



NW Outdoor Science School

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NOSS Inquiry-Based Field Study Overview

Goals/Objectives:

- Students will be curious about their surroundings as they develop (or deepen) a meaningful personal relationship with the natural world through immersive, hands-on experiences.
- Students will feel safe, cared for, and excited about being in nature.
- Students will use scientific thinking (scientific method, planning investigations, problem solving, asking questions, etc.), scientific language (argumentation, language of uncertainty, etc.), and scientific practices (NGSS), throughout their time at Outdoor School, helping them to develop identity and agency as a scientific learner and thinker.
- Students will want to return to Outdoor School as a Student Leader and see Outdoor Education or other outdoor fields as a possible career path.
- Students learn about who/what lives at Outdoor School (place specific) and the interrelationship between the living and nonliving parts of the ecosystem.
- Students learn about and understand human/nature interdependence including collective responsibility/action and Indigenous ways of knowing about and caring for the land

Driving Questions:

- How do the organisms who live in this area survive in their environment?
 - Who lives here?
 - How are the organisms who live here interacting with each other and the nonliving parts of the ecosystem?

Curriculum Outline

Day 1 (Tues): Introduction, Observations & Inquiry Fever (1.5 hours)

- Name game & community building activity
- Introduce students as Ecologists/Scientists
- [What Scientists do](#) activity
- [Group Agreements for Science Discussions](#)
- Observation/Sensory Exploration
- [I Notice, I Wonder, It Reminds Me Of](#) & [Hand lens intro](#)
- Journal reflection
 - Students reflect on learning and begin to develop questions that interest them

Day 2 (Wed): Ecosystems & Interdependence (4-5 hours)

[Ecosystems \(and Matter\) Themed Field Experience](#)

Activities: Who/What Lives Here? Critter Catch (Discovery Swap), Decomposition Mission, and a Focused Ecosystem Exploration

Introduction: (30 min)

- [Thought Swap](#) (5 min)--While moving to Field Study Area
- Name game or other team building activity
- Introduction to Ecosystems and Matter Theme (15 min)
- Sit spots (practice observing)
 - A chance for kids to have a quiet moment to themselves in nature to write, draw, etc.

Session 1: [Who/What Lives Here Part 1 & 2](#) (50 min)

Session 2: [Discovery Swap](#) (Macroinvertebrates/Critter Catch) (50 min)

~Lunch~

Session 3: Focused Ecosystem Exploration (50 min)

- [Beach Exploration](#), [Lichen Exploration](#) or other focused exploration

Session 4: [Decomposition Mission](#) (50 min)

Wrap up:

- Who/[What Lives Here? \(Part3\)](#) (30min)

Day 3 (Thurs): Exploratory Investigations and Student Work Session (5 hours)

[Exploratory Investigation](#) (This lesson is the base format, however will be extended for 4-5 hours)

“How do the(se) organisms in this area survive in their environment?”

“How are the organisms in this area interacting with each other and the nonliving parts of the ecosystem?”

- Students collaboratively choose testable question and plan investigation (1.5 hours)
- Student collect data (2 hours)
- Student work together creating materials to present findings (1.5 hours)

Day 4 (Fri): Student Symposium (1 hour)

- Students present their findings and learn from their peers