

## Our Bones Are Made of Salmon

### Background Information on the Fraser River:

The Fraser River was named after Simon Fraser (1776-1862) who explored the river in 1808 on behalf of the North West Company in search of a navigable route for fur trading. Simon Fraser believed that he was traveling on the Columbia River to its ocean outlet. It was another explorer, David Thompson, who later named the river after Simon Fraser.

First Nations people had lived along the Fraser River for thousands of years before Simon Fraser's arrival. Some of the archaeologists estimate up to 9000 years before. (A site under the Alex Fraser Bridge has been dated back that far). While we can't know an exact arrival date, it would have been after the last ice age, 10-14 thousand years ago. It is worth noting, though, that within the oral traditions of First Nations groups, there are no stories of them arriving in what we now call Canada. For them, they have always been here.

The Fraser River starts as a trickle at Mount Robson (Headwaters) and ends in the Strait of Georgia in the Pacific Ocean. There are many tributaries that add water to the Fraser, including the Thompson River (22% of the total water flow).

The Fraser River is estimated to be 1,375 kilometers long. If it was stretched out across Canada, it would span the distance between Vancouver and Regina, Saskatchewan. The Fraser River is longest river in BC, and the fifth largest river in Canada. It is less than 15,000 years old.

The characteristics and landscapes of the Fraser River change from the beginning of its journey to its end. As you exit the headwaters on Mount Robson and enter the Upper Basin region, the river's sediment load increases creating more turbulent waters with the water appearing grey or brown in colour. The river then passes through drier lands with low vegetation as a result of little rainfall and hot temperatures. In the Fraser Canyon, the river is squeezed between the Coast and the Cascade mountain ranges, increasing the speed and creating many impressive rapids.

The point at which the fresh water of the Fraser River meets the salty water of the Pacific Ocean is called the estuary, (also sometimes called "between land" by the First Nations people because as the tides ebb and flow, the estuary mudflats alternate between being exposed and submerged). Because estuaries have access to both riparian (river) and marine nutrients, they are home to an incredible diversity of life.

A habitat can be defined as a place where an organism can get food, water and shelter. The major habitat types along the Fraser River include: brackish and freshwater marshes, salt marshes, tidal flats, sloughs, and flood-plain forests among others.

The Fraser River watershed is also home to 60% of BC's population, approximately 2.7 million people. A watershed is an area of land that drains all the water into one main river. The Fraser River watershed is also called a drainage basin, since it collects so much water and drains such a large area (25% of BC's area).

## Program Overview:

This program explores the connection between Indigenous peoples and salmon on the Fraser River. Students get hands-on experience with fishing technology, learn about wind-drying salmon, and discover that salmon is in the hearts of Aboriginal people living along the Fraser River today.

## Program Objectives

- to show the importance of the Fraser River to Indigenous peoples.
- to share the importance of fishing to Aboriginal people on the lower Fraser River.
- to explore the complexity of fishing methods and technology.
- to explore the diversity of First Nations along the river.
- to link traditional fishing practices with contemporary issues in the Indigenous fisheries.

## Helpful Vocabulary

**Indigenous:** originating or occurring naturally in a particular place, in this case, modern-day Canada

**Coast Salish:** a First Nations language group consisting of groups along the lower Fraser River

**Sockeye:** a type of salmon prevalent in the Fraser River

**Spawn:** an act of reproduction of fishes; mixing of the milt of a male fish and the eggs of a female fish

**Estuary:** where the freshwater of the river meets the salt water of the ocean

**River basin or watershed:** the area of land that drains into a river

**Oral storytelling:** a reliance on passing history to future generations through spoken means rather than written

**Tradition:** the handing down of statements, beliefs, legends, customs, information etc. from generation to generation

**Life cycle:** the continuous sequence of changes through the development of an organism (i.e. – salmon from birth to death)

**Elder:** an influential member of a First Nations group; respected by virtue of age and wisdom.

**Hemp:** a plant fiber used to make rope and fabrics

**Dogbane:** a strong, grass like plant used in making netting

**Nylon:** a modern fiber used in the production of many types of fishing equipment, among other things

**Canyon:** a deep valley with very steep sides

**Granite:** a coarse rock, often found in canyon walls

**Dehydrate:** to preserve by removing water from a substance (ie – drying salmon using wind or smoke)

**Wind tunnel:** a narrow channel with a constant stream of wind

**Radiating:** to emit stored-up heat energy (ie – stored heat in canyon walls)

**Preservation:** in relation to food, preparing to avoid spoiling or decomposition

**Entrails:** the intestinal part of an animal that is generally removed before consumption

**Kwetsel:** a flat slate blade used to process salmon

**Trade:** the exchange of commodities between multiple people or groups

**Community:** a group of people working together towards a common goal or objective

## In- class activities:

Here are some ideas to help prepare your class for the program, and to continue the learning back in the classroom.

### Pre-visit:

1. Start thinking about traditions. Have students think about traditions that exist in their own families. These could be traditions from holidays or things their families do regularly. Share traditions with the class. Are there any families who have the same or similar traditions? Where did these traditions come from?
2. In this program, we will be talking about a particular way to preserve salmon. Preserving food was vital before the spread of home refrigeration (early to mid 1900s), however, we still rely on it today.
  - a. As a class, brainstorm ways to preserve food besides refrigeration (ex. drying, salting, pickling, curing, smoking, burying, alcohol, soaked in oils). Really, most foods that aren't fresh produce has been preserved in some way.
  - b. Have students do a survey of their lunch. What did they bring in that was preserved in some way?
  - c. Research what it is in season at this time of year. If we couldn't preserve foods, this is all we would be eating. Try to come up with some recipe ideas using ONLY these foods.
3. In this program, we'll be touching on the salmon life cycle. If you haven't talked about it yet, or need a refresher, try one of these videos:
  - a. This National Geographic video provides a good overview, with high quality video.
    - i. [https://www.youtube.com/watch?v=ZR4\\_LhPCgbo](https://www.youtube.com/watch?v=ZR4_LhPCgbo)
  - b. This is a parody of "I Will Survive". While not the best quality audio, the lyrics are very clever.
    - i. <https://www.youtube.com/watch?v=qV30UZ9aF04>

### Post visit:

1. Recall what you learned about traditional fishing and preservation methods by working together as a class to make a model of the fishing tools and wind-drying rack. Assign different groups of students to each of the following components: wind-drying rack, six steps for processing salmon, harpoon, dip net, and gill net. You could use classroom materials like construction paper, skewer sticks, glue, etc, or you could try to construct the entire thing out of recycled materials, like egg cartons, orange juice containers, etc. Go a step further and make the Fraser Canyon to house your drying rack and tools, turning it into a diorama.
2. Elders are a very important part of the First Nations communities. They have lived on the river for thousands of years, and throughout this time have managed to continue to pass down traditions, skills, and stories. Ask your students to think of a skill they learned from their elders. This could be a parent, grandparents, or other older person in their life. For example, perhaps a student learned to build something out of wood because their parent or grandparent taught them, or maybe a student learned to cook a special meal or dish because their families enjoy it and want to pass it on. Write these elders thank you letters. The students can explain what the skill was, what it meant to them, and perhaps draw a picture.