



SCIENCE

How Tribes and the Environment Take Care of Each Other

ESSENTIAL UNDERSTANDINGS

Lifeways

LEARNING OUTCOMES

Student will understand

- why Native people in Oregon take care of plants, animals and the land,
- how to observe plants and animals in their habitats, and
- living things influence one another in an ecosystem.

ESSENTIAL QUESTIONS

- What can I learn from observing plants and animals in their habitat?
- How are Native lifeways in Oregon shaped by the environment?

REQUIRED TIME

30 minutes

Overview

In this lesson, students learn about the Indigenous value and practice of observing and listening to plants, animals and the physical environment as a way to understand relationships in an ecosystem. This traditional approach to teaching and learning based on observation extends from time immemorial through to today for Oregon Tribes. In this lesson, students learn about plants and animals from the lands of the Burns Paiute Tribe and the Confederated Tribes of Warm Springs. Students explore images of the ecosystems in which these tribes live, then use the information to draw conclusions about the ways the plants, animals, people and land influence one another in an ecosystem.

Background for Teachers

There are a variety of ways of teaching and learning across cultures. Native people in Oregon, even today, learn a great deal from observation. As soon as children can



comprehend language, parents explain to them the importance of understanding their surroundings. Children are taught that they must always look around and learn to observe so that they have a good sense of the landscape. Periodically, there are "tests" where parents have children complete a task demonstrating what they are beginning to understand. This is rarely articulated, just part of life. Native children are often exposed early to the importance of knowing where they are and how an awareness of all things in an environment contributes to that understanding. This awareness includes understanding the effects plants and animal species on their habitats and the effects that habitats have on the plants and animals over time. This expresses the value Native communities place on harmony and balance in the universe and in one's life. Students come to understand how this worldview permeates everything.

Due to these values and practices, Oregon Tribes have historical knowledge of the plants and animals found in their regions and the balance that exists as a result of their interactions. They also have knowledge of how habitats have changed over time and ways the plants and animals in those habitats have changed as well.

In this lesson, students learn about the plants and animals in an ecosystem and discuss how these organisms interact.

STANDARDS

Oregon Life Science Standards

 LS.2.4.1: Make observations of plants and animals to compare the diversity of life in different habitats.

KEY WORDS and IDEAS

- Habitat: The natural home or environment of an animal, plant or other organism.
- Organism: Any living thing.
- Ecosystem: A community of living organisms interacting with one another and their physical environment.
- **Region**: An area of land that has common features.

MATERIALS

What materials are needed for students to be successful in this lesson?

- Slide deck
- Technology to display slides
- Student self-assessment



Students learn that Oregon Tribes are stewards of their lands and work to maintain or restore health and balance to those ecosystems.

Considerations for Teachers

Practices

While teaching this lesson, the following principles can help guide your decisionmaking and engagement with students.

- Focus on teaching the Essential Understandings through an orientation toward traditional ecological knowledge.
- When sharing content with students, address the why not just the what.
- Highlight the traditional ecological knowledge of the Burns Paiute Tribe and the Confederated Tribes of Warm Springs.
- Ensure your teaching practices are accessible and appropriate for Native and non-Native students.
- Remember that learning about traditional ecological knowledge is about appreciation and awareness, not appropriation.

Assessment

During this lesson, observe and listen to students during discussions and as they work independently and collaboratively to determine how their learning is progressing. Write down what you notice about what students say and do in relation to the Success Criteria. Use this formative information to provide feedback to students and plan next steps.

At the end of the lesson, provide students with an opportunity to reflect on their learning through a self-assessment. Students can indicate their level of learning in relation to specific Success Criteria. They can also write out an explanation of why they feel they are at that learning stage.



Success Criteria

- Students can describe the plants, animals and habitats they observe.
- Students can explain how plants, animals and habitats influence one another.
- Students can explain how Oregon Tribes and the land take care of each other.

For the following activities, use the slide deck to support your implementation.

Opening

Time: 5 minutes

Step 1:

Ask students to share what kinds of animals and plants live around their homes and record their responses.

Explain that animals, plants and people are all living things and are all part of an ecosystem—a place where plants, animals, people and the land live in support of one another.

Ask students the following questions and record their responses:

- How do the plants and animals interact with one another?
- How do you interact with them?

Explain to students that they can learn a lot about a place by observing and listening. Since time immemorial, families in Native Tribes in Oregon have taught their children about their world by having them observe and listen to the plants and animals around them. These are the ecosystems that they are a part of, and these environments shape the way they live.



Step 2:

Read the Essential Questions aloud to students. Give them an opportunity to answer, question and wonder.

Share the Learning Outcomes and Success Criteria for the lesson.

Review the Key Words and Ideas for the lesson.

Step 3:

Using a map of Oregon, ask students to find the Burns Paiute Tribe and the Confederated Tribes of Warm Springs. Tell students that they will be looking at examples of the environment that can be found on the reservations of these two Tribes.

Main Activity

Time: 15 minutes

Step 1:

Explain to students that they will be looking at some pictures to observe the plants and animals that interact in the environment on the Burns Paiute and Warm Springs tribal lands.

Ask students to have the following questions in mind as they observe and read about how the Tribes and the land care for each other:

- What animals do you observe? Describe the animals you see.
- What plants do you observe? Describe the plants you see.
- What habitats do you observe? Describe the land that you see.
- How do all living things in this ecosystem interact?
- How do the people and the land care for each other?



Step 2:

Review the presentation slides for the Burns Paiute Tribe. Following the presentation, ask students to respond to the questions individually, then pair and share, before asking students to share with the whole class.

Step 3:

Review the presentation slides for the Confederated Tribes of Warm Springs. Following the presentation, ask students to respond to the questions individually, then pair and share, before asking students to share out to the whole class.

Closing

Time: 5 minutes

Step 1:

Ask students to use sentence stems to demonstrate their learning in relation to the Learning Objectives:

- Some of the plants and animals I observed were ...
- Native people in Oregon take care of plants, animals, and the land because ...
- One way Native people in Oregon take care of the environment is ...
- One way the environment takes care of Native people in Oregon is ...

Step 2: Self-Assessment

Have students do the self-assessment based on the success criteria. Go over the success criteria as needed.

Additional Resources

Kindergarten Lesson, <u>The Confederated Tribes of the Grand Ronde Community of Oregon</u>, <u>Land Stewardship: Grand Ronde and You</u>



Student Self-Assessment

Name:

Directions: Read the lesson success criteria in the first column. Then decide, can I do this now or not yet. If you chose Not Yet, share one thing you can do as a next step. If you chose Yes, share what you did well.

Success Criteria	Not Yet	Yes
Can I describe plants, animals and habitats I observed?		
Can I explain how plants animals and habitats influence each other?		
Can I explain how the environment and Tribes take care of each other?		

What did I do well and what is a next step I can take?



Grade 2

Environment

