



Kids at a powwow, photo courtesy of [The Confederated Tribes of the Grand Ronde](#).

**WISDOM OF THE ELDERS RADIO: SERIES 3, PROGRAM 7
HONORING GRAND RONDE
GRADES K-3 * ENVIRONMENTAL STUDIES**

Lesson plan written by Elaine LaBonte.

SUBJECT AREAS

To be defined following completion of all lesson activities.

SKILLS

To be defined following completion of all lesson activities.

LEARNING OBJECTIVES

After completing the lessons in this Sea Otter Series, students will be able to:

- Identify the Tribes and/or ancestral homelands of the Confederated Tribes of Grand Ronde and to describe the cultural role that sea otters have to these Tribes
- Discuss keystone species in general, and sea otters specifically and the impact they have on kelp forests
- Consider the responsibility of individuals, communities and society as a whole to other species, other cultures and to future generations yet to come

INTRODUCTION

Historically, as well as pre-historically, Native Americans have defined their culture largely dependent upon the natural resources that occurred within their geographic region and environmental features found within their ancestral homelands. During the five lessons that follow, students will be provided with a

worldview very different from their own. They will learn about the role of sea otters as a keystone species. Students will be introduced to the Confederated Tribes of Grand Ronde and learn the cultural role that sea otters have to Native Americans.

NOTE: Sea Otter Awareness Week is September 24-30; for information on activities and events go to <http://www.defenders.org/seaotter/awareness/>.

Overview

Lesson 1: Introduction to Relationships between Humans and the Environment

Lesson 2: Sea Otters and the Food Web

Lesson 3: Sea Otters, A Keystone Species

Lesson 4: Native Americans and the Sea Otter

Lesson 5: Dangers to Sea Otter and Responsibility of People

GUIDING QUESTIONS

PREPARING TO TEACH THIS LESSON

If at all possible, invite a tribal member to discuss the sea otter and its cultural importance.

Resources include:

- David Hatch at the Elakha Alliance: <http://www.ecotrust.org/nativeprograms/elakha.htm>
- Elizabeth Woody at Ecotrust: <http://www.ecotrust.org/nativeprograms/index.html>
- The Confederated Tribes of Grand Ronde: <http://www.grandronde.org>

Other resources for possible guests include:

- Turtle Island Storytellers: <http://www.turtleislandstorytellers.net/>
- Northwest Spirit Quest, Inc.: Elaine.nwspiritquest@dish.net

SUGGESTED ACTIVITIES

Lesson 1: Introduction to Relationships between Humans and the Environment

Standards

ENGLISH LANGUAGE ARTS

- EL.03.RE.07—Listen to, read, and understand a wide variety of grade-level informational and narrative (story) text.
- EL.03.RE.08—Demonstrate listening comprehension of more complex text through discussions.
- EL.03.RE.32—Ask questions and support answers by connecting prior knowledge with literal information found in, and inferred from, the text.
- EL.03.RE.34—Take part in creative response to text, such as dramatizations and oral presentations.

CD Segments to Play

For this topic, go to *Sacred Landscape*.

Background

Sea otters live in the ocean in an underwater forest called a Kelp Forest. A Kelp Forest looks like giant leaves, they grow from the bottom of the ocean all the way to the top. Kelp is actually giant seaweed which is algae. In a kelp forest live different kinds of algae (besides the giant kelp).

Inside of the kelp forest live fish, sea urchins and other sea life. Sea otters like to live by the kelp forests. They roll around in the kelp leaves so they don't float away when they go to sleep!

Suggested Strategies

- In preparation for this lesson, go to this site (if you don't have computer access in the classroom) and tape record the various sounds the sea otters make: <http://www.seaotters.org/Otters/index.cfm?DocID=63>.
- Go to <http://www.seaotters.org/Otters/index.cfm?FuseAction=Photos> and print out color photos of sea otters; go to http://www.mbayaq.org/lc/activities/pups_coloring_pages.asp and print out color page of sea otter.

Activities

1. Listen

Listen to the Connie Graves segment.

2. Discuss

Following this short segment, ask the students questions to determine their exposure to sea otters and/or to Native Americans:

- Do you know what sea otters are?

- Do you know what a kelp forest is?
- Have you ever heard of a keystone species?
- Have you heard of the Confederated Tribes of Grand Ronde (CTGR)?

Talk to the class about the way that Native American people view the world. Many tribes consider all things are related to each other. All things include fish, animals, plants, trees and everything else you can think of. The sea otter, though it no longer is found within the Oregon coastal areas, is still very important to the CTGR. Historically, as was heard in the Wisdom of the Elders segment, the sea otter was very important to the Tribes in Oregon.

3. Read

4. Draw

Pass out the color page and have the students color the sea otter eating a sea urchin.

Lesson 2: Sea Otters and the Food Web

Standards

ENGLISH LANGUAGE ARTS

- EL.03.RE.08—Demonstrate listening comprehension of more complex text through discussions.
- EL.03.RE.34—Take part in creative response to text, such as dramatizations and oral presentations.
- EL.03.SL.09—Answer questions completely and with appropriate elaboration.
- EL.03.WR.02—Discuss ideas for writing, use diagrams and charts to develop ideas, and make a list or notebook of ideas.

LIFE SCIENCE

- SC.03.LS.04—Describe a habitat and the organisms that live there.

CD Segments to Play

Background

Suggested Strategies

- In preparation for today's lesson, print out the picture of the kelp forest at http://www.mbayaq.org/lc/kids_place/pnd_prnt_kelpcolor01.html.
- Also, for today's lesson, you will need a piece of string the diameter of the class standing in a circle; one for each child.

Activities

1. Review

Pass out the kelp forest picture. Remind the students of yesterday's information on kelp forests, A Kelp Forest looks like giant leaves, they grow from the bottom of the ocean all the way to the top. Kelp is actually giant seaweed, which are algae. In a kelp forest live different kinds of algae (besides the giant kelp). Have the students look at the page they colored yesterday of the sea otter eating the sea urchin. Ask if they can find a sea urchin in the kelp forest color page.

2. Discuss

Ask: What do you think that sea otters eat? (They love to eat sea urchins which live in the kelp forest. They also like clams, crab, turban snails, mussels, shrimp, octopus and fish.)

3. Play a game

The Food Web Game

- Write four living organisms on the board: sea otter, sea urchin, fish, and kelp.
- Divide the class equally into the four groups. Have them write their name on a piece of paper and place it on their shirt.
- Tell the students who eats who:
 - a. Sea otter eats sea urchin and fish, but their favorite food is the sea urchin.
 - b. Sea urchin eats kelp.
 - c. Fish eat smaller fish and algae (kelp).
 - d. Kelp converts sunlight to energy.
- Have the students stand in a circle, each with a piece of string. One student holds a piece of string and walks over to something it would eat and drapes the string along the floor from where they started to where they end. The organism that gets eaten finds something to eat and drapes the string from the starting point to the next organism. Once a student eats something they must sit down.
- Continue until all the students have had a chance to eat something. The kelp does not eat anything, but uses the sun; the teacher should be the sun, so the kelp has something to go to.
- After all the students have eaten something, have the students look at the food web they have just created. Remind the students that many Native

- American Tribes consider all things are related to each other. Ask them if they can see by the food web how everything is actually related to each other and how dependent upon each other that the organisms are.
- Now, have the students pick up their string and start over. But this time remove all of the sea otters from the group. Have each student sit down after they have been eaten.
 - All that should be left standing are the sea urchin.
 - Ask the students what will happen to the kelp forests?

4. Draw

Have the students color their kelp forest picture.

Lesson 3: Sea Otters, A Keystone Species

Standards

ENGLISH LANGUAGE ARTS

- EL.03.RE.08—Demonstrate listening comprehension of more complex text through discussions.
- EL.03.RE.34—Take part in creative response to text, such as dramatizations and oral presentations.
- EL.03.SL.09—Answer questions completely and with appropriate elaboration.
- EL.03.WR.02—Discuss ideas for writing, use diagrams and charts to develop ideas, and make a list or notebook of ideas.

CD Segments to Play

Background

The sea otter is considered a keystone species. A keystone species is a species that is so important to an ecosystem (one kind of ecosystem is a kelp forest) that when it is gone the entire ecosystem is at risk.

- In the 1700s and 1800s fur trappers killed most all of the sea otters.
- As the sea otters died, the number of sea urchin grew and grew because there was nothing in the ecosystem that ate sea urchins.
- As a result, the kelp forests were eaten up by the sea urchins.
- When kelp forests disappear, there is no place for the fish and other sea animals that need the kelp forest to survive.

Just like in the food web game, the sea urchins kept eating until there was no kelp left.

The ban on killing sea otters saved some of the sea otters that lived in Alaska, but the sea otters that once lived up and down the coast of the Pacific Ocean

were gone. In 1938 a small group of sea otters were seen in California. The sea otters began eating the sea urchins and the kelp forests began coming back. Along with the kelp forests came fish and other sea animals that need kelp forests to live in.

There are many groups of people—Native American tribes, scientists, universities and others interested in bringing back the sea otter—that work together trying to help the sea otter populations come back. Recently a few sea otters were seen off the Oregon coast. This was great news! Scientists and other interested people are all working together to try to help the sea otters repopulate areas where they once lived so abundantly.

Activities

1. Review

Remind the students of what happened in the Food Web game, and how all the sea urchins ate the kelp forests.

2. Discuss

Ask: How many sea otters do you think are in California?

The answer is approximately 2,000 sea otters. Much of the research scientists do on sea otters is focused on the kelp forests. As we learned yesterday, without sea otters, the sea urchins often eat away the kelp forests. One of the things scientists do is take pictures from airplanes to see whether the kelp forests are growing, staying the same, or getting smaller. There are also scientists who dive into the water and count all of the living organisms; this is done by video recording and then later counting all organisms in the video.

Besides scientists, Native American Tribes and other interested people work together to try to help the sea otters come back to the oceans.

3. Draw

Have the students draw a picture of sea otters and kelp forests. Allow them to draw sea otters eating all the sea urchins; sea urchins eating all the kelp, or how happy the people were to see the sea otters in California, or any other thing they would like to illustrate.

Lesson 4: Native Americans and the Sea Otter

Lesson 4, Day 1

Suggested Strategies

- Hopefully, a guest speaker can attend this day and talk to your class.

Lesson 4, Day 2 (or Day 1 if no guest speaker or video available)

Standards

ENGLISH LANGUAGE ARTS

- EL.03.RE.32—Ask questions and support answers by connecting prior knowledge with literal information found in, and inferred from, the text.

GEOGRAPHY

- SS.03.GE.01—View and draw simple maps and pictures to locate, describe, and show movement among places.

CD Segments to Play

Background

A Reservation is an area of land that the U.S. government created in exchange for homelands ceded (traded) by a Treaty. A Treaty is an agreement, like a promise, that the U.S. government made with the Native American Tribes throughout the country. The reason for the Treaties was so that American citizens could build houses and create towns and states which eventually led to the United States of America. The Confederated Tribes of Grand Ronde originally had over 13.5 million acres of homelands, and there were 26 different tribes that all spoke differently. (Pass out the map and show the students the original homelands and point out the Reservation land.)

Native American Tribes lived in areas of land commonly referred to as homelands. They did not believe that they owned the lands, but that they were caretakers of the land. In addition, there were areas of land that the tribes would travel to hunt and gather their foods and medicines; these lands are referred to as usual and accustomed areas.

The United States wanted tribal lands for themselves. Many Native Americans died from fighting with the military and with the settlers. They were also starving to death because as the settlers arrived and began making homes and towns, the traditional gathering areas to get food were being destroyed and the wildlife and fish were being overhunted and their habitat (place they lived) ruined for the new houses and towns and farms. The tribal leaders were trying to make the best decisions to save their people, so while they didn't want to sign the Treaties, they had no choice but to do so.

Back in the late 1800s, if you were a Native American, you were not treated very well by the new settlers. The tribal leaders and headmen of the various Tribes would let these people who did not sign any treaty to live on their Reservation. As a result, the Confederated Tribes of Grand Ronde has a mixture of many, many tribes.

For these coastal tribal members, the sea otter was an extremely important part of their culture. Even for the non-coastal tribes, sea otter pelts were something that they traded for. For some tribes, only their headmen (like a chief) or their medicine people (like a doctor) were able to wear sea otter. So, the sea otter robes were beautiful and warm robes and only very important people could wear them. The coastal tribes would also trade sea otter for things they needed. A long time ago, different tribes had different items available that other tribes didn't have. For instance, salmon was a trade item for tribes that didn't live near rivers where salmon migrated. And sea otters were traded to people who didn't live near the oceans.

The Confederated Tribes of Grand Ronde are considered a sovereign nation, which is like a separate country (like Canada). They can make their own rules for who can be tribal members (citizens) and what happens on their Reservation. The Confederated Tribes of Grand Ronde have created many different offices to help them govern their tribal members and their Reservation. One of their offices is the Natural Resource Department. The people who work in this office also work with state and federal agencies in managing the natural and cultural resources off of the Reservation.

Suggested Strategies

- In preparation for today's lesson, go to the Confederated Tribes of Grand Ronde (CTGR) website at <http://www.grandronde.org/culture/ikanum/> and print out the ceded lands map.

Activities

1. Discuss

Ask if anyone knows what an Indian Reservation is.

To help the students understand the concept of "usual and accustomed areas," use a large city park as an example. It would be helpful if you could use a park in the area that your students are familiar with. The area of the park which holds the playground equipment is the area that the children normally play in (like the Tribes who lived in their homelands). But, the children might also go to a far corner of the park to play baseball, or go to a different part of the park to have a barbeque or take a hike. These areas of

the park are like the usual and accustomed lands that the Tribes would go to for hunting, fishing, etc.

2. Mapping exercise

Now point out the Grand Ronde Reservation which is the very small shaded area. This is the area of land that the Tribes had to move to when they signed the Treaty which ceded their homelands of over 13.5 million acres of land.

Ask: Do you think the Tribes made a good trade?

Looking at the map, the ceded homelands were not close to the ocean where the sea otter lived. There were many smaller tribes such as the Clatsop and Tillamook Tribes which were part of the Grand Ronde Reservation, but they didn't sign treaties.

Lesson 5: Dangers to Sea Otter and Responsibility of People

Standards

ENGLISH LANGUAGE ARTS

- EL.03.RE.07—Listen to, read, and understand a wide variety of grade-level informational and narrative (story) text.
- EL.03.RE.32—Ask questions and support answers by connecting prior knowledge with literal information found in, and inferred from, the text.
- EL.03.WR.01—Find ideas for writing stories and descriptions through various sources, including conversations with others.
- EL.03.WR.26—Write letters, thank-you notes, and invitations.

CD Segments to Play

Background

Suggested Strategies

- In preparation for today's lesson, print out the letters from kids on at <http://www.seaotters.org/Kids/index.cfm?DocID=90>.

Activities

1. Listen

Begin the class by reading the book, Baby Sea Otter. Give the class time to discuss the book

2. Discuss

There are many dangers to sea otters. Ask the students for some of the dangers. Make a list on the board.

- Oil spills from huge barges are lethal to sea otters and other sea life
- Commercial fishermen place nets out in the ocean and the sea otters get caught in them and die
- Loss of habitat (the place where they live) and destruction to their habitat
- Pollution
- Chemicals

Ask: What can we do about these things?

- When you go on a picnic or camping, always take your garbage with you.
- Never dump anything into the water.
- Save (conserve) water.
- Ask your parents if they use chemicals for gardens, and tell them how chemicals get into the waters that sea otters live in; maybe they can figure out a different way to take care of their garden.
- After it rains really hard, look at the water that runs down the streets, all that water eventually ends up in the ocean, the sea otter's habitat, so never throw garbage out, not even gum.
- When you help you parents wash their car at home (or if they wash it alone at home), the soapy water will end up going in the ocean; ask your parents if they use biodegradable soaps. These are the only safe kinds of soap, and even that will end up in the sea otter's habitat.
- Walk whenever you can. Every time we use our car, we are consuming gasoline which is what the oil barges are carrying across the ocean; oil to convert into gasoline.

Ask: Who should do these things to help the sea otter?

3. Read

Pass out copies of the letters that were written to Friend of the Sea Otter.

4. Writing exercise

Have the students write a letter to the Elakah Alliance and send to <http://www.ecotrust.org/nativeprograms/elakha.htm>.

EXTENDING THE LESSON/REFERENCES

Books

Tatham, Betty and Joan Paley (Illustrator). Baby Sea Otter. ISBN-10: 0805075046 ISBN-13: 978-0805075045.

Websites

Sea Otter Awareness Week is September 24-30; for information on activities and events go to:

<http://www.defenders.org/seaotter/awareness/>

David Hatch at the Elakha Alliance

<http://www.ecotrust.org/nativeprograms/elakha.htm>

Elizabeth Woody at Ecotrust

<http://www.ecotrust.org/nativeprograms/index.html>

The Confederated Tribes of Grand Ronde

<http://www.grandronde.org>

Turtle Island Storytellers

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