

## ACTIVITY 3: INDICATOR SPECIES INFOGRAPHIC



The purpose of this activity is for students to research and communicate about an indicator species of their choice to explain how their indicator species functions in its environment.

### Materials:

- Chart paper and markers or digital tools for making an infographic
- Internet access for research

First, inform students that they will be researching an indicator species of their choice and communicating the story of how that species is used to serve as an early warning of a potential problem or danger in a particular environment. In this activity they will develop an infographic poster to tell the story of their indicator species.

Then, have them partner up with another student and select an indicator species to research. They should choose a real-world phenomenon that will serve as the central focus of the storyline. For example, the Spring Peeper is a tree frog species that appears in regions of North America, like the state of Maine, when winter finally breaks. It is known for its distinctive peeping calls during the breeding season, which typically occurs in early spring. This is usually triggered by warmer temperatures and increased daylight. Spring Peepers indicate that the waters have thawed and are healthy enough for the frogs to lay eggs.

Next, have them research enough information to create a storyline about their indicator species. They should develop a narrative or storyline that revolves around the chosen phenomenon and how the indicator species is involved with it.

**\*Teaching Tip:** Compile a list of indicator species that students can choose from for their research infographics.

### Research and storylines should include:

1. What the species is
2. The region where the species is found
3. What is the observed phenomenon that takes place with the species
4. When does the phenomenon happen
5. What are the environmental conditions to which the species responds (or does not)
6. Why the species is a valuable indicator
7. What is the sequence of steps that take place, involving the species, to indicate important environmental information
8. How is the population of the species doing currently in its typical environment
9. How has human activity, if at all, influenced the population of the indicator species

Next, on chart paper or using a digital tool, students should create an infographic that tells the story of the indicator species and its phenomenon, providing all the necessary information in an organized, logical and sequential fashion. There should be strong visuals, facts and data, and concise blocks of information to communicate the story of the indicator species and ideas about it.

Last, have students share their infographics with the class by giving poster presentations. Allow students a set amount of time to tell the story of their indicator species and present the information from their infographic to their peers. Give students the chance to ask follow up questions of the presenters. Encourage all students to create a data table from the presentations that lists out each indicator species, the observed phenomenon, and what the species indicates about its environment. That way, they will have a list of several indicator species when presentations are done.

### Evaluate the infographics and presentations based on any of the following criteria:

- Accuracy of information
- Clarity and organization of the infographic
- Creative use of visuals
- Communication during presentation