

Professional Development Situation: Activity Guide

Skill Focus: Enabling Active STEM Learning

Time Required: 90 minutes

EXPLORE YOUR HABITAT

In this activity, youth explore their environment and learn about plants, animals, and other living things in their local habitat.

Learning Objectives

- Youth will be able to describe what makes their local environment unique.
- Youth will be able to identify plants, animals, and other living things in their habitat.

Key Terms

- *Habitat*: ecological or environmental area that is inhabited by humans, a particular species of animal, plant, or other type of organism.

Materials

- Information about plants, animals, insects, and other living things that are unique to your local habitat or environment.
- Any special equipment you will need to explore your environment:
 - Binoculars, nets, waders, gloves, etc.

Advanced Preparation

- Review the activity and practice it on your own, if possible.
 - *Italics words are what you can say to youth.*
- Research unique local habitats and environments. This could be a nearby river, spring, wetland, grassland, forest, lake, cave, desert, or anything that is unique to your local environment.

- If you are not near any wild habitats and cannot plan a field trip to a habitat, try visiting a local zoo, botanical garden, or aquarium. Many zoos, botanical gardens, and aquariums have exhibits that showcase species native to your state or area.
- Before your fieldtrip to the local habitat, zoo, botanical garden, or aquarium, do your research! Look up what plant, animal, and insect species are native to the area so that you can be prepared to help youth identify them.
- Be familiar with what different species look like and where to find them as you encourage youth to get messy and explore their environment.
- Plan several possible discussion topics, so that you can ask purposeful questions and keep youth learning during their exploration.

Activity Instructions

Introduction (10 minutes)

- The habitat you choose to explore will dictate how youth move around the habitat and what discussions will take place.
- Encourage youth to be hands-on while exploring the habitat, reminding them to be respectful of the species living there. Be prepared for youth to get messy as they look under rocks, dig in the dirt, or wade in the water to discover what lives in the habitat.

Exploring the Habitat (60 minutes)

- As youth are exploring the habitat and identifying plants, animals, and other living things keep youth talking and processing what they see and hear.
- If youth ask you a question you do not know the answer to, don't panic! This is a great opportunity to get youth thinking about how they can find out the answer to their question. Maybe it is looking on the Internet when they get back from to your site, asking a staff person at the habitat, zoo, aquarium, or botanical garden, or looking at the environment to figure it out. You'll be teaching youth to problem solve, as well as reinforcing that it is okay to not know the answers. Learning is a process and they will feel a sense of accomplishment after finding answers to their own questions!

Habitat Reflection and Discussion (10 minutes)

Based on what youth see and hear in the habitat, start discussions as they explore or use some prepared discussion topics to debrief after their exploration. Some sample discussion topics:

- The role a specific plant, animal, etc. plays in that habitat.
- How humans impact the habitat (example: leaving waste there, building next to it, keeping it protected, etc.).

- Why this habitat is important to the larger environment.

During the discussion, ask questions to encourage youth to think about why habitats are important, even though you may not live near one or see one frequently.

Reflection and Discussion

Questions (5 minutes)

- *What do you think would happen to this (animal, plant, other living organism) if this habitat was removed?*
- *How would this impact the larger environment?*
- *How would this affect you?*
- *What other animals, plants, etc. might live in a habitat like this one?*
- *What can we do to protect animal's habitats?*

Connections (5 minutes)

Discuss the following career connections with the youth.

- **Wildlife Manager:** research and manage wildlife and their habitats. Wildlife managers work to maintain, improve, and protect natural resources, including animals, plants, soil, and water. They research the habits and environment of animals to make recommendations to ensure wildlife populations are there for future generations.
- **Wildlife and Fisheries Scientist:** study the origins, behavior, diseases, and life processes of fish and wildlife. They collect data to study the effects of land and water use on the local species of animals and fish.

For more possible careers in natural resources, please see:

<http://snr.unl.edu/undergrad/careers.asp> or <http://academics.aces.illinois.edu/career-services/linking-careers/nres-careers>.

References

Careers in natural resources and environmental sciences. (2015, June 30). Retrieved from: <http://academics.aces.illinois.edu/career-services/linking-careers/nres-careers>.