

# Paros's Infestation

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# Paros's Infestation GDD

A game design document is the blueprint from which a game is to be built. As such, every single detail necessary to build the game should be addressed. The larger the team and the longer the design and development cycle, the more critical is the need.

## 1. Game Overview

### 1.1. Game Concept

Rook Bellator is a 23 year old special operative in the ICG on a mission to recover an egg of the Unke nest near his home island in the Republic of Unitatis. One day Memora and her team presented their Unke research to the armed forces of the ICG, theorizing that the Unke are ancient creatures that are now taking back their breeding grounds. The island of Malum is also theorized to be one of these breeding grounds and it is advised to find the nest and destroy it. But the ICG doesn't believe her, however Rook does and set it as his personal mission to disobey orders and prove that his lifelong friend is in fact right.

### 1.2. Genre

The game's genre is action-adventure stealth.

### 1.3. Target Audience

The target audience is young men and women, ages 16 - 36.

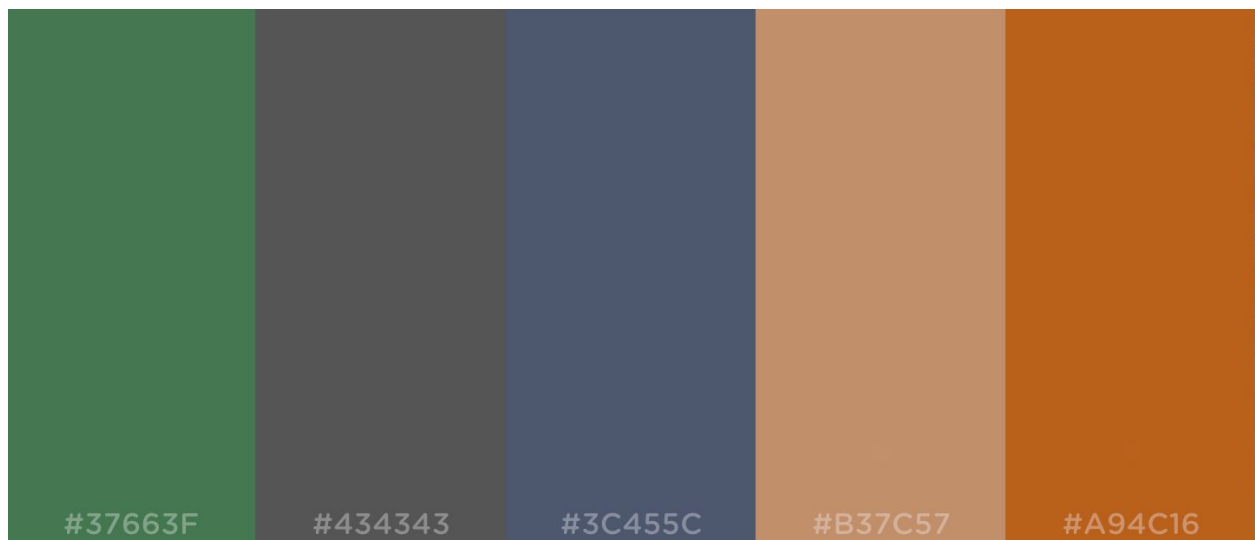
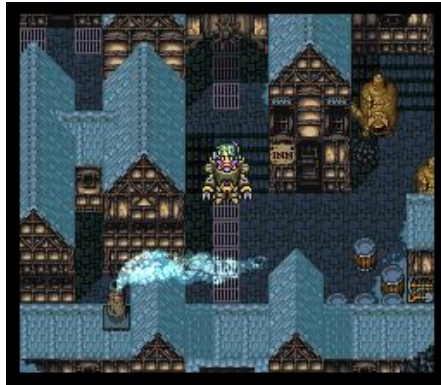
### 1.4. Game Flow Summary

The flow of the game is as follows: beach (training) > forest > city > cave > city > forest beach. The game is a linear progression so player will only have one path to follow. When the player dies they will be able to restart in the same area that they die in.

## 1.5. Look and Feel

The look and feel of the game is gritty and dark. To accomplish this tone, the color palette will contain muted, cold colors with few warmer complementary highlights.

The style is 16-bit pixel art that is similar to the Fire Emblem, Final Fantasy, or Chrono Trigger's art - but darker.



## 2. Gameplay and Mechanics

### 2.1. Gameplay

#### 2.1.1. Game Progression

The player will move through the environments, avoiding the Unke, finding their nest, retrieving an egg, and make it off the island alive.

#### 2.1.2. Puzzle Structure

The puzzles of the game are the level designs and enemy behaviors. The puzzles are the navigating around the various Unke without being detected.

#### 2.1.3. Objectives – What are the objectives of the game?

1. Avoid or eliminate the Unke while navigating the island.
2. Retrieve an egg from the Unke nest.
3. Make it off the island alive with the egg.

### 2.2. Mechanics

The player can be seen, smelled, and heard by the Unke.

The player can run and sneak up, down, left, right, or diagonally. These movements produce different levels of sound, running being the loudest and sneaking being the quietest.

The player can shoot their pistol and it can hurt the Unke.

#### Enemy Stimuli and the Player:

##### Sight

Each enemy will have a cone of vision that they will constantly use, unless asleep, to detect the player. Different enemies will have different cones of vision, one small, one medium, and one large. If the player is in the enemy's cone of vision for a second, the enemy will notice and investigate the spot of the sighting, looking around it for a few seconds, then resuming their set behavior. If the player is caught in this cone of vision for 2 seconds, the enemy will pursue the player. If the enemy loses sight of the player during pursuit, the enemy will look around the last sighting of the player for a few seconds, then resume their set behavior.

##### Smell

The player will always be emitting some smell particles in a small radius that can be detected by the Unke. These have a short lifespan, move slowly, can collide with objects, and can be masked by hiding in bushes. When the player has the egg, the egg emits a much stronger, longer lasting smell.

### Sound

The player makes sound by doing actions. This sound is shown to the player through visual sound waves. Enemies can detect these sound waves and will investigate them upon hearing them.

#### **2.2.1. Physics**

The physics work in the same manner as our Earth.

#### **2.2.2. Movement in the game**

Movement is limited to 360 degrees from a top-down view on the X and Y axis. Player is able to run, walk and crouch.

#### **2.2.3. Objects**

Player can use the terrain and objects to help them avoid the enemy, while some of the objects might work against players.

Flower = cover smell

Tree/ large rock = blocks sight

Moving in cave = increase the noise the player makes

The player can only pick up an egg and they do this by pushing the E button on a keyboard.

#### **2.2.4. Actions**

Actions the player can take are:

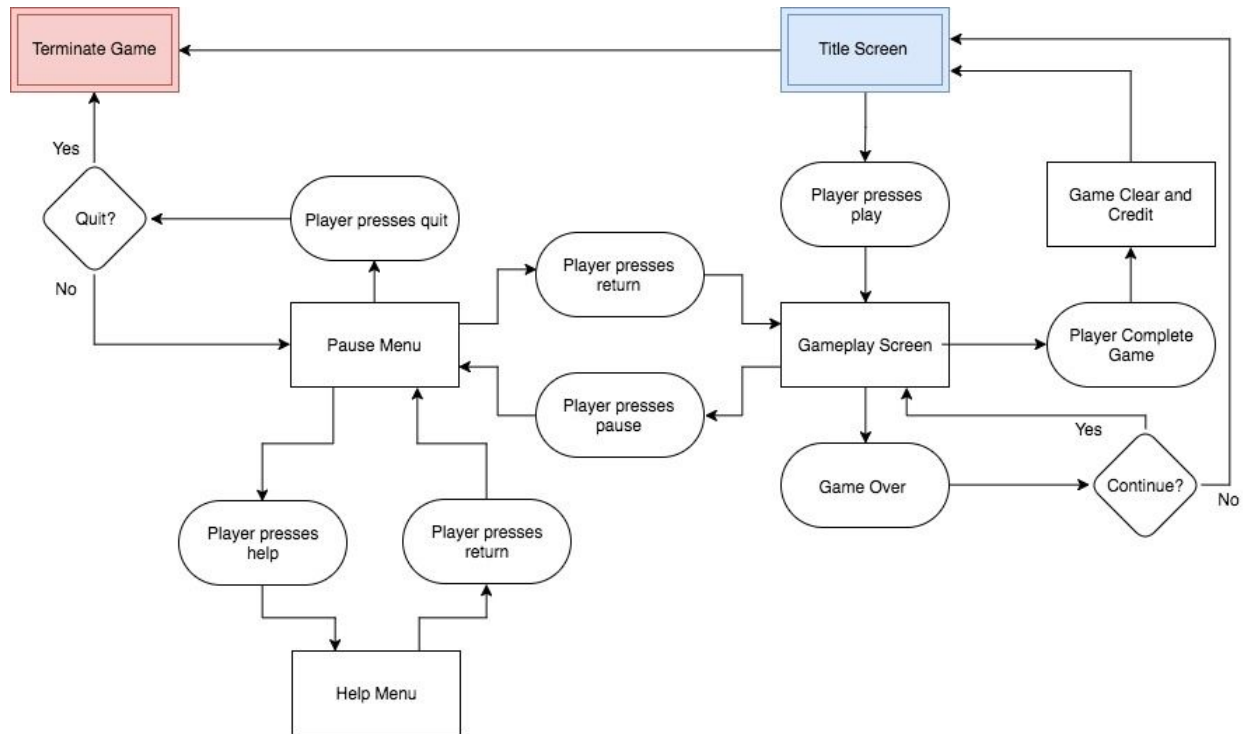
1. Moving/Sneaking around slow or fast.
2. Hiding.
3. Throwing rocks for distraction.
4. Shooting the player's guns and killing Unke.
5. Sneaking behind the Unke and temporarily paralyzing them with a stun gun.

#### **2.2.5. Combat**

Combat is between the player and the Unke. The island will be filled with various Unke for the player to sneak around or take out. The player can sneak around them, temporarily disable them with their stun gun, or kill them with guns. The player can be detected by the Unke, can choose to run and hide, or fight them with varying degrees of success. Fighting them is done with the guns the player has, being able to shoot the Unke and kill them, but the guns are loud and will

attract other Unke, quickly overwhelming the player if they don't act fast. Ammo is very limited and must be conserved.

### 2.2.6. Screenflow



### 2.3. Game Options

The options menu will consist of the player being able to change the different settings of the game. From enabling, or disabling the sound effects, and music. It will also consist of the help button that will enable the player to see a quick peek at what the controls are, and how to play.

### 2.4. Replaying and Saving

The player will not be able to save the game. Replayability-wise the game will be the same every time that the player plays it. However, the character will be able to get checkpoints for every zone they enter.



### 3. Story, Setting and Character

**3.1. Story and Narrative** – Includes back story, plot elements, game progression, and cut scenes. Cut scenes descriptions include the actors, the setting, and the storyboard or script.

The world has been dramatically changed by the awakening of the ancient sea creatures known as the Unke. Memora Tenetelle, a scientist studying the Unke, has come up with a theory that they are taking islands to breed and make nests for their offspring, one of these islands being Malum, an island once part of the Republic of Unitatis.

The ICG does not fully believe this theory, as there are other theories, and there is a lack of concrete evidence supporting Memora's. The ICG dismisses the theory until further evidence is gathered, and declines her request to invade the island to destroy a nest they don't know is there.

Rook Bellator, an ICG special operative and childhood friend of Memora, believes her theory and is determined to fight back against the Unke, and prevent as many human deaths as possible. With the help of mentor and friend Otis Alcock, Rook goes on a secret infiltration mission to grab an Unke egg from Malum to prove Memora's theory and get the help of the armed forces.

#### 3.2. Game World

##### 3.2.1. General look and feel of world

The color tones of the world are dark blue, rust orange, sand, grey, and dark green. The fashion in the Republic of Unitatis is close to that of the early 1900's commoner clothes.

##### 3.2.2. Areas

We have four sections: Beach, Forest, City, and Cave. The Beach will be the shortest part of the game, having very little land. The Beach is connected to the Forest, the Forest is connected to the City, and the City is connected to the Cave.

Some of the characteristics of each area will include:

Beach: sand, rocks, water

Forest: trees, rocks, foliage

City: ruined/abandoned buildings, patches of gravel road

Cave: stalagmite, boulders, dark corners, puddles

### 3.3. Characters

**Rook Bellator:** Rook Bellator is a 23 year old special operative in the ICG on a mission to recover an egg of the Unke nest near his home island in the Republic of Unitatis.

Rook was born 27 A.A. on the island of Pala in the Republic of Unitatis. His father died fighting the Unke in 30 A.A.. Rook's family was very close to the Tenetelle family, their neighbors, who they often shared food with. Memora Tenetelle was Rook's childhood friend, who also lost her father to the Unke. They often played with each other and were companions until they went their separate ways.

When Rook was 11 years old and being chased by some older bullies, he took refuge in a boat by the harbor. There he met Otis Alcock, a grizzled retired soldier smoking one of his hand-rolled cigars. Otis asked the kid, "What's the rush, kid? Why are you here?" After an explanation, Otis tells him, "I'll take care of this, boy." He grabs his pump shotgun and scares away the bullies. Having empathy for Rook, he tells him to come back the next day, they'll share some fish and chips, and he'll teach Rook how to fight. Otis becomes a mentor and father figure for Rook, teaching him to defend himself, teaching him about the world, his war stories, sharing his books with him, and more. They share much time and many memories with each other over the next decade.

When Rook became 17 years old, he joined the armed forces of the ICG, while his childhood friend Memora became a scientist to study the Unke.

While Rook trained and fought in the armed forces, the ICG saw that he was a very talented soldier. In the year 133 A.A. the ICG selected Rook to become part of TESO, Tactical Elimination Special Operatives. Rook went on many missions as part of TESO, saving lives from Unke assaults, defending towns and cities, etc.

One day Memora and her team presented their Unke research to the armed forces of the ICG, theorizing that they are ancient creatures that are now taking back their breeding grounds. The island of Malum is also theorized to be one of these breeding grounds and it is advised to find the nest and destroy it.

**Memora Tenetelle:** Memora Tenetelle, a scientist that is dedicated to the study of the Unke, has recently come up with the theory that the reason Unke are so keen on attacking the humans are because they needed the island to reproduce. So Malum has most likely become a breeding ground for the Unke.

**Otis Alcock:** Rook's mentor and father figure.

Otis is a 64 year old retired naval captain.

Rook sees him as a father figure because Rook's father died at a young age. He looked up to Otis and joined the armed forces because of him. He lives on his

ship and is a rugged man of the sea. Rook goes to him for assistance to get to Malum.

## 4. Levels

**4.1. Levels.** Each level should include a synopsis, the required introductory material (and how it is provided), the objectives, and the details of what happens in the level. Depending on the game, this may include the physical description of the map, the critical path that the player needs to take, and what encounters are important or incidental.

### 1. Beach (Tutorial Level)

One type of Unke or none, and some basic cover like palm trees and rocks to aid the player in sneaking around the Unke. The beach will be either a peninsula or small beach surrounded by rocks.

### 2. Forest

The first actual level of the game. The player will encounter more Unke and be introduced to all types of Unke and given details on each. Objects in the forest will be trees, rocks, and bushes.

### 3. City

The second level of the game. The player will encounter more unique Unke patterns here making the game slightly more difficult. Objects in the city will be broken buildings, rubble, and foliage.

### 4. Cave

The final level of the game. The player will encounter the greatest Unke resistance here. Objects in the cave will be rocks, puddles, and stalagmites.

**Player Environment Stimuli Difficulty Level**

Name	Sight	Sound	Scent
Beach	Normal	Normal	Normal
Forest	Normal	Normal	Decreased
City	Normal	Increased	Normal
Cave	Decreased	Increased	Normal

<b>Cave (egg)</b>	Decreased	Increased	Increased
<b>City (egg)</b>	Normal	Increased	Increased
<b>Forest (egg)</b>	Normal	Increased	Increased
<b>Beach (egg)</b>	Normal	Normal	Normal

## 5. Interface

**5.1. Visual System.** If you have a HUD, what is on it? What menus are you displaying? What is the camera model?

The HUD will contain a revolver cylinder at the bottom right-hand corner of the screen with a bullet and number count to the left of it. The revolver cylinder will show how many bullets are in the gun, with a maximum being 6. It will also contain a pause button that not only pauses the game but gives the player the options to resume play, help, and disabling/enabling the music and sound.

**5.2. Control System – How does the game player control the game? What are the specific commands?**

The player will move around using the W,A,S,D keys, aim their reticle with the mouse, and upon weapon activation, look towards reticle and use equipped weapon. The player will be able to move 360 degrees on the X and Y axis, aim the reticle, and use the currently equipped item in the direction of the reticle.

**5.3. Audio, music, sound effects**

We will use everybody's sound libraries.

**5.4. Help System**

Located in the help menu, under the pause menu.

## 6. Artificial Intelligence

**6.1. Opponent and Enemy AI** – The active opponent that plays against the game player and therefore requires strategic decision making

The Enemy AI will have basic predatory animal instincts. They will use their various stimuli, including sight, hearing, touch, and smell to detect the player, then proceed to attack until the player is dead. The Unke will patrol, guard, wander, and sleep.

**Unke Statistics**

Unke Type	Speed	Sight	Hearing	Smell	Health
Larva	Increased	Decreased	Decreased	Decreased	Decreased
Regular	Normal	Normal	Normal	Normal	Normal
Hearing type	Normal	Decrease	Increase	Decrease	Normal
Sight type	Normal	Increased	Decreased	Decreased	Normal
Smell type	Increased	Decreased	Decreased	Increased	Normal
Rock Shell	Decreased	Decrease	Decrease	Decrease	Increase

### 6.2. Non-combat and Friendly Characters

Otis is the only friendly character to make an appearance in the game. He captain's the boat that brought the player to the island, and is the player's way off the island.

The various animals of the island are non-combat, they are just living there.

### 6.3. Support AI -- Player and Collision Detection, Pathfinding

The player will collide with all things as they do in our world. The player can collide with rocks, trees, buildings, etc. The player will not collide with the tops of items, such as trees, so the player can get behind them.

The AI will be able to navigate through the maps, avoiding collisions with obstacles to get to where they are programmed to go.

## **7. Technical**

### **7.1. Target Hardware**

The game will be able to run on Google Chrome, Firefox, and Safari. The operating systems able to run the game are PC and Mac.

OS: OS X version Leopard 10.5.8, Snow Leopard 10.6.3, or later.

Windows: Windows 7 or later.

Processor: Intel Core 2 Duo @ 2.4 Ghz

Memory: 4GB RAM

Hard Disk Space: 500 MB Free Space

Video Card: Graphics Card with 256 MB of RAM

### **7.2. Development hardware and software, including Game Engine**

We will use Unity to develop the game, Photoshop to develop the art, and Tiled for the level design.

### **7.3. Network requirements**

Internet access is required to play the HTML 5 version of the game.

## **8. Game Art** – Key assets, how they are being developed. Intended style.

Our intended style is 16-bit pixel art, similar to that of early to mid-90's with the game art being similar to games on the Sega Genesis or Super Nintendo.

Key assets that need to be made are the tilesets for the 4 environments, the characters, the creatures, and two cutscenes.

The art assets will be developed with Adobe Photoshop.



