

Ecosystems Project - Save a Species!

As an **ecologist**, you have explored much of the world. While on one of your expeditions, you stumbled across a species that you have never seen before!

In order to protect this new species, you must create a presentation that will convince other ecologists and the government that this species must be saved.

1. **My Species is:** _____

2. **Species description:**

- Describe what your species looks like: size, shape, colour, legs, arms, eyes.
- Include a picture (or drawing) of your species.

3. **Ecosystem:**

- Describe the ecosystem where your species lives (ex: farm, ocean, swamp, forest).
- Describe abiotic and biotic features that can be found within the ecosystem.
 - Biotic: animals, plants (living organisms)
 - Abiotic: temperature, climate, soil (non-living)
- Describe how your species interacts with some of the biotic and abiotic features (it eats worms, it lives in a tree, it breathes water).

4. **Habitat:**

- Describe the habitat where your species lives (its home) within the ecosystem.
- Include a drawing or a picture of the habitat. You can even build model!

5. **Niche:**

- What is your species niche (its job) in its ecosystem?
- How does it get its energy (producer, consumer, predator, prey, scavenger?).
- Example: My species hunts birds in the early morning. To survive, it needs to eat at least 10 birds every morning so that it can have enough energy to do its job all day.

6. **Food Chain:**

- Draw a food chain for your species. Label the producers, consumers and decomposers.
- Label the primary, secondary and tertiary consumers as well.
- Make sure that your arrows show the direction of energy flow and that you explain how the energy is recycled in your chain.

7. **Energy Transfer:**

- Draw an energy pyramid for your species.
- Draw a pyramid of numbers that describes what is happening in your ecosystem.

8. **Protection**

- Explain why your species needs protection.
- Is there anything that is disrupting your habitat? Niche? Food chain?
- Are humans a factor?