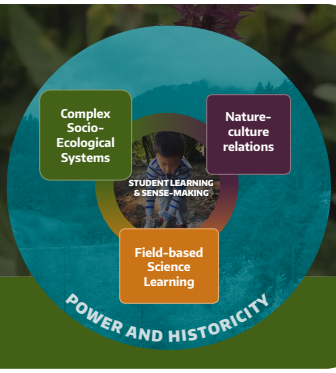
Learning in Places

Family Science Learning Engagement



LE 3.A Taking a focused walk together: Species, kinds, and behaviors

Activity Purpose

Use this activity to focus your walks to observe the variety and density of species, kinds, and their behaviors in your neighborhood ecosystems - including humans! This observation can help you understand components of socio-ecological systems and begin to think about the relationships and cycles they are part of. Walking together and making these focused observations will encourage question asking and thinking about the decisions humans make in the places we inhabit.

Activity Overview

Use the activity sheet to guide your thinking while you walk, or you can draw the boxes on a piece of paper or try using a journal to collect your observations over time.

- Look for signs of species, kinds, and behaviors and draw or write anything interesting that you see.
- If any new questions come up, write them down and come back to them later.
- **Extension ideas:** Use your notes to keep track of what you see when you return home. You can make a map to track your observations, or draw a picture of your neighborhood and add in detail as you learn more.

What can you do to support learning?

» When you walk with your family, don't worry about knowing the names of plants. Instead look for patterns of growth and stages of life. What is the shape of the plant? How does it look in this season? Which plants are growing in clumps, and which are by themselves? Pay attention to light, and observe which plants seem to like shade, for example. Which are growing in the sun?

» Look closely for signs of animals if you can't see any. You can scan the ground and look for scat (animal poop!), or pieces of a pine tree's cone. Look closely at plants and trees or the ground. Do you see holes? Or maybe some bite marks? If you find some scat or an owl pellet, use sticks to gently dissect it and look for what the animal ate. Also don't forget to notice people too!

» Try walking quietly for a while. What do you hear? Imagine you are a coyote, creeping through the neighborhood. What might you see or smell in the night? Imagine you are a bird, flying over the neighborhood. What might you see or feel soaring through the sky?

Connecting with other families

» Write an email or a letter to a neighbor. Tell them about something you observed. Ask them if they have observed something similar or interesting. Take pictures of what you see, and text them to your friends. Ask them what they have been observing.

Science Practices Emphasized

- Asking Questions
- Planning and Carrying Out Investigations
- Obtaining, Evaluating, and Communicating Information

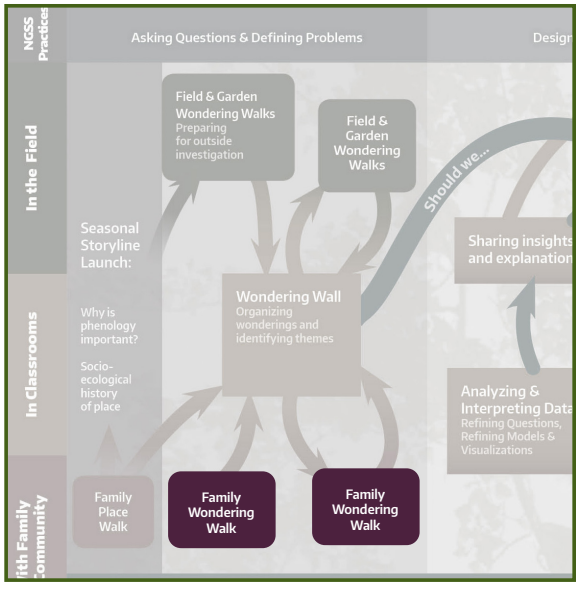
Disciplinary Core Ideas & Important Phenomena

LS1.C: Organization for Matter and Energy Flow in Organisms: All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.

K-2: There are many different kinds of living things in any area and they exist in different places on land and in water.

ESS2.E: Biogeology: Plants and animals can change their environment.

YOUR PLACE IN THE SEASONAL STORYLINE



Key Ideas & Practices

Species, Kinds, and Behaviors

This includes different species of plants, animals and bugs. Kinds are the abiotic beings such as rocks, water, soil, etc. Behaviors are the many different ways species and kinds interact with the environment. Some examples are the way the water moves across a landscape, or the way a caterpillar behaves when they come across water.

Complex Socio-ecological Systems

Socio-ecological systems refer to the interactions between human systems and ecological systems. Humans are part of the natural world, and all of our systems (e.g. social, political, institutional) are always in relationship with ecological systems. Complex socio-ecological systems involve several space, time, and organizational scales.

CONNECT TO OTHER ACTIVITIES

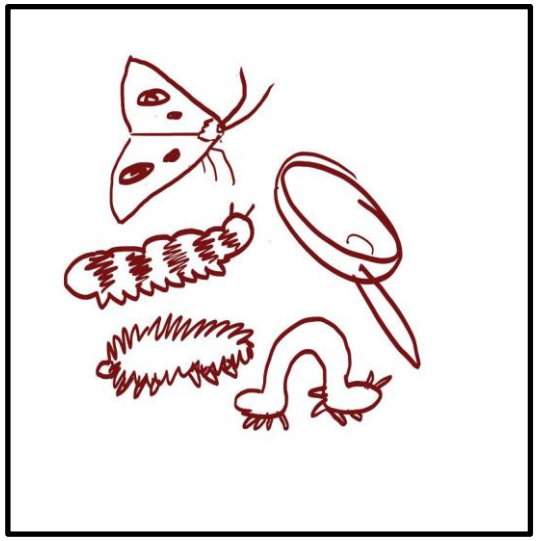
Learning Engagement 3: Taking a focused walk together

- 3.B: Relationships
- 3.C: Places, Lands and Waters
- 3.D: Human Decision Making
- 3.E: Thinking across scales

LEARNING IN PLACES FRAMEWORKS TO CONSIDER

- Species, Kinds, and Behaviors
- Observation and Data Collection
- Complex Socio-ecological Systems Reasoning
- Place and Place-Designing

LE 3.A Taking A Focused Walk Together: Species, Kinds and Behaviors



Observing species and their behaviors is important for understanding components of socio-ecological systems. Some questions to keep in mind as you walk with your family are:

- *What plants are you noticing? Are there any patterns in growth?*
- *What signs of animals do you see? Where?*
- *What are you noticing about them? At what stage of life are they in?*
- *Who or what are these species in relation with? How can you tell?*
- *Where do you think the water is? Where is the sun? What do you notice about the ground you are walking on?*

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Draw or write down any signs of species, kinds and behaviors that you notice.	We noticed: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

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	We wonder: _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____

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