



4TH GRADE | SEA OTTERS

Artful Otters: A Celebration of Sea Otters and the Coquille Indian Tribe

Essential understandings

- | | |
|------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Since time immemorial | <input type="checkbox"/> Treaties with the United States |
| <input type="checkbox"/> Tribal government | X History |
| <input type="checkbox"/> Language | X Lifeways |
| <input type="checkbox"/> Sovereignty | <input type="checkbox"/> Genocide, federal policy, and laws |
| <input type="checkbox"/> Identity | |

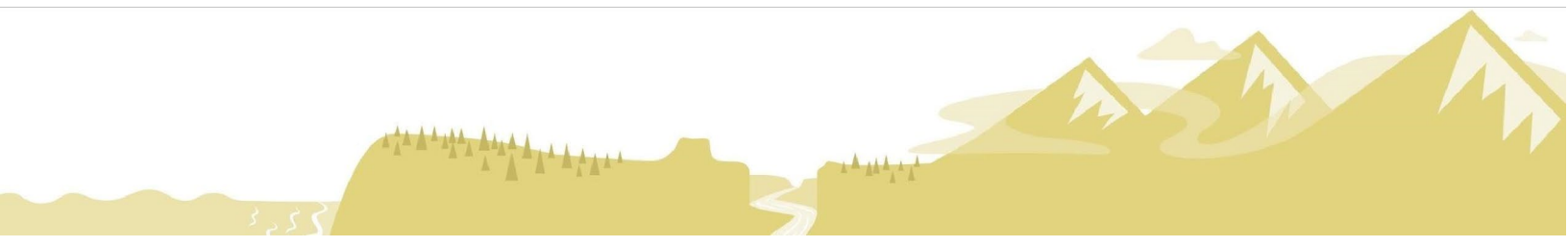
Learning outcomes

By the end of this lesson, students will be able to:

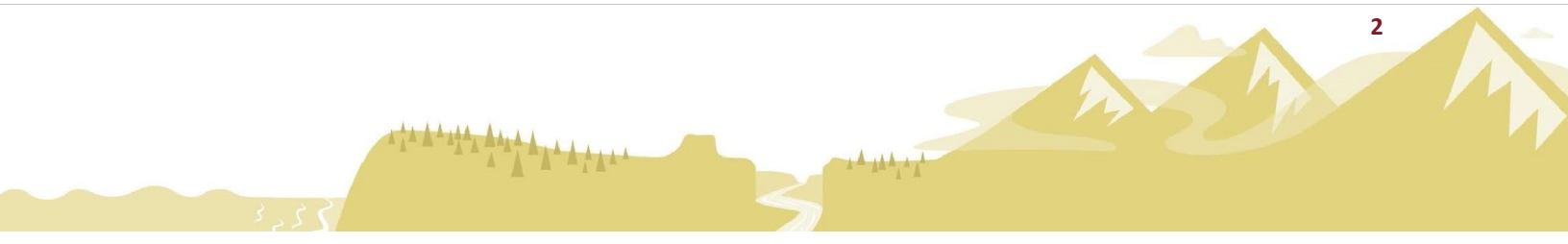
- Students will identify reasons why the sea otter has been important to the Coquille Indian Tribe's traditional way of living. Students will discuss the impacts of the non-Indian takeover of the ecosystems of the Oregon Coast.
- Students will identify both the internal and external structures of the sea otter and describe their function.
- Students will understand why sea otters are important for balancing the ecosystem of the **Oregon Coast**.

Essential questions

- How did the Coquille Tribe use sea otters in the past?
- How did hunting impact sea otter populations and the Oregon Coast ecosystem? Why are sea otters important for a healthy ocean environment?



Logistics	<ul style="list-style-type: none"> Where does the activity take place? <i>Classroom</i> <ul style="list-style-type: none"> How are the students organized? <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Whole class <input type="checkbox"/> Teams: 3-4 <input type="checkbox"/> Pairs <input checked="" type="checkbox"/> Individually
Time required	80 minutes
Oregon Standards	<p>Oregon Arts Standards</p> <p>VA.2.CR2.4 1.Explore art-making techniques and approaches that reflect consideration to form and structure (i.e. organizational principles and expressive features).</p> <p>VA.10.CO1.4 1. Create works of art that reflect community cultural traditions. 2. Examine and apply personal and external resources, such as interests, research, and cultural understanding, to create artwork.</p> <p>Oregon Social Science Standards (2024)</p> <p>4.H.CP.6 Identify the history, religion, languages, and cultural practices of the Indigenous Tribes of Oregon and examples of resistance and resilience to immigration and settlement by the United States.</p> <p>4.G.MM.5: Explain how the contributions of the Indigenous Tribes of Oregon and various historical and contemporary immigrant groups create the diverse culture of present-day Oregon.</p> <p>Oregon Science Standards</p> <p>4.LS1.1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.</p>



4.LS1.2 Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways.

Materials

- Colored Cardstock paper or construction paper
- Scissors
- Pencils and Erasers
- Sea Otter Grid Photo, printed and cut along grid lines into small squares
- Drawing paper or white construction paper, cut into squares between 5x5 to 9x9
- Age-appropriate books or websites about the Coquille Tribe and sea otters
- Sea otter packets, printed for all students

Vocabulary

- **Sea otter:** A furry, semi-aquatic mammal that lives along the Oregon Coast.
- **Coquille Indian Tribe:** A federally recognized group of indigenous people who have lived on the southern Oregon Coast since time immemorial.
- **Ecosystem:** A community of living things (plants, animals) and the nonliving things (water, air, rocks) in their environment.
- **External structures:** The body parts you can see on an animal (fur, paws, whiskers).
- **Internal structures:** The body parts you cannot see on an animal (heart, lungs, stomach).

Extension Activities

- For students who finish early, provide additional resources on sea otters for further exploration. They can create a short comic strip or storybook about sea otters and their role in the ecosystem.

Overview

- Sea otters played an important role in the traditional life of the Coquille Indian Tribe.
- The European fur trade led to the virtual extinction of sea otters along the Oregon Coast.
- Sea otters have internal and external structures that support their survival.
- Sea otters are important for balancing the ecosystem of the Oregon Coast.

Background for teachers

Teachers should visit the Coquille Indian Tribe's website (<https://www.coquilletribe.org/>) and become familiar with Tribe's history. The Tribe's ancestral homelands extend to all reaches of the Coquille River watershed and surrounding areas in Coos, Curry, and Douglas counties.

The Coquille Indian Tribe's history, culture, and lifeways are inseparable from the forests, meadows, and coastal lands of Southwest Oregon. This region's fertile landscape provides plentiful resources for the Tribe, including abundant forests and a rich coastal ecosystem. Prior to contact with non-Indians, the Tribe constructed its permanent villages along the tidewaters and lower reaches of streams and rivers. At least seven of these villages are known to have been around the southern Oregon Coast.

Both historically and in the present day, the Tribe has relied on the forests, meadows, tidal pools, estuaries, and ocean for food, medicine, and shelter. From the ocean they harvested mussels, clams, and other shellfish. From the rivers they harvested salmon, sturgeon, lamprey, and other fish. From the forests and meadows they gathered roots, berries, and medicinal plants such as buckbrush, fireweed, yarrow, and cascara buckthorn, and stinging nettle. Seashells were used as ornaments on clothing, especially the tusk-like shells called dentalium. Many of these traditions persist in the present day.

From time immemorial, sea otters also made their home along the Oregon Coast. The Coquille Indian Tribe used their pelts for clothing—both practical and ceremonial—and for some kinds of shelter. Sea otter pelts were highly valued and were worn as capes by some honored men and as ceremonial headdresses for women. Because of the Coquille Indian Tribe's understanding of kinship with the animal world, every animal or fish that was harvested was treated reverently and with respect. Every part of the animal was used for either food, clothing, or tools.

The Coquille Indian Tribe continues to be a steward of the land and sea. The Tribe makes careful use of natural resources; protects wildlife habitat; and promotes a lush, diverse, and productive landscape. For example, the Tribe uses fire proactively to encourage fresh growth of useful plants—a practice they have been using for thousands of years. Routine burning manages the growth of brush and helps clear the underlying layer of vegetation in old-growth forests. This also helps maintain grassy prairies on ridges and southwest slopes, where plentiful elk are a cherished blessing. Since the Coquille Indian Tribe's restoration in 1989, the Tribe has regained several important tracts of its ancestral lands.

To prepare for this lesson teachers should

Teachers should print the sea otter packets for students and grid photo of the sea otter before the lesson.

Teachers should cut out the grid photo pieces, and label them 1-35, on the back. It is recommended that teachers print in black and white – however, depending on the skill level of students with visual art practices, color can be a fun addition. Remove a row or two of grid pieces for a smaller class, or have some interested students do more than one drawing.

Teachers should also prep the 35 5x5 to 9x9 squares of drawing paper or white construction paper, and label them 1-35 on the back. For ease of use, teachers can also clip the matching grid piece directly to the drawing paper piece.

Teachers must have a strong knowledge of how to diagram the functions and structures of animal biology and be able to model this skill for students (see websites listed under “Resources” below).

References

Coquille Indian Tribe- SB13- Grade 4- Lesson 2- Sea Otters & Coquille Traditional Lifeways

Resources

Online articles:

- https://oregonencyclopedia.org/articles/fur_trade_in_oregon_country/
- https://oregonencyclopedia.org/articles/sea_otter/
- <http://articles.latimes.com/2001/apr/07/news/mn-48079>
- <https://cmast.ncsu.edu/cmast-sites/synergy/seaotter/shist.html>
- Berg, L. (Ed.). (2007). First Oregonians (2nd ed.). Corvallis, OR: Oregon State University Press.

SEA OTTER RESOURCES

Teachers should review the following resources and become familiar with the sea otter. For example, teachers should understand the internal and external structures and functions of the sea otter. Teachers should also understand why sea otters are important to coastal ecosystems.

Websites:

- Elakha Alliance
(<https://www.myowf.org/elakhaalliance>)
- Oregon Coast Aquarium

(<https://aquarium.org/animals/northern-sea-otter/>)

- Science Grade 4 Lesson 2: Sea Otters & Coquille

Traditional Lifeways 5

- The Otter Project

(<http://www.otterproject.org/>)

- Monterey Bay Aquarium

(<https://www.montereybayaquarium.org/conservation-and-science/our-priorities/thriving-ocean-wildlife/southern-sea-otters>)

Educational Videos

- Sea Otter Anatomy Video <https://oceantoday.noaa.gov/seaotteranatomy/>
- Sea Otters 101 Video <https://oceantoday.noaa.gov/seaotters101/welcome.html>
- https://www.youtube.com/watch?v=qjrgDVh_gPE&feature=youtu.be
- “Some Animals are More Equal Than Others” <https://www.youtube.com/watch?v=hRGg5it5FMI>
- “Coquille Indian Tribe & Elakha (Sea Otter)” <https://youtu.be/8mJt38I0fzs>

Articles

Ivy, D. B., & Byram, R. S. (Eds.). (2002). Changing landscapes, sustaining traditions: Proceedings of the 5th and 6th Annual Coquille Cultural Preservation Conferences. North Bend, OR: Coquille Indian Tribe.

Book

Payne, M. (2007). The fur trade on the Upper Athabasca River, 1810–1910. In I. S. MacLaren (Ed.), *Culturing wilderness in Jasper National Park: Studies in two centuries of human history in the Upper Athabasca River Watershed* (pp. 1–39). Edmonton, Alberta, Canada: University of Alberta Press.

Ocean Literacy: Teachers will need to become familiar with ocean and environmental literacy by visiting the websites below. For example, teachers should understand fundamental ocean concepts—specifically, the unique ecosystem of kelp forests off the Oregon Coast. In addition, teachers should have a strong working knowledge of the current efforts to preserve and maintain the Pacific Northwest’s sea otter population.

Websites:

- **Ocean Literacy**

(http://oceanliteracy.wp2.coexploration.org/ocean-literacy-framework/?page_id=164)

- **Ocean Conservancy**

(<https://oceanconservancy.org/>)

- **Oregon Environmental Literacy Plan**

(http://www.eeao.org/images/pdf_docs/OELP/OELP_revised04202013.pdf)

Considerations for teachers

Assessment

Students will create a collaborative drawing and display that includes the ecosystem otters live in along with a drawing of an otter in the ecosystem showing details of its anatomy. Teachers can utilize or print this [Sea Otter Art Rubric](#) to assess student performance.

Practices

- *Classroom discussion – Large group, whole class discussion allows students to express their thoughts and hear the thoughts of others. For the instructor, this practice is a good way to take the pulse of the group and see what general themes are emerging. For students, large group discussion can be a way to express themselves or to hear differing perspectives from others.*

Learning targets

- Students will identify reasons why the sea otter has been important to the Coquille Indian Tribe's traditional way of living.
- Students will discuss the impacts of the non-Indian takeover of the ecosystems of the Oregon Coast.
- Students will identify both the internal and external structures of the sea otter and describe their function.
- Students will use the art elements of value and texture to create an accurate collaborative artwork of a sea otter in its environment.

Appendix

Materials included in the electronic folder that support this lesson are:

- Changing Landscapes PPT
- Concentric Circle Graphic Organizer
- Northern Sea Otter Structure and Function

Activity 1.

Artful Otters: A Celebration of Sea Otters and the Coquille Tribe | 60 minutes

Overview. Students will become explorers of the Oregon Coast ecosystem! They'll start by brainstorming what they know about sea otters and how the ocean might have been important to the Coquille Tribe. Then, they'll turn into scientists, learning about the special body parts (adaptations) that help sea otters survive and thrive. They'll also discover how the Coquille Tribe relied on sea otters for many things. Finally, students will unleash their creativity as artists, crafting a collaborative drawing representing the Oregon Coast with a special guest star - the sea otter!

Introduction (10 minutes):

(Reference the blank sea otter diagram)

Teacher: *Today we're going on a learning adventure to the Oregon Coast! Let's start by brainstorming things you already know about these furry friends, the sea otters. What comes to mind?*

(Listen to student responses and write them on the board)

Teacher: *Great ideas! Sea otters are fascinating creatures. But did you know they were also important neighbors for the Coquille Tribe, who have lived along the Oregon Coast for a very long time?*

Sea Otter Talk (15 minutes):

Teacher: *Alright, let's take a closer look at this special relationship. Take out your notebooks and be ready to jot down some interesting facts!*

(Show the Changing Landscapes slideshow)

Teacher: Sea otters weren't just cute companions for the Coquille Tribe. They provided fur for warmth, shells for tools, and were an important part of their food sources.

(Hand out students packet with pictures or diagrams of sea otter anatomy)

Teacher: Now, look at this picture of a sea otter. Can you spot any features that might help them survive in the cold ocean water? (Point out thick fur, strong claws, etc.)

These special tools, called adaptations, allow sea otters to thrive in their environment.

(Watch the short video <https://oceantoday.noaa.gov/seaotteranatomy/>. Go through the different parts of the sea otter and have students label the illustration in their packet)

The Disappearing Otters (10 minutes):

Teacher: We learned how important sea otters were to the Coquille Tribe. But sadly, in the past, many sea otters were hunted for their fur. This caused their numbers to drop dramatically.

Teacher: Can you imagine how this might have impacted the Coquille Tribe's way of life? (Discuss with students)

Teacher: Today, thanks to conservation efforts, sea otter populations are slowly recovering. It's important to protect these amazing creatures!

Creating our Coastal Canvas (30 minutes):

Teacher: Alright, scientists and artists! Now it's your turn to become experts on sea otters and the Oregon Coast ecosystem. We'll be creating a collaborative drawing to show this special connection.

(Distribute construction paper in various shades of blue, brown, and green, scissors, and glue sticks to each student.)

Teacher: First, let's think about a background for our drawing that show the different parts of the Oregon Coast ecosystem.

- What colors and shapes would you use to represent the ocean? (Distribute blue construction paper)
- What about the land? (Distribute brown construction paper)

- And we can't forget the underwater forests where sea otters live! What colors and shapes would be good for the kelp? (Distribute green construction paper)

(Allow students time to choose their paper)

Teacher: Now that you have your ideas, let's get creative! Use torn paper pieces to create a wavy texture for the ocean. You can also cut out shapes for landforms like mountains or cliffs. Don't forget the kelp forests!

(Students work on creating plants and aspects of the Oregon Coast Ecosystem, to display with their drawing)

Teacher: Once you're happy with your ocean and land, it's time for the star of the show - the sea otter! We are going to work together to draw all of the beautiful parts and details that make up this amazing animal.

(Hand out a section of the sea otter grid photo to each student) Remember those special features we learned about? Include their thick fur, powerful paws, and long whiskers! Which part do you have?

(Point out to students the values (dark, medium, light) and textures (smooth, curvy, straight, fuzzy) in one of the grid pieces. Demonstrate with a pencil how to shade the dark parts of the piece, and the light parts of the piece, with different pressure to make the textures. Show students how you can erase parts of shapes, to change them, or make them lighter)

Teacher: Drawing a sea otter can be challenging, but we're going to do this together! Each one of us will be drawing one piece of the sea otter – just your piece of the puzzle! Inside your piece there are dark shapes (demonstrate), medium shapes (demonstrate) and light shapes (demonstrate). Each puzzle piece does not look like an otter itself, but you will each draw at least one important part. These values and pieces together will show us all of the amazing parts of the sea otter!

(Students draw sea otter pieces. Monitor student progress and help demonstrate shading or help point out shapes in their piece if needed)

Wrap-up (15 minutes)

Teacher: *It's time to share our amazing creations! Gather around and let's talk about your artwork.*

(Put up the collaborative piece all together on the wall. Have students add their environment – grass, mountains, ocean, kelp – whatever they have created.)

Teacher: *What kind of environment did you create? How does your sea otter fit into the Oregon Coast ecosystem?*

(Facilitate a discussion about the importance of sea otters and maintaining a healthy balance in nature)

Teacher: *Today we learned how important sea otters are to the Coquille Tribe and the Oregon Coast. Remember, a healthy ecosystem needs all its parts to thrive!*

Sea Otter Art Project Rubric

The following [rubric](#) is designed for the 4th-grade assignment on Sea Otter Art, focusing on the sea otter's importance to the Coquille Indian Tribe and the ecosystem of the Oregon Coast.