

# Antropy

**"Frostpunk, but with substantially more legs"**

Bernd Pogartitz, Haris Sarac, Dzemail Rozajac,  
Gerhard Dorn, Adrian Steinmann

November 18, 2022

Game Design Document Template  
Version v1.1, Nov 2016  
Version v1.2, Dec 2017  
Version v1.3, Nov 2019  
Version v1.4, Mar 2020  
Copyright 2017-2020 - Johanna Pirker #tugamedev

The game plays from the point of view of an ant queen trying to manage and ensure the survival of the colony. As one of the smallest but also the strongest entities of the forest your ability to shape your surroundings will be crucial to survival.

# Contents

<b>1</b>	<b>Overview</b>	<b>6</b>
1.1	Main Concept . . . . .	6
1.2	Unique Selling Point . . . . .	6
<b>2</b>	<b>References</b>	<b>7</b>
<b>3</b>	<b>Specification</b>	<b>8</b>
3.1	Player(s) / Target-group . . . . .	8
3.2	Genre . . . . .	8
3.3	Art Style . . . . .	8
3.4	Forms of Engagement . . . . .	8
<b>4</b>	<b>Gameplay and Game Setting</b>	<b>9</b>
4.1	Mood and Emotions . . . . .	9
4.2	Story . . . . .	9
4.3	World/Environment . . . . .	9
4.4	Objects in the Game . . . . .	9
4.5	Characters in the Game . . . . .	10
4.6	Main Objective . . . . .	10
4.7	Core Mechanics . . . . .	10
4.8	Controls . . . . .	11
<b>5</b>	<b>Front End</b>	<b>12</b>
5.1	Start Screen . . . . .	12
5.2	Start Game . . . . .	12
5.3	Options Menu . . . . .	12
5.4	Credits . . . . .	12
5.5	Quit . . . . .	12
5.6	End Screen . . . . .	12
<b>6</b>	<b>Technology</b>	<b>13</b>
6.1	Target Systems . . . . .	13
6.2	Hardware . . . . .	13
6.3	Development Systems/Tools . . . . .	13
<b>7</b>	<b>Topic and Inclusion</b>	<b>14</b>
7.1	Main Theme . . . . .	14
7.2	Inclusion . . . . .	14
7.2.1	Diversity . . . . .	14
7.2.2	Accessibility . . . . .	14
<b>8</b>	<b>Marketing and Publishing Strategy</b>	<b>15</b>
<b>9</b>	<b>Timeline and Cost Estimation</b>	<b>16</b>
9.1	Time Estimation . . . . .	16
9.2	Cost Estimation . . . . .	16



# 1 Overview

## 1.1 Main Concept

Ensuring the colonies survival of the winter season is the main goal. The player will play through a year of 4 seasons, each season with different challenges. The challenge of the game will be to transform the tiled map to your needs, sustainability will be the core challenge. Food that you gather will be exhausted if you do not consider the impact excessive gathering and or the seasons will have on them. Another factor will be your population and anthill, managing the population, assigning tasks to grow, work and explore.

## 1.2 Unique Selling Point

The focus of the player will be the population managing instead of gathering a vast variety of resources to upgrade, build, explore and grow. The altering seasonal map and different tile layouts will challenge the player to think strategical on how to assign the population in the limited time. The population management will fall back to a scaling challenge, the larger the population the more considerate you have to be with the amount of available resource tiles you can access.

## 2 References

- Banished, Shining Rock Software

Banished focuses on a vast variety of resources you need to gather, to ensure your city will grow and flourish. A core mechanic of this game is the assignment of the population to various tasks, the game challenges you to optimize and adapt with a very limited population count.

For Antropy the focus on the population is rather similar but we would change the priority from the vast variety of resources to a single one and focus more on optimization of the work force and transformation of the world map itself. Antropy will also play turn based, so the players have to be more strategic with their time.

- Frostpunk, 11 bit studios S.A.

Frostpunk is a city builder that focuses on mixture of limited resources, exploration, population management and temperature management in a frozen wasteland.

The core mechanic of Frostpunk is definitely the way you need to handle temperature and the well being of your population, so it is a constant struggle against the odds. While Frostpunk gives you a sense of needing to be resourceful with your resources, there is a point in the game where the constant struggle will start to stagnate and you stabilize. The reasoning behind that is that resources are not very limited but your population is. For Antropy we're trying a different approach to the optimization problem, instead of struggling against freezing temperatures the player needs to play very sustainable with the resources on the map, if you overexert them, they might take longer to recover.

## 3 Specification

### 3.1 Player(s) / Target-group

Player(s) who enjoy management games like

- Anno
- Frostpunk
- Banished

### 3.2 Genre

Turn based strategy

### 3.3 Art Style

3D Low-poly

### 3.4 Forms of Engagement

Fantasy - Game as make-believe

Challenge - Game as obstacle course

Discovery - Game as uncharted territory

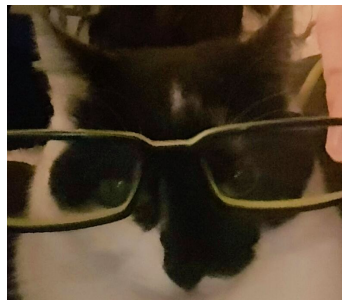


Figure 3.1: Art example



## 4 Gameplay and Game Setting

### 4.1 Mood and Emotions

The seasons itself should have a different mood setting to them

- Spring - calm, relaxed
- Summer - excited, productive
- Autumn - stressed, resolute
- Winter - anticipation, dread

### 4.2 Story

You're a inexperienced ant queen trying to ensure the survival of her colony.

### 4.3 World/Environment

The game takes place in a forest region, which is represented as a 2d grid. The region will change according to the seasons and possible events that can influence the region tiles. The tiles will be divided into a section of 4 types of tiles:

- Grass
- Water
- Stones
- Soil

Each of the tiles presenting the player with possible actions to transform or harvest them.

### 4.4 Objects in the Game

- Ant Hill
- Game Map
- Tiles of the map
- Season Interface
- Reports

## 4.5 Characters in the Game

- Ant Colony
- Ant Queen
- Population

## 4.6 Main Objective

Ensure you have enough food, population and upgraded your anthill to survive the coming winter.

## 4.7 Core Mechanics

The Population grows constantly, this means the player will have to upgrade the anthill to not run into the population cap, which will bring negative effects on the colony.

The player can assign the population to

- explore
- care of larva
- construct/upgrade
- harvest

Everything related to assignment will cost time, in the case of a turn based game either single turns or multiple ones to achieves result. The player can assign on his turn and expect results of his assignment the following term, with either a progress bar or the results.

The Anthill is in constant need of upgrades and maintenance to keep up with the population cap, which mean the player will be forced to upgrade it constantly. Upgrades are as follows:

- population cap
- storage capacities
- hatchery
- depth of the anthill

The map and the tiles are the key factor to multiple mechanics

- construct/upgrade on tile resources
- harvest resources with population assignment
- explore the map with population assignment

Factors that can change a tile:

- construct/upgrade on a tile
- exhaust it with gathering

- seasons
- events (climate change, weather)

The seasons will bring various changes to the tiles:

- Spring: fast regrow bonus
- Summer: medium regrow bonus
- Autumn: slow regrow bonus
- Winter: No more regrow, no tile access

The weather also influences the tiles:

- Sun, easy tile access, no bonus
- Overcast, normal tile access, no bonus
- Rain, slower tile access, major regrow bonus
- Fog, slower tile access, minor regrow bonus
- Snow, no tile access, no bonus

The influence of the tile system with weather and seasons are factors the player needs to consider, factors can be negated if the player invests into upgrades of tiles.

## 4.8 Controls

The controls are mainly done with the mouse input, with additional shortcuts for easy access of the menus and interfaces.

Left click - select

Right click - do action

B - building

M - map

H - anthill

Option for touch input will be considered.

## 5 Front End

### 5.1 Start Screen

- Start Game
- Options
- Credits
- Quit

### 5.2 Start Game

- Game Save Slot 1
- Game Save Slot 2
- Game Save Slot 3
- Back to Start Screen

### 5.3 Options Menu

- General
- Video
- Audio
- Controls

### 5.4 Credits

- Credits

### 5.5 Quit

- Quits the Game

### 5.6 End Screen

- Time
- Population
- Score

## **6 Technology**

### **6.1 Target Systems**

The game is designed for Desktop Windows machines, optional also for mobile games.

### **6.2 Hardware**

The game is played with the mouse and keyboard.

### **6.3 Development Systems/Tools**

As art tools the team is using Blender, Clip Studio, Krita, Aseprite, Inkscape and for sounds Audacity.

The game will be developed in Unity.

## 7 Topic and Inclusion

### 7.1 Main Theme

The main theme is build around the idea of four seasons and adaptation of the player to the changing environment. Sustainability concepts are trained by taking care of resources and not exploiting the environment.

### 7.2 Inclusion

#### 7.2.1 Diversity

The game is designed for anyone, it shall be inclusive. Optional: Adding a language module for localisation.

#### 7.2.2 Accessibility

Colourblind mode, where the player can adjust the colour.

## 8 Marketing and Publishing Strategy

Prerelease strategy: follower building

- regular postings on Twitter #Antropy and on Mustodon about game progress
- Giving a talk at GameDevGraz Meetup
- Optional: creating a webpage
- Optional: Crowdfunding campaign

Release is planned on common platforms such as Steam, etc.. Optional: Export for mobile and publishing on Google PlayStore and IOS Appstore.

## 9 Timeline and Cost Estimation

Milestone	Description	Date
	Official Start Date	04.11.2022.
1	First Prototype	16.12.2022
2	QA Feedback Discussion	13.01.2023
3	Game Release v1.0	27.01.2023
4	Game Release v1.5	03.03.2023
	End of Project	03.03.2023

Table 9.1: Schedule.

### 9.1 Time Estimation

Expected development time according to ECTS time equivalents: 500 hours in total.

### 9.2 Cost Estimation

Expected costs under normal market conditions: 15000€ (30€ per hour)



## 10 Team and Credits

Project Management: Bernd Pogartitz, Gerhard Dorn

Programming: Bernd Pogartitz, Haris Sarac, Dzemail Rozajac

Art: Adrian Steinmann, Haris Sarac

UI Design: Gerhard Dorn