

Bounty of the Sea

The Salmon in Oregon

Grade: Adaptable for 2-5

Overview

Salmonid fish can be found in subarctic waters worldwide. However, for more than a century, "salmon" have been virtually synonymous with the Pacific Northwest. In fact, the Chinook salmon is the official state fish of Oregon. Lessons on salmon are a good way of integrating science learning into a unit on the social and economic history of the state. The purpose of this lesson is to introduce the topic of salmon and its impact in Oregon, using primary source documents found on the <u>Historic Oregon Newspapers website</u>.

Oregon Common Core State Standards

Language Arts Standards:

- CCSS.ELA.RI.4.2 Determine the main idea of a text and explain how it is supported by key details;
 summarize the text.
- CCSS.ELA.RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- CCSS.ELA.RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.
- CCSS.ELA.RI.4.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- CCSS.ELA.W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- CCSS.ELA.SL.4.4 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

Social Studies Standards:

- Geography 4.9: Explain the influence of Oregon and the Northwest's physical systems on humans, including Native Americans.
- Geography 4.11: Identify conflicts involving use of land, natural resources, economy, and competition for scarce resources, different political views, boundary disputes, and cultural differences within Oregon and between different geographical areas.

- Geography 4.12: Explain how people in Oregon have modified their environment and how the environment has influenced people's lives.
- Economics 4.18: Identify key industries of Oregon.

Materials

- Historic Oregon Newspapers website
- Poster paper
- Markers
- KWL chart (optional)

Key Vocabulary

- Salmonid
- Canneries
- Rivers
- Streams
- Spawn/spawning
- Oceans
- Fresh water
- Salt water

Lesson

- Introduction: Ask students about all of the different places that water can be found in nature. As students share their ideas, write the words on poster paper. Make sure the list includes "river," "stream," "lakes," and "ocean"—suggest these words if students have not already done so.
 - Once the list contains at least ten to fifteen items, ask the students about the kinds of water, writing down the responses on the chart paper.
 - o Some discussion questions to consider:
 - Does anyone in class know the difference between fresh water and salt water?
 - What does "fresh" water and "salt" water mean?
 - Of the bodies of water listed on the board, which are salty and which are fresh?
 - The purpose of the discussion questions is to assist students to reach the conclusion of the two kinds of water, and more specifically, the organisms that live in each.
- Transition and discussion: Ask the students about the different kinds of animals that live in water, making sure to emphasize that not all kinds of animals live in all kinds of water. Most kinds of animals prefer to live in either salt water or fresh water—moving between the two types of water would kill many types of

animals. Pose some questions about specific animals that live in these types of water, focusing on fish and the *kinds* of fish, and list them on the poster paper.

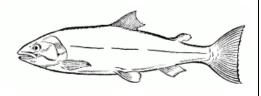
- Tell students to imagine they are in a pet store in the aquatic section, reminding them that these stores
 usually have different sections for pet animals kept in fresh water (such as goldfish and frogs) and pets
 kept in salt water (such as clownfish and corals).
- o Some discussion questions to consider:
 - Can you think of some other animals that live mostly in fresh water?
 - How about some animals that live mostly in salt water?
 - Do you think there are animals that live in both fresh and salt water?
 - Does "fish" fit in the "freshwater" or "saltwater" category?
- Introduction to topic: Ask students what they know about salmon and the history of salmon in Oregon. This can be a great opportunity to use a KWL chart to assess what students already know, want to know, and have learned after the lessons.
- Some discussion questions to consider:
 - o What is the state fish of Oregon?
 - o How do you know?
 - o What are some things you know about salmon?
 - o What do they look like?
- Background information: "At the time of first Euro-American settlement, the salmon fisheries of the Pacific Northwest seemed literally inexhaustible. Millions of fish averaging thirty pounds and more made the annual spawning run up Oregon's numerous coastal rivers. They were an important food resource for both Native Americans and the pioneer settlers. In fact, the fish were so abundant that people often kept only the choicest cuts of meat and threw the rest away. Many thousands were caught every year, but for a while it seemed as if all the people in Oregon would never be able to eat enough salmon to put even a dent in the overall population of the fish. However, by the 1860s, new inventions and improvements in food canning technology suddenly made it possible for Oregon fishermen to preserve their catch and transport it for sale to markets around the globe. In Oregon, we have a remarkable kind of native fish called the salmon. One of the things that make the salmon so special is that it can and does live in both fresh water and salt water. As we have just been discussing: not many fish or other animals can do that!"
 - o In order to further impress upon the students that the salmon has been important to the economy and culture of Oregon for a long time, present photographs, illustrations, and articles about salmon found on the Historic Oregon Newspapers website.
 - "Value of Our Salmon Fisheries" from Willamette Farmer, September 27, 1873
 - Now Comes the Salmon" from Sunday Oregonian, April, 22, 1900
 - "Cradling the Chinook Salmon" from Sunday Oregonian, May 13, 1900
 - "Fishing" from Daily Coast Mail, January 07, 1904
- Lesson: Segue from discussion to lesson. Depending on the grade level, some useful lesson plan and unit plan ideas have been listed.
 - o For grades K-2: "Pacific Salmon" by National Geography
 - For all grades: <u>"Salmon in the Classroom"</u> by Oregon State University
 - o For all grades: "The Salmon Box!" by the U.S. Forest Service

Extension Activity Ideas

Activities can be modified several different ways, depending on the grade level and focus of study. Listed are activity ideas that can be adapted and extended to and for any grade level.

- Compare and Contrast: Using the articles listed previously, and the Historic Oregon Newspapers website, have students compare and contrast the importance of salmon in the early 1900s and in the present day. To further extend this activity, have students compile information and present their findings to the class. In addition, compare and contrast the importance and use of salmon across the states.
- Life Cycle Vocabulary Jeopardy: One of the topics that 4th graders learn is the life cycle of salmon. After teaching the life cycle lesson, play jeopardy using the vocabulary terms listed above or on the specific websites. This not only extends students' learning, but also cements their understanding of these vocabulary terms. For further challenge, mix vocabulary terms and different anatomical parts of the salmon in addition to the places salmon spawn, swim, live, etc.

Salmon!



K	TAJ	L
What do you already KNOW?	What do you WANT to know?	What did you LEAR

Compare and Contrast Activity Sheet

Driving Question:

What is the importance of salmon in the early 1900s and in the present day?

How are they similar? How are they different?

- 1. Browse http://oregonnews.uoregon.edu/search/pages, specifying the year (early 1900s versus present day) and key terms.
- 2. If necessary, use present-day newspapers to find more information.
- 3. Find at least 3 differences each, and write down in the proper space.
- 4. Find at least 3 similarities, and write down in the proper space.
- 5. Write down the URL for where you found the information.
- 6. Write a short summary of your findings.
- 7. Prepare to share your findings in a class discussion.

	Early 1900s	Present Day
	(At least 3 examples)	(At least 3 examples)
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		

What do both have in common?		
(At least 3 examples)		
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
	Summary	
	Put all of your findings together in a SHORT summary, using complete sentence and punctuation.	