A beginner's guide to reaching the Bronze Age in 15 minutes with Shang Villagers on Land Based Maps

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September 1, 1998

Abstract

The keys to reaching the bronze age fast are: creating three villagers a minute, finding food and wood sources and exploiting those sources efficiently.

I first present a simple scheme which will get you to the bronze age in fifteen minutes or less 90% of the time. Then I present alternatives which reduce that the time it takes to get to the bronze age and deal with some rare events that may make getting to the bronze age particularly difficult.

It took me hundred of hours to learn to reach the bronze age in fifteen minutes. If you follow this sequence and spend a few hours doing the training exercises listed here, you will save yourself hundreds of hours.

Although I have tried hard to make this guide accesible to beginner's, it is difficult not to take things for granted that beginner's might not know. Hence, the most importnat way for this guide to improve is through your feed back. So, please send your comments to me at: stanley@cs.berkeley.edu.

1 Introduction

1.1 Assumptions

As the title implies, I assume that you playing Shang on a land based map (i.e. inland, highland or coastal).

I assume that you know the rules for "Age of Empires" and that you know the basic concepts (1 house supports four villagers, it takes 35 or 50 food to conceive a villager, "you need to build more houses" means you made a mistake, hot keys, etc.). Section 12 explores some of the facts needed to get to the bronze age fast. Section 5 lists the skills that you will need to learn and suggest some exercises that you can use to acquire them.

1.2 Basic principles

Your time is the most important resource. After the first couple minutes you will not have time to micro-manage.

Hit "H, C" as soon as you hear the birth announcement (i.e. conceive another villager). After a while this becomes automatic.

When you hear the attack sound, hit alt-1 and click on the offending animal. See section 3.2.1 for details.

Don't watch your villagers fight lions, or build buildings. Give them instructions, move on and come back to them later.

1.3 Importance of getting to the bronze age fast

Games are not won and lost on the basis of who gets to the bronze age first. You can win without getting to the bronze age at all with a tool age rush. And, you can win by delaying your advance to the bronze age in favor of more villagers and fishing boats and hence a more robust economy (vil bomming).

However, the same skills that allow you to get to the bronze age in fifteen minutes are necessary for both of these other strategies. If you can't get to the bronze age consistently in fifteen minutes with Shang, you aren't going to beat a strong player with a tool age rush nor by vil booming.

How fast you can get to the bronze age on an average random map is as good an indication of your skill at handling the economic side of AoE as there is.

1.4 Fixed build sequences

Using a fixed build sequence is the easiest way to achieve a consistent fifteen minute bronze time. It isn't optimal and it won't get you a thirteen minute bronze. But, it can make a beginner an intermediate in a hurry.

The pros disdain fixed build sequences such as the one that I recommend here, because they do not allow you to take maximum advantage of the map.

1.5 Goals

Your first goal is to create 3 villagers each minute (that is as fast as the Town Center will allow). Check how you are doing by clicking on a house, dividing the number by three and subtracting one to show the minimum time it should have taken to get here (ignoring the time spent on the next villager). I figure that I am doing well if I have only lost 2 seconds for each villager that I have. And, hence if I have 24 villagers by 8 minutes I am happy indeed. It takes 4 Shang villagers[1] foraging to a nearby granary to generate 105 food[2] per minute.

[1] 6 for other civs.
[2] 150 for other civs

Your second goal is to find the resources that you will need to get you to the bronze age, i.e. 2500 food and about 2000 wood. Three additional food sources will usually suffice[3].

Your third goal is to gather enough wood for a storage pit, build a storage pit near a forest and start collecting some serious wood.

Your fourth goal is to gather enough food to advance to the tool and bronze ages. i.e. exploiting the food sources that you have found during your exploration.

2 Sequence Overview

2.1 Minutes 1 and 2: Explore, forage

Your goal in the first two minutes is to gather food quickly enough that you can keep your town center busy creating villagers. If you are using Shang, you should be able to find the berry bushes, build the granary and start foraging fast enough to gather enough food to keep the town center busy creating villagers.

2.2 Minutes 3 and 4: Explore, chop wood

You have four goals: 1) Conceive a new villager every 20 seconds. 2) Build 5 houses and 3) Keep your explorers alive as they seek the resources that you need to get you to the bronze age (a forest and three more food sources).

Have your fifth villager build a house and then send your fifth and sixth[4] villagers exploring.

Continue exploring (see section 3.2) and building a villager every 20 seconds. Send all new born villagers to chop wood.

Every time you have 30 wood build a house until you have 5 houses (i.e. enough to support 24 villagers).

2.3 Minute 5: Build a storage pit near a forest

Build a storage pit near a forest (See section 7.2) as soon as you have 120 wood and 5 houses.

2.4 Minutes 6, 7 and 8: Gather food

At this point, you should have 4 villagers foraging, 2 exploring, and the rest gathering wood or building the storage pit. You should also have 5 houses and have identified three additional sources of food. After you have built a storage pit near a forest, and have 8 villagers chopping wood, have the rest build food collection buildings and gather food.

[3] A food source is: 1 berry patch, 2 elephants or 2 schools of shore fish. A herd of gazelles is also, but I treat them as an advanced topic.

[4] For non-Shang civs you need seven foragers and have to send your eighth villager chopping wood for your third house hence you send your ninth and tenth exploring

You are going to want to build three food collection buildings (granaries or storage pits). Build them as soon as you have the wood to do so.

Advance to the tool age as soon as you have 500 food and 24 villagers.

2.5 Transition to the tool age

Stop, take a deep breath. If you have done everything right up to here, you can pretty much coast to the bronze age in five minutes. If you have to make significant changes to your economy at this point, you aren't going to reach the bronze age in five minutes, but obviously the sooner you make those necesary adjustments, the sooner you will reach the bronze age.

2.6 Tool Age

If you have done everything right, you will only spend about twenty seconds in the tool age before advancing to the bronze age.

2.7 Tool age to bronze age transition.

Add two minutes and 20 seconds to your time to see when you will reach the bronze age. Get ready to hit the bronze age running.

3 Sequence details

3.1 Details of the first minute

I consider the first two minutes to be the most important time in AoE. The goal is simple: get a food supply going fast enough to allow your town center to continue pumping out villagers. Every second which your town center must wait before pumping out your ninth (or tenth) villager adds a second to your bronze age time.

AoE provides a berry patch near every town center[5], hence you need only look for those berry bushes and get that granary started quickly.

Here is what I do in the first minute:

H C Conceive your fourth villager[6].

select 2 villagers; ctrl-3; B, E; click Assign two villagers to unit 3 and start them building a house.

select the third villager; shift-click, click, ctrl-1 Send the third villager exploring. Set a waypoint (shift-click) a few squares outside the visible

[5]Perhaps 1 time in 20 those berry bushes are inaccessible or offer only limited access. If you really want to sound incompetent in an intermediate game, sending out a message saying "I have no berries near my TC."

[6]It seems to me that after hitting H, you have to wait until you see the villager icon before hitting C. This is the only time when you have to do this though.

area and a final destination say 60 degrees away from the waypoint. Your goal is to explore the area just outside the visible area as quickly as possible. Assign this villager to unit 1 so that you can follow her easily.

select another; ctrl- 2; click Reassign a second villager to exploring and rename her to unit 2. Send her off in a different direction. I find that if I take the time to assign waypoints to this villager I don't manage to get the third villager sent off before the first villager birth.

alt-3; wait; click Select the remaining villager, wait for her to complete the house and send her off in yet another direction.

H C Conceive your fifth villager.

select; click; ctrl-4 Send your fourth villager off in another direction and assign her to unit 4.

alt-1; click, alt-2; click; alt-3; click; alt-4; click Cycle through the villagers giving them new exploration instructions and looking for berries and shore fish. I like to explore counter-clockwise, clockwise would be just as good, the point is that this sends all villagers spiralling outward. Some, but not all, will bump into terrain that prevents them from exploring easily. Concentrate on those explorers that can explore efficiently.

H C Conceive your sixth villager. From now on, I assume that you are responding to the birth announcement with an automatic H,C and I will not mention this again.

select newborn villager; B E Have your fifth villager build your second house

alt-1, alt-2,alt-3,alt-4 Find those berries. If you can't find them, look for black areas near your TC and explore them. Continue exploring until you find those berries.

1; click; 2; click; 3; click; 4; click Send all four explorers to the berries. Send the first villager to arrive to the farthest berry (to make sure that you can see the entire patch). Then build a granary as soon as you can place it (villagers may be in the way for a while) (See section 7.1).

F11 Turn the clock on

3.2 Exploring

Use the "down time" early in the game to explore. Your 4 foraging Shang villagers don't need your help, and as you get more villagers you will send them chopping wood. The wood cutters will not need much help from you either[7]. So, rotate between your explorers and your home operation.

[7] They may occasionally have trouble finding the next tree until you have built a storage pit near a forest.

Send your fifth villager (after she has finished building your second house) exploring, assign her to unit 1 by typing ctrl-1. Likewise send your sixth villager exploring, assign her to unit 2. If there is a coastline, your top priority is to search it in both directions. But, don't explore more than have the distance of the map along the coast because that is too far for your villagers to walk.

Use artifacts to explore. I usually give an artifact 4 or 5 way points criss-crossing my side of the board, and then ignore them. They are slower than villagers and see much less so I don't want to waste much time on them. On the other hand, they can be used to explore near lions without risk.

Watch your explorers as much as you can. When you have a spare second, type alt-1 to see how explorer 1 is doing and then alt-2 to see how explorer 2 is doing. If they are exploring coastline you will want to bring them back to the coast repeatedly to look for shore fish. Avoid lions if possible and kill them otherwise. Run away from alligators.

Build a house whenever you have 30 wood available, until you have 5 houses (i.e. enough to support 24 villagers).

3.2.1 Dealing with lion and alligator attacks

If you hear the attack sound, type "alt-1", click on the lion[8] and hit "H C" just in case. If no lion, hit "alt-2" and click on the lion.

As soon as an explorer has been wounded[9], re-assign them to the safest job you have (presumably chopping wood) and replace them with a full strength villager.

3.3 Count your chickens

After you have started building your fifth house, you can relax a bit and see what your explorers have found. If you haven't found three new food sources and a forest, send out another explorer and concentrate even more on exploration.

3.4 Building a storage pit near wood

As soon as you have 120 food, send villagers out to build a storage pit near a forest (See section 7.2).

[8] The "fight or flight" option is a tough one. Either one works great for alligators, neither works well for lions, but I lean towards fighting lions unless I know that I can reach a swamp quickly - lions don't seem to like swamps. Alligators are easy to kill, but if they aren't in my way, I'll run away from them just to save time and keep my villager near full strength.

[9] It is a tough call if they are 10 - 20% wounded. It is hard to consider that seriously wounded, but villagers often come out of a fight with a lion with only 10% of their hit points left, so it may be wise to replace even slightly wounded explorers.

3.5 Gathering food

At this point, your goals is to build three food collection points and have 4 villagers assigned to each one[10]. It will take about a minute to create and staff each food collection point.

Start shore fishing first, berry picking second and elephant hunting third. Shore fishing is the most productive and also requires the fewest villagers. The others are roughly equally productive, but berry picking is the easiest. And, it has the advantage that you can start berry picking with as little as one villagers, whereas hunting requires at least 4 villagers, preferably six.

You will also re-assign your explorers to food collection in this stage. Once you have found three food sources, you don't need those explorers anymore and you won't have time to devote to the explorers anyway. The easiest way to bring them back is to type "1" and then click on a tree in your clear cutting operation, and then type "2" and click again. However, this has a couple risks: lions and poor path finding by the computer. Poor path finding can leave your explorer stuck in between. Both of these hazards can be checked by looking at the direct path between explorer and where you told her to chop wood, but this consumes your valuable time. Another option is to have the explorers continue to explore but have them end up near one of the food sources (or even not explore but end up near a food source).

3.6 Stone Age to Tool Age transition

You might not have to do much during this transition. This is the time to check to make sure that you are on track. You should have eight villagers collecting wood and about 200 wood in your stock pile. You should have 16 villagers collecting food in 4 food collection operations.

If you have only three food collection operations, add one.

If you have more than 200 wood at the time you click on the advance to tool age button, you may be able to move some wood cutters to food collection. My rule of thumb is:

number of wood cutters = (1000 - wood) / 100

Send one villager to build a barracks and a house.

Recheck your first foraging operation. If you are down to one or two bushes, reassign a couple villagers.

Double check for idle villagers. Cycle through your explorers (alt-1, alt-2, ...). Click on the dots of your color in the diamond shaped map.

Determine where you are going to build your market and stable, and which villagers you are going to use. If you have enough wood, use your wood cutters, otherwise use food gatherers first.

[10] Shore fishing only requires 2 villagers but produces as much as four. Elephant hunting requires 6 villagers.

3.7 Tool Age

Build a market ("B, M")and a stable ("B, L") using 4-6 villagers on each task. Advance to the bronze age.

3.8 Tool age to bronze age transition.

Send the villagers who built the market and stable back to work.

Your goals during the transition depend upon what you want to do when you reach the bronze age. My recommendations here are pretty general but lean toward waiting until you get to the bronze age before building a military force.

Build a scout ("ctrl-L, S") as soon as you have 100 food.

Build a gold mine and convert 8 villagers to gold miners.

Build some houses. If you have excess wood, go ahead and build 6 houses (for a total of 12). This will bring you up to the 50 population limit (unless you are playing with a higher pop count).

3.9 Detailed goals

I believe that these are reasonable goals for an intermediate player following the building sequence which I have recommended above. The number of villagers is based on the assumption that you lose two seconds per villager (i.e. you create a villager every 22 seconds).

This sequence leads to a 13 minute and 40 second bronze time. So, you can be slightly off this and still achieve a 15 minute bronze.

1 minute 5.72 villagers; Berries found

2 minutes 8.45 villagers; 2 houses; Granary

3 minutes 11.18 villagers; 3 houses

4 minutes 13.90 villagers; 5 houses

5 minutes 16.64 villagers; SP built

6 minutes 19.36 villagers; Food collection 1 started

7 minutes 22.09 villagers; Food collection 2 started

8 minutes 24 villagers; 100 food; Food collection 3 started

9 minutes 300 food; 100 wood

9 minutes 100 food; 260 wood; advance to tool age at .1

10 minutes 400 food; 260 wood; Barracks plus another house started

11 minutes 700 food; 100 wood; Market + Stable started

11:20 800 food; advance to bronze

4 Computer requirements

If your computer is too slow or does not offer high enough resolution, your are at a disadvantage. I can't tell you what is good enough, but I use a 133 Mhz pentium with 32 Megabytes of memory and a 17 inch screen. I also play on a laptop with a 166 Mhz pentium, 32 Megabytes of RAM and a nice active matrix display. In both cases I set the resolution (with AoE) to 1024x760. (I found that my play improved considerably when I noticed this option.) I also set the scroll rate fairly high.

Your connection to the internet affects the lag (which affects both you and the other players) and hence affects your (and their) enjoyment of the game. But, it does not seem to affect your ability as compared to them. In other words, if your connection is bad, both of you suffer similarly. Right now, a 28.8 modem and a good internet provider is the standard. But, within the next two years isdn or cable modems will become the standard and those stuck with 28.8 modems will find themselves excluded from some games.

5 Skills and Training

5.1 Skills

The skills that you need are:

hit H,C at the birth announcement Rule number one. Do it.

hot keys The most important are:

- **ctrl-1** Assign selected units to unit 1.
- **alt-1** Select unit 1 and center the screen on them.
- **1** Select unit 1 but do not center the screen. This is useful for bringing your explorers back to forage berries.
- **B, E** Build a house.

waypoints shift-click sets a waypoint. Units don't move until you set the final destination, so don't forget to set the final destination.

find berries quickly Every second lost here adds a second to your bronze time.

granary and storage pit placement Granary placement is especially important. 4 Shang villagers is enough if and only if the granary is placed optimally. If you choose not to learn how to place the granary optimally, use 5 Shang villagers.

find food sources and forest If you can't find the food sources you can't exploit them.

the build sequence Follow this build sequence until doing so becomes automatic. When it becomes automatic you will have time to think as you go and can modify the build sequence to respond to your starting spot.

keep explorers alive Don't worry about this until you have the other asects in pretty good shape. You can reach the bronze age in fifteen minutes even if a couple villagers get killed by lions. However, as you get better you can significantly reduce the number of explorers lost to lions.

hunting elephants Elephants are easier to hunt than gazelles. But, you have to do it right or you will lose villagers.

Don't watch your villagers One of the habits that I found hardest to break was watching my villagers fight lions. I used to click on the lion dozens of times hoping that would cause my villager to fight harder. It never seemed to help, but I would often miss the birth announcement in the process and would routinely lose ten to twenty seconds as a result. Give your villagers a task, move on and come back later.

Use the diamond shaped map Know where you are on the diamond shaped map. Use it to give explorers long term instructions. Check what areas to explore further. Look for gold and stone in the diamond shaped map. Look for idle villagers in the diamond shaped map[11].

Check your computer settings Make sure that you have the map resolutoin set to 1024 by 760. Set the scroll speed to as high as you find comfortable (I set mine at about 80% of the top speed. (See section 4))

5.2 Training

Practice by playing against against one computer opponent set on the easiest setting. The computer will not attack you within the first 15 minutes (never has for me at least).

I recommend the following training sequence:

Granary placement Reveal map on. Place a granary next to a berry patch as described in section 7.1. Have four villagers forage. See how much they collect in the first two minutes. You should be able to get 200 food in two minutes[12]

Elephant hunting Reveal map on. Take 4 villagers build a storage pit 4 squares from an elephant. Save the game at that point. Hunt the elephant. Although you will be using 6 villagers when you are playing, the same technique should work fine with 4 villagers as long as they are nearly

[11] They aren't marked any differently from other units, but you should know what all of the dots of your color on the map are. Check them from time to time.

[12] After you have assigned your villagers to foraging you might as well set the speed to fast(2.0) and save yourself a few seconds. Set it back to slow before you start the next game or exercise though.

equidistant form the elephant. So, practice with four, use six in a game for safety.

Storage pit placement Reveal map on. Take six villagers and build a storage pit near a forest as described in section 7.2. Have the six villagers chop wood. They should be able to chop 300 wood in two minutes.

Reveal map Choose a random map with reveal map enabled. Study the map, determine which food sources you are going to use, where and in what order you will build your buildings. Then restart the game and give it a try. You will not need to explore and hence you might be able to achieve a 15 minute bronze time by your second or third try. Stop the game after each minute and write down your status. Compare it against section 3.9. In particular note whether you are able to start the ninth villager before minute 2.

Two minute drill Play the game for two minutes and pause. Write down your exact status: buildings built (i.e. houses and hopefully a granary), what resources you have and what your villagers are assigned to. Then let the game play for another minute without any help from you. Write down the status again. This third minute will tell you whether you are producing food fast enough (you need 105 per minute).

This drill is designed to test your early exploration skill and your ability to get that first granary and foraging operation started. But, if you are having trouble, do it first with reveal map on a couple times just to reassure yourself that it can be done.

Full sequence Practice the full sequence against the computer (one easy opponent) using a new random map each time. Stop at each minute, write your status (buildings, wood, food, number of villagers, % of map explored.) and compare it against section 3.9. If you are behind schedule, try to figure out what went wrong, then start over. If you are on or ahead of schedule, think about what you should be doing in the next minute.

6 Hunting techniques

6.1 Hunting elephants

Have six villagers build a storage pit about 3 squares from the elephant. Make sure that the 6 villagers are roughly equidistant from the elephant. In particular make sure that no one villager is too far out in front of the others. Select all six villagers and then click on the elephant.

6.2 Gazelles, alligators and lions

Gazelle hunting is significantly harder than elephant hunting. I recommend ignoring gazelles initially. Alligators and lions are quite unattractive as a food source. They bite back, offer little food, and decay quickly.

6.3 Shore fishing

Shore fishing[13] is the fastest means of collecting food. Use one villager per school of shore fish. It is worth placing a villager on a school as much as 7 squares away from the nearest food collection point (town center or storage pit).

7 Placement

7.1 Placing your first Granary

Because you will be relying on foraging to supply your town center with the food it needs to create villagers, it is important to place the granary and start your foragers carefully.

Villagers will forage optimally from a bush as long as they do not need to travel outside of the square that they are in. Hence, they will forage optimally from a bush one square away and can do so from a bush immediately adjacent to the granary.

Two villagers can forage optimally from a bush immediately adjacent to a granary provided that they you place them on opposite sides of the bush. Two villagers can also forage optimally from a bush that is exactly one square away from the town center. Furthermore they will do so without micromanagement on your part.

Hence, if there the berry patch includes a row of three or more berry bushes, place the granary one square away from these bushes. Assign one villager on each of the bushes in the row. (If the row has only three bushes, put two villagers on one of the end bushes.)

If there is no row of three consequetive, you can probably get away with using a row of two consequetive, but instead I place the granary as close to the center of the patch as possible, thus having it touch two berry bushes. I then make sure that the two villagers on each bush are working on opposite sides and hence don't have to walk around anyone to drop off their berries. The computer will not make this adjustment for you, you must micromanage to make this happen. The easiest way that I have found is two assign two villagers to each of two bushes each of which are touching the granary, then after they are foraging force them to forage on opposite sides. Often the optimal foragers are on the outside of the berry bushes (where the inside is defined to be the area between the two berry bushes). In this case, all that one needs to do is to select the non-optimal foragers and click on the other berry bush. They will both become optimal foragers on those berry bushes[14]. The one added hitch is

[13] Schools of shore fish are shown in small square boxes and can always be fished either from shore or from the sea. The large boxes (deep sea schools) can sometimes also be fished form the shore.

[14] Is this micromanagement worth it? I think it is, but only on the first berry bush. Four optimal foragers will generate 104 food per minute whereas two optimal and two non optimal

that villagers cannot slide between diagonally adjacent berries bushes. Hence, you should not place the granary adjacent to two berry bushes unless you can get villagers to both sides of the berry bushes[15]. By placing the granary as close as possible to the center of the bushes the foraging operation remains relatively efficient even after the first bushes are consumed.

Sometimes bushes offer no easy access. In that case, do the best you can and start with an extra forager.

7.2 Placing your storage pit near a forest

Place your first storage pit along the edge of a forest, one square away from the trees.

7.3 Placing your first house

Don't think, don't explore, just build.

8 Playing on the internet

There are three things that you will learn quickly about playing on the internet: 1) human's abilities vary more widely than the computer's. 2) lag sucks 3) many players like to play at speed=1.5 or even 2.0. Expert human players are dramatically better than the computer. Even an average player in Kali or in the rated rooms in the Zone will crush a "hard" computer opponent.

Lag not only slows down the game, it makes some things much harder. Players often like to compenstate for lag by increasing the speed. Although this does speed the game up, it also makes it much harder to get your ecomony going quickly.

8.1 Lag

Lag makes keeping explorers alive much more difficult. Just because you see a lion does not mean that you can avoid it. You see it, you try to click away from it, but before the computer accepts your command, the lion has found your villager and is attacking it. Likewise, it is hard to instruct your villager to attack a lion. What ever you do, don't stop exploring. In fact, I suggest in a game with a lot of lag that you send out three explorers assuming that at least one will get killed by a lion.

Lag also makes advanced hunting techniques much more difficult (which is part of the reason that I call them advanced). Moving elephants is dangerous with lag. And hunting gazelles can be quite frustrating and non-productive.

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foragers will generate only 96 per minute. Whereas 104 is essentially the 105 that the town center can conceivably use in a minute, 96 guarantees a 10% slip in villager production.

[15] An advanced technique is to put the villagers in the inaccessible area before you build the granary.

8.2 Speed

I greatly prefer playing at speed=1.0 because at higher speeds strategy tends to be less important than how fast you can click. Someone once referred to playing at speed=2.0 as “Nintendo AoE”. However, many players like to play at faster speeds, so I learned to play at faster speeds.

Faster speeds, like lag, make advanced hunting techniques difficult. And, hence at fast speeds I tend to avoid those. Other than that, the only thing that I do differently is that I have all three villagers start building the first house and name them all unit 3. I then send each of the three in different directions as quickly as I can (just one click for each). When I find the berries, “3; click” brings them back to the berries. I also use three explorers at fast speeds, expecting at least one to be killed by a lion.

9 Other civilizations

9.1 Non-shang civilizations

For all civilizations other than Shang, you will need 6 foragers[16], you will find it very difficult to keep your town center busy creating villagers in the first two minutes and you will need an extra food source.

With Shang, you need 10 food by the 1:40 mark and then 35 food per 20 seconds thereafter. With other civilizations you need 50 food by the 1:20 mark and 50 food for every 20 seconds thereafter.

9.2 Assyrian and Yamato

These civilization’s faster villagers give you several advantages: 1) They explore faster. 2) They gather faster if walking is involved. 3) They are much less likely to be killed by lions (they are as fast as lions). 4) They can out run archers and hence can afford to exploit resources a great distance from home with much less fear of being slaughtered.

9.3 Phoenician

With their undocumented 30% wood cutting bonus, those in the know consider them amongst the fast civilizations. I have never played them however.

9.4 Minoan

Minoan’s are clearly amongst the slow civilizations. However, with their cheap fishing boats (35 wood a pop) you have to consider building a fleet of them. While you may never get a 13 minute bronze with Minoans, your goal should be a 15 minute bronze with a 30+ villager and boat population. Build docks and fishing boats with the first 300 to 400 wood that your clear cutting operation

[16] Experts often start with 5 and add one later.

produces and then build two other food collection spots. Fishing boats also have the advantage of being immune to most early attacks.

10 Advanced topics

10.1 Anticipate

Anticipate wood. Don't wait until you have 120 wood to send villagers out to where they will be building the next building. It will usually take the villagers 20 to 30 seconds to get there, so you can send them as soon as you have 40 wood and 8 active wood cutters.

10.2 Other first minute options

Other food sources can be used to gather the 105 (150 if not Shang) food per minute that you need. I like shore fishing, but elephants are useful for non-Shang civs because you can get started on them faster than berry picking and hence can conceive your eighth villager on schedule.

Shore fishing from the beginning can allow you to reach the bronze age several seconds faster because it gives you two extra villagers from the start because 3 villagers shore fishing replace 5 villagers foraging (for non-Shang civs, 4 villagers shore fishing replace 7 villagers foraging.) If you find two schools of shore fish before you find the berries, build a storage pit and sending two villagers to one school and one to the other (for non-Shang civs send two villagers to each. See section 6.3 for details. The school that has two villagers working it will be depleted in just over three minutes, so make sure that you get your berry picking started fairly soon.

If you find an elephant before you find the berries, bring the elephant to your house, kill it and collect the food. See section 10.4 for details.

Both of these methods have advantages over foraging. If the elephant is sufficiently close, you may be able to start gathering food faster from an elephant than from berry bushes. Hence, you may be able to conceive your ninth[17] villager faster. Whereas, four villagers shore fishing do the work of 7 villagers foraging, allowing you three extra villagers while the schools last (i.e. three minutes and 20 seconds).

However, since they don't last very long, you will still need to get started on your berry bushes soon. One elephant allows you to conceive 8 Shang villagers, keeping the town center busy for 2 minutes and forty seconds. Two schools of shore fish allow you to conceive 14 Shang villagers, keeping the town center busy for 4 minutes and 40 seconds.

[17] Eighth for non-Shang civs

10.3 Placing your wood collection storage pit near food

One of the best ways to improve your bronze time is to place your wood collection storage pit near food.

The ideal food is shore fish because shore fishing is twice as fast as any other method of food gathering. Hunting gazelles and elephants are the other choices. If you will be hunting gazelles you should kill the gazelles first (See section 10.5) but you should start 6 villagers gathering wood before you start butchering the gazelles.

10.4 Hunting elephants

Hunting elephants is dangerous but since villagers are faster than elephants, you can bring the elephant close to your food storage location without losing a villager. I recommend that you bring your elephants close first and that you hunt them as a second operation. i.e. don't hunt them while they are on the move - you are likely to make a mistake.

10.4.1 Bringing the elephant close

Bring one or two villagers to a spot about 3 squares away from the elephant in the direction of where you want the elephant to go (i.e. your town center or storage pit).

Wait until you have just conceived a villager.

Have these villagers to attack the elephant, as soon as they have hit the elephant, have them retreat toward your food storage location. If the elephant stops, go back and hit it again, but remember to retreat quickly. If a villager gets hit by the elephant, get it back to safety before you finish the attack[18].

Conceive the next villager. (i.e. "H, C")

10.4.2 Killing the elephant

Wait until you have just conceived a villager (i.e. the last step in section 10.4.1).

Make sure that you have at least five villagers all roughly equidistant from the elephant. (If one is significantly closer, the elephant can kill it.) Select them and click on the elephant.

Conceive the next villager. (i.e. "H, C")

10.4.3 Kill nearby elephants soon

If there is another elephant within 2 to 3 squares, your villagers will automatically start hunting that elephant after they finish butchering the elephant that they are working on[19]. In all likelyhood, they will lose a villager in this hunt, if you allow them to do it themselves.

[18] If a villager gets hit, you may have to finish off the attack or at least distract the elephant with another villager to save that villager.

[19] It will take 5 villagers about 3 minutes to butcher one elephant.

10.4.4 Dangers in hunting elephants

There are two dangers in hunting elephants. The first is that you will lose a villager - a huge mistake. The second is that you will get wrapped up in the attack and fail to conceive the next villager. If, like me, you wait until you hear the sound of a villager being born until you hit "H, C", if you miss that sound you may wait quite a while before you go back and check.

10.5 Hunting gazelles

I like to use two villagers per gazelle. Kill the gazelles first, then build the storage pit and then go back and hunt them. I first read this strategy in: http://netleague.com/aoe/STRAT/food.html.

10.6 Hunting lions and alligators

Don't waste your time on these unless they happen to be near a storage pit. If you do hunt them, use several villagers.

10.7 Grouping technology buildings

I have always found it difficult to rememeber to upgrade the right technologies. My response to this problem is to create a unit which contains all of the buildings holding key technologies as follows: I start by putting my town center into unit 0 ("H, ctrl-0") and then add a granary ("select a granary; shift-0; ctrl-0"), at least one storage pit ("select storage pit; shift-0; ctrl-0"), the market ("select market; shift-0; ctrl-0"), the government buildings ("select government building; shift-0; ctrl-0"), and a house ("select a house; shift-0; ctrl-0"). In fact, I usually create unit 0 with the Town Center, a granary, one or two storage pits and a house during the transition to tool age. I then add the market as soon as I start building it and so likewise with the government center.

Then, when I want to check my technoloiges, I simply type "1" and tab through the technology buildings clicking on whichever technologies I want to research.

11 Advanced exercises

Advanced elephant hunting See if you can kill the elephant with 4 villagers without taking any hits. Repeat with just one villager. (Yes, one savvy villager can take down an elephant without taking a single hit.)

Next build the storage pit 8 squares from the elephant. Try to bring the elephant as close as possible before you kill it.

Next, build a house before you start hunting the elephant. Hit H, C before you attack the elephant and hit H, C every time you hear the birth announcement. Try to repeat your success (it is much harder to hunt when you are being interrupted with H, C's.)

Fast speed When you are able to reach the bronze age in fifteen minutes on normal speed try it at fast speed. You will find that many of the problems you used to have are back. But, as you get used to the faster speed you will re-learn which aspects of the game are the most important. Then, when you come back to normal speed you will find that now you have time to think a bit.

12 Facts

Villagers Cost 35 food (50 for non-Shang civs) to conceive. Gestation time is 20 seconds. Villagers can create most resources at a rate of about 20 per minute assuming that the gathering spot is within 3 squares (on average). Shore fishing produces nearly 40 per minute if the storage pit is very close and is the only notable exception.

Villagers can only carry one item at a time. Hence, if you re-assign a villager from say hunting to wood collection they will drop their loads immediately. You can save resources if you can get them to the appropriate collection location to drop their loads before giving them a new task. Villagers do not drop their loads when ask to build buildings.

Houses Need one house or town center for every 4 villagers. Houses take 20 villager-seconds to build. Four villagers working together can build a house in five seconds.

Granary and storage pit Require 120 wood and takes about 40 villager-seconds to build.

13 Acknowledgements

I thank Cyrill Artho for his comments on early drafts, for interesting discussions and for his web site:http://age.gamesmania.com/. I thank Chris Janson for thoughtful comments and advice.

A Planned improvements

Here are some notes to myself of things that I would like to add to this document.

Use ctrl-0 on TC and then 0 to view villager creation without losing sight of your villager.

Three shore fish can be serviced by one SP if they are all within 5-6 tiles, more if YassY

Explain cost as a function of distance. Make sure that experimental evidence matches theory.

Include Methos' bronze time list

How, when to shore fish.

- One near within 3 (4 if YassY) of TC. Do it.
- One near within 6 of TC. Wait until the food phase.
- Two within 5 of TC. Do it.
- Two within 6 of each other.
  - **YES** if wood is cheap (200 wood within 5 squares of TC or SP)
  - **WAIT** Otherwise. Note that wood will be cheap late.

nearby normal fish

shore fish are small squares

shore fish can be deceptive

Foraging without granary. SF without SP.

Feeding. If you can wall, stay in tool.

Tooling early

Checking achievements.

Script for when you see berries from your TC

Exploration rate, five minute goals.

SP before Granary - find it near food Grab 10 food from 1 berry to get the ninth villager.

Build a house while waiting for others in your hunting party.