, *: only available at some captured structures.

3 Structures

3.1 Civic

class	building costs (s, f, w, m, s; time)	pop. bonus	loot (s, f, w, m, s; exp)	armour (c, h, p, t)	capture points	garrison capacity	health	territory (root/radius/weight)	vision range
centre, crannog (civil center)	0, 300, 300, 0, 0; 500 (-, 0, 500, 500, 500; 500)	15 (20)	60, 60, 60, 0, 0; 250 (-, 0, 200, 200, 200; 200)	3, 25, 35, 30 (3, 25, 35, -)	2500 (2500)	20 (20)	3000 (3000)	1/150/10000 (1/140/10000)	100 (90)
pillar (monument) (pillar)	0, 0, 0, 100, 100; 100 (-, 0, 0, 100, 100; 120) (-, 0, 0, 100, 100; 80)	0 (0) (0)	0, 0, 0, 20, 20; 0 (-, 0, 0, 25, 25; 0) (-, 0, 0, 25, 25; 0)	5, 25, 35, 30 (3, 20, 30, -) (3, 20, 30, -)	- (-) (-)	- (-) (-)	1000 (1200) (1000)	1/50/50000 (1/38/40000) (1/38/40000)	50 (60) (40)
temple	0, 0, 100, 100, 300; 300 (-, 0, 0, 0, 300; 200)	0 (5)	0, 0, 20, 20, 60; 0 (-, 0, 0, 50, 50; 0)	5, 25, 35, 30 (3, 20, 30, -)	1000 (500)	20 (20)	2000 (2000)	0/50/50000 (0/40/30000)	50 (40)
library	0, 0, 150, 150, 450; 400 (-, 0, 0, 200, 200; 200)	0 (0)	0, 0, 30, 30, 90; 0 (-, 0, 0, 50, 50; 0)	5, 25, 35, 30 (3, 20, 30, -)	1000 (500)	25 (5)	2500 (2000)	0/50/50000 (0/50/40000)	50 (40)
lighthouse	0, 0, 200, 200, 600; 500 (-, 0, 0, 200, 200; 200)	0 (0)	0, 0, 40, 40, 120; 0 (-, 0, 0, 50, 50; 0)	5, 25, 35, 30 (3, 20, 30, -)	1000 (500)	(5) (5)	3000 (2000)	- (0/0/40000)	200 (180)
theatre	0, 0, 300, 300, 900; 600 (-, 0, 0, 500, 500; 500)	0 (0)	0, 0, 60, 60, 180; 0 (-, 0, 0, 125, 125; 0)	5, 25, 35, 30 (3, 20, 30, -)	1000 (500)	(5) (5)	4000 (2000)	0/100/50000 (0/100/40000)	50 (40)
wonder	0, 0, 1000, 1000, 2000; 1200 (-, 1000, 1000, 1000, 1000; 1000)	0 (0)	400, 200, 200, 200, 200; 0 (-, 300, 300, 300, 300; 300)	5, 25, 35, 30 (3, 15, 25, -)	3000 (2000)	50 (30)	6000 (5000)	1/100/65535 (1/100/65535)	50 (72)

3.2 Economic

class	building costs (s, f, w, m, s; time)	pop. bonus	loot (s, f, w, m, s; exp)	armour (c, h, p, t)	capture points	garrison capacity	health	territory (root/radius/weight)	vision range
field	0, 0, 100, 0, 0; 60 (-, 0, 100, 0, 0; 50)	0 (0)	0, 0, 20, 0, 0; 0 (-, 50, 0, 0, 0; 0)	5, 15, 40, 25 (5, 15, 40, -)	100 (500)	- (-)	300 (250)	- (-)	0 (0)
corral	0, 0, 100, 0, 0; 30 (-, 0, 100, 0, 0; 50)	0 (0)	0, 0, 20, 0, 0; 0 (-, 25, 10, 0, 0; 0)	1, 5, 20, 10 (1, 1, 20, -)	300 (500)	3 (-)	500 (500)	- (0/20/30000)	30 (20)
storehouse	0, 0, 100, 0, 0; 40 (-, 0, 100, 0, 0; 40)	0 (0)	0, 0, 20, 0, 0; 0 (-, 0, 10, 0, 0; 0)	1, 5, 20, 10 (1, 5, 20, -)	300 (300)	4 (-)	700 (800)	- (0/20/30000)	30 (20)
farmstead	0, 0, 100, 0, 0; 50 (-, 0, 100, 0, 0; 45)	0 (0)	0, 0, 20, 0, 0; 0 (-, 100, 10, 0, 0; 0)	1, 5, 20, 10 (1, 5, 20, -)	300 (300)	5 (-)	900 (900)	- (0/20/30000)	30 (20)
small house	0, 0, 75, 0, 0; 25 (-, 0, 75, 0, 0; 30)	5 (5)	0, 0, 15, 0, 0; 0 (-, 0, 10, 0, 0; 0)	1, 5, 20, 10 (3, 20, 30, -)	200 (300)	3 (3)	600 (800)	- (0/16/65535)	30 (20)
big house	0, 0, 150, 0, 0; 45 (-, 0, 150, 0, 0; 50)	10 (10)	0, 0, 30, 0, 0; 0 (-, 0, 20, 0, 0; 0)	1, 5, 20, 10 (3, 20, 30, -)	400 (300)	6 (6)	1000 (1200)	- (0/20/40000)	30 (20)
dock	0, 0, 200, 0, 0; 150 (-, 0, 200, 0, 0; 150)	0 (5)	0, 0, 40, 0, 0; 0 (-, 30, 30, 0, 0; 0)	3, 20, 35, 10 (3, 20, 35, -)	500 (500)	5 (1)	1500 (2500)	- (-)	30 (40)
market	0, 0, 300, 0, 0; 120 (-, 0, 300, 0, 0; 150)	0 (0)	0, 0, 60, 0, 0; 0 (-, 25, 25, 25, 25; 0)	1, 5, 20, 10 (1, 5, 20, -)	500 (500)	10 (-)	1500 (1500)	- (0/40/30000)	30 (32)
rotary mill	0, 0, 200, 0, 100; 100 (-, 0, 200, 0, 100; 100)	0 (2)	0, 0, 40, 0, 20; 0 (-, 50, 25, 0, 15; 0)	3, 20, 30, 10 (3, 20, 30, -)	300 (500)	6 (-)	1500 (2000)	- (0/32/40000)	30 (40)

3.3 Military

class	building costs (s, f, w, m, s; time)	pop. bonus	loot (s, f, w, m, s; exp)	armour (c, h, p, t)	capture points	garrison capacity	health	territory (root/radius/weight)	vision range
blacksmith	0, 0, 200, 100, 0; 150 (-, 0, 200, 0, 0; 200)	0 (0)	0, 0, 40, 20, 0; 0 (-, 0, 50, 25, 0; 0)	3, 20, 40, 30 (3, 20, 35, -)	500 (500)	8 (1)	2000 (2000)	0/40/40000 (0/38/30000)	40 (32)
embassy	0, 0, 200, 0, 0; 150 (-, 0, 100, 200, 100; 150)	0 (0)	0, 0, 40, 0, 0; 0 (-, 0, 10, 0, 20; 0)	3, 20, 40, 30 (3, 20, 30, -)	1000 (500)	6 (6)	2000 (2000)	0/40/40000 (0/25/40000)	40 (24)
kennel	0, 50, 50, 0, 0; 50 (-, 0, 50, 200, 50; 50)	0 (0)	0, 10, 10, 0, 0; 0 (-, 0, 10, 10, 0; 0)	3, 20, 40, 30 (5, 10, 40, -)	250 (500)	5 (5)	500 (500)	0/20/40000 (0/20/30000)	40 (40)
barracks	0, 100, 300, 0, 0; 150 (-, 0, 300, 0, 0; 150)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 30, 0, 10; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	15 (10)	2000 (2000)	0/40/40000 (0/50/40000)	40 (32)
practice range	0, 100, 300, 0, 0; 150 (-, 0, 300, 0, 0; 150)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 30, 0, 10; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	10 (10)	2000 (2000)	0/40/40000 (0/50/40000)	40 (32)
camel stables	0, 100, 300, 0, 0; 150 (-, 0, 0, 0, 200; 150)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 30, 0, 10; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	10 (10)	2000 (2000)	0/40/40000 (0/50/40000)	40 (32)
cavalry stables	0, 100, 300, 0, 0; 150 (-, 0, 0, 0, 200; 150)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 30, 0, 10; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	10 (10)	2000 (2000)	0/40/40000 (0/50/40000)	40 (32)
chariot stables	0, 100, 300, 0, 0; 200 (-, 0, 0, 0, 200; 150)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 30, 0, 10; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	5 (10)	2000 (2000)	0/40/40000 (0/50/40000)	40 (32)
elephant stables	0, 100, 300, 0, 0; 250 (-, 0, 0, 200, 200; 300)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 0, 50, 50; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	5 (5)	2000 (3000)	0/40/40000 (0/38/40000)	40 (40)
workshop	0, 100, 300, 0, 0; 200 (-, 0, 300, 0, 0; 200)	0 (0)	0, 20, 60, 0, 0; 0 (-, 0, 75, 0, 0; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	2 (2)	2000 (2000)	0/40/40000 (0/38/40000)	40 (40)
shipyard (dock)	0, 100, 300, 0, 0; 150 (-, 0, 200, 0, 0; 150)	0 (5)	0, 20, 60, 0, 0; 0 (-, 30, 30, 0, 0; 0)	3, 20, 40, 30 (3, 20, 35, -)	1000 (500)	5 (1)	2000 (2500)	- (-)	40 (40)
harbour (super dock)	0, 100, 400, 100, 200; 500 (-, 0, 300, 0, 200; 500)	0 (10)	0, 20, 80, 20, 40; 0 (-, 0, 75, 50, 50; 0)	3, 20, 40, 30 (3, 20, 35, -)	2500 (2000)	5 (5)	5000 (5000)	1/200/25000 (1/200/25000)	100 (100)

3.4 Defensive

class	building costs (s, f, w, m, s; time)	pop. bonus	loot (s, f, w, m, s; exp)	armour (c, h, p, t)	capture points	garrison capacity	health	territory (root/radius/weight)	vision range
outpost	0, 0, 75, 0, 0; 30 (-, 0, 80, 0, 0; 40)	0 (0)	0, 0, 15, 0, 0; 0 (-, 0, 8, 0, 0; 100)	1, 5, 20, 10 (1, 5, 20, -)	500 (500)	1 (1)	750 (800)	- (-)	80 (80)
small tower (sentry tower)	0, 50, 100, 0, 50; 90 (-, 0, 100, 0, 0; 40)	0 (0)	0, 10, 20, 0, 0; 0 (-, 0, 20, 0, 0; 100)	2, 20, 30, 25 (1, 20, 25, -)	500 (500)	3 (3)	1000 (500)	0/16/30000 (0/16/30000)	80 (80)
large tower (defense tower)	0, 50, 150, 0, 100; 150 (-, 0, 100, 0, 100; 150)	0 (0)	0, 10, 30, 0, 20; 0 (-, 0, 0, 0, 20; 100)	3, 25, 30, 30 (3, 25, 30, -)	500 (500)	5 (5)	1500 (1000)	0/32/40000 (0/32/40000)	80 (80)
fortress	0, 200, 400, 100, 800; 600 (-, 0, 0, 0, 1000; 500)	0 (10)	0, 40, 80, 20, 160; 0 (-, 0, 0, 0, 65; 100)	3, 25, 30, 30 (6, 25, 40, -)	4000 (4000)	30 (20)	6000 (4200)	1/100/40000 (0/100/40000)	100 (80)
palisade short	0, 0, 10, 0, 0; 5 (-, 0, 4, 0, 0; 5)	0 (0)	0, 0, 2, 0, 0; 0 (-, 0, 10, 0, 0; 100)	2, 4, 25, 10 (2, 4, 25, -)	500 (1200)	- (-)	400 (250)	- (-)	10 (20)
palisade medium	0, 0, 20, 0, 0; 10 (-, 0, 7, 0, 0; 8)	0 (0)	0, 0, 4, 0, 0; 0 (-, 0, 10, 0, 0; 100)	2, 4, 25, 10 (2, 4, 25, -)	500 (1200)	- (-)	600 (500)	- (-)	10 (20)
palisade long	0, 0, 30, 0, 0; 15 (-, 0, 13, 0, 0; 11)	0 (0)	0, 0, 6, 0, 0; 0 (-, 0, 10, 0, 0; 100)	2, 4, 25, 10 (2, 4, 25, -)	500 (1200)	- (-)	800 (750)	- (-)	10 (20)
palisade gate	0, 0, +20, 0, 0; +5 (-, 0, +20, 0, 0; +5)	0 (0)	0, 0, 10, 0, 0; 0 (-, 0, 10, 0, 0; 100)	2, 4, 25, 10 (2, 4, 25, -)	500 (1200)	- (-)	1000 (637)	- (-)	10 (20)
palisade tower	0, 0, 15, 0, 0; 12 (-, 0, 5, 0, 0; 7)	0 (0)	0, 0, 3, 0, 0; 0 (-, 0, 10, 0, 0; 100)	2, 4, 25, 10 (2, 4, 25, -)	500 (1200)	- (-)	500 (750)	- (-)	10 (20)
siege wall short	0, 0, 30, 0, 0; 15 (-, 0, 20, 0, 0; 15)	0 (0)	0, 0, 6, 0, 0; 0 (-, 0, 15, 0, 0; 100)	5, 15, 35, 25 (5, 15, 35, -)	1000 (1200)	1 (-)	1000 (750)	- (-)	20 (20)
siege wall medium	0, 0, 60, 0, 0; 30 (-, 0, 40, 0, 0; 30)	0 (0)	0, 0, 12, 0, 0; 0 (-, 0, 15, 0, 0; 100)	5, 15, 35, 25 (5, 15, 35, -)	1000 (1200)	3 (3)	1500 (1500)	- (-)	20 (20)
siege wall long	0, 0, 90, 0, 0; 45 (-, 0, 60, 0, 0; 45)	0 (0)	0, 0, 18, 0, 0; 0 (-, 0, 15, 0, 0; 100)	5, 15, 35, 25 (5, 15, 35, -)	1000 (1200)	5 (5)	2000 (2250)	- (-)	20 (20)
siege wall gate	0, 0, +30, +30, 0; +15 (-, 0, +80, 0, 0; +10)	0 (0)	0, 0, 24, 6, 0; 0 (-, 0, 15, 0, 0; 100)	5, 15, 35, 25 (5, 15, 35, -)	1000 (1200)	- (-)	1700 (1912)	- (-)	20 (20)
siege wall tower	0, 0, 120, 0, 0; 60 (-, 0, 100, 0, 0; 80)	0 (0)	0, 0, 24, 0, 0; 0 (-, 0, 15, 0, 0; 100)	5, 15, 35, 25 (5, 15, 35, -)	1000 (1200)	2 (2)	2500 (3000)	- (-)	(60) (60)
city wall short	0, 0, 15, 0, 45; 30 (-, 0, 0, 0, 15; 15)	0 (0)	0, 0, 3, 0, 9; 0 (-, 0, 0, 0, 15; 100)	3, 25, 30, 30 (3, 25, 30, -)	1500 (1200)	1 (-)	2000 (1000)	0/20/65535 (0/20/65535)	30 (20)
city wall medium	0, 0, 30, 0, 90; 45 (-, 0, 0, 0, 22; 30)	0 (0)	0, 0, 6, 0, 18; 0 (-, 0, 0, 0, 15; 100)	3, 25, 30, 30 (3, 25, 30, -)	1500 (1200)	3 (3)	3000 (2000)	0/20/65535 (0/20/65535)	30 (20)
city wall long	0, 0, 45, 0, 135; 60 (-, 0, 0, 0, 28; 45)	0 (0)	0, 0, 9, 0, 27; 0 (-, 0, 0, 0, 15; 100)	3, 25, 30, 30 (3, 25, 30, -)	1500 (1200)	5 (5)	4000 (3000)	0/20/65535 (0/20/65535)	30 (20)
city wall gate	0, 0, +30, +30, 0; +15 (-, 0, 0, 0, +60; +10)	0 (0)	0, 0, 18, 6, 36; 0 (-, 0, 0, 0, 15; 100)	3, 25, 30, 30 (3, 25, 30, -)	1500 (1200)	- (-)	3400 (2550)	0/20/65535 (0/20/65535)	30 (20)
city wall tower	0, 0, 60, 0, 180; 90 (-, 0, 0, 0, 90; 80)	0 (0)	0, 0, 12, 0, 36; 0 (-, 0, 0, 0, 15; 100)	3, 25, 30, 30 (3, 25, 30, -)	1500 (1200)	2 (2)	5000 (4000)	0/20/65535 (0/20/65535)	(60) (60)

4 Technologies and auras

4.1 Unit auras

- **Camel Stench** (15 m): enemy cavalry -20% attack damage and capture strength.
- **Chariot Noise** (12 m): enemy infantry -15% attack damage and capture strength.
- **Elephant Intimidation** (10 m): enemy soldiers -10% attack damage and capture strength.
- **Merchant Convoy** (20 m): own naval traders $+2.0$ pierce armour.
- **Trader Caravan** (10 m): own land traders $+2.0$ pierce armour.

4.2 Class bonuses

- **Champion**: $+200\%$ silver cost, $+100\%$ training time, $+50\%$ health, $+2.0$ armour levels, $+100\%$ capture attack strength, and $+100\%$ melee and ranged attack damage.
- **Veteran**: $+50\%$ silver cost, $+50\%$ training time, $+20\%$ health, $+1.0$ armour levels, $+50\%$ capture attack strength, and $+50\%$ melee and ranged attack damage.
- **Mercenary**: $+100\%$ silver cost, 0 other resource costs, -50% training time, $+10\%$ health, $+15\%$ capture attack strength, and $+15\%$ melee and ranged attack damage.
- **Cataphract**: $+20\%$ silver cost, $+2.0z$ armour levels, and -5% movement speed.
- **Fanatic**: -4 armour levels, $+15\%$ melee attack damage, and $+30\%$ movement speed.
- **Balearic**: -10% health, $+5\%$ ranged attack damage, -10% reload time, -10% spread, and $+5\%$ movement speed.
- **Cretan**: -20% ranged attack spread.
- **Libyan**: -5% health, $+5\%$ ranged attack damage, -5% reload time, and $+5\%$ movement speed.
- **Numidian**: -10% health, $+5\%$ ranged attack damage, -10% reload time, -10% spread, and $+5\%$ movement speed.
- **Rhodian**: -20% ranged attack spread.

4.3 Civilization bonuses

All bonuses and penalties from the default distribution have been removed.

- **Celtic Architecture** (Britons, Gauls): all structures -20% build time, -10% health; temples -50% stone cost, $+100\%$ wood cost.
- **Greek Architecture** (Greeks, Macedonians, Seleucids): civic structures $+20\%$ health.
- **Egyptian Architecture** (Kushites, Ptolemies): economic structures -75% wood cost, $+100\%$ build time; military structures -50% wood cost, $+50\%$ build time; fortresses $+25\%$ build time, $+10\%$ health.
- **Indian Architecture** (Mauryas): city walls and temples 0 stone cost, $+200\%$ wood cost, -30% build time, -20% health.
- **Indian Training** (Mauryas): elephants -20% training time.
- **Iberian Architecture** (Iberians): centres -10% build time, -5% health; large towers $+20\%$ stone and wood costs, $+10\%$ build time, $+100\%$ garrison capacity, $+30\%$ health.
- **Near Eastern Archers** (Persians, Seleucids): archers $+20\%$ ranged attack range.
- **Persian Architecture** (Persians): economic structures $+20\%$ health.
- **Persian Training** (Persians): archers -20% training time.
- **Punic Architecture** (Carthaginians): city walls $+20\%$ stone cost, $+20\%$ build time, $+30\%$ health; fortresses $+10\%$ stone cost, $+10\%$ build time, $+20\%$ health; markets -50% wood cost.
- **Punic Training** (Carthaginians): traders -20% training time.
- **Roman Architecture** (Romans): city walls $+10\%$ health; military structures -10% build time.
- **Roman Engineers** (Romans): stone-throwers $+25\%$ wood cost, $+20\%$ health, $+25\%$ ranged attack crush damage.

4.4 Team bonuses

—