



*Fort Nez Percés (Walla Walla) at the confluence of the Walla Walla and Columbia rivers, 1855. (OrHi 1651). Courtesy [National Park Service](#).*

**WISDOM OF THE ELDERS RADIO: SERIES 3, PROGRAM 5  
HONORING THE UMATILLA NATIONS  
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 Salmon Series, students will be able to:

- Identify the Tribes and/or ancestral homelands of the Confederated Tribes of the Umatilla Indians and to describe the cultural role that salmon plays for these Tribes
- Discuss the salmon lifecycle and will be able to show how a salmon fits into a food web
- Identify threats to salmon and what can be done to help the salmon
- Consider the responsibility of individuals towards helping the salmon habitat

**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 salmon play in the food chain. Students will examine the lifecycle of the salmon and discuss the threats that wild salmon are currently faced with. Students will be introduced to the Confederated Tribes of the Umatilla Indian Reservation and the cultural role salmon has to them.

## **Overview**

Lesson 1: Introduction to Relationships between Humans and the Environment

Lesson 2: The Lifecycle of a Salmon

Lesson 3: Salmon in the Foodweb

Lesson 4: Native Americans and the Salmon

Lesson 5: The Dangers to Salmon

## **GUIDING QUESTIONS**

### **PREPARING TO TEACH THIS LESSON**

If at all possible, invite a tribal member from the Umatilla Tribe to come and speak to the class during Lesson 3 below, to discuss the role of salmon and humans from their cultural perspective. Contact the Umatilla Tribe at <http://www.umatilla.nsn.us/>.

Other resources include:

- Columbia River Inter-Tribal Fish Commission: <http://www.critfc.org/>
- 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.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**

### **Suggested Strategies**

- In preparation for today's lesson, print out the following coloring page at Print out this page and reproduce for class to color: [http://www.mbayaq.org/lc/kids\\_place/activities/coloring\\_salmon.html](http://www.mbayaq.org/lc/kids_place/activities/coloring_salmon.html)

### **Activities**

#### 1. Listen

Listen to *Sacred Landscape* segment, Wisdom of the Elders Radio: Series 3, Program 5, Umatilla.

#### 2. Discuss

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

- What are salmon?
- Where do they live?
- How can a salmon be a brother to a person?
- Have you ever eaten salmon?
- Would you eat your brother?

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 all other things. The salmon as a brother is a very important relationship.

Ask: How would you care for your brother?

Make a list of their answers on the board or on a large piece of paper so you can refer to it later. Based upon their answers, help them to make the connection between how a person treats their brother and how native people treat salmon.

Give class the color page of salmon to color and take home.

## **Lesson 2: The Lifecycle of a Salmon**

### **Lesson 2, Day 1**

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

#### **Suggested Strategies**

##### **Activities**

###### 1. Research

If you have computer access in your classroom, go to this website, which will show your students what each life cycle of the salmon looks like:  
<http://www.goldseal.ca/kids/homepage.asp>.

###### 2. Read

If not, or in addition to, read the book Salmon Stream. Allow time for questions and comments.

###### 3. Draw

Have the class make a salmon lifecycle. Give the children the following information to ensure they understand the basic lifecycle.

Salmon are fish call anadromous fish. This means they are born in fresh water, live in salt water and then come back to the freshwater. Draw a large circle on the board as you say this to help illustrate the cyclical nature of the salmon's lifecycle.

Ask: What is the difference between fresh and salt water?

Fresh water are rivers and streams, salt water is the ocean.

Ask: Does anyone have a fish aquarium?

Fish aquariums are either fresh water aquariums or salt water aquariums, if you put the wrong kind of fish in the wrong kind of water, they will die. Most fish can only live in either fresh water or salt water. Repeat the word anadromous, and explain that this kind of fish is special, in that it can live in both fresh and salt water.

Begin at the top of the circle and write the word “eggs”.

Ask: Where do salmon eggs come from and how do they get there?

Salmon eggs come from a female salmon. The female salmon digs a nest in a gravel bed (called a redd) with her tail then she pushes thousands of eggs into the nest. Then a male salmon milks the eggs which fertilizes them.

Have the class draw the eggs on a quarter of a piece of paper and set aside.

Write the word “Alevins” about a quarter of the way down the circle on the board (between 1 and 2 on a clock model).

Ask: What happens after the eggs are fertilized?

The obvious answer is the eggs hatch. However, the important point to get across is that when the eggs hatch, alevins come out of the egg. An alevin has a food sac attached to it which provides all of the food that the alevin need. This could be compared to a baby living in the mother’s womb, with all nourishment being supplied by the Mom. Have the students draw an alevin on a quarter of a piece of paper and set it aside.

Write the word “fry” on the circle on the board (between 4 and 5 on a clock model).

Ask: What happens when the alevin food sac is gone?

Once the food sac is gone, the alevin must come out of its gravel nest to find food. When this occurs, the alevin is now called a fry. As the fry develop, they become camouflaged with parr marks (dark spots). This stage could be compared to the time a baby is born and now needs to eat food. Have the students draw a fry on a quarter of a piece of paper and set it aside.

## **Lesson 2, Day 2**

## Standards

### ENGLISH LANGUAGE ARTS

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

## Suggested Strategies

### Activities

#### 1. Review

Review yesterday's lifecycle, the fertilized egg; the alevin with food sac attached and the fry which must begin looking for its own food.

Ask: What do the fry eat?

Young fry eat insects. Remind the students that the fry are camouflaged, camouflaged means that they blend into their environment and trick fish that would eat them.

Write the word "smolt" on your circle (in the 6 place on a clock model).

Ask: if anyone knows what a smolt might be?

Smolt are the next stage of development after a fry. The largest difference is in size and color. Smolt turn a silvery-color (these are often called juvenile fish). Juvenile fish eat more than just insects, they eat other things that live in the rivers such as smaller fish. Have the students draw a Smolt on a quarter of a piece of paper and set aside.

Write the word estuary on your circle (between 6 and 7 on clock model).

Ask is anyone knows what an estuary is?

An estuary is the place where the river meets the ocean.

Ask: Does anyone remembers what an anadromous fish is? An anadromous fish is a fish that can live in both fresh and salt water. The smolt has been growing and swimming down closer to the estuary. When the smolt

arrives in the estuary changes happen to the fish so it can live in salt water. Have the students draw a river, a stream, an estuary and the ocean on a very large piece of paper (the other pictures will be placed on this) and set aside.

Write the word “Salmon” on the circle (9 on the clock model).

Ask: What do you think is happening with the salmon now? What is it eating?

As the salmon begins maturing, s/he is now living in the ocean. Some species swim thousands of miles in the ocean during this time. Depending upon the kind of salmon, they live in the ocean 1-7 years. Salmon eat smaller fish, squids, crustaceans which are sea animals like shrimp that have shells. Salmon are also being eaten by larger fish and whales. Have the students draw a salmon on a quarter of piece of paper and set aside.

## **Lesson 2, Day 3**

### **Standards**

#### **ENGLISH LANGUAGE ARTS**

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

### **Suggested Strategies**

#### **Activities**

##### **1. Review**

Review the lifecycle of the salmon. Use the circle on the board and ask the students to call-out answers to the various stages, reinforce the words estuary and anadromous fish. Write the word “migration” on the circle on the board (between 10 and 11 on the clock model). Also draw a large arrow around your circle in a clockwise manner.

Ask: Does anyone know what migration means?

In the simplest form, migration means moving from one place to another. The arrow shows the direction the salmon is moving towards – back to the gravel bed where s/he was born.

Ask: Why do you think the salmon is migrating back to the gravel bed and how will it find its way home? Use a map of the western United States and/or the state of Oregon, California or Washington. Show the students the ocean and the many rivers that the salmon must find its way through to get home.

The salmon is migrating back to the gravel bed to make new babies; the female will use her tail to dig a nest to lay her eggs in; the male will milk the eggs to fertilize them, and the cycle begins again (use the circle lifecycle to help them understand what the cycle is). The salmon returns to the place of their birth. No one really knows how a salmon finds its way back home, but they do. Once they begin the migration, most kinds of salmon no longer eat any food, they change color and their muscles get soft. After they spawn, most kinds of salmon die. Have the students draw a final salmon on a quarter of a piece of paper and set aside.

## 2. Share

Once more, using your circle on the board, have the students talk about each stage of the salmon's lifecycle. Now, have them glue all of their pictures on to their bodies of water. Have a place in the classroom, or outside of the classroom on a bulletin board so the students can place their salmon lifecycle for all to see!

### **Lesson 3: Salmon in the Foodweb**

#### **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.34—Take part in creative response to text, such as dramatizations and oral presentations.

#### **Suggested Strategies**

- In preparation for today's lesson, you will need to have paper plates or paper bags for the students to make masks, if you are using paper plates, you will need string to attach the mask to their face; you will also need a piece of string or yarn as long as the diameter of the class standing in a circle; each student will need one of these pieces of string.

#### **Activities**

##### 1. Read

Read the story There Was an Old Lady Who Swallowed a Trout. This book is tailored after the song "There Was an Old Lady Who Swallowed a Fly."

## 2. Draw

Using the story as the basis, help the students understand a basic food web. Have each student choose one of the characters in the story or some other food that they think would either eat salmon or that a salmon might eat. Have them draw it on a paper plate to make a mask or on a paper bag that they can wear.

## 3. Play a game

### **The Food Web Game**

- Have the class stand in a circle wearing their mask, each with a piece of string or yarn.
- Begin with any one of the students, have them walk over to something that they would eat, have them lay their string along the floor behind them as they walk to the character, so that the string begins where the student was standing and ends where they end up standing.
- Have the next student do the same thing, carefully placing their string on top of the previous one.
- When a student "eats" the character, emphasize that each character is equal to more than one food item!
- Continue until the whole class has had a chance to participate.
- For older students, have them repeat the process.

Ask: Do you remember how Native Americans believe that all things are related to each other?

Ask: Looking at all these strings, does it look like everything is related to each other?

- Take all of the salmon out of the food web, then ask the students what would happen if all of that food was no longer available. Help the class to understand the dependence that each of the components in a food web has on each other.

## **Lesson 4: Native Americans and the Salmon**

### **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.07—Listen to, read, and understand a wide variety of grade-level informational and narrative (story) text.
- EL.03.RE.34—Take part in creative response to text, such as dramatizations and oral presentations.
- 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.

### **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 buy property to build houses and create towns and States which eventually led to the United States of America. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) signed a treaty trading their homelands for the Reservation. The Treaty also had other promises, including a promise that the Tribes would be able to continue to hunt, fish and gather foods and medicines in their usual and accustomed areas.

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. Point out the usual and accustomed area of lands on the map. Usual and accustomed area means lands that the Native Americans would travel to in addition to their homelands to hunt, fish, and gather foods and medicines.

### **Suggested Strategies**

- Go to the Confederated Tribes of the Umatilla Indian Reservation website and print out the map of their ceded homelands at <http://www.umatilla.nsn.us/ceded.pdf>.

## Activities

### 1. Discuss

Ask if anyone knows what an Indian Reservation is.

### 2. Mapping exercise

Pass out the map of the ceded territory. Talk to the class about the original homelands which are indicated by the solid black line. Now point out the Umatilla Indian Reservation which is the shaded area just east of Pendleton. This is the area of land that the Tribes had to move to when they signed the Treaty which ceded their homelands.

Next, point out the rivers that are shown on the map. These rivers are the areas where the salmon lay their eggs in. Use a map of Oregon to show them how far the salmon swim to get to the ocean. Remind the students of the food web game they played.

To help the students understand the concept of homelands, 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.

### 3. Discuss

Ask: Were there any people in the food web game?

Native Americans think about life and all living things as being connected to each other. They believe they are one part of the food web. They believe that every thing has a purpose and a responsibility.

Ask: What is the purpose and responsibility of salmon?

Salmon was one of the main foods that the Native Americans depended on. Salmon are also foods for other fish and animals.

Ask: What is the purpose and responsibility of the Native Americans to salmon?

Refer back to the list of items created about how students would treat their brother. While native people do eat salmon, they do so in a respectful manner. Salmon Ceremonies are held. These are special events, often held when the very first salmon is caught in a special way, by a chosen person. After this first salmon is honored and celebrated through ceremony, only then can other people fish for salmon. All parts of the salmon are used, even the eyes and the brains. Native people also take care of the salmon habitat. Habitat is the place where salmon live.

Ask: Where do salmon live?

Reinforce the concept of the salmon lifecycle and the multiple habitats they live in. The Confederated Tribes of the Umatilla Indian Reservation have a special office called the Natural Resources Department. The people that work there take care of the salmon habitat. One of the things that the Natural Resources Department has done is to bring salmon back to the Umatilla River after over 70 years of extinction!

Ask: What is a food that is important to you?

#### 4. Reflect

Make a list of foods, look for the most common. Have the students draw a picture and/or write a paragraph (depending upon grade level) about how they could show respect to this food.

### **Lesson 5: The Dangers to Salmon**

#### **Lesson 5, Day 1**

#### **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.34—Take part in creative response to text, such as dramatizations and oral presentations.
- EL.03.RE.32—Ask questions and support answers by connecting prior knowledge with literal information found in, and inferred from, the text.

##### LIFE SCIENCE

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

## Suggested Strategies

- In preparation for this lesson, you will need the string from the Food Web Game.

## Activities

### 1. Discuss

Ask: Can anyone remember what the Confederated Tribes of the Umatilla Indian Reservation, Natural Resources Department did after 70 years? (After 70 years of extinction, salmon were restored to the Umatilla River.)

Ask: What might cause salmon to become extinct?

- The lifecycle of the salmon is disrupted. The salmon cannot get back to the place they were born to lay eggs in the gravel beds.
- The habitat (the place where salmon live) is changed.
- Dams block the salmon from swimming to and from the ocean.
- People use chemicals on farms, in forests, in factories and at home.
- Chemicals get into the water and they hurt the salmon.
- People leave their garbage outside at parks, at the ocean, in the forest and other places. No matter where they leave their garbage, it ends up in the water.
- People catch too many salmon.

There are many answers that the students can think of.

Ask: Who is responsible to help the salmon?

Native American people believe that people are responsible to help the salmon. Many other people also believe that people are responsible for helping the salmon. We are all responsible to help the salmon.

### 2. Play a game

#### **The Food Web Game (modified)**

- Divide the class into groups:
  - a. Salmon
  - b. Bear
  - c. Berries
  - d. Birds
  - e. Worms

- Tell the students to imagine these five groups are all that exist. Tell them who eats who:
  - a. The bears eat salmon and berries.
  - b. The birds eat birds and worms.
  - c. The salmon eat the worms.
  - d. The worms eat the salmon eggs.
- Make sure each student understands what they eat, you can have them write the name of what they are and attach it to their shirt so everyone can identify what they are. Use the string, and have each student eat something, laying the string across the floor.
- Now have the class pick up their string, change the salmon into something else (either bear, berry, bird or worm) and play the game again. Once a student is eaten they must sit down. Let the students find their food source. With only one salmon, the bear will need to eat the berries which will force the birds to eat the worms. The worms have no salmon eggs to eat, all the students left standing (not eaten yet) ask them what is going to happen to them; they of course will starve to death.
- If time permits, you can let them play this game a few times, alternating the number of students per group to see if there is ever a good outcome when the salmon numbers decline.

### 3. Discuss

Ask: Do you think it is important to help the salmon?

Ask: How can we help the salmon?

Make a list of answers on the board.

Remind the students of how important that habitat is to the salmon. One of the easiest things for students to do is to protect the salmon's habitat.

Ask: How can we keep the salmon habitat clean and healthy?

- When they go on a picnic or camping, always take their garbage with them.
- Never dump anything into the water.
- Save (conserve) water.
- Ask your parents if they use chemicals for gardens. If they do, tell them how chemicals get into the waters that salmon 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 salmon 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 getting into salmon habitat; ask your parents if they use biodegradable soaps. These are the only safe kinds of soap, and even that will end up in the salmon habitat.

#### 4. Draw

Have the students draw a picture of one thing they can do to help the salmon.

### **Lesson 5, Day 2**

#### **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.

#### **Suggested Strategies**

#### **Activities**

##### 1. Read

Re-read the salmon story from Lesson 1.

##### 2. Review

Use this day to bring all the lessons together, with an emphasis on the relationship between native people and salmon. If you had a guest speaker and/or a video, ask the students to recall things that were important to the Native Americans. Allow the students time to ask questions of things they didn't quite understand.

##### 3. Share

Give each student time to share their poster on what they can do to help the salmon.

#### **EXTENDING THE LESSON/REFERENCES**

## **Books**

Sloat, Terri. There Was an Old Lady Who Swallowed a Trout. ISBN-10: 0805042946; ISBN-13: 978-0805042948.

Carol Reed-Jones and Michael S. Maydak (Illustrator). Salmon Stream. ISBN-10: 1584690135, ISBN-13: 978-1584690139.