

JUNE ACTIVITY SHEET

Use this activity sheet to explore the museum world in a whole new way!

JUNE ACTIVITIES

While the museum is closed, we hope you'll continue exploring our natural world. This month, let's talk about ecology and biodiversity.

The Academy has many scientists who study ecology. **Ecology** is the branch of biology that looks at how living things interact with and rely on other living and non-living things in their environment. **Biodiversity** is short for biological diversity. It means the variety of unique species found in a specific area, and it's really important! Learn more by completing the June activities.

BACKYARD BIODIVERSITY

Academy scientists know when they find a lot of biodiversity in an ecosystem¹ it's a healthy environment for the plants and animals living there — including the humans! Examine the biodiversity in your backyard or a nearby outdoor area by following the steps below.

Useful tools:

- A pencil and notepad
- A small bin for collection and observation

Instructions:

Choose an outdoor location and determine a square spot about three feet wide.

Start by examining the plants. How many species can you collect? Use your tweezers or safe scissors to snip specimens and collect them in your bin. Observe things like the plant's color and shape to determine if it's a different species from others you collect. As you search for plants, make a note of any bugs or other animals you see in your spot.

- Magnifying glass
- Tweezers or safe scissors

Questions to consider:

- How many plants did you collect?
- How many animals did you see?
- What non-living things do the plants and animals rely on?
- What other animals might visit this spot today?
- What do you think lives under the soil in this spot?

1. Ecosystem – a community of living and nonliving things that interact with each other in a specific area.

BIODIVERSITY AND THE FOOD WEB

To help us understand how plants and animals interact, scientists make diagrams called food chains. A food chain shows the order in which energy is transferred from one living thing to another by consumption (eating). Most animals can eat, and be eaten by, many different animals. When scientists put food chains together to show all of the living things involved, it's called a food web.

This helps us see that biodiversity is important! When we look at the food chain below, if there were suddenly no mayflies for the trout to eat, both the trout and the osprey would be impacted. But with a diverse environment, a lack of mayflies may not impact the food web if the trout still has mosquitos to give them energy.



