

FreeCol scenario Tutorial

Introduction

In this scenario we want to test the human ability to optimize the use of a fairly simple set of resources:

FOOD, LUMBER, ORE and BELLS are basic resources

TOOLS and HAMMER are refined resources. They cannot be harvested directly but instead have to be created by transforming basic resources.

While FreeCol has many more possibilities, we have stripped a large set of actions from the game (for those who know the game):

1. The player plays alone with no opposition
2. The player cannot use immigration or resources from Europe
3. The player will not be able to choose Founding Father

To keep a controlled environment, we ask the players to limit their actions to the following:

1. Use their units to collect basics and refined resources, within the confines of the colony of Brussels.
2. Use the resource to build any buildings they see fit to improve colony production
3. Build as many artilleries as they can before year 1776, this will serve as a metric to measure the colony efficiency

In particular, we ask them not to:

1. Plow fields or remove forests or start any kind of improvements on the tiles
2. Use their units to build additional colonies

During the course of the game, we will keep track of the following metrics:

1. Colony size
2. Production Modifier
3. Sons Of Liberty Percentage
4. Number of artilleries stationed in Brussels.

The colony screen

The main view that the player will use is the colony screen. You can access it by right clicking on the colony. From here you can:

1. Move around units by dragging and dropping them from one tile to another, or into a building. You can right-click a unit to change his profession and have him gather another type of resource from the same tile if it's allowed (all tiles allow for FOOD, LUMBER and ORE, but some are more fit to one resource type than another)
2. See how many of each resources are produced/consumed each turn
3. Access the build queue to improve the colony with buildings of build artificeries



Goods

FOOD

Food sustains colonists. Each colonist will consume 2 FOOD every turn. If the colony runs out of food, one colonist will disappear each turn there is a famine. If the FOOD reaches a 200 surplus, a new colonist will be created in the colony and the surplus will be reset to 0. Use this mechanism to grow your colony and increase its production capacity

LUMBER

Lumber has no direct use, but it is required to produce HAMMERS. HAMMERS are one of the basic requirements to build artilleries and buildings.

ORE

Ore, like lumber, has no direct use. Instead it is used to produce TOOLS. TOOLS are the second basic requirement to build artilleries. Some buildings also require TOOLS to be built.

BELLS

BELLS can be harvested by placing a unit in the Townhall. BELLS indicate the liberty of the colony. In the original game, the player needed to harvest enough BELLS to declare independence. In this scenario, BELLS only affect the production modifier of the town. If a colony has between 50% and 99% liberty, each colonist inside will produce one more resource per turn. If a colony has 100% liberty, each colonist will produce two more resources per turn. Conversely, if the number of free colonists (rebels) is 6 less than the number of royalists, the colony will have a -1 production modifier, cutting down each colonist's production by one. If the colony has 10 more royalists than rebels, the colony will have a -2 production modifier.

HAMMERS

HAMMERS are transformed from LUMBER by having units work in the lumberyard. One unit of LUMBER is necessary to produce one HAMMER. Hammers are a prerequisite to build artilleries and buildings

TOOLS

TOOLS are transformed from ORE by having units work in the blacksmith shop. One unit of ORE is necessary to produce one TOOL. TOOLS are a prerequisite to build artilleries and some buildings.





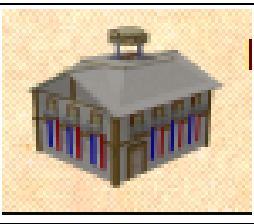

Units

There are two types of units: Colonists and artilleries. Colonists can work everywhere and do every job. Colonists working on a tile have a chance to become a specialist at their job (expert farmer, expert lumberjack, and expert ore miner). Once they become specialist, they will have a bonus to produce the kind of goods they are specialized in. Colonists cannot become expert at working inside a building.

Artilleries are used to defend the colony or attack other colonies. In our scenario, they are simply a benchmark of how efficient the colony is at producing things. Before one can start building artilleries, the player has to build the armory building (Artilleries will not appear as an option in the build queue before the armory has been built). Then the player needs to accumulate enough hammers and tools to complete the unit. Having as many of those units by the time the game ends in 1776 will tell us how good the player was, and we will compare that to the results of our AI

Buildings

The colony has several buildings already built. Not all of them are interesting in our scenario however. Additionally, some buildings can be upgraded after some prerequisites are met. Here's a short list of the interesting buildings:

	<p>Townhall: Produces bells. Already built.</p>
	<p>Carpenter House: Transforms LUMBER into HAMMERS. Already built. Can be upgraded to a lumbermill (after colony reaches size 3)</p>
	<p>Blacksmith House: Transforms ORE into TOOLS. Already built. Can be upgraded to a Blacksmith Shop.</p>
	<p>Armory: Required to build artilleries.</p>
	<p>Printing Press: Improve bell productions in the Townhall. Can be upgraded to a Newspaper after colony reaches size 6</p>
	<p>Last building in the city screen: The last building in the city screen is the top of the build queue. The number on it is the number of turns before the building is completed. If it shows 'N/A', it means that the colony is not currently producing everything that is required (Hammer and tools).</p>