

Division of Outdoor Experiences

Habitats & Interactions

Grade Level: 2

Length of Program: 3 – ten-minute video segments (A, B, C)

Setting: Asynchronous Remote Learning

State Standards:

2.LS.1: Living things cause changes on Earth

2.LS.2: All organisms alive today result from their ancestors, some of which may be extinct. Not all organisms that lived in the past are represented by living organisms today.

2.SS, Sec. 3: People Working Together; Communities: Past and Present, Near and Far

Theme: Just as living things impact the environment in which they live, the environment impacts living things

Objectives

At the end of the program, students will be able to:

- Articulate that a habitat is the place where a living thing can meet all its basic needs
- Understand that habitats are diverse, and that different animals need the right habitat to survive
- Articulate one way living things (organisms) impact their environment
- Articulate one way that an environment impacts living things

Vocabulary (key concept words only)

- Habitat: a living thing's environment that provides all its basic needs
- Adaptations: special skills living things have, to survive in their habitat
- Extinct: a type of plant or animal no longer alive on Earth
- Extant: a type of plant or animal currently living on Earth

PROGRAM OUTLINE

Watch Video A

1. Introduction: Basic Needs of Living Things
 - Ask your students to say one thing they need and one thing they want. All living things have basic needs. The basic needs of animals include food, water, shelter, space, and air.
 - See if you students can identify an animal that traverses the outdoors near their home. Could this animal survive in Lake Erie? Habitats can look very different. They can be cold, hot, dry, wet, etc. Not all animals can survive in all environments. For example, a fish cannot live in the trees of a forest, and tropical animals cannot live where there are cold winters.

Watch Video B

2. Species Comparison: Two Salamanders, Two Habitats

- Review the following information that was introduced in the video: Salamanders belong to a group of cold blooded, backboned animals called amphibians. There are many types of amphibians, including frogs and toads. Most salamanders start as eggs that hatch into aquatic larvae that rely on gills to breathe. Over time, their body changes into its adult form in a process called metamorphosis. Within the group of salamanders, there is a lot of diversity! Some salamanders may be able to survive in habitats where other salamanders never could.
- Discuss examples of the following, in the classroom: Physical adaptations that are passed down as inherited traits can improve survival.
- Read a nonfiction/informational book about life cycles or amphibians that includes the topic of metamorphosis. Recommended titles include *Animal Life Cycles*, *Metamorphosis Changing Bodies*, or *Becoming a Salamander*. County library systems may offer eBook reading options
- Select a fictional book about salamanders by searching BookFlix, epic!, or RazKids for an online reading option. *The Salamander Room* can be read independently for 5 to 10 minutes at a time or by a grownup in one sitting. *Salamander Rescue* is a K-3 chapter book that can be read by grownups over a few days.

3. Living Things Can Affect Their Environment

- Explore the fact that organisms can create impacts on the environment, sometimes with negative outcomes for other living creatures.
- **Enrichment Activity:** Read *A River Ran Wild*. This is a book that exemplifies environmental stewardship and ethics, and human impact on natural habitats. In short, American Indians and European Colonists had opposing philosophies of land use. In this story, American Indians considered themselves part of nature while European Colonists thought of nature as something to conquer and that trees and water were profitable commodities.

Watch Video C

4. Environmental Impacts on Living Things

- How has recent weather affected the environment right outside your school? People and other living things can affect their environments, but environments can also impact living things. Sometimes major events like volcanic eruptions or natural changes in climate can alter the way an environment functions, and this can affect what animals survive. If an animal can adapt to changes in its environment, it will often survive and remain an extant species.
- Introduce the scientific disciplines related to paleontology and talk about your local natural history museum. Fossils are the impression of plants or animal bones preserved in rock. Some salamanders lived on Earth many millions of years ago and were not able to adapt to environmental changes. They are now considered extinct species. Evidence of their existence is seen in their fossil remains.
- **Enrichment Activity:** Choose an online fossil game from the American Museum of Natural History. Your students can do this during independent work time.
 - <https://www.amnh.org/explore/ology/paleontology#games>