



**Big Idea:** The Fraser River has been home to the white sturgeon for thousands of years. The fish lives its entire life in the river and it resides near the bottom of the river. These factors contributed to the survival of the First Nations people who relied on sturgeon as a source of food, particularly when other fish were scarce. To catch the white sturgeon, First Nations fishermen used various techniques to overcome its large size and the problem of fishing in deep water. In this lesson, students will examine one of the traditional methods the First Nations fishermen used to catch sturgeon.

**Objectives:** Students will...

- predict how the First Nations fishermen overcame the challenge of catching sturgeon
- learn one of the fishing techniques used by First Nations fishermen to catch sturgeon

**Curricula Links:** Social Studies, Language Arts, Art, Science

**Suggested Grade Levels:** 4 - 6

**Materials:**

- Overhead of sturgeon mouth photos (Appendix 2.5)
- Copies of graphic organizer 'How to Catch Sturgeon' (Appendix 2.6)
- Copies of 'Sturgeon Fishing by First Nations Fishermen' (Appendix 2.7)

## Lesson Two (b) - Early Fishing Challenges

### Opening Motivator:

On an overhead projector, show the picture of the sturgeon's mouth (Appendix A). Briefly explain/discuss the photo, and then ask the students "Where do you predict the sturgeon feeds?". Teachers should lead the discussion to the fact that sturgeon are bottom feeders (they vacuum up the food by extending their mouth downward) and they search for food along the floor of the Fraser River. Then pose the question "Does this make them easy or difficult to catch?". Again, lead the discussion toward the fact that they may be difficult to catch when they are in deep water.

### Classroom Activity:

1) Present this scenario to your students: "You are a contestant in the latest reality TV show 'Survivor BC' and one of the challenges you need to accomplish is to catch a sturgeon, count its scutes, then release it back into the water. Part of the challenge is that you are in the wilderness and the only equipment you have is a hatchet and a knife. With a partner, you need to come up with a way to catch a sturgeon using only these two tools and any other materials you might find in the wilderness (trees, rocks, etc...)."

**Teaching Tip:** Before beginning the task, it may be helpful to ask students to list useful materials they might find in the wilderness and write them on the board.

3) Once the students have brainstormed a solution, they will record their ideas on their own individual graphic organizer. On the top part of the section entitled “My method for catching a sturgeon,” students will draw the main part of their plan. On the bottom set of lines, they will write a description to explain the drawing. Students should use only the left side of the graphic organizer and leave the right side blank for now.

4) When students complete their drawings and written explanations, hand out the copies of the sturgeon fishing techniques used by First Nations people. Read the information aloud with the class. On the right side of the graphic organizer entitled “First Nations method for catching a sturgeon” students should then illustrate and label the important aspects that relate to catching sturgeon. On the bottom section, students are to write a summary of the technique used by First Nations fishermen.

**Teaching Tip:** After the students have read over the information on First Nations fishing techniques and drawn the diagram, have them put away the information sheet and try to complete the written description by using their own diagram as a reference. This prevents students from copying sentences from the information sheet.

## **Conclusion and Reflections:**

Were any parts of your ideas similar to the techniques used by the First Nations fishermen? Which technique do you think would be most successful in catching sturgeon?

**or**

You were asked to write a description of the First Nations technique without looking at the information sheet. What part was most challenging? Do you think this is an effective way to record information using your own words?

## **Extension Ideas:**

- 1) Make a 3D mural of the Fraser River cross section and, after lesson 3, include where different stages of the life cycle occur. Students can draw sturgeon and other animals / plants that populate the river, label each with their name, and provide one or two facts.
- 2) Compare the techniques used by First Nations fishermen to catch sturgeon with those used to catch salmon.
- 3) Construct a diorama that depicts a scene of First Nations fishermen trying to catch a sturgeon using traditional fishing methods.

## **Web Links:**

[Champlain Collection](http://www.champlainsociety.ca) - This website provides original documents (journal entries, stories) of various people who explored Canada in the 1700's and 1800's. A sample is provided in Appendix 2.8 (reminder that this description is not of a white sturgeon, however the technique is the same one used by First Nations fishermen who also caught white sturgeon along the Fraser River. <http://www.champlainsociety.ca>

Appendix 2.5 - Mouth of a White Sturgeon



photo from [http://www.jjphoto.dk/fish\\_archive/freshwater/acipenser\\_transmontanus](http://www.jjphoto.dk/fish_archive/freshwater/acipenser_transmontanus)



photo from <http://www.anglinguk.net/sturgeon.htm>



Appendix 2.6 - 'How to Catch a Sturgeon'

My method for catching a sturgeon	First Nations method for catching a sturgeon



## Appendix 2.7 - Sturgeon Fishing By First Nations Fishermen

Excerpt taken from Indian Fishing by Hilary Stewart, published 1977 by Douglas & McIntyre Ltd. Reprinted by permission of the publisher.

### **Sturgeon Fishing**

Probably the largest of the fish caught by the coast Indians was the sturgeon, a long-lived freshwater fish that can grow to about six metres (20 feet), and range in weight up to 812 kilos (1,800 pounds). While the sturgeon inhabits the major rivers of the Northwest Coast, the Coast Salish people were the great pursuers of this fish.

The sturgeon, sluggish in winter, lay in deeper water during this time and was not difficult to locate by probing with a two-pronged harpoon with an extended shaft. In the early summers the sturgeon came in to shallower water to spawn, and from April through summer could be taken in the sloughs by fence weir, set net, trawl net and harpoon. Harpoons, the same ones used for seal and porpoise with a trident butt, were used in the daytime on low tides. At night, on any tide, a fish swimming about 2.4 metres (8 feet) deep could be seen well ahead by its phosphorescence, and be an easy target.

A large sturgeon, struck with a harpoon, would take off into deeper water, speedily towing the canoe behind it. The late Chief August Jack Khahtsahlano (born 1887 in Vancouver) once described how a heavy stone on a cedar bark rope would be dropped from the stern of the canoe to help slow down and steady the erratic craft being powered by a captive sturgeon. When eventually the fish tired and sank to the bottom, the line went vertically down - a signal to the fishermen to bring it to the surface. With sufficient lines embedded in the flesh, the fish was hauled up and clubbed on the side of the head.

In a well practised manoeuvre the canoe was then tipped, the sturgeon rolled in over the gunwale, and the water bailed out. sometimes an outrigger was made to steady the canoe for hauling in large fish. A pole, with a block of wood at one end, was put across the canoe and lashed to the thwart. Another method of getting the catch home was to simply reverse the fish-towing-the-canoe procedure and have the canoe tow the fish.

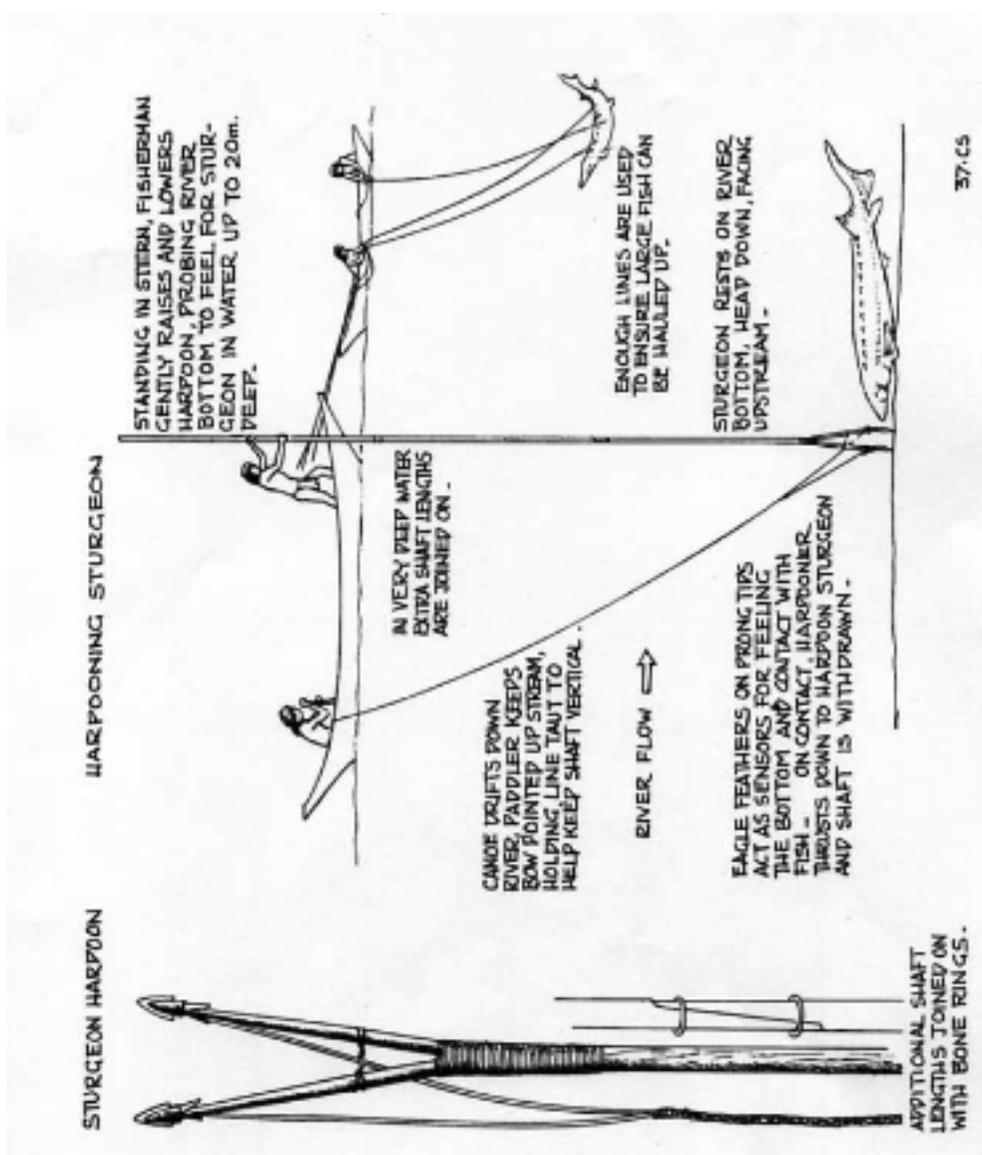
The 1827 journal of fort Langley, on the Fraser River, has a July 21 entry reading:

“We procured a small supply of fresh sturgeon from the Indians today. These fish are as large as those of the Columbia, and are killed in this River with Spears fifty feet in length, having a fork at the end, Barbed occasionally with iron, but oftener with a piece of shell. When the fish is struck, the barbs having a cord, attached to their middle, and held at the end of the Spear, are drawn from their socket and remain in the fish across the wound, til it is drawn up and killed.”

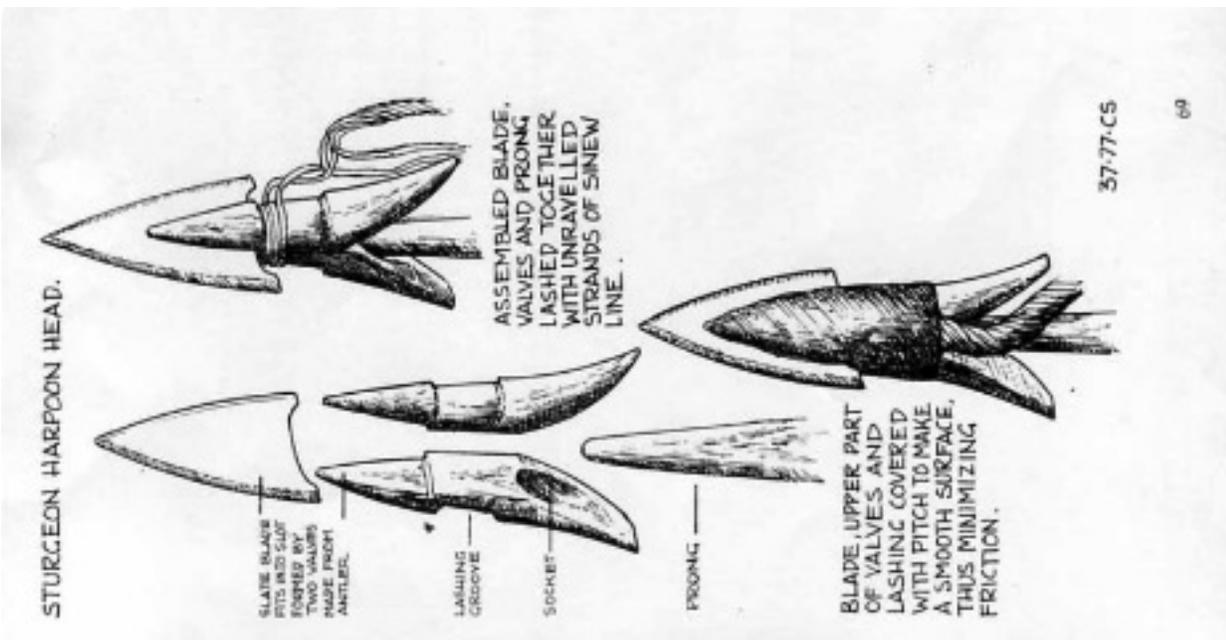
On August 2 the fort traded “Two hundredweight of sturgeon” and at a later date “Bought a sturgeon from the Cowichans - weight 400 lbs. the guts out.”

Another eye witness to sturgeon fishing was Sir Arthur Birch, colonial Secretary at Government House in New Westminster. In a letter to his brother John, dated 7 May 1864, he writes: “I have got a very nice little Wooden Office & my room is charming now though I fear very cold in the winter. It is close onto the Fraser & the balcony & veranda over hand the water. All the Indians now fishing and it is great fun to watch them spearing Sturgeon which here run to the enormous size of 500 & 600 lbs. The Indians drift down with the stream perhaps 30 canoes abreast with their long poles with spear attached kept within about a foot of the bottom of the River. When they feel a fish lying they raise the spear and thrust it at the fish seldom missing. The barb of the spear immediately disconnects from the pole but remains attached to a rope & you see sometimes 2 or 3 canoes being carried off at the same time down river at any pace by these huge fish.”

Appendix 2.7 (cont'd)



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Appendix 2.7 (cont'd)

