

Survive The Pale

Game Design Document

Prototype

Concept	3
Core Loop	3
Game Structure	4
Power Scale	5
Player	6
Creature Design	7
Behavioural System Design	9

Concept

Survive The Pale is a top-down silhouette-based puzzle game in which the player must manipulate a hostile ecosystem to find a path forward. The player cannot fight. They can only observe, think, and act.

North Star: Overcome uncertainty through deliberate manipulation and find a path forward.

Design Philosophy: The player is never in danger from what they don't know how to do. They are in danger from what they cannot fully predict. Progress belongs to those who can read the world well enough to act anyway.

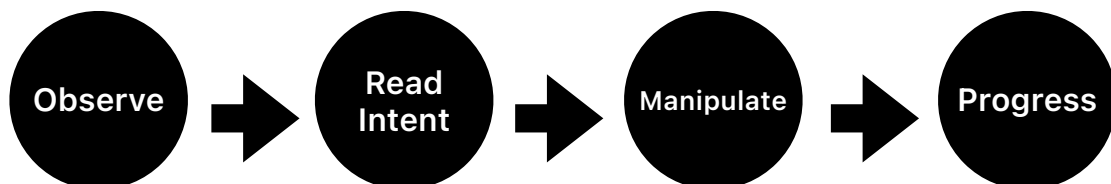
Genre: Puzzle

Perspective: Top-down, fixed vertical with horizontal pan

GUI: Phaser Editor 5

Visual Constraint: Black, white, and one accent colour. No textures. No UI text. All information communicated through shape, scale, motion, and timing.

Core Loop



The player enters a level and immediately reads the ecosystem. Creatures are moving. Patterns are visible. The player identifies what is blocking their path and what tools the environment gives them to address it.

Every action the player takes is an influence on creature behaviour, a fruit thrown, a direction moved, or a position held for instance. The ecosystem resolves the consequences. The player reads the result and acts again.

Progress is earned through correct reads and deliberate action, not reflexes or combat skill.

What sustains the loop across levels: The power scale remains constant but the arrangements change. The player carries forward their understanding of creature behaviour as the only persistent resource. Knowledge is the progression system.

Game Structure

Survive The Pale is structured as a series of self-contained levels.

The Run Level Loop

Enter Level

Read Ecosystem Identify Obstacles Form Plan Execute Progress

Reach Exit

Each level is composed as a sequence of zones. Each zone presents the player with a creature arrangement that blocks forward progress. The player must manipulate the ecosystem within that zone to clear a safe path before moving to the next.

What the player is always solving

Every zone reduces to one of two core problem types:

Problem type	Description	Example
Clearance	A creature is blocking the path and must be moved or occupied	Throw fruit to redirect a Tier 2 Herbivore out of the path
Chain Reaction	Two or more creatures must interact to create an opening	Bait a Tier 2 Herbivore into a Tier 2 Carnivore's detection zone, carnivore kills herbivore, carnivore eats, player passes during eating window

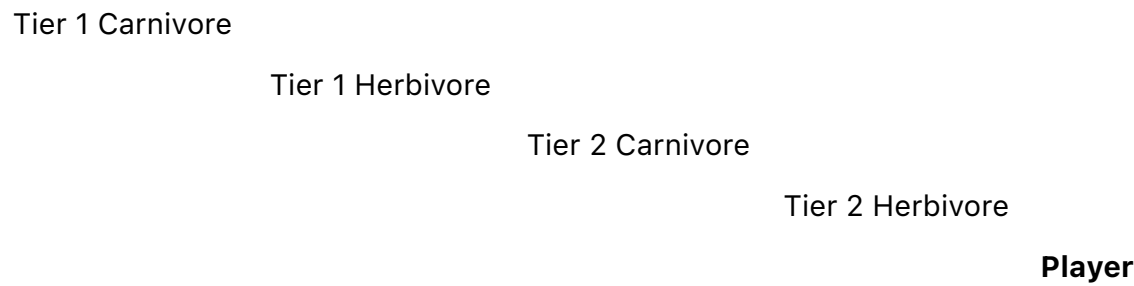
The Teaching Progression

Levels are designed on the principle of constrained agency — geometry and creature placement direct the player toward intended discoveries without explicit instruction. The player always feels in control even when the outcome is guided. The progression follows a deliberate teaching curve:

- **Early levels** introduce one creature type at a time. Zone geometry is narrow and linear, limiting options to guarantee the intended lesson is experienced.
- **Mid/Late levels** combine creature types and introduce the fruit throw as a deliberate tool. Zones open up spatially, giving the player room to experiment.

Power Scale

All creatures in Survive The Pale are ranked on a single power scale. When two creatures encounter each other directly, the higher ranked creature always wins.



Why the player is at the bottom

The player cannot attack. Their only actions are movement and fruit/corpse throwing. This places them below every creature on the power scale. Any direct encounter with any creature results in death.

This is an **intentional design decision**. Placing the player at the bottom of the power scale removes combat as a solution entirely. Every problem in the game must be solved through manipulation, not force. The player's power is informational. They are the only entity in the ecosystem that can read the whole picture and act with deliberate intent.

The Hierarchy is Interlaced

The power scale is not cleanly divided into herbivores and carnivores. The Tier 1 Herbivore sits above the Tier 2 Carnivore. This is deliberate. A purely predator versus prey hierarchy would make creature interactions predictable and limit puzzle complexity.

The interlaced hierarchy means the player cannot assume a carnivore will always beat a herbivore. They must know the specific matchup. This rewards knowledge and creates surprising chain reaction possibilities.

Combat Outcomes (Quick Reference)

Creature A	Creature B	Outcome
T1 Carnivore	Any creature	T1 Carnivore Wins
T1 Herbivore	T2 Carnivore	T1 Herbivore Wins
T1 Herbivore	T2 Herbivore	T1 Herbivore Wins
T2 Carnivore	T2 Herbivore	T2 Carnivore Wins
Any Creature	Player	Player dies

Player

The player is the weakest entity in the ecosystem. They have no attack and no defence. Their survival depends entirely on reading creature behaviour and manipulating the ecosystem before any creature detects them.

Actions

Action	Input	Description
Move	Directional input	Move across the level. Movement is the player's primary manipulation tool. Player presence triggers flee and attack responses in creatures.
Pick up	Automatic when adjacent to item	Pick up a fruit or corpse found in the level.
Throw	Space bar + left click	Throw the current item in the aimed direction. Thrown items land at a target location and trigger creature responses on landing.

Why the player cannot attack

Removing attack as an option is the single most important design decision in the game. If the player could attack, every problem reduces to a combat problem. The ecosystem manipulation loop only exists because the player must work through the ecosystem rather than against it. Powerlessness is the design.

Inventory

The player can carry only one item at a time. Inventory is intentionally limited to create resource management decisions. The player cannot pick up every fruit they see and save them all for later.

This decision was made to maintain the difficulty in each zone. If the player can pick up and store items from a previous zone, it would trivialise the difficulty and planning required in the following zones. Level design as a result is also easier. Zones can be designed without the worry of player actions previously. Although the player can still carry an item between zones in a level, this is meant to reward the player for finding optimal solutions to puzzles.

Pick-up— able Items (limited to prototype)

Item	Description
Fruit	Found in the environment. Any herbivore moves to eat it when detected.
Corpse	Found in the environment, left when any creature dies. Any carnivore moves to eat it when detected.

Creature Design

All creatures in Survive The Pale are silhouettes. Their identity is communicated through shape, scale, and motion alone. Each creature has a distinct behavioural profile that the player must learn and exploit to progress.

Tier 2 Herbivore

Identity: Small, rounded silhouette. Movement is smooth and unhurried in neutral state. Snaps to fast erratic movement when fleeing.

Role in the ecosystem: The Tier 2 Herbivore is the player's primary manipulation tool in early levels. It is attracted by fruit and repelled by creatures. These two properties make it a reliable redirect target. The player can move it predictably by exploiting either response.

Behavioural Rules

Priority	Context	Behaviour
1 (highest)	Creature detected	Flee immediately
2	Fruit detected	Move towards, eat, return to neutral
3	Nothing detected	Roam within area

Note: The player is treated as a creature. The Tier 2 Herbivore will flee from the player on detection. This is the first lesson the game teaches.

Tier 1 Herbivore

Identity: Medium silhouette with angular, sharp features. Movement is deliberate and heavy in neutral state. Aggressive and direct when attacking.

Role in the ecosystem: The Tier 1 Herbivore is a mid-tier threat and a mid-tier tool. It is dangerous to the player but exploitable against Tier 2 Carnivores. Its indiscriminate aggression means the player can weaponise it by baiting it toward any target.

Behavioural Rules

Priority	Context	Behaviour
1 (highest)	Creature detected	Attack immediately
2	Fruit detected	Move towards, eat, return to neutral
3	Nothing detected	Roam within area

The Tier 1 Herbivore's indiscriminate aggression is its defining property. It does not distinguish between prey and predator. This makes it unpredictable to a new player but powerful to a player who understands the power scale.

Tier 2 Carnivore

Identity: Medium-large silhouette with a lean, predatory shape. Movement is purposeful during patrol. Accelerates sharply when chasing.

Role in the ecosystem: The Tier 2 Carnivore is the primary obstacle creature in mid-game levels. It is dangerous enough to threaten the player but vulnerable to the Tier 1 Herbivore, which the player can exploit. Its eating behaviour, pausing on a corpse, creates the primary opening window the player targets in chain reaction puzzles.

Behavioural Rules

Priority	Context	Behaviour
1 (highest)	T1 Carnivore detected	Flee immediately
2	Corpse detected	Move towards, eat, return to neutral
3	Any other creature detected	Chase and attack
4	Nothing detected	Roam within area

Carnivores only eat corpses. They ignore fruit entirely. A carnivore eating a corpse is the primary opening window in chain reaction puzzles. The duration of this window is a key balance variable.

Tier 1 Carnivore

The apex predator. Attacks everything without exception.

Identity: Large, imposing silhouette. Slow and deliberate in patrol. Relentless when chasing. Never breaks pursuit.

Role in the ecosystem: The Tier 1 Carnivore is the most dangerous static obstacle in the game. It cannot be outmatched by any other creature. The player's only options are to avoid its detection zone entirely or engineer a situation where a corpse occupies it temporarily.

Behavioural Rules

Priority	Context	Behaviour
1 (highest)	Corpse detected	Move towards, eat, return to neutral
2	Any creature detected	Chase and attack
3	Nothing detected	Patrol area

The Tier 1 Carnivore's eating behaviour is its only exploitable property. Every puzzle involving a Tier 1 Carnivore requires the player to engineer a corpse in the right location at the right time.

Behavioural System Design

All creature behaviour in Survive The Pale is driven by a context-based state machine. The system is deterministic, every creature will always produce the same output. This determinism is non-negotiable. The player's ability to manipulate the ecosystem depends entirely on creature behaviour being consistent and learnable.

System Architecture

Each creature is a self-contained prefab with four components attached:

Component	Responsibility
Detection Radius	A circular physics body that broadcasts what it detects to the State Decider. Radius size is unique per creature.
State Decider	Receives detection broadcasts and determines which state to assign based on the creature's priority rules. Resolves conflicts when multiple conditions are satisfied simultaneously.
State Manager	Holds the current active state. Switches states on instruction from the State Decider. Activates and deactivates behaviour nodes accordingly.
Behaviour Nodes	One (script) node per state. Each node contains the logic for that state only. Nodes are inactive until the State Manager activates them.

Detection Radius

The Detection Radius is a circular physics body centred on the creature. It fires an overlap event when another entity enters or exits its range. On overlap it broadcasts the detected entity's type to the State Decider.

Detectable entity types:

- Player
- Creature (with tier and class tag)
- Fruit item
- Corpse item

The Detection Radius only reports what is currently inside it. When an entity exits the radius the State Decider is notified and re-evaluates the current state.

State Decider

The State Decider is the priority engine. When the Detection Radius reports one or more detected entities simultaneously, the State Decider evaluates all active conditions against the creature's priority list and returns the highest priority state to the State Manager.

Example: T2 Herbivore detects food and creature simultaneously

Active Conditions:

Fruit detected	——>	Opportunity state
Creature detected	——>	Flee state

Priority List:

1. Flee
2. Opportunity
3. Neutral

Result:

Flee state assigned

State Manager

The State Manager holds the current active state and switches states when instructed by the State Decider. It is responsible for activating the correct Behaviour Node and deactivating all others.

State transition rules:

- A state switch only occurs when the State Decider returns a different state than the current one
- State switches are immediate.
- When a Behaviour Node completes its task it notifies the State Manager, which triggers a re-evaluation from the State Decider

Behaviour Nodes

Each state has exactly one Behaviour Node (script node). The node runs its logic loop until either the State Manager deactivates it or the task completes.

State Descriptions

States	Descriptions
Neutral	idle wander, tight radius (150), returns home(point) if strayed out of radius
Patrol	same wander logic, wider radius (300)
Opportunity	seek + eat food-tagged entity, 2000ms eat window
Eat corpse	same as Opportunity, targets corpse-tagged entities instead
Chase	direct pursuit of a target tag, no eating logic
Flee	flees nearest threat for a fixed 2000ms, uninterruptible until complete

States	Descriptions
Combat	full stop, plays combat animation, waits for resolution

Attack Resolution node

All creatures but the player additionally have an attackResolution node. When two creatures come into contact, after a carnivore has chased a herbivore for instance, they move into the combat state. To resolve the victor each creature has an attack resolution node which compares the two creatures against the power scale and returns the creature that must turn into a corpse.

Rules:

- Triggered by physical overlap between any two creatures, both forced into Combat state
- 3000ms resolution window, then powerValue compared
- If Equal both die; higher wins, lower dies
- Death spawns a corpse (for eligible types) which becomes player-pickup-able inventory

Combat is never something the player initiates directly. The player's only lever is positioning: herding, baiting, or redirecting creatures into contact with each other. Attack Resolution enforces this at the system level: resolution triggers purely from physical overlap between creatures, with the power scale as the sole arbiter of outcome. There is no player input during the 3000ms window. This keeps the player's role strictly informational. They can engineer the collision, but never fight it.