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Ruleset version 1.0

Species

In *Species* You take the role of ecosystem stewards working to keep ecosystems in balance as new species arrive to them. Your objective is to foster a diverse ecosystem while managing the effects that result from species pushing their new homes out of balance.

Overview

Stewards in *Species* will each have their own Ecosystem Card to manage. Every ecosystem has 3 statistics: Sun, Water, and Earth (SWE for short). Each time a new species arrives to an ecosystem, these 3 statistics are impacted. Your goal as a steward is to keep these 3 values within certain ranges.

Every turn, stewards must play one new Species Card from the Species Pool or Deck to their ecosystem and add or subtract that card's SWE values to their ecosystems SWE ranges. If adding a species to an ecosystem causes values to rise or fall below the coloured ranges, that ecosystem becomes imbalanced and Species Cards added during that turn trigger their invasive effects.

Playing Action Cards can stop or mitigate Species Cards effects.

Goal of the game

Your goal as a steward is to foster a diverse and balanced ecosystem. To this end, your success is measured in ecopoints. Every steward starts with 3 ecopoints that correspond to their ecosystem's SWE values being in balance. Every time one of your SWE ranges falls out of balance you lose 1 point and every time to get those ranges back in balance, you get that point back.

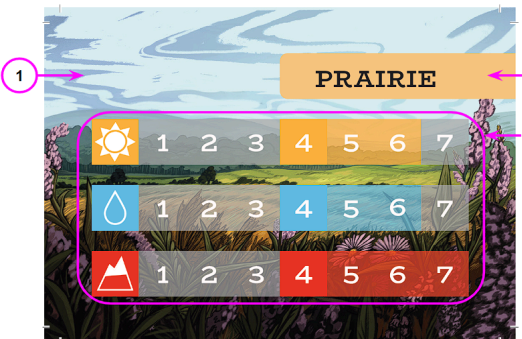
To earn more points, form pairs or trios of Species Cards of different kingdoms. A single pair of Species Cards will give you 1 point. A trio will give you 2 points.

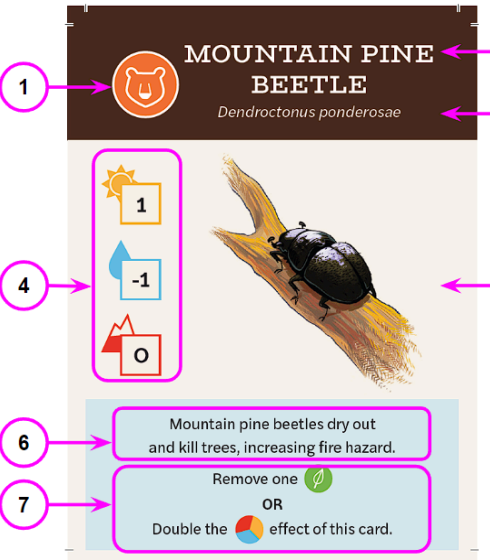
First steward to finish their turn with 6 ecopoints wins.


Contents

This box contains all the components you need to play:










- 4 ecosystem cards
- 28 species cards (1 of each)
- 20 action cards (2 of each)
- 4 Sun tracking tokens
- 4 Water tracking tokens
- 4 Earth tracking tokens
- This rule booklet



Ecosystem Cards	#	Element	Description
 <p>The image shows a 'PRAIRIE' ecosystem card. It features a landscape background with a sun, water, and mountains. There are three rows of numbers (1-7) corresponding to Sun, Water, and Earth. The Sun row has a yellow background, the Water row has a blue background, and the Earth row has a red background. Numbered callouts point to: 1. The landscape illustration, 2. The 'PRAIRIE' name, and 3. The colored number ranges.</p>	1	Illustration	N/A
	2	Name	N/A
	3	Sun, Water, Earth ranges	The coloured or highlighted numbers are the numbers where the biome remains balanced.

Species Cards	#	Element	Description
 <p>The image shows a 'MOUNTAIN PINE BEETLE' species card. It features a brown header with a bear icon, the species name, and its scientific name <i>Dendroctonus ponderosae</i>. Below is an illustration of the beetle on a tree branch. To the left of the beetle are three small boxes with icons and numbers: a sun with '1', a water drop with '-1', and a mountain with '0'. At the bottom are two text boxes: 'Mountain pine beetles dry out and kill trees, increasing fire hazard.' and 'Remove one [leaf icon] OR Double the [sun icon] effect of this card.' Numbered callouts point to: 1. The bear icon, 2. The species name, 3. The scientific name, 4. The SWE effect boxes, 5. The beetle illustration, 6. The flavour text box, and 7. The invasive effect box.</p>	1	Kingdom / Category Symbol	What Kingdom the species belong to.
	2	Common name	
	3	Scientific name	
	4	SWE effect	Add or subtract each of these numbers to the SWE ranges in your ecosystem card.
	5	Illustration	
	6	Flavour text	This text is here to provide some real-life context about this species' effect on ecosystems.
	7	Invasive effect	The effect a species has on an ecosystem when the ecosystem is out of balance.

	#	Element
	1	Name
	2	Effect description

Glossary

Icon	Meaning	Icon	Meaning	Icon	Meaning
	Sun, Water, Earth (SWE).		Earth		Animal
	Sun		Species		Plant
	Water		Species Card		Fungi

	Action				
	Action Card				

How to play

Setup

1. Separate all the cards in 3 decks, one for each type of card.
2. Shuffle each deck.
3. Have each player draw a card from the ecosystem deck.
4. Give each player 3 SWE tracking tokens, one of each type.
 - a. Place your Ecosystem Cards face-up in front of each player
 - b. Place the Sun, Water, and Earth tokens on your ecosystem cards, on top of the underlined number in their respective ranges.
5. Place both the Species Deck and Action Deck within reach of all players.
6. Draw 3 Species Cards and set them face-up. This is the species pool.

Choose among the players who's going to start.

Game Phases

All player turns follow the same structure and steps:

1	Action Draw Phase	<p>If you have less than 3 Action Cards in your hand, draw one.</p> <p>You may play Action Cards in your hand at any point during your turn. Other stewards may also play special Action Cards after your Action Draw Phase.</p>
2	Species Selection Phase	<p>Select 1 Species Card from the pool OR draw a Species Card from the deck. This card now makes part of your ecosystem. Place it face-up next to your environment card.</p>
3	SWE Calculation Phase	<p>Calculate the SWE impact of new Species Cards in your ecosystem by moving the tokens by the amounts displayed on the Species Cards. If your token moves outside the coloured ranges in the ecosystem cards, your ecosystem is out of balance.</p>
4	Impact Phase	<p>If your ecosystem is out of balance, read Species Cards effect text. Most cards have two options to choose from. If more than 1 Species Card effect will take place, you decide their order.</p>

5	Point Calculation Phase	<p>Arrange your Species Cards in pairs or trios:</p> <p>Points</p> <ul style="list-style-type: none"> • Plant & Animal = +1 point • Plant & Fungi = +1 point • Animal & Fungi = +1 point • Animal & Fungi & Plant = +2 points <p>For either Sun, Water or Earth out of balance, -1 point.</p>
6	End Phase	If you have 3 Action Cards in your hand, you may discard 1 of them before ending your turn.

Other rules

- You may rearrange pairs and trios during your turn to maximise your points.
- Species Cards removed from an ecosystem do not affect SWE numbers of the ecosystem they leave.
- Species poached to a new ecosystem only affect SWE values once that steward's turn begins, not before.
- If any SWE calculation would move the token beyond the numbers in the card (below 1 or above 7), the token remains at either 1 or 7.
- For a steward to win they have to finish their turn with 6 points. Other stewards can still use Action Cards to prevent them from winning.

Species Appendix

WILD BOAR	Sus scrofa	Introduced ▾
GIANT HORNET	Vespa mandarinia	Introduced ▾
HONEY BEE	Apis mellifera	Introduced ▾
JAPANESE BEETLE	Popillia japonica	Introduced ▾
NUTRIA	Myocastor coypus	Introduced ▾
GOLDFISH	Carassius auratus	Introduced ▾
JUMPING WORM	Amyntas agrestis	Introduced ▾
MOUNTAIN PINE BEETLE	Dendroctonus ponderosae	Native ▾
BEAVER	Castor canadensis	Native ▾
GREY WOLF	Canis lupus	Native ▾

MOOSE	<i>Alces alces</i>	Native ▾
PURPLE LOOSESTRIFE	<i>Lythrum salicaria</i>	Introduced ▾
COMMON BUCKTHORN	<i>Rhamnus cathartica</i>	Introduced ▾
EUROPEAN FROG-BIT	<i>Hydrocharis morsus-ranae</i>	Introduced ▾
DOG-STRANGLING VINE	<i>Cynanchum rossicum</i>	Introduced ▾
FLOWERING RUSH	<i>Butomus umbellatus</i>	Introduced ▾
COMMON REED	<i>Phragmites</i>	Introduced ▾
CREEPING THISTLE	<i>Cirsium arvense</i>	Introduced ▾
BLACK SPRUCE	<i>Picea mariana</i>	Native ▾
ASPEN	<i>Populus tremuloides</i>	Native ▾
PRAIRIE ROSE	<i>Rosa arkansana</i>	Native ▾
SUGAR MAPLE	<i>Acer saccharum</i>	Native ▾
BEECH BARK FUNGUS	<i>Cryptococcus fagisuga</i>	Introduced ▾
RUST FUNGUS	<i>Cronartium ribicola</i>	Introduced ▾
PANTHER MUSHROOM	<i>Amanita pantherinoides</i>	Native ▾
DEADLY GALERINA	<i>Bretziella fagacearum</i>	Native ▾
DEATH CAP	<i>Amanita phalloides</i>	Native ▾
FLY AGARIC	<i>Amanita muscaria</i>	Native ▾

Why Species?

This game was designed and developed with the intent to spread awareness and education on the complex relationship between species and the environments they inhabit. We want to start the conversation and help people be curious about and understand the mechanics of species introductions into ecosystems. However, the effects displayed on our cards are abstractions and approximations and do not reflect the real impact these species have in their habitats. Creative liberties were taken to adapt how these organisms impact their ecosystems into game mechanics.

If you want to learn more and support the work that we do, please visit:

Where?	URL	QR
Donations	https://canadainvasives.ca/support-our-work/	
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Take action 1	https://canadainvasives.ca/take-action/report/	

Credits

Game design by	Martin Rodriguez
Illustrations by	Sarah Alouani
UI design by	Ruth Ormiston

Special thanks to	Rebecca Lord
	Fel Castañeda
	Gabby Nichols

The idea here would be to fit the following in a single card so the players can have it as reference while they play.

Cheat sheet

Every turn:

1. If you have less than 3 Action Cards, draw an Action Card.
2. Play a Species Card from the Pool or Deck.
3. Calculate SWE impacts.
4. If your ecosystem is out of balance, trigger effects of Species Cards added this turn.
5. You may discard an action card.

You may play Action Cards in between steps or during other stewards' turns if the card says so.

Points

- Plant & Animal = +1 point
- Plant & Fungi = +1 point
- Animal & Fungi = +1 point
- Animal & Fungi & Plant = +2 points

For either Sun, Water or Earth out of balance, -1 point