



EDGE OF EXTINCTION

AN ANIMAL CONSERVATION GAME

Protecting the planet's most vulnerable species through strategic decision-making and awareness.

Project Overview

The mission to turn educational awareness into high-stakes strategic gameplay.

Summary

What is the Game?

Edge of Extinction is a cooperative strategy game where players act as conservation leaders. The goal is to manage resources to prevent five critically endangered species from reaching the "Edge" of permanent extinction.

The Audience

Designed for strategy board game enthusiasts, environmental educators, and families. It combines deep resource management with emotionally resonant ecological narratives.

Game Design Document



Message

Conservation is a complex web of limited resources, political will, and unpredictable natural threats.



Core Mechanics

Species Status Trackers, Threat Card Escalation, and Role-Based Action Point Allowance.



Victory Condition

Stabilize all five species tracks before the "Extinction Deck" runs empty or three species are lost.

The Iterative Design Process

Refining the Tension

Initial designs were overly focused on random destructive events. Iterations shifted the weight toward **Resource Management**.

- **Challenge:** Players felt helpless against high-threat cards.
- **Decision:** Introduced "Prevention Actions" that allow players to mitigate threats before they trigger.
- **Result:** Increased agency and strategic depth without losing thematic urgency.

The Five Species Spotlight



Amur Leopard

Target of illegal wildlife trade and habitat loss.



Vaquita

Vulnerable to illegal fishing nets in the Gulf of California.



Sumatran Orangutan

Facing rapid deforestation for palm oil plantations.

The Five Species Spotlight



Black Rhinoceros

Targeted by international poaching syndicates for the illegal trade of their horns.



California Condor

Critically impacted by lead poisoning from ingesting fragments of spent ammunition in carrion.

Player Goals and Winning

- ❑ **Protect biodiversity:** Keep endangered species from going extinct across global ecosystems
- ❑ **Stabilize ecosystems:** Maintain biome health while responding to escalating environmental threats
- ❑ **Manage resources:** Strategically use limited funding, research, and influence each round
- ❑ **Balance teamwork + competition:** Collaborate to survive while optimizing personal impact

Winning Conditions

- ❑ **Global Victory:** Most ecosystems remain stable and a majority of species survive
- ❑ **Global Loss:** Too many extinctions or total ecosystem collapse ends the game for everyone

Individual Win Layer

- ❑ Players earn **Conservation Impact Points (CIP)** for saving species and stabilizing ecosystems
- ❑ Highest CIP becomes the **Leading Conservation Force**, even within a shared outcome

Mechanics

- ❑ **Semi-cooperative gameplay:** Players must work together to prevent global extinction, but compete for individual Conservation Impact Points.
- ❑ **Round-based crisis system:** Each round escalates environmental threats that progressively worsen ecosystem stability
- ❑ **Action economy:** Each player has a small number of actions per round, forcing prioritization and teamwork.
- ❑ **Ecosystem & species system:** Biomes and species shift between **Stable** → **Endangered** → **Critical** → **Extinct** based on player decisions and threats.
- ❑ **Dynamic threat deck:** Randomized environmental crises (climate events, poaching, disease, habitat loss) stack and escalate over time.
- ❑ **Asymmetric player roles:** Each role has unique abilities (e.g., policy control, research upgrades, field recovery, funding boosts)
- ❑ **Global extinction pressure:** A shared extinction track acts as a fail state timer if it fills, all players lose.
- ❑ **Victory condition tension:** Survive as a group while maximizing individual impact for scoring dominance.

EDGE OF EXTINCTION

TOGETHER WE CAN SAVE TOMORROW

GAME OVERVIEW

Work together as global conservation teams to protect endangered species and the ecosystems they depend on. Manage resources, reduce threats, restore habitats, and keep species from going extinct.

PLAYER ROLES

RESEARCH SCIENTIST
Discover species needs faster and gain extra Research.

WILDLIFE RANGER
More effective at removing threats and combating poaching.

POLICY ADVOCATE
Reduce Threat escalation and pass stronger protections.

HABITAT RESTORER
Restore habitats faster and heal collapsed ecosystems.

PLAYER REFERENCE

ACTIONS (Take 2 per turn)

PROTECT SPECIES
Add protection / reduce extinction pressure.

FUND CONSERVATION
Spend funding to support projects.

REMOVE THREAT
Remove or reduce threat cards/tokens.

RESTORE HABITAT
Add habitat points / heal ecosystems.

RESEARCH
Gain research or discover species needs.

You may take the same action twice.

SHARED RESOURCES

FUNDING
0 1 2 3 4 5 6 7 8 9 10

RESEARCH
0 1 2 3 4 5 6 7 8 9 10

HABITAT POINTS
0 1 2 3 4 5 6 7 8 9 10

GLOBAL THREAT TRACK

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
When the track reaches 20, the world is overwhelmed. All players lose.

RAINFOREST

HABITAT STABILITY
1 2 3 4 5

SAVANNA

HABITAT STABILITY
1 2 3 4 5

OCEAN

HABITAT STABILITY
1 2 3 4 5

ARCTIC

HABITAT STABILITY
1 2 3 4 5

SPECIES EXTINCTION TRACK (GLOBAL)

KEEPING SPECIES ALIVE 0 1 2 3 4 5 6 7 8 9 10
If 6 or more species go extinct, all players lose.

CONSERVATION PROJECTS (Optional Shared Objectives)

PLAYER MAT / AREA
Keep your role card, resources, and reference here during the game.

PROTECT CORRIDORS
Maintain habitat connections between biomes.
Reward: +2 Habitat Points

ANTI-POACHING INITIATIVE
Reduce poaching threats across the world.
Reward: +2 Funding

RESEARCH BREAKTHROUGH
Advance global research and conservation knowledge.
Reward: +2 Research

DISCARD AREA
Used Threat and Event cards go here.

Components and Game Board

- 1 Modular World Map Board (ecosystem regions: rainforest, ocean, tundra, savanna, etc.)
- 30–40 Endangered Animal Cards
- Role Cards
- Threat Deck (climate events, poaching, deforestation, pollution, disease)
- Conservation Action Cards Resource Tokens (funding, research, influence)
- Extinction Track (global loss meter)
- 5 Player Faction Boards Dice (optional crisis resolution mechanic)
- Status Markers (Stable, Endangered, Critical, Extinct)

Rulebook Sample

EDGE OF EXTINCTION

A Strategic Conservation Tabletop Game

Players: 2-5 | Time: 45-90 min | Age: 12+

GAME OVERVIEW

The world is fragile. Every decision matters. Players take on the role of conservation teams working to prevent endangered species from going extinct. You must balance limited resources, respond to global threats, and make difficult trade-offs to protect ecosystems before time runs out.

While the goal of survival is shared, the organization that manages their resources most effectively will be named the **Lead Conservation Network**.

WINNING & LOSING

Global Victory: At least 70% of species remain alive AND no ecosystem has fully collapsed.

Global Collapse: All players lose if the Extinction Track reaches maximum or 50% of species are lost.

THE GAMEPLAY LOOP

Phase 1: Global Threat

Draw 1-2 Threat Cards. Apply effects like habitat loss, population decline, or poaching surges to the board.

Phase 2: Player Action

Each player takes 2 actions: Deploy Funding, Conduct Research, Relocate Species, Negotiate Policy, or Restore Habitat.

Phase 3: Species Resolution

Check survival conditions. Adjust status markers: Stable → Endangered → Critical → Extinct.

Phase 4: Recovery

Gain resources based on surviving ecosystems. Stabilized habitats allow for drawing new Animal Cards.

FEATURED SPECIES

Black Rhinoceros

Targeted by international poaching syndicates for the illegal trade of their horns.

Habitat: Savanna | **Trait:** Heavy Armor - Immune to minor environmental threats, but highly vulnerable to Poaching Cards.

California Condor

Critically impacted by lead poisoning from ingesting fragments of spent ammunition in carrion.

Habitat: Mountain/Canyon | **Trait:** Scavenger - Can move to adjacent regions to find food, but takes 1 damage if the region has "Pollution" markers.

Vaquita

Vulnerable to illegal fishing nets in the Gulf of California.

Habitat: Coastal Ocean | **Condition:** Requires removal of "Commercial Net" markers to stabilize.

PLAYER FACTIONS

- **Field Biologist:** Bonus to species recovery actions.
- **Policy Advocate:** Reduced cost for Global Influence actions.
- **Research Scientist:** Unlocks technology upgrades 1 turn faster.
- **Funding Director:** Gains +1 Funding Token during the Recovery Phase.
- **Crisis Response:** Can negate one "Event" card per game.

Playtesting and Refinement

Cognitive Overload

Players found tracking simultaneous systems (Species, Threats, Resources) overwhelming in early rounds.

Co-op Balance

CIP scoring occasionally incentivized competition that undermined group survival goals too early.

Pacing Curve

The early game felt overly "safe," followed by abrupt, unavoidable collapses due to stacked Threat cards.

Downtime

Disengagement occurred while active players resolved complex ecosystem checks and resolution steps.

Emotional Experience

Strong thematic weight led to discouragement. Balancing the "high stakes" with "recovery moments" is vital.