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INTRODUCTION

Congratulations and welcome to SERF CITY: LIFE IS FEUDAL! You've purchased a unique computer gaming experience that tests you mentally and provides you with hours of entertainment and enjoyment.

Our serfs do as you command; history never saw serfs that worked so efficiently and happily. Our serfs have occupations; they can be bakers, farmers, knights or any of a number of different working types.

In SERF CITY *you* are the omnipotent leader of a group of serfs. You lead your serfs in the creation of a village, and if you prove to be wise enough, that village will grow into a great city (we like to think of them as *serfdoms*). Command your serfs to construct buildings, grow food, attack enemies, collect minerals, or whatever else you think is necessary.

The road to success isn't easy. You have to allocate your resources efficiently and fend off enemy attacks or you will see your serfdom go up in flames. Miners must be fed, knights must be paid, workers need tools, factories need coal, and buildings need wood and stone. . . .

Enjoy the challenge that awaits you in SERF CITY: LIFE IS FEUDAL!

ON THE RIGHT PATH

In SERF CITY you rule over a group of serfs and try to expand your serdom. You decide where you want your serfs to construct buildings, how the roads are made, where to search for raw materials, and which enemies to attack. You can modify numerous parameters that affect the behavior of your serfs.

The computer handles the execution of your decisions, sending the commands to your numerous serfs. The serfs build houses, cut down trees, work in the mines, construct weapons and tools, and dispatch construction materials in the places where they are needed. They defend their castles against enemy knight attacks, provide the miners with food, and do many other things!

The goal of the game is to build a prosperous, well-organized city and gain control of the enemy cities. This sounds simple to do, but in reality it is complex. If you consider all the game's challenges inversely, that is from the end of the game first, you may better understand the game.

In order to conquer the enemy castles, you need many knights. To keep their morale up you need gold, and for the weapons you need iron and coal. Iron and coal are found in mines. Miners must be fed and ore must be refined and smelted in a foundry.

The food supply is provided by the fishermen, farmers, and pig farmers who, like most other workers, need tools. These tools are made by blacksmiths. To build huts, houses, and mines you need construction materials and workers.

You won't have to remember all this for the moment. Everything will be explained along the way. We recommend that you play the training games and follow along in this manual as you go. Enjoy playing SERF CITY!

The Main Menu

Before beginning play, all the preliminary parameters appear on the main menu. A maximum of four groups of serfs can participate in the game. A group of serfs is controlled by: the player, the computer, or two players working as a team.

To choose a game mode, left-click on the second icon from the left. The icon's graphic and the text indicates the game mode chosen from the following options:

 Mission: Orders are fixed for one or two players (in a team) against computer-controlled opponents.

 Training: Orders are fixed for one or two players in a team.

 One player: One or two players compete *as a team* against computer opponents that may be modified before the beginning of the game.

 Two players: Two players compete against each other *and* against computer opponents that may be modified before the beginning of the game.

 Demo mode: You are only an observer here. You watch the computer create serfdoms.

In the lower half of the screen, you see the participants of the game. The leftmost character is yours. The remaining images represent your opponents.

The different computer-controlled opponents have their own personalities, and can be aggressive or reserved, ready to take risks, or preoccupied with their own safety. You may find additional personality quirks as you play.

On the right side of each image, you see three colored bars.

The *blue bar* indicates the state of the *supplies* of a serfdom (city) at the beginning of the game. A large stock allows for rapid expansion and provides certain advantages. A short supply creates problems when the city begins to expand. If you are a novice, make sure that the blue bar is always above the 50% level.

The *green bar* indicates the *intelligence* level of the computer-controlled players. This level affects how rapidly computer-controlled players act and react. (For human players, the green bar is always at its maximum.)

The *red bar* represents the *growth rate.* The higher it is, the faster your serfdoms produce, and the faster you can expand. Novices should try to keep this bar above the 50% level.

According to the game mode chosen, you can modify certain other parameters. To start off, we recommend that you try Training Game 1.

If you choose to play a Mission, in the middle of the screen you see the current level (beginning 1), the password (at the beginning the password is **START**), and two arrows.

When you successfully complete a mission, the program displays the password that allows you to restart the game at the same level. Left-click on the password and enter the new password. Remember to press the Return key to confirm. If the password is incorrect, the message **FALSE** appears on the screen. If the password is correct, you see the level.

Your aim in SERF CITY is always to "grow" faster and more efficiently than your rivals. During the missions you encounter progressively harder opponents. Depending on the stage you've reached, your enemies become smarter, your beginning supplies may be lower, and the landscape becomes rougher. It is a mighty feat to complete every mission, but once you do, you can consider yourself the Ultimate Serf City Ruler.

The arrows displayed to the right of the password return you to the levels already completed. You can activate the team mode by left-clicking with the mouse in the left frame.

We recommend that you do not try the mission orders right away, but rather try the training games and read along in this manual first. In training games there are no passwords. You can select each available training game by using the arrows.

In one player, two player, and demo mode you can modify numerous parameters. The size of the world is displayed in the center. To modify it, left-click on the small or the large planet. (Novices should probably not play worlds with a size greater than 3, due to the complexity of events. Try larger worlds as you get better at playing the game.) You can modify all data concerning a group of serfs:

❖ the blue bar for the stocks

❖ the green bar for the intelligence (with computer-controlled opponents)

❖ the red bar for the growth rate

❖ the button to activate or deactivate the computer-controlled opponents

❖ the image of the computer-controlled adversary, to choose another adversary

The initial data is chosen randomly. If you are a novice, we recommend that you change the parameters to your advantage, especially where the supply levels are concerned, because a large supply of materials and workers is very important.

The combination of numbers displayed to the right is a randomly chosen number for the creation of a world. This combination decides the location of mountains, lakes, deserts, forests, etc. in this world. The same combination of numbers always produces the same world. To change worlds, left-click on the icon with the question mark for another combination of numbers.

To start the game, left-click on the **START** icon. The screen fades to black as the computer creates a world for you.

To reload a previously saved game, select the **LOAD** option. A window appears with a list of files saved on the hard disk. Left-click on the name of the saved game and then on **LOAD** to load the game, or on **EXIT** to cancel.

The Game - The Commands

You can play alone or with/against another player. All functions remain identical. The only differences are that in two-player mode the screen is divided in two, the image of the world is smaller, and the icons are closer together.

After starting the game, you see part of the world on the screen: perhaps some grass with some trees or a lake. To simplify future explanations, this part of the world is called the "screen." At the bottom of the screen are five different round icons that have different functions. They are called the "Menu."

As we have already mentioned, you only see a part of a world on the screen. According to the size of the screen, the world can range from 10 to 1200 times this size for larger worlds. To move around in a world, press the right mouse button and drag it in the desired direction. When you arrive at the desired destination, release the mouse button. Look at the scenery for a moment. You see deserts, lakes, forests, mountains, and many other things.

You might have noticed your pointer in the middle of the image when you started the game. It is made of a central symbol and six surrounding points. You position this pointer where you want to activate one of the game options. If, for example, you want to construct a house or a road somewhere, you must first place your pointer on this area. To place the pointer on the desired area, just left-click on the screen. The pointer's central icon, which is also displayed in the lower left of the menu, will usually change. We discuss this in the following paragraphs.

SPECIAL-CLICK: *In this manual the term "special-click" means hold down the right mouse button and left-click.*

Pressing **P** during the game pauses play; no actions are available until you press **P** again.

The Map

In the middle of the menu, you see a "map" icon. Left-click on this icon with the mouse. A new window appears showing an overview map of the game world. On this map, the grasslands are indicated in green, the deserts in yellow, the lakes in blue, and the mountains (according to their height) in brown and white. If you left-click somewhere on the map, your screen moves to the corresponding area and the map disappears.

A world is "endless," which is to say that if you continue moving to the left you eventually return to your point of departure. The world, therefore, does not have any "edges." You will understand this better if you select the map again and left-click on the icon located second from the right on the overhead map screen. You see slanted and horizontal lines that define the size of the world.

For example, if you have selected size 3, you notice that the world is represented four times on the map, and sixteen times for a size 1 world. The different sections are connected to each other and this is why the game's terrain has no limits. The size 5 world fits perfectly in the map section. The size 7 world is enormous. You will only see a small piece of the entire world on the overhead map at a time! With size 3 and larger worlds, you can move both the map and the screen by pressing the right mouse button and dragging in the desired direction. Remember that this movement is not possible for smaller worlds (as they adapt themselves to the section of the map).

The lower right corner of the overhead map menu serves as a "zoom" feature. Left-click here to either "zoom in" on the map or "zoom out." The other icons displayed at the bottom of the map are discussed further in "The Overhead Map" on page 14.

The Castle

You begin by constructing your castle, which serves as your headquarters. The area where you place this castle is of utmost importance for the rest of the game. If you are a novice and you have a large amount of stocks, you will not run into any immediate problems and the location of the headquarters is not terribly important. However, if you have limited stocks, a poorly placed castle can be fatal. To illustrate the most important aspects, we have established a list of conditions that are favorable to the construction of your castle:

- ❖ Avoid narrow valleys in the mountains. Look for relatively flat areas.
- ❖ Choose an area with raw materials that are close to the castle for the construction of new houses (trees and rock formations).
- ❖ Choose an area that has a large amount of underground riches.

The first two points can easily be verified on the screen. If there are a few trees and some granite and if the environment is not too inhospitable, these conditions are fulfilled.

The underground riches are also very important. These include gold, iron, coal and granite. Except for granite, which is often located above ground as well as below, these materials are found only in the mountains. To see the underground riches in the zone displayed on the screen, ask the geologist to give you an overall estimate of the area's riches. The second menu icon from the left on the menu represents the geologist. Left-click on this icon to obtain information on what riches are present in the current map zone.

All the values do not need to be at a maximum, but if there is no coal, iron, or gold, or only small quantities of the three, look for another area. Left-click on the Exit icon to back up a step.

The importance of the underground riches also depends on your strategy. Often with the size 1 worlds, it is possible that certain riches do not exist at all, or that there are no mountains (and therefore no riches). In this case, do not desperately look for another area; just forget about the riches. With the geologist, you only have an estimate of the riches in the area, but you do not know exactly in which mountains they are

found, or if you are going to find them at all. Your serfs may have to find them later in the game.

The castle is a large structure that must be placed on a relatively flat and grassy area. To do this, left-click anywhere on the screen; the pointer will be placed on this area. If a castle appears in the center of the pointer, you made a good choice.

In the lower left of the menu you see the "construct a castle" icon. If, after several tries, you have not found an area to construct your castle, use the "construction help" feature. Special-click on the leftmost menu icon (it does not matter what is displayed); the construction help function becomes active. All areas where a castle can be constructed are indicated on the screen. Left-click on one of these areas and the "Construct a castle" icon appears in the lower left. Left-click on this symbol and your castle is constructed in a few seconds. A flag with the player's color now flies in front of the castle.

The castle is the only building that is "freely" given to you. All the other houses are built by your serfs. At a certain distance from the castle, you see a barrier of black and white poles, or of red posts in the water. This visual barrier indicates the limits of your kingdom; you may only build buildings within your kingdom.

Constructing Buildings

You have taken the first step and your castle has been constructed. Now your serfs can build other houses. If you place your pointer somewhere within the limits around your castle, the central icon tells you the type of buildings that you can construct (if any):
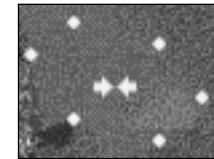
Two arrows: You cannot construct here.
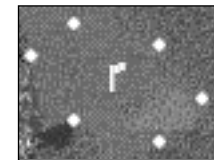
Flag: You can only place a flag here.

Hut: You can construct any of the different types of huts (small buildings).

Castle: You have enough space for all the buildings.

Mine: You can build a mine (only in the mountains).

How do you decide which type of building can be built and where it can be placed?

First, all buildings must be built on your land and there must not be any trees or boulders obstructing the area. All houses, huts, and guard buildings must be built on a green surface and mines built in the mountains (but not in the snow).

The type of building that can be constructed depends on the slope of the terrain. For large buildings, the ground must be level; their construction is impossible on steep slopes. If you are looking for an area that is appropriate for a large building, the "construction help" option helps you avoid clicking all around the screen to find a good location. Special-click on the left menu icon. You immediately see the areas where you can construct a building on the screen. Choose an area and special-click again on the left menu icon to deactivate the construction help.

The left menu icon changes to reflect the type of item that can be constructed in the selected map area. For the most part, the icons represent the following functions: "place a flag," "construct a hut," or "construct a large building." When you left-click on these options, the icon is highlighted along with a new window with a choice of buildings. In some cases, not all available buildings can be displayed at once in the menu, so you can scroll through them by click-

ing on the "change page" icon. Choose one of them and left-click on it to give the order to construct. The window disappears and you see the first stone of the construction or a cross on the screen. The first stone means that a house will be built in this place. The cross means the same except that the ground must first be leveled to provide a solid foundation for the large building.

If you decide not to construct a building on the chosen area, left-click on the highlighted icon and quit the construction mode. Your new building must connect with your current network of roads before it receives supplies for its construction.

Constructing Roads

The serfs need roads so that they can access the different areas of the kingdom. These roads always run from one flag to another. Your network of roads is very important. A good network ensures the rapid transfer of goods. The flags serve as intersections. Six roads can begin at each flag to lead to other flags. There is a flag in front of each one of your buildings, as well.

You must connect all your newly created construction sites to your main castle via roadways. You see a flag in front of the construction site, just like

the flag in front of your castle. Left-click on one of the two flags. Select the construction icon in the lower left of the menu. The pointer contains two new symbols. You are now in "road construction" mode.

The different symbols around the pointer have the following significance:

❖ Zone hatched in red and yellow: you cannot construct roads in this direction.

❖ Different slope symbols that range from red (very steep ascents and descents) to yellow (moderately steep ascents and descents) to green (flat): you can construct roads in this direction.

❖ UNDO symbol: if you left-click on this icon, you destroy the last part of the road made.

If you left-click on one of the slope icons, a section of new road appears and the pointer contains new symbols for building the next section of road. Repeat this operation until the road meets the other flag. The star in the lower left disappears and the pointer takes its initial form. The road is constructed and you quit the construction mode. The first serfs begin to leave your castle.

The color of the slope icons indicates the slope of the road. Red indicates a steep slope, yellow a moderate slope,

and green means flat or almost no slope. The flatter the terrain, the faster the merchandise can be distributed. This is because the serfs tire quickly on steep slopes.

If you construct a road and then decide that you no longer want it, left-click on the highlighted icon. You quit the "road construction" mode and the road is erased.

If you want to branch off from an already existing road, you must place a flag on the road. Left-click on the desired area. If it is possible to place a flag there, a flag appears on the pointer. If you can't place a flag there, use the "construction help" function. It may be impossible to put a flag down on a road because the road is too short or a tree is in the way. If you can create a new intersection, you see the "place flag" icon in the menu. Left-click on this icon to construct the new intersection.

You can also construct water ways. Two flags must be on the banks of a lake for a water way to be built. Construct a water way between the two flags in the same way you construct a road. Remember to connect this water way with your network of roads. The water way is used for transporting merchandise. Only transporter serfs with boats can use waterways.

The First Serfs

When the road leading to the first construction site is built, the first serfs begin to leave your castle.

The first serf who leaves the castle is a transporter. He takes 100 steps on the new road and looks to see if there is some merchandise that needs to be transported. As soon as he sees some merchandise on the road to transport, he takes it to the next flag.

At the beginning of the game, you have twenty serfs. Some of them already have jobs, others are waiting for jobs.

If you want to build a large building, a serf with an orange helmet and a shovel (the leveler) arrives and walks toward the construction site. Once there, he levels the ground. When he has finished, the cross on the site becomes a building foundation and the serf returns to the castle. A construction worker then goes to the site to finish the building.

If you want to build a small building, a serf with a yellow helmet (construction worker) arrives and looks for his work area. He then waits for the construction materials to arrive so he can begin building the house.

Another serf distributes the construction material from the castle to the construction site; this is always wood and eventually may include stones (depending on what type of building is being built). The construction worker immedi-

ately begins working and you soon see scaffolding; eventually, the building itself is finished. Small huts are built very quickly; larger buildings take much longer.

The construction worker returns to the castle as soon as he finishes his job. A new worker then arrives to start work in the new building. The occupation of the worker who moves in depends on the type of house that you built for him. The functions of each worker and of each building are explained further on.

If you construct a water way, a serf with a boat leaves the castle and walks toward the new water way. This serf is able to use the water way to move merchandise.

You do not have to wait for the construction of your house to be finished before giving orders to construct other things (houses, roads, etc.).

Your serfs go about their tasks automatically when adequately supplied with resources. This is true not only for the transporters and the construction workers, but also for all the other serfs that you see later in the game.

Demolition

You may want to demolish a building, road, or flag for a number of reasons. To avoid demolishing something by inadvertently pressing a mouse button, a special-click is required to use the demolish function.

Demolishing buildings: Left-click on the desired building. The second menu icon from the left transforms into a ruin. Special-click on this ruin to set the building on fire and burn it down. If a serf lives in the building, he returns to the castle and waits for a new job.

Demolishing roads: Left-click anywhere on a road and the "demolish road" icon appears in the menu. Special-click on this icon to remove the road. The transporters that worked on this road return to the castle and wait for new work. The other serfs on this road run toward the next flag and continue on their way.

Demolishing flags: You can demolish a flag. Left-click on the flag that you want to remove and a ruin appears in the menu (if the flag's demolition is possible).

Urban renewal: If you want to construct a new building in the place of another, select the old building and then select the construction icon in the menu. A new menu with a list of buildings that can be built on the construction site appears. Special-click on the building you want and the old building is burned down and the new building is built.

Saving and Ending the Game

In two-player mode, these options can only be activated by the player on the left. Left-click on the right menu icon and new options appear. For now, do not pay attention to the upper icons, but only to the **SAVE** option and **END** at the bottom of the screen.

To quit the current game, left-click on the **END** option. The program asks you to confirm. If you have been playing for more than one minute or if you have not saved the game after more than one minute, the program asks you to confirm a second time. You then return to the main menu. To exit to DOS, click on the small button at the top left of the menu.

The **SAVE** option allows you to access the saved game menu. The list of saved games appears on the screen. To save the current game, left-click on one of the ten areas and then on the "New name" option to enter a new name. If you want to save a game with the same name as a game already saved, you don't have to enter a new name. Be careful! The game already saved is erased by the new game. Left-click on the **SAVE** option to save the current game.

THE TRAINING GAMES

You now know the game's basic principles and can begin with the first training game. Each building is explained and the program tells you where you should be careful. Each training game contains orders which are specified in the instructions. You can play and follow the game's progression on the screen.

In the training games, you are supplied with many tools, food, construction materials, and serfs.

When certain important events occur, you are informed by a sound and a small blinking icon that looks like a piece of paper; it appears in the bottom left of the menu. If you left-click on the piece of paper, a message is displayed on the screen and the computer moves the screen to where the event is taking place. If you left-click on the check mark in the window the message disappears.

Training Game 1 – Land

Orders: Have your serfs construct a guard hut, a guard tower, and a garrison.

BUILDING A GUARD HUT, GUARD TOWER, AND GARRISON

| Guard Hut | Guard Tower | Garrison |

After beginning the game, choose a location to build your castle. You don't need to worry about the fertility of the soil or the trees. Give the order to construct the three required buildings and wait (use the help functions for construction if you cannot find a good location right away).

For the garrison and the guard tower, a leveler begins by leveling the ground. You have to have the construction materials transported. While the hut requires only one delivery of wood and stones, the garrison requires at least ten.

As soon as the guard hut is built, a knight leaves your castle in order to occupy it. When the first knight arrives in a guard hut, guard tower, or garrison, your rural property grows. Look and you see the property limits have expanded. This is how your kingdom 'grows' and increases its geographic area.

To inform you of this growth (if you were looking elsewhere in the world), you hear a noise telling you that you have received a message. Left-click on the piece of paper (located in the lower left of your screen) and you learn that a building has been occupied by a knight. Next, some gold is brought to the hut.

A white flag flies in front of the guard hut. Later, flags are flown on the guard tower and on the garrison towers. The flag's height indicates the building's occupation rate. A hut can house up to three knights, a guard tower can house up to six knights, and a garrison can house up to twelve knights.

The icon on the flag indicates an enemy's distance. The white flag signifies that there is no enemy colony nearby and that there is no danger of being attacked in the immediate future. If you later you play against computer-controlled opponents or another player, other symbols appear on the flags. When the enemy gets close enough, a black stripe appears on the flag. As the enemy approaches, the stripe changes to a black cross. When the enemy is right outside your door, the flag has a very thick black cross. (In the latter case, you should definitely prepare for an attack.)

THE OVERHEAD MAP

Familiarize yourself with the overhead map. Left-click on the map icon and the map appears. You see several blue dots where your buildings (finished or still under construction) are located. The left icon activates the map presentation mode in one of 3 ways:
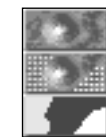
scenery

scenery + property

property

Left-click on this icon. After the first left-click, the map's image changes just a little. Around the blue dots (your buildings), you now see a surface with dots

that indicate the size of your property. If you left-click again on this icon, the scenery disappears completely. Only your property is still displayed in blue, and the buildings are represented by little white dots. If you left-click a third time on this icon, you return to the mode that you started with. If you are playing against other players or against the computer, their property is displayed in their color.

Return once again to "property" mode (no more scenery) and left-click on the second icon from the left. You see your network of roads on the map. If you left-click again on this icon, the roads disappear. The third icon from the right allows you to activate or deactivate the buildings on the map. Quit the map by left-clicking on the highlighted icon.

Let's see what your serfs are doing. When the buildings are completed, a window appears to let you know that the order was executed. You can continue with this game or move to the next training game.

Training Game 2 – Creating Construction Materials

Orders: Fabricate at least five units of wood and five units of stone.

BUILDING A FOREST RANGER'S HUT, LUMBERJACK'S HUT, SAWMILL, AND QUARRYMAN'S HUT

Forest Ranger's Hut	*Lumberjack's Hut*	*Sawmill*	*Quarryman's Hut*

This time, you have to watch the scenery very closely. Choose an area with trees and, more importantly, a few slabs of granite (the large gray boulders) and place your main castle next to it.

You must obtain stones and wood. These materials are necessary for the construction of buildings and are generally the first things that you must take care of in a new serfdom. The stones come from granite that a quarryman looks for in rock formations. The wood is a little more complicated. You need a lumberjack to cut down trees and a sawmill worker to transform the trunks into boards so the wood can be used. The forest ranger is described in this section because he plants new trees.

The forest ranger is constantly in the process of planting new trees. After a while, the trees grow and can then be cut down. If you cut the trees down without planting new ones, you quickly find yourself with a shortage of wood.

You can place a forest ranger next to a lumberjack. The two complement each other very well. If there is no lumberjack next to the forest ranger, you will soon have a new forest, but no wood for construction.

Place a lumberjack's hut near the trees, preferably in the middle of a small forest, and a quarryman's hut somewhere near the slabs of granite. Look for an appropriate location for the sawmill (which is a large building) and place the forester's house where there aren't many trees. Connect the buildings with roads. If you have done everything correctly, your work is finished. The rest is done by your serfs!

They build huts and level the ground for the sawmill. The workers arrive after the construction of the buildings. The lumberjack goes to his hut and leaves it a little while later to find a tree to cut down. After cutting it down, he lops off the branches and brings the trunk to his hut. He then rests a while before returning to work. A transporter sees the trunk and comes to take it. As your sawmill is probably still under construction, the trunk is temporarily stored in the castle.

The quarryman climbs on a boulder and hammers it with his pickax until he extracts a few stones. He puts them in front of his hut where a transporter comes and takes them to the castle (if the stones are not needed on a construction site).

The sawmill is the last building to be completed as it is the largest of the four. The sawmill worker goes to the sawmill and waits for the tree trunks that are brought from the castle or by the lumberjack. The sawmill worker then cuts them up and puts the boards in front of the mill. These boards are stored in the castle until they are used.

As soon as you have fabricated the materials asked for, you will have accomplished your mission.

Training Game 3 – Making Food and Transporting It

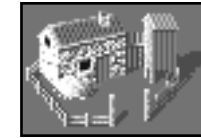**Orders:** Fabricate five units of each of the following foods: fish, meat, and bread.

THE FISHERMAN, FARMER, MILLER, BAKER, PIG FARMER, AND BUTCHER

Fisherman's Hut *Farm (Wheat)*

Windmill *Bakery* *Pig Farm* *Butcher Shop*

Your fisherman needs a lake located near the castle. Your farmer needs a large area for his farm so he can grow wheat. You do not need any underground riches or other raw materials *yet.*

To allow your serfs to work during the following explanation, construct the six required buildings and continue reading while the structures are being put together. Build:

- ❖ the farm (a large building), preferably with a lot of free space, as the farmer needs land to plant wheat
- ❖ the fisherman's hut, as close as possible to the lake
- ❖ the pig farm, the bakery, the butcher's shop, and the windmill in the locations of your choice

If you connect the buildings with roads, be careful not to build roads on the banks of the lake because the fisherman does not fish from the road. He does not want to hinder the transportation of merchandise.

You have three methods of obtaining food:

- ❖ The simplest method is by fishing. A fisherman goes fishing and his fish can be used as food. One drawback: you need a lake, and when there are too many fishermen on a little lake, it is quickly cleared of fish. As long as there are fish, they reproduce. Avoid "over fishing" if you want to continue fishing for a long time.

❖ The second method is by making bread. The farmer grows the wheat. When the wheat is mature, it is harvested and a transporter takes it to the miller (in the windmill), who transforms it into flour. The sacks of flour are then taken to the baker who uses them to make bread. Note that this method requires more patience, but its return is better.

❖ The third method takes as much time as the previous method, but requires less space. The farmer provides the pig farmer with wheat, who then uses it to feed his pigs. When the pigs reproduce, the farmer removes a pig from his farm. It is taken to the butcher who uses it to make meat.

Food is used to feed the miners who work in the mountains. They strike if they don't have anything to eat. Provide the food that is easiest for you to supply.

TRANSPORTING FOOD AND CONSTRUCTING ROADS

Let's use this occasion to look at some useful information concerning road construction. This is not very important for your current serfdom, but it becomes crucial when you have built twenty or more houses.

There is often a lot of circulation in front of the castle. Later on, when you have constructed several buildings, you will have to place them strategically and build roads in a practical manner. For example, the transportation of wheat on a road between the farm and the mill that passes in front of the castle is likely to slow down the transportation of construction materials. Group all related buildings together and build a system of roadways that does not pass in front of the castle. Put a sawmill near a lumberjack's hut, for example.

It is also very important to have a good network of roads. To accomplish this, take several factors into account. The construction of an additional small connecting road can considerably improve the transportation of merchandise. The experience that you acquire after a few games helps. We will, nonetheless, give you a few tips:

❖ Avoid red (steep slope) sections of road; it is better to make a detour by using two other road sections because the speed with which the merchandise is transported on a road always depends on the *slowest* section of the road.

❖ Do not clog up a flag's six possible branches with a road that, for example, goes halfway around the flag. You will have a hard time enlarging your network of roads. In this case, try to construct a straighter road.

❖ It is possible to construct two parallel roads between two flags. When one of the roads is crowded, another one can be used to transport the merchandise. This solution is not necessary if you construct several crossover roads, but it is very important to have a good network. If certain lanes of transport are crowded and the merchandise begins to pile up, your serfs are intelligent enough to transport the merchandise on another, less crowded, road — as long as it exists! The least efficient type of network is the one in the shape of a star beginning at the castle. In this case, all merchandise is transported on one of the star's branches and will have to pass in front of the castle in order to access another branch. An efficient network is a "grided" network that looks like a piece of graph paper. To simplify things, construct several connections between the buildings so that your city grows more quickly and with less effort. If you display the roads on the map in "property" mode, you clearly see the places where the "crossover" connections are missing.

Let's look at our game again and the serfs at work:

The fisherman sits on the bank of the lake and begins fishing. Depending on the number of fish living in the lake, he fishes more or less rapidly. He may not catch anything. Fish are taken to the castle and stored to later feed the miners.

The farmer spreads his wheat seeds, lets them grow, and then harvests the wheat which is then taken to the windmill, the pig farmer, or stored in the castle.

As soon as the wheat is received, the miller grinds it and delivers the flour in sacks to the baker. The baker kneads the dough and makes bread.

The pig farmer uses the farmer's wheat to feed his pigs, and he will soon be able to send some of the pigs to the butcher. The butcher cuts up the meat and hangs it up for storage.

As you have seen, the farmer provides the pig farmer and the miller with wheat. His production may at times be insufficient and he may not be able to deliver his wheat to both of them, even though they are continually awaiting a new delivery. In this case, build another farm.

Wait for all the food to be fabricated before moving to Training Game 4.

Training Game 4 – Mining and Using Gold, Iron, and Coal

Orders: Search for the underground riches and find
at least five units of gold and of iron.

MINES AND FOUNDRIES
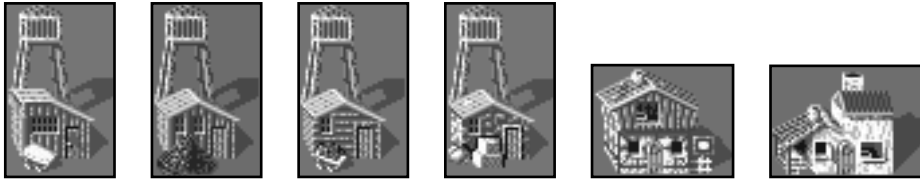
| Gold Mine | Coal Mine | Iron Mine | Granite Mine | Gold Foundry | Iron Foundry |

Underground riches are extracted from the mountains. Raw ores are transported from the mines to the foundries where the ore is refined into pure gold, iron, and coal. Iron is an important raw material because it allows you to forge new weapons and tools. Gold is also very important because it raises the morale of the knights. When the knights think about their future fortune, they fight with more vigor. Coal is very important too. You need coal for the casters in the foundries and the blacksmith needs coal to forge weapons. Granite is the least important raw material; however, if there is no source of granite on the surface, the situation could change as you need stones for all the large buildings. Granite is the only raw material found both above and under the ground.

Put your castle in a mountainous region and remember to ask for the geologist's help. Place your castle close to an area where you find coal, iron, *and* gold. Immediately construct guard huts in the area in order to expand your rural property and prospect further into the mountains to find underground riches. We can now move on to the first geological prospects.

You must place a flag somewhere in the mountains. Connect this flag to the rest of the network and special-click on it. A window with a few symbols appears. Disregard them all except for the geologist's head, at the bottom. Left-click on the geologist and he tells you that he has received his orders. He then leaves the castle and heads off toward the mountains. Once there, he examines the ground and takes a few samples. If he finds any riches, he jumps for joy and plants a sign in the ground to indicate what he has found.

This sign shows a small circle if there are small quantities of underground riches and a large circle if there are large quantities. The circle can be one of four colors: yellow for gold, red for iron, black for coal, and light gray for granite. If the geologist does not find anything, he plants a blank sign. When he finds underground riches for the first time, you receive a message because you may not be there to watch him work.

You can send the geologist toward any flag (as long as it is connected to the network of roads) and even toward the flags in front of buildings. The geologist examines the area and returns home if he does not find any mountains.

To accomplish the goal of your training mission, you must find coal, gold, and iron. Do not hesitate to send several geologists into the mountains and to expand your property by constructing guard huts if underground riches are not nearby. You have probably noticed already that the guard huts cannot be constructed in the mountains. You will have to "surround" the large mountains with guard huts if you want to find the most underground riches.

Begin constructing a mine as soon as you have found a likely location. As soon as the mine is connected to the network of roads, a construction worker arrives and goes to work.

If you have given the order to construct at least one mine for the exploitation of gold, one for iron, one for granite, and one for coal, you must now begin thinking about building some foundries. Select a location near the castle and have your serfs construct the gold and iron foundries.

Your workers construct the mines and the foundries while the miners are looking for the necessary raw materials. Food is brought from the castle to the mines. The raw materials that you find are taken to the foundries where the unrefined gold is transformed into

gold and the iron ore into iron. As you don't immediately need either of these raw materials for your city, they are stored in the castle. You are given some additional information while the game progresses.

If your network of roads has been poorly constructed, you will see it in this training game. If the mines produce too many raw materials, and if you have set up only one road (which may also be steep) between the mines and the foundries, you will have trouble with the transportation of merchandise. Build other roads to clear congestion. The new roads are used instead, and the merchandise gets to its destination much more quickly.

Underground riches are, naturally, limited. When a deposit starts to run low, the miner finds fewer raw materials. You receive a message as soon as a mine has been stripped of raw materials.

Too many mines can be a problem if you're not producing enough food. If your food stocks are low and you can't obtain it quickly enough, demolish the excess mines. A miner who doesn't receive food strikes and begins marching in front of the mine to show his anger.

The geologist's signs disappear with time. You can, however, ask for a new inspection at any time to see if there are any remaining underground riches in the areas surrounding an existing mine.

If you are not in a hurry to build the mines, wait until the geologist plants several signs so that you can be sure to find a profitable deposit. On the other hand, if you are playing against other players or against computer-controlled opponents, you should construct the mines as soon as you think a deposit may exist because each minute counts.

If the program ever denies your request for a geologist this means that you do not have any more workers or tools available. You must wait a few seconds before asking for another geologist.

To conclude, here is a tip to better place your flags in the mountains. When you place a flag for a geologist, it is because you plan to construct a mine in this location later on. If there are underground riches, left-click on the construction help function and choose a location to build your mine. Next place the flag next to this location, in the lower right. Later, you can construct a mine next to the flag; you won't need a new road or a new transporter, and the mine will be built more rapidly.

Training Game 5 – Making Tools and Weapons

Orders: Make at least ten weapons, ten tools, and five boats.

THE SHIP MAKER, BLACKSMITH, AND TOOL MAKER

Shipmaker's Shop   *Blacksmith's Shop*   *Tool Maker's Shop*

This training game allows you to create four new buildings: the shipmaker's shop, the blacksmith's shop, the tool maker's shop and the warehouse. You learn how to fabricate objects with the materials that you have extracted in the preceding section. The blacksmith makes weapons with iron but he needs coal. The tool maker makes various tools from wood and iron that are used by the other serfs. The ship maker only needs wood to construct his boats. He is the least used worker and is generally needed only in worlds containing large expanses of water.

This time, you can choose a location without worrying about the richness of the ground because you already have the necessary materials stored in your castle at the beginning of the game. Choose any location that provides enough space for several large buildings. Construct an iron forge, a shop for the tool maker, a naval shipyard, and a warehouse.

Give wood to the ship maker; he delivers the first boats as soon as he is done. The workers can then take these boats to the banks of the lake and transport their merchandise on this water way. This method of transportation is often quicker than the land routes.

Supply the blacksmith with coal and iron. He forges swords and shields that your knights need to guard your castle and attack the enemy. The weapons are delivered to the castle where each new knight can take what he needs.

Supply the tool maker with wood and iron to make nine different tools: hammer, saw, hatchet, shovel, scythe, pick, fishing pole, pliers, and butcher's knife. These tools are delivered to the castle and used by the workers. Depending on their professions, they need different tools. Some workers (for example, the baker) don't use any tools, but most jobs require at least one tool while others need two:

- ❖ leveler – shovel
- ❖ fisherman – fishing pole
- ❖ butcher – butcher's knife
- ❖ farmer – scythe
- ❖ lumberjack – axe
- ❖ sawmill worker – saw
- ❖ miner – pick
- ❖ quarryman – pick
- ❖ construction worker – hammer
- ❖ ship maker – hammer
- ❖ geologist – hammer
- ❖ tool maker – hammer and saw
- ❖ blacksmith – hammer and pliers

You may wonder why you must make the tools when the workers automatically leave the castle with their tools in hand. It is because at the beginning of the game, you had a certain supply of construction materials, food, and tools. For the early training games you had a large stock to start off with and therefore did not have to fabricate tools or merchandise.

THE WAREHOUSE

The warehouse is used to store merchandise. It is also a place where serfs wait for new work (as at the castle). This is why the warehouse is, with the castle, one of the most important buildings. In a relatively large city, the castle quickly reaches its capacity without an additional warehouse. As soon as the warehouse is built, a serf leaves the castle and goes to the warehouse. You thereby have a sort of "second castle." The expansion of your city can be difficult to control if you only have a castle. The workers take too much time to go from the castle to the construction site, or they produce so much merchandise that it will start to pile up on the road to the castle and the transporters can no longer do their job.

Evenly distribute the warehouses to avoid all this. The warehouse offers practically all the same benefits as your castle:

- ❖ When you receive new serfs, they are divided up between the castle and the warehouse.
- ❖ Excess merchandise was brought to the castle up until now. It is now taken to the nearest warehouse, thereby cutting down on return trips.
- ❖ Merchandise (on a construction site for example) is ordered from the nearest warehouse having the required materials, so the distance to the site is reduced.

- ❖ A worker no longer returns to the castle after his work is finished but goes to the nearest warehouse and waits for his next job. The trip for your workers to their work sites is reduced.
- ❖ If a building requires the presence of a new worker, he is hired from the nearest warehouse, so his trip is shorter.

These various points demonstrate that an even distribution of warehouses is essential. As soon as your warehouse is built, you receive a message.

Training Game 6 – Attack and Conquer Enemy Buildings

Orders: Conquer several enemy buildings.

KNIGHTS

The objective of this training game is to conquer certain buildings with your knights. Left-click on the overhead map and examine the locations of the enemy's buildings. Choose a location close to the enemy so that you do not have to travel very far to attack.

Construct guard huts around your frontier. While your serfs are working, we can take a look at the knights.

There are five kinds of knights in the game. When you receive a new knight, he starts at the lowest level. He can, however, receive training in the main castle (or later in a warehouse) and change levels. A knight can also receive training in a guard tower or in the garrisons, but he progresses very slowly because he has to work at the same time. However, during his service he will not improve his skills if he sits in a guard hut.

The advantages and disadvantages are clear: if you leave the knights in the castle, they become well-trained, but your city will be poorly guarded. If you send your knights outside, your buildings will be well-guarded but the enemy may have more powerful knights that could pose problems for you. If you have built several towers and guard huts, your knights will go to them. In this training game, however, your opponents are defenseless.

You only attack castles, garrisons, guard towers, or guard huts belonging to the enemy. A knight won't attack a farmer, fisherman, nor any other civilian serf. When you attack, your knights march toward the enemy building(s). An enemy knight comes out of the enemy building and a combat ensues, leaving one knight victorious; there are no ties in combat.

After a while, either the attackers or the defending knights in the enemy building are eliminated. If there are no knights in the enemy building, the attacker is victorious and takes control of the building. The frontiers of your city are consequently modified. The victorious knights burn any other unguarded enemy buildings that they can. Such a defeat can be devastating for a city. If, for example, your only coal mine or warehouse is in flames, then your serfdom's stability may also be going up in smoke.

When you have built your first guard huts and they are occupied by knights, you see flags with a thick cross. All guard huts that are located near the enemy's territory and that can be targeted for attack are marked by this cross.

Special-click on any enemy building having a thick cross on its flag. A new window appears allowing you to enter the number of knights you want to have attack it. The four numbers in the middle indicate the number of available knights, and then numbers for knights in the surrounding areas, far away, or very far away. The distance is not an essential factor but the knights will need more time to reach the enemy. If all the numbers are zeros, there are not enough knights in your buildings. You should know that all the knights that enter a building cannot be sent into battle because you need some to defend the building should it be attacked by enemies.

Launch a new attack; two arrows allow you to modify the number of knights that attack the enemy.

If you have sent all your available knights into combat, you cannot launch other attacks. You see, however, other knights immediately leave your castle to replace those who have left for battle.

When you seize an enemy building, you receive a message.

Enemy knights engage each other should they, by coincidence, meet somewhere on the map.

If the enemy attacks you at an important corner of your serfdom, look for the enemy garrison nearest the battle and give the order to attack this building. If your knights meet the enemies on their march, they attack the troops where they meet them. Of course, the enemies must be visible; if there are hills separating the soldiers, they can march parallel to each other and be totally unaware of the other.

FRONTIER STRATEGY

Here's a final point that does not concern the knights, but rather your rural property: do not construct civilian buildings near the enemy frontier. If the enemy constructs a guard hut near the frontier at the same time you start building there, but he finishes before you do, he will burn down *any of* your unfinished construction.

Garrisons situated near the frontier are of no help to you because construction takes too long. You can try to finish guard huts before your opponents do, or place your buildings in safer locations to begin with. Naturally, you can use this strategy against your opponents if they had the bad idea of constructing large buildings too close to the frontier.

THE ECONOMY

The Economic System

It is essential to know the economic aspects of each building type and how that building is tied into the "grand scheme" of your serfdom. Here is a summary.

THE FOOD CHAIN

The food chain refers to the production of fish, meat, and bread. The fisherman catches fish for immediate consumption. The farmer plants and harvests wheat that is taken to the pig farmer who feeds his pigs with it. The pigs reproduce and can later be slaughtered for meat. Or, the farmer's wheat can be ground by the miller in his windmill and transformed into flour for the baker to make bread. In either case, you create food for your workers.

MERCHANDISE

Merchandise refers to tools, weapons, boats, gold, and construction materials for buildings. The tools, weapons, and boats are stored in the warehouses. The gold is guarded in the castle, the garrisons, the guard towers, and the guard huts. The tool maker needs wood and iron. The wood comes from the sawmill where the tree trunks furnished by the lumberjack are cut. The iron is purified in a foundry. The caster needs ore and coal for the forge. These two materials are extracted from the mines. To fabricate weapons, the blacksmith needs iron and coal. The ship maker needs wood for his boats. For the construction of your buildings, you need (in most cases) wood and granite. The use of iron, coal, and wood for the fabrication of tools has already been discussed. The granite is found either above ground in rock formations, or below ground in a granite mine. The unrefined gold is extracted from the mines. The gold is refined by a goldsmith from unrefined gold. What follows gives you a better understanding of the numerous factors that affect the game.

Your First Serfdom – Mission One

It is essential to build an "active" city. To do this, you need all the buildings.

When you select the first mission, notice that you do not have a large beginning supply level, so be careful. The first thing to do is to find a good location for your castle; refer to the section "The Castle" on page 7 earlier in this manual. Try to expand your rural property immediately.

Place two to four guard huts near the frontier. The construction of guard towers and garrisons requires more time and slows down your expansion. Make sure that you have enough construction materials to avoid big problems building the necessary buildings.

Place a lumberjack, sawmill, and quarryman's hut in appropriate locations.

After completing these three tasks, the game becomes more complex. Depending on the layout of your land, you can do certain things. As soon as possible, send the geologists into the mountains. Based on their findings, construct mines in the appropriate locations. Construct a gold or iron foundry, and a forge or a tool factory (based on the underground riches found).

If you can rapidly fabricate weapons, you gain an advantage during combat.

As soon as the geologists start prospecting in the mountains, think about the mine workers and their food. If there is a lake in the area, build a fisherman's hut. The fish he catches can be stored before the first mines are built. Meat production and the fabrication of bread take some time. When the castle's wheat reserves (for the pigs and the windmill) run low, you need to wait for a farmer to plant and harvest more wheat. If no lake is in the area, build a farm as quickly as possible. You can choose between meat or bread, depending on the situation. If the enemies are still far away and you possess a lot of land, choose the bread because it is faster. Place windmills and bakers close to the farms.

Bread is the most efficient source of food. If you don't have enough space, we recommend pig farming. You need only one farmer to supply the pig farmers with wheat.

Remember that lumberjacks cut down trees constantly, and unless you plan ahead this may leave you without a single standing tree. Try to have forest rangers plant trees as soon as possible.

If the region contains large lakes, take advantage of the speed of the water ways. You will eventually need a ship maker if you are short on boats.

Above all, remember to build warehouses. They alleviate congestion on the roads and speed your progress.

The guard towers and garrisons are essential to protect important buildings, especially the warehouses. Depending on the progression of the game, a mine or a tool maker could also be very important (especially if you only have one of them)! Place your garrisons in these areas. Don't let the enemy destroy your economic system because of a small victory!

Watch the enemy closely! Find a free moment in your schedule to see what your adversary is doing. Is he already in the process of making weapons? How far away is he? Which lands should you occupy before the enemy annexes them? Which locations are poorly protected where an attack could be successful?

Your first attempt to construct a city with several huts and different houses may not be entirely satisfactory. Don't be discouraged. The next time, you can better plan your city without making the same mistakes. Experience helps.

About Statistics

THE FIRST STATISTICS

There are statistics for serfs, buildings, and warehouses. They allow you to quickly get an idea about important areas. At the beginning of the game, the statistics are not very interesting; you do, however, have to look at them regularly during the course of the game to see, for example, when you are short on supplies such as wood or food.

To see the statistics, left-click on the second icon from the right in the main menu. Eight other icons are displayed. Each icon corresponds to specific statistics. If you left-click on the middle icon, the buildings' statistics appear. They indicate the number of each type of building that you have in your serfdom. All buildings cannot be displayed on one page; the bottom icon allows you to scroll through the pages and see the other types of buildings. If the number is followed by a + and another number, then buildings of this type are under construction. 2 + 1 means two buildings are completed and one is under construction. These statistics also allow you to foresee certain difficulties. For example, if you have ten lumberjacks, they cut down a large quantity of trees; one sawmill may not be enough to cut all the wood, and you may even run out of trees for them to cut. Adjust your resources for optimum returns. To quit the statistics and return to the eight icons, left-click on **EXIT**.

Left-click on the right icon, in the center. You see various heads and numbers. The statistics concern your serfs. Each head represents a profession, with the number of people practicing this profession. The head with a question mark (in the lower right) indicates the number of serfs that do not have a profession yet. A good player tries to have a minimum of unemployed serfs in order to increase production and yield. The last number in the lower right indicates the total number of your serfs. To quit these statistics, left-click anywhere in the window.

Left-click on the left icon, in the center. These statistics represent your supplies; they show the type and quantity of merchandise stored in your warehouses. The merchandise stored in the warehouses is not immediately important, but a large reserve of wood and granite is a good sign because you will have enough materials for your construction projects. On the other hand, if you have a lot of iron ore in your warehouses, and you do not have enough iron foundries or coal in your city. . . . You must always stay one step ahead.

THE STATISTIC CURVES

The statistics of comparison and of production

In the statistics menu, left-click on the bottom icon in the center. You see the comparison statistics. The color of the

curves corresponds to the different players. Your color is sky blue, the same as your serfs'. The vertical scale ranges from 0 to 100%, and the horizontal scale represents time. The curve changes over time, from left to right. The unit used is the hour (.5 hour = 30 minutes). You can choose the display mode for the statistics in the lower left of the screen: upper left = overall comparison; upper right = comparison of rural properties; lower left = comparison of the buildings; and lower right = combat power.

In the lower right, you see four other icons that correspond to the time. The four positions correspond to .5 hours, 2 hours, 10 hours, and 50 (!) hours.

The comparison of the rural properties only indicates the size of your land compared to that of your opponents'. The buildings are evaluated according to their size and type, and not just according to their quantity. The combat power depends on the number, type, and motivation of your knights. The overall comparison is based on all three of these values.

These statistics are the only way to obtain precise information about your adversaries. You know who has the most powerful army and who possesses the most land. If the curves rise very quickly at the beginning of the game, do not worry. It is not an error. The

player who places his castle first is momentarily the only person to possess land and a building (100%).

To see the production statistics concerning *all players*, left-click on the lower left icon. These statistics indicate the type and quantity of merchandise produced. The vertical scale corresponds to the quantity, in units. The horizontal scale represents the time.

In these statistics, the time counted is around two hours. At the beginning of the game, these statistics are at zero (you have not produced anything yet). Later on, however, you can choose at the bottom of the screen the merchandise that your serfs produce. From trees to tools, you find all the different types of merchandise.

If you have, for example, selected the trees at the bottom and the red surface of the vertical scale stays at one, this means that your lumberjacks are cutting down about one tree per minute.

This may seem rather confusing, but you will learn to interpret these statistics better with practice.

THE SUPPLY STATISTICS

In these three statistics, small pointers indicate the state of your supply. The food chain and the flow of merchandise are the most important statistics if your city is relatively large.

Professions Statistics

Let's begin with the statistics about the professions. Left-click on the upper right icon. As with the statistics for the serfs, all the heads appear, but with pointers. The pointers indicate the availability of serfs that you can use for the corresponding profession. If none are available, the pointer stays in the red. It is in the center if you have three serfs, and to the right if you have twenty or more serfs.

Before building a forge, look at the statistics. If you need a blacksmith and the pointer is red, no serf is available, or perhaps a tool that he needs is not available in the warehouses. The number in the lower right indicates the number of serfs who are waiting for work. If this number is ten or greater, and a profession's pointer is in the red, you lack tools for this profession.

Food Chain Statistics

Let's look at the food chain. You see a diagram with heads, merchandise, pointers, and arrows. Each head represents a profession. The merchandise is delivered by one profession to another

profession in the direction of the arrow. The diagram is presented as follows: the farmer (in the upper right) delivers the wheat to the miller and the pig farmer. The miller delivers the flour to the baker who, in turn, delivers the bread. The pig farmer delivers pigs to the butcher who delivers the meat. The fisherman (in the lower left) delivers the fish. The bread, meat, and fish are the three foods that are delivered to the mines. The pointers are important in this diagram. There are two types:

1. This is the supply pointer (for the pig farmer or the miners, for example). The dial is, from left to right: red (no supply), yellow (good supply), and green (excellent supply). This dial indicates the supply of the professions; the more merchandise they receive, the better off they are. The pig farmer prefers having a lot of wheat to feed his pigs, rather than a meager, or non-existent, supply.

2. This is the activity pointer (for the miller or butcher, for example). This dial is, from left to right: red (no work), green (a lot of work), and yellow (too much work). This means that the ideal situation for the person receiving the merchandise is to receive neither too much nor too little. If the miller does not receive enough wheat, he has no work and his windmill is useless. If he receives a normal delivery, his mill is

active and he is busy. If he receives too much wheat, however, he is unable to keep up with the work. The mill turns constantly, but the wheat arrives too quickly and begins to pile up. After a while, you have to put this surplus in a warehouse. If you build another windmill, you can produce more flour. Later, when you have ten millers, you can see the average activity rate for all the windmills. You see if the mines are well-supplied, and if the pig farmer is receiving enough wheat to feed his pigs. Don't be surprised if you don't see a pointer at the beginning of the game, as the food supply for a mine cannot be indicated if it does not exist.

Merchandise Statistics

These statistics are identical to those for food, except that they represent all merchandise except food. The suppliers of raw materials are indicated to the left (miners, for example). The intermediate professions are in the center (casters, for example). The users are to the right (knights, for example).

The arrows indicate the direction of the delivery, as explained above. The others function as per the food chain. The only difference is that certain professions (casters and blacksmiths) cannot do anything if there is iron but no coal.

The Warehouses

You already know how to build a warehouse. If you special-click on a warehouse (if there are none, use a castle), a window appears indicating the state of the stock in this warehouse. By changing the page with the arrow, you see the serfs that are in this warehouse. The third page contains two icons having different symbols. The upper icon concerns the merchandise, the lower icon concerns the serfs located in this warehouse.

There are three different settings for the merchandise in the warehouse. A checkmark confirms the current setting. If the checkmark is at the top, merchandise is brought to this warehouse. When the checkmark is in the middle, no more new merchandise will be stored in the warehouse. When the checkmark is at the bottom, the warehouse is emptied of its merchandise and nothing else can be stored there. For the serfs waiting for work in the warehouse, the settings are practically the same: when the checkmark is at the top, they must go to the warehouse after work. If it is in the middle, no new serfs are accepted. If it is at the bottom, all the serfs must leave the warehouse. You must special-click to activate the two latter options.

What are these options for? If the enemy approaches your warehouse and you can no longer defend your position, he could wipe out your warehouse and you would lose all your merchandise. Only certain serfs are able to escape. You have to be able to retreat and fight if you want to minimize your losses. Remember that you need time to empty a warehouse or evacuate the serfs. If you fight back too late when retreating, you can save only a few serfs. The warehouses are, moreover, crucial for your economy. If a warehouse no longer accepts merchandise or serfs, the others are stocked instead.

The evacuation of the merchandise and serfs has a negative effect. Think before deciding if it is better to retreat than to fight. Do not build your warehouses too close to the enemy, or if you do, protect them with garrisons. If a warehouse appears to be in danger, stop the reception of merchandise before the enemy crushes the building and all the goods inside.

You sometimes have problems when unemployed serfs are in the warehouse and the weapons and tools are stored elsewhere. In this case, your serfs automatically go to a warehouse where tools are stocked and wait there for work. You have similar problems with the tools when the pliers are in one warehouse and the hammers in another. No blacksmith can set up shop, as he needs both tools. This holds true for the tool maker (saw and hammer) and for the knights (sword and shield). In this situation, the tools and weapons are automatically taken to the other warehouse.

Statistics On Buildings and Flags

The statistics give you an overview of your total development. You might, for example, want to know specific things about the state of the supplies in a particular building. The statistics give you the available information for the buildings. This information is always activated with a special-click.

If you special-click on a construction site, you see the building that you are in the process of constructing.

If you special-click on one of your mines, you immediately see the mine's yield. The calculation is made as a function of the number of trips the miner makes into the mine (with merchandise). Remember that it requires several trips into the mines before you can use this information. It is useful in determining the future demolition of these mines, because if a mine no longer has a yield, the miner still eats food (which can become scarce, depending on the progression of the game). You also see the food stock that a mine has at its disposal. The miner accepts fish as well as bread or meat; the meat icon indicates this quantity. If there is no food, the hungry miner goes on strike.

If you special-click on a castle, garrison, guard tower, or guard hut, you can see the position of your knights. Most importantly, you see the strength of the building to be defended. As with the mines, you also see the state of the supplies, but this time it concerns the gold. The guard huts receive a maximum of two units of gold, the guard towers receive a maximum of four units, and the garrisons receive a maximum of eight units.

You see the supplies for all of the following buildings:

❖ Ship maker's shop
(wood)

❖ Sawmill
(tree trunks)

❖ Pig Farm
(wheat)

❖ Butcher's shop
(pigs)

❖ Windmill
(wheat)

❖ Baker
(flour)

❖ Iron foundry
(iron ore and coal)

❖ Gold foundry
(unrefined gold and coal)

❖ Blacksmith's shop
(iron and coal)

❖ Tool maker's shop
(iron and wood)

The lumberjack huts, forest ranger's huts, fishermen's huts, quarrymen's huts, and wheat farms do not supply the same information because they deliver merchandise. They don't store any supplies to operate.

Special-click on any intersection. A flag is displayed. In each direction from the flag, where a road branches out from the flag, you see a check mark or a line. If everything is normal, you see a check mark. If you left-click on a flag where large quantities of merchandise are being transported, you can uncover traffic problems. They are indicated by lines. In other terms, there is a lot of merchandise to distribute in this direction, but the serfs cannot get by, and the traffic jam will disappear after they have distributed all the merchandise that is blocking the road. You might try to find other solutions, such as making a detour, so that the serfs can distribute the merchandise. In high traffic locations, take a close look at the network of roads and think about constructing a new warehouse. Do not wait until several flags are blocked up by the merchandise.

The Distribution Menus

In the next six pages, we discuss the menus in detail. The menus allow you to modify various parameters and to influence the life of your city. To activate the menus, left-click on the lower icon. As with the statistics, you may activate several menus and return to the main selection.

In each menu, a default button allows you to reset all the parameters back to zero. The first three menus are distribution menus for merchandise. There are several types of merchandise (food, wood, iron, coal, and wheat) which are delivered to the different professions. The tree trunks are delivered to the sawmills, while iron is delivered to the blacksmiths and tool makers.

Your iron stock may sometimes be low, and you may want to fabricate weapons rather than tools, or vice versa. You can modify these parameters in the distribution menus. Left-click on the top left icon. You see the different foods displayed at the top of the screen, with the mine below, each with a "supply bar." These bars show the food supply received by each mine.

If you have a very short supply of food and you want to supply the iron and coal mines in order to continue fabricating weapons, lower the supply bar for the other mines to zero (left), and raise the supply bar of the iron and coal mines to the maximum (right).

The second menu allows you to organize the wood and iron deliveries. Wood is used for construction sites, tools, and boats. If you have a ship maker and you don't want him to construct any unnecessary boats, stop delivering wood to him.

The iron is delivered to the blacksmith and tool maker. If you are short of iron, priorities are established according to your evaluation of the situation and the condition of your supplies.

The third distribution menu concerns coal and wheat. Coal is delivered to the foundries and the blacksmiths. There too, the distribution depends on the situation of the game. If you are short of coal, decrease deliveries to the gold foundry.

Wheat is delivered to the pig farms and mills. Your preferences should depend upon your city and your plan of distribution.

If you set one of the parameters at zero, the type of building selected does not receive any merchandise. If a bar is two times longer than another one, it means that the building receives twice as much merchandise as the other one. If a piece of merchandise is rare, your serfs only deliver it to the most important building concerned. If your stock is large enough, then they also deliver to the less important buildings.

RULES OF COMBAT

The Knight Menus

Two icons in the statistics menu allow you to modify various parameters for the knights. Left-click on the lower left icon in the menu. A new window appears with four icons on the left, and two texts relating to each icon. The left image shows the castles in various positions based on their distance from the frontier:

❖ On the front line: Your guard towers, your garrisons, and guard huts located right on the frontier with the enemy are indicated by a thick black cross on their flag.

❖ On second line: The guard towers, etc. located behind the front are indicated by a normal black cross on their flag.

❖ On third line: The guard towers, etc. located far from the frontier are not immediately threatened. Their flag bears a black stripe.

❖ Within the inner-serfdom: The enemy is not visible, and the guard tower's, etc. flag is white.

In each case, you decide how many knights are placed in these buildings (garrisons, watchtowers, and guard huts). The optimal occupation rate is indicated next to the four images. The buildings located on the front line should be full, the ones on the second line should be well occupied, the ones on the third line moderately full, and the garrisons deep in the inner-serfdom should be nearly empty. Thus, your borders are optimally protected.

The second word shows the minimum amount of troops to be left behind, should you decide to use knights to attack the enemy: "good" for the front line, "average" for behind the front, "weak" for the third line, and "minimum" for the inner-serfdom. Here are some examples: if you read "full/good," this means that all buildings must be occupied to the maximum and if your troops attack the enemy, you only send out a few knights, keeping enough of them inside to maintain a "good" occupation rate. If you choose "full/full," the knights occupy the buildings equally, and none of them leave for an attack. Your front-line will thus be protected to the maximum. But in this case, the knights remaining in remote buildings need more time to get to the front-line, as the road to travel is longer. With

"full/minimum" settings, all knights leave the building to attack the enemy, except one. Of course, this means that your building is poorly guarded. You can use such settings for the buildings located in the inner-serfdom if you have knights available.

Try not to use settings that could be detrimental. If you don't have all the knights you need, your guard huts, etc. are emptied sooner or later. To change these settings, left-click on the + and - signs. The upper setting (ideal number of knights) logically cannot be smaller than the following one (number of remaining knights). Change the second setting. Remember: It is very important to *immediately* change these parameters. If you change the occupation rate setting from "full" to "minimum" in the garrisons located on the front-line, all your knights will leave, except one. Think first, and click later.

When your knights leave their homes to attack the enemy, they are immediately replaced by new knights from the warehouses or main castle, as long as more knights are available.

The second knight menu allows you to change several other parameters. Left-click on the lower central icon. The "knights' rate" appears in the upper left corner of the screen. The default rate is 30%, which you can modify as you like. This rate shows the number of serfs that can become knights, provided that you have enough swords and shields. If you choose a medium setting (bar in the middle), half of your serfs become knights. If you set the bar all the way to the left, you do not receive any knights.

The lower icons allow you to recruit unemployed workers to form new knights. The number of serfs available for recruiting is displayed to the right. This number depends mostly on the number of weapons available in your warehouses. You also need enough unemployed serfs, of course.

Another icon allows you to choose the knights who attack the enemy. With the default settings, the weaker knights attack the enemy, while the stronger ones stay in defense. You can also send the stronger ones to attack and keep the weak ones to defend your buildings.

Both options have advantages and drawbacks. It is usually better to send the weaker knights in combat and to maintain a good defense in your forts. You decide which strategy is best.

The icon to the right allows you to organize your knight relief force. If the occupation rate is high enough, when you left-click on this icon one or more knights leaves his fortification and goes to the closest warehouse. New knights replace those that leave.

The advantage of this is that the weakest knights go back to the warehouses to receive more training, while the stronger ones take their place. Before using this option, you must consider the following factors:

1. If you fear an attack in the upcoming minutes, wait. You will prevent a sudden drop in the occupation rate of your buildings for a moment.
2. Make sure you have enough well-trained knights in your warehouses. If not, changing the settings is not useful.

Your knights' strength depends on their training level, and their motivation is increased by the amount of gold stored in their city. The more gold stored, the higher their motivation.

At the beginning of the game, it is extremely difficult to win a battle. You have no gold extracted and your knights are not trained enough. If you want to win, the strength ratio should be at least 4:1. Your losses may, of course, be higher than your opponent's, so you must carefully choose the place of the attack. If your attack allows you to take control over an enemy gold mine or sole food producing building, even with heavy losses, you can profit from the following:

1. The enemy will suffer heavy economic damage, and
2. The enemy knights who are weak at the beginning of the game have a hard time recapturing their lost territory.

As soon as you have enough gold, your knights become more motivated. You can then contemplate the complete destruction of your enemies. Be careful if you play against several opponents.

You can check the motivation level of the enemy knights from the attack menu. Each gold unit stocked in a garrison, watchtower, or guard hut has a positive effect. While in transit, gold is not considered stored.

You have probably noticed the attack menu displays not only the combat strength, but also the total number of gold units owned by the player. The

number of knights defending the castle is displayed at the bottom of the screen. You can change this number by left-clicking on the arrows. If you think your situation is hopeless, you can left-click on the white flag to quit the game.

You can attack an enemy castle, but remember the enemy may have left more knights than usual in his castle. If you conquer the castle, it is burned down. Just like the warehouses, the winner strikes a decisive blow on his opponent, causing him or her to lose the merchandise and serfs held in the castle. Furthermore, your knights' morale rises, while the enemy knights' drops.

If you think you can easily conquer a castle, launch an attack. If you lose a castle, don't give up. Enough well-trained knights *can* help you recover, but it is not easy!

The attack menu allows you to specify the number of knights remaining in the castle to defend it. Remember that the castle is important not only for your troops' morale, but also because it is the only storage location protected by knights, and thus much safer than the warehouses you construct later in the game.

The Other Menus

TOOL FABRICATION MENU

In the menu, left-click on the central left icon. The nine different tools are displayed with a bar showing the number of tools manufactured by your workers. The default settings show high rates for hammers and picks and low rates for scythes and pliers. Tool makers, geologists, blacksmiths, and construction workers all need hammers, but only farmers need scythes.

You can modify the tool fabrication rate during the game. For example, if you urgently need a specific tool (you may have enough hammers, but you need pliers for a new blacksmith), you can speed up the manufacturing rate for the pliers while reducing that rate for the other tools. Remember to change these settings later on in the game or you will wind up with more pliers than you ever needed or wanted.

The length of the bars shows the number of manufactured tools. If the hammer bar is twice as long as the saw bar, this means that your workers will manufacture two hammers for each saw. As long as you don't have a blacksmith, this menu is not useful. If you want to avoid having to set priorities for the tools, manufacture as many tools as possible as soon as you can.

MERCHANDISE PRIORITIES MENU

Click on the central icon to open the merchandise priorities menu. You see a list of merchandise and icons. This menu allows you to define priorities for merchandise; some of them are transported in priority by your transporters.

The wood has the first priority in the default settings because it is very important for construction work, and must be delivered as soon as possible to the sawmills. Gold has a lower priority level; even if it strengthens your troops' morale, its transportation is less urgent, and has less effect on the game. You may also have your own strategy, so you can change these priority settings. Left-click on the desired merchandise. The small arrows allow you to lower or raise the priority level, and the large arrow places the merchandise at the top or bottom of the priority list. The upper left icon allows you to return to the initial settings.

If you are fighting against the enemy, weapons should generally be a transport priority before construction materials. However, the choice is yours.

EVACUATION MENU

Another important menu is the evacuation menu. It allows you to evacuate merchandise; activate it by left-clicking on the central right icon. If the enemy gets too close to one of your warehouses and you decide to evacuate it, it would be a pity to save more wheat than gold. In this menu, you decide the evacuation priority of the merchandise. This option works like the delivery priorities menu.

Messages and Preferences

During the game, you always know of important events from the messages displayed by the program. You can also send yourself messages to keep yourself informed.

GAME MESSAGES

This section is related to the various messages sent during the game.

You receive messages for the following:

❖ A new guard building is occupied for the first time by a knight. You thus annex new territories and are able to plan your city's expansion.

❖ A new warehouse has been constructed.

❖ A geologist discovered new underground riches.

❖ A mine which yields no more ore must be demolished because the miners consume food but produce nothing.

❖ You are attacked.

❖ You conquered an enemy guard building and gained new territories.

❖ One of your buildings has been taken over by the enemy.

❖ The enemy placed a hut near your territory, and you lost some land.

❖ Same as above, but you lost land and one or more buildings.

❖ The construction materials stock in your castle is too low. An emergency program is started, and the only construction works to receive materials are the lumberjack huts, the sawmills, and the quarries.

❖ The emergency program is stopped, the construction works mentioned above have been provided with materials, and their deliveries have been carried on.

You don't need to read all the messages the moment they arrive. The program memorizes more than fifty of them, so you have time to finish what you are currently doing.

To view a message, left-click on the flashing message icon in the menu. If the message displayed doesn't interest you and there are more, left-click on the sheet to view the next message. An arrow allows you to come back to the previous message.

SENDING YOURSELF MESSAGES

SERF CITY includes other message options. For example, you can send yourself a message. This option is in fact a "recall" option which you can use in two ways:

1. Call yourself to a certain place after a specified length of time.

2. Call yourself to a menu or a warehouse after a specified length of time.

The different watches in the main menu allow you to specify the length of time with brackets of 5, 10, 20, 30 or 60 minutes. When this time has expired, you receive a message and are automatically called back to the desired place or menu. Here are a few examples of this option:

❖ You urgently need a certain type of tool and you decide to halt the manufacture of other tools with the production menu. If you forget to change the production settings later on, no other tools are manufactured, and you can easily foresee the consequences. . . . Left-click on a watch while in the tools menu. After the specified length of time, you are informed that you still have something to do in this menu.

❖ Your mine workers are on strike and you urgently need food. You can modify the delivery priorities for the merchandise. Fish, meat, and bread are delivered in priority, before the construction materials. When the problem is resolved, the recall option allows you to change the settings again and set new priorities.

❖ You want to build new huts for fishermen in a certain place, but you have not yet annexed the land and the guard huts are still under construction. Specify the desired length of time after which you want to check on this place again. The situation may be different later on.

❖ You realize that the enemy is suddenly constructing many guard huts, and you want to keep an eye on him. Just set the length of time after which you will be called to a certain place to check on the situation.

Sometimes it is useful to use the recall option if you want to change the merchandise and/or serfs' settings again later on in the game.

You must also consider this: if you play in team mode with another player (blue serfs), the right player on the screen may not use the watches, because all the messages arrive to the left player. But you're playing as a team, right?

Replaying a World

Back to the main menu. In one and two-player mode and in demo mode, an icon appears in the center of the screen. We did not discuss this icon earlier in this manual. As you already know, the sixteen digit number affects the world's appearance. Thus, the same number always produces the same world. If you left-click on this icon, the same combination is used for your opponents.

What is the real advantage of this? For example, say you choose the 6355174823325876 combination and a size 4 world. At the end of the game, if you found that this world was interesting and challenging, you can give that combination and the world size to a friend. They can play the same game using the arrow icon, because the world *and* opponents data are always based on the digit combination and world size.

The sixteen digits (between 1 and 8) allow about 270,000 billion combinations (some are more interesting than others). Examine your opponent's abilities carefully, and decide if you want to accept this game or not. If you want to play another game, left-click on the arrow to obtain a new combination, then left-click again on the bottom arrow. You can do this as many times as you want.

If another player gave you a combination, left-click on the dialogue box and enter the combination, which must include all sixteen digits. Remember to note the world size and the combination if you want to pass the game to another player.

Demo and Team Mode

In demo mode, you can watch a game entirely controlled by the computer. Even if you only watch the game, SERF CITY is entertaining and interesting. In demo mode, the statistics, the menus, the map and the usual buildings information are available as in a normal game. You may change some menus and statistics options, but you cannot change the settings or construct buildings or roads.

Relax and watch the computer opponents fight for control of the land.

The team mode allows two players to play together against computer-controlled opponents. Both players control the same serf group (the blue ones). Team play has an advantage: you have more time to think and decide. But there is also a drawback: you may experience some coordination problems from time to time. In team mode, the game is slightly different. Both players *cannot* simultaneously activate the menus, the attack option, or the geologist. But this is a minor constraint, because the players are supposed to inform each other of any change in the settings anyway.

The Options

You can define several extra options for each player. These options are activated when left-clicking on the icon on the main menu or the play menu.

Messages: the game includes four different message display modes.

> **0.** No messages are displayed.
>
> **1.** Only important messages are displayed (attacks, victories, defeats, building losses, and the emergency program).
>
> **2.** All messages are displayed, except the messages concerning newly constructed buildings and geologists.
>
> **3.** All messages are displayed.

Scrolling when building roads: If you get close to the edge of the play-screen while building a road, the world scrolls automatically and you hear a sound.

Fast construction click: If you left-click twice on the pointer, this has the same result as left-clicking on the construction icon. Left-click twice on a flag to build a road, or on an empty place to construct a building.

Fast map click: Double-click on the right mouse button to display the map. Double-click again to close it.

Special Functions for the Map

The map includes a special option: Display the map and special-click on the buildings icon. A new window with buildings appears. This window is identical to the statistics window.

The change page icon allows you to see the other buildings. Choose a building and left-click on it. The buildings will disappear and the map appears.

A new icon is displayed at the bottom of the screen. The map only displays the selected building. This option allows you to quickly see where your warehouses, etc. are located. In very large worlds, this option is very useful. The buildings currently under construction are displayed for your convenience, allowing for better planning. For example, if you are looking for the right spot to place a new baker, you check for where you placed your windmills. When you close the map, the option is still active.

To return to normal mode, left-click "normally" on the icon. To select another type of building, special-click again.

You can use the flag to select the type of buildings displayed on the map. Left-click on the flag. A new icon appears below the map. All flags will not be displayed, only the ones where all roads are not used. This allows you to see if your network is jammed by the transport of merchandise. There are three reasons why a road is not being used:

> 1. You just built a road and a transporter hasn't arrived on it yet.
>
> 2. There is a traffic jam at this crossroad.
>
> 3. There are no more workers available, so there are no new transporters for the road.

Another special option, the magnifying glass icon, is often useful because it allows you to zoom in on the game map.

HINTS

The Most Important Rule – Be Observant

As soon as you change one of the settings, your serfs (small groups or hundreds of them) act differently in order to follow your new instructions.

A small change may have profound effects. It is wiser to carefully plan your construction schedule and your strategy, rather than build things haphazardly and constantly attack your enemies. Examine situations carefully and analyze them before making decisions. The winner of the game is not the one who clicks quicker on the icons, it's the one who develops the best tactics and strategies.

You already know how to choose a good location for your castle, but observe the positions of your opponents' castles as well. Avoid placing yourself too close to a powerful adversary. The computer-controlled opponents can actually fight amongst themselves and destroy each other.

Look at your statistics from time to time, analyze your development mistakes or the negative results of an operation, and find the best solution. You can solve a problem in many ways.

Let's take an example: your construction work halts because your wood (boards, not tree trunks) supply is exhausted. As long as you have enough lumberjacks, build a sawmill. In case of a grave crisis, demolish a few roads to reduce merchandise deliveries to certain areas in your city. Are some workers are using the wood needed for your construction works? Reduce wood deliveries to the ship makers or tool makers until the crisis is over. Do you

have enough tools to allow this, or do you have more urgent problems to solve in this area? What will you do to have a sufficient stock of wood? Did you train enough forest rangers? Will you be able to solve the crisis more rapidly by cutting the trees down in a new forest? If there is no forest around, a new guard hut will allow you to annex new lands if you need to. You will always find new tasks in SERF CITY because each game is different.

Carefully examine your opponent's strengths; look at his territory and guess what he is trying to do. Determine his weak points so that you can attack him. Has he built only one iron mine? Destroying that would allow you to deprive him of his raw materials. Is one of his warehouses easy to take, or lacking food? Could you interrupt his food, merchandise, and/or building production? The problems you face are the same that your opponents face. There are several ways to freeze up his economy.

Depending on the size of the world, the number of serfs is limited as follows:

world size	number of serfs
1	500
2	1,000
3	2,000
4	4,000
5	8,000
6	16,000
7	32,000

Hints and Tips on Professions

This section contains some hints and tips for the various serf professions.

Butcher: The butcher works quickly and, in spite of many deliveries from the pig farmers, he generally does not have any problems with his work.

Caster: Casting takes a little while and the caster cannot cast the ore of several mines fast enough without falling behind. He can catch up as soon as the deliveries slow down. Depending on the size of his backlog, you need to hold back on new construction.

Construction Worker: The land for the construction of large buildings is rare, and consequently, expensive. Do not construct huts and small roads on land where you could construct a larger building.

Farmer: The farmer needs unoccupied land in order to transform it into fields. Roads are not considered unoccupied land, so do not construct too many roads around a farm. To allow the farmer quick travel to his fields, avoid building farms on steep terrain.

Fisherman: A lake that is as big as the game screen contains enough fish for three or four fishermen. Spread the fishermen out on the lake; if they all fish in the same spot, they will not catch anything.

Geologist: When the geologists return home after their prospecting, they stay in the warehouses with nothing to do. From time to time, send them back into the mountains to look for new underground riches. You may discover a new vein of gold that you had missed before.

Lumberjack and **Forest Ranger**: These two complement each other perfectly. The forest ranger can replace the trees cut down by the passing of the lumberjack. Wood is the raw material with the highest demand, so use several lumberjacks and forest rangers. The forest rangers cannot plant trees on the roads. Do not place them in the general vicinity of the castle or near the warehouses. Place trees on land that is not perfectly flat and that cannot be used for other things.

Miller and **Baker**: One miller and one baker are enough for several farms. Be sure that the roads used for transporting their merchandise are not too long.

Miner: If he can no longer find anything, burn the mine down so he finds a new profession. In the mountains, construct a network of roads with numerous branches to facilitate the transport of raw materials to the valley.

Sawmill Worker: One sawmill is sufficient for several lumberjacks; as the game progresses you may have to construct more.

Ship Maker: For large lakes use water ways to quickly transport merchandise. Make sure that the ship maker does not use up all your wood to build a fleet of boats. As soon as he has finished his work, stop giving him wood.

Transporter: When you demolish a road, you interrupt the transport of merchandise passing in that direction. Try to figure out a way to leave roads intact, and do not destroy important connecting roads. Merchandise has to wait for the arrival of a new transporter before being transported on a new road. Any modification of your network affects the transportation of merchandise. Construct a well-organized network of roads right from the start.

How do the serfs choose the road on which to transport the merchandise? It is a rather complicated procedure. It is important to know where the merchandise is needed. A mill can be very close and contain a lot of wheat, even though the stock of another mill that is further away is dried up. Moreover, certain merchandise is distributed according to the menu parameters.

When a destination has been found for the merchandise, the serfs take the shorter route. The essential element is the number of roads that the merchandise has to pass by; a very long road between two flags is faster than a shorter voyage with an intermediate flag. You have, therefore, a great advantage, because you can influence the choice of roads for transportation. Here is an example: you have placed a flag on each side of a warehouse and a road to connect it to your network. All merchandise that must travel through the warehouse is already keeping the crossroads very busy. The merchandise transported from one flag to the other, and in both directions, blocks traffic even more. On the other hand, if you create a new connection between the two flags (even if it makes an apparent detour around the warehouse), the traffic no longer passes in front of the warehouse, but by the new road that allows you to avoid it. This principle allows you to construct complex networks around important warehouses or castles, which, in turn, allows you to transport merchandise more rapidly.

Remember that any construction, demolition, and transformation of roads initially has negative effects on the transportation of merchandise. It is only when the serfs adapt to the new situation that the transportation of merchandise proceeds normally. Your workers often have to cross over enemy land to cut down trees or harvest wheat. In the mines, you can take advantage of this situation and steal underground riches from the enemy.

The Behavior of Your Opponents

All adversaries have different personalities and playing strategies. Here is a brief presentation of the principal character types:

Lady Amalie

Amalie is an inoffensive, reserved lady, who goes about her work peacefully.

Kumpy Onefinger

Kumpy is a very hostile character who loves gold above all else.

Balduin, a former monk

Balduin is a very discrete character who worries chiefly about protecting his lands and his important buildings.

Frollin

His unpredictable behavior may take you by surprise. Frollin "pilfers" away lands that are not occupied.

Kallina

Kallina is a fighter who blocks her enemy's food supply with clever tactics.

Rasparuk the Druid

Rasparuk's tactics consist of amassing large stocks of raw materials. He is a sly aggressor.

Count Aldaba

Protect your warehouses well, because Aldaba is aggressive and knows exactly where he must attack.

King Ralph VII

Ralph is a prudent ruler, without any particular weakness. He tries to check his adversaries' supply of construction materials.

Homen Doublehorn

Homen is the most aggressive enemy. Watch your buildings carefully, or he may take you by surprise.

Sollok the Joker

Sollok is coy and treacherous; he tries to stop the supply of raw materials to his enemies from the beginning.

Need Help?

During the game, you can sometimes find yourself in a "no-win" situation. For example, if you have lumberjacks but no more wood, the construction of a new hut can pose a serious problem. All is not yet lost, however, because you can always send your knights into combat. If you do not have any stocks at the beginning of the game, you may end up quickly lacking materials. If you do not watch your production closely, you may find that you lack one unit of wood for the sawmill too late . . . and have to restart at zero.

To avoid this, an "emergency program" is started at the beginning of the game. This program is, in fact, a reserve of two units of granite and seven units of wood that allow you to construct a lumberjack's hut, sawmill, and quarryman's hut.

If you need materials, these construction sites receive them as a priority, because these three buildings are necessary to continue the game. If all the hammers have been distributed to the construction workers and to the geologists, you will not have any hammers left for a new tool maker. The tool maker is the only person who could make more! It is for this reason that at the beginning of the game, certain serfs take the necessary tools.

The End of the Game

The game finishes when there is only one city remaining in the game's world. You can quit a game by left-clicking on the white, surrender flag in the attack menu. If the computer-controlled adversary pleads for you to quit, you can still decide whether or not to continue the game. There may be instances when several cities remain in the game. In this case, the game is a draw. This situation can happen when no city has enough knights and all the deposits of ore and coal are dried up, prohibiting the fabrication of weapons. In this case, there is no winner.

Early in the game, you will not have too many problems. Everything has been foreseen. But, later on, you become the sole person responsible for your successes and mistakes. Now that you know everything about the program, your knowledge should be sufficient to confront the computer or challenge another player! Enjoy.

REFERENCE MATERIAL: Jobs

Baker	Geologist	Tool Maker
Blacksmith	Leveler	Transporter (Water Ways)
Butcher	Lumberjack	Transporter (Merchandise)
Caster (of Iron)	Miller (of Wheat)	
Construction Worker	Miner	
Farmer (of Wheat)	Pig Farmer	
Fisherman	Quarryman	
Forest Ranger	Sawmill Worker	
	Ship Maker	

Knights

2nd Lance Corporal	
1st Lance Corporal	
Corporal	
Lieutenant	
Captain	

REFERENCE MATERIAL: Resources and Tools

Axe	Gold (Ore)	Scythe
Boat	Ham	Shield
Bread	Hammer	Shovel
Butcher's Knife	Iron	Stones
Coal	Iron (Ore)	Sword
Fish	Pick	Tree Trunks
Fishing Rod	Pigs	Wheat
Flour	Pliers	Wood
Gold	Saw	

REFERENCE MATERIAL: Buildings

 Bakery

 Fisherman's Hut

 Blacksmith's Shop

 Forest Ranger's Hut

 Butcher Shop

 Garrison

 Castle

 Gold Foundry

 Gold Mine

 Coal Mine

 Farm (Wheat)

 Granite Mine

REFERENCE MATERIAL: Buildings

 Guard Hut

 Quarryman's Hut

 Guard Tower

 Sawmill

 Iron Foundry

 Ship Maker's Shop

 Iron Mine

 Tool Maker's Shop

 Lumberjack's Hut

 Warehouse

 Pig Farm

 Windmill

CREDITS

Blue Byte Credits

Producer	**Thomas Hertzler**
Project Manager	**Stefan Piasecki**
Programming and Conception	**Volker Wertich**
Graphics	**Christoph Werner**
Music	**Haiko Ruttmann**
Rule Book Writers	**Volker Wertich, Stefan Piasecki**
PC Adaptation	**Alexander Jorias, Ingo Frick, Volker Wertich**
Introduction	**Christoph Werner** (Graphics), **Ingo Frick** (Program)
Playtesters	**Matthias Best, Frank Grimm, Michael Passmann, Birgit Krause**

SSI Credits

Producer	**Bret Berry**
Associate Producer and Rule Book Author	**Jason Ray**
Rule Book Editors	**Eileen Matsumi, André Vrignaud, Joshua Cloud**
Product Test Supervisor	**Glen Cureton**
Product Tester	**Chris Lanka**
Test Support	**Annette Grove, Rose Ramos**
Rule Book DTP	Louis Saekow Design: **Dave Boudreau, Leedara Zola**
Rule Book Printing	**A&a Lithographers**

WHAT TO DO IF YOU HAVE A DEFECTIVE DISK

Each of our games undergoes extensive playtesting prior to its release. Through this process we hope to uncover and correct any errors in programming. However, due to the complex nature of our simulations, some program errors may go undetected until after publication. In addition to errors in the program, there are occasionally problems with the disk itself. We experience the industry standard of approximately a 3 to 5% failure rate of duplicated disks. Before assuming that a disk is defective, make sure to check your disk drive. Up to 95% of the disks returned to us as defective will run fine on our computer systems. Often the problem is with a disk drive that needs servicing for alignment, speed, or cleaning.

Should you have a defective disk, please return the disk only (keep all other parts of the game) to our Customer Support Department, along with a note describing the problem you have encountered. A replacement disk will be provided upon our receipt of the defective disk.

Should you uncover an error in the program, return both your game disk and any "save game" disks to our Customer Support Department. Please enclose a description of what was taking place in the game when the error occurred. Upon correction of the pro-gram error, we will return an updated disk to you.

> **Always make sure to include your name, address, and daytime telephone number with any correspon-dence. We will do our best to see that any problems are corrected as soon as possible.**

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Our main business number is (408) 737-6800. **If you encounter disk or system related problems you can call our Technical Support Staff at (408) 737-6850 between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, holidays excluded.** NO GAME PLAYING HINTS WILL BE GIVEN THROUGH THIS NUMBER. You can write to us for hints at: Hints, Strategic Simulations, Inc., 675 Almanor Avenue, Suite 201, Sunnyvale, CA 94086 (include a self-addressed, stamped envelope for reply).

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Many of our games will work on IBM compatible computers. If you own an IBM compatible computer we suggest that you consult with our **Technical Support Staff at (408) 737-6850** between 11 a.m. and 5 p.m., Pacific Time, Monday through Friday, (holidays excluded) to see if an SSI game you're considering purchasing is compatible with your comput-er. If we have insufficient data to determine compatibility, you may wish to purchase the game and test for compatibility yourself. If the game proves to be incompatible, you may return it within 14 days with your dated receipt and we will refund your money. Or, if you return the game within 30 days, you may exchange the game for another.