



Gulf of Georgia Cannery National Historic Site of Canada

12138 Fourth Ave. Richmond B.C. V7E 3J1

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Pre-visit Package (2015 update)

Fishy Business

Grade(s): 2-3

Duration: 90 mins

Program Goal:

Students will understand how fishing technology has changed over the years and why fishing is an important part of our community history. They will also learn about the different types of fish in our waters and what impact fishing has on their environment.

PLO's:

Grade 2

Social Studies

- Describe ways individuals contribute to a community (B2)
- Describe how technology affects individuals (D3)
- Describe our responsibility to the local environment (E2)
- Describe how physical environment influences human activities (E3)

Science

- Classify familiar animals according to similarities and differences in appearance, behaviour and life cycles
- Describe some changes that affect animals
- Describe ways in which animals are important to other living things and the environment

Grade 3

Social Studies

- Apply critical thinking skills to selected problems or issues (A1)
- Formulate a response to a relevant community problem or issue (A7)
- Identify changes that can occur in communities over time (B1)
- Assess how technology affects individuals and communities (D2)
- Demonstrate a sense of responsibility for the local environment (E3)
- Describe how the physical environment influenced early settlement in the local community (E4)



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*Can be adapted to fit Grade 4 SC PLO's: analyse simple food chains and determine how personal choices and actions have environmental consequences

*Can be adapted to fit Grade 5 SS PLO's: E2 describe the location of natural resources within BC and Canada and E3 explain why sustainability is important

Program Summary:

Upon arriving at the Gulf of Georgia Cannery, students will engage in the following activities under the guidance of a Cannery Interpreter:

- Introduction to the Cannery & *Journey Through Time* film
- Fish Wall activity;
 - o What types of fish are in our waters?
- Skiff & Wheelhouse examination
 - o How do we catch the fish and how has technology changed over time?
- Introduction to fishing methods
 - o How is ocean sustainability affected by different fishing methods?
- Fish Licensing game
 - o Why is it important to regulate fishing?

Pre-visit Activities: *Please refer to included worksheets.*

1. A Century of Fishing
2. Fishing Words
3. Let's Go Fishing!
4. By-Catch? What's that?!

Post-visit Activities:

After your visit to the Cannery, your class can engage in the following activities to help expand on what they learnt.

1. DISCUSSION:

Either as a class, or in small groups, discuss and reflect on these questions:

- a. Why did the early people of our area settle along the river? Why was water important to them?
- b. How did the river affect the development of early communities?
- c. How has fishing changed over time? What are some of the advances in fishing technology?
- d. Are all fishing methods good for the environment? Why / Why not?
- e. What can we do to help protect our aquatic species?



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2. **CREATIVE PRESENTATIONS:**

In groups of 3 to 6, ask your students to create a presentation on what they learnt at the Cannery. Topics can include: Community development, Fishing technology, Fishing control and Environmental Sustainability. These presentations can be produced in their preferred form of a creative presentation: a short story, a skit, a drawing, a collage, etc.

3. **FISHING IN THE FRASER RIVER:** *Please refer to included worksheet.*

Additional Web Resources:

1. *Freshwater Fisheries Society of BC*

<http://www.gofishbc.com/how-to-fish.aspx>

2. *Underwater World, Fisheries and Oceans Canada*

<http://www.dfo-mpo.gc.ca/science/publications/uww-msm/articles/pacificsalmon-saumonpacifique-eng.htm>

3. *The Salmon Atlas- Pacific Salmon Rivers of Western Canada*

<http://www.salmonatlas.com/pacific-salmon/canada-west/index.1.html>

A Century of Fishing

(words in **bold** are defined on the next page: “Fishing Words”)

At the turn of the 20th century, commercial fishing was done in small boats (about 25 feet long). The boats were open except for one tent-like cover in the **bow** of the boat. Two kinds of open boats were common on the BC coast: the River’s Inlet **Skiff** and the Columbia River Boat. There were no engines on these boats and they were equipped with just 2 oars and a rough sail.

On Sunday nights, the boats were towed from the cannery up an **inlet** or to the mouth of a salmon river (like the Fraser, Nass or Skeena Rivers). Two people, usually Aboriginal or Japanese men, spent up to one week out on the water, **setting** the nets and pulling in the fish by hand. The fish they caught were collected in nearby **scows** or by a pick-up boat. The fishermen ate and slept in their boats, sharing their small space with the fish they caught. There were no radios, televisions or computers to help pass the time. In those early years, millions of pounds of salmon were caught and taken to the canneries every season.

There have been many changes in the fishing industry in the last one hundred years. Technology has not only put powerful engines into every fishing boat, but replaced much of the back-breaking work with strong **pulleys** and net **drums** which make it faster and easier to haul in the catch. **Synthetic** material has made fishing gear, such as lines, nets and floats, lighter and more durable. Radios allow fishermen to communicate over far distances. **Radar** and **sonar** have taken the guess work out of finding the fish. Refrigeration and freezers on the boats make it now possible to keep a catch fresh and continue to fish, without having to rush back to land to sell or preserve it. Living quarters are still cramped by our ‘landlubber’ standards, but luxurious compared to the early skiffs.

Current Issues

While technology has made fishing boats extremely efficient, there are fewer boats fishing today than there were 100 years ago. Also, it has become evident that fish, including the salmon species of BC, are not an unlimited resource. Declining fish populations are caused by many factors, such as over-fishing & by catch, habitat loss, global warming and pollution.

Fishery-centred issues are part of our daily news, especially in coastal communities. Can your class collect newspaper clippings, magazine articles or news reports that highlight fishery or ocean-related issues? The “Fishy Business” program will provide a good foundation to continue discussing those modern-day issues in the classroom.

FISHING WORDS

In order to get the fish into the Canneries, they needed to be caught first. Here is a list of boats, tools, and materials that fishermen use to catch the fish.

Can you find these words in the puzzle below?

1. **Aft** *The rear of a boat.*
2. **Bow** *The front of a boat.*
3. **Drum** *A large, power-driven spool used to bring in or let out fishing nets. There are different sizes and types of drums for different types of fishing.*
4. **Gurdy** *A motor driven spool or crank used to pull in or let out troller lines.*
5. **Hoochie** *A squid-like lure used by trollers (boats that fish with more than one line).*
6. **Inlet** *A natural opening in the coastline. Most of the fishing done 100 years ago was in the inlets.*
7. **Lure** *Any kind of artificial bait used to attract fish.*
8. **Pulley** *A wheel around which a rope, chain or wire is pulled.*
9. **Radar** *An electronic device that locates and tracks objects by radio waves. The radar allows fishermen to find their way in bad weather.*
10. **Scow** *A flat-bottomed boat or barge.*
11. **Set** *A term used for putting out a fishing net, ready for fishing.*
12. **Skiff** *A small open boat.*
13. **Sonar** *An electronic device that locates objects underwater by measuring the time taken for an echo to return from that object. This technology allows fishermen to detect schools of fish by using sound.*
14. **Synthetic** *Any man-made material, such as nylon or plastic.*

You will also find a few "nets" & "fish," a "salmon", a "chum" (a kind of salmon) and fishing "gear."

N	G	H	O	O	C	H	I	E
E	N	U	F	I	S	H	R	T
T	O	I	R	I	M	O	N	S
S	L	N	F	D	S	E	T	O
P	U	L	L	E	Y	T	D	P
I	R	E	S	O	N	A	R	Y
R	E	T	E	B	T	M	U	D
A	C	S	O	C	H	U	M	A
D	U	A	S	F	E	N	E	G
A	G	L	C	K	T	I	H	E
R	O	M	O	K	I	A	L	A
A	B	O	W	X	C	F	V	R
P	O	N	E	T	S	T	F	Y

Let's Go Fishing: Purse Seining

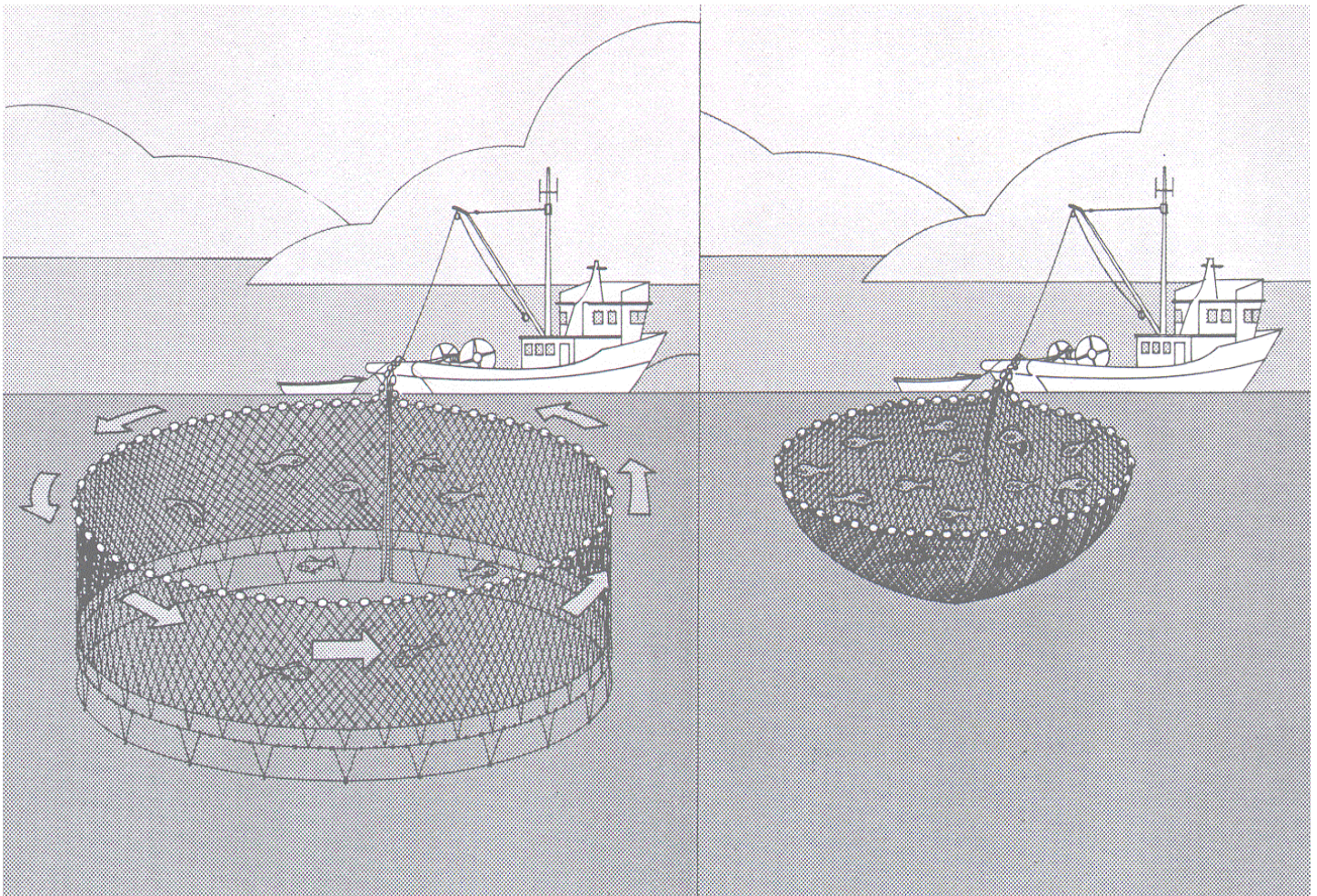
Seine boats use large nets to encircle a school of fish.

A small **skiff** holds one end of the net, while the seine boat encircles the fish. The net is held up by a **cork line** (a string of plastic floats) and held down by a **lead line** in the water. A powered **winch** (like a spool or reel) on the seine boat draws in the **purse line**, attached by rings to the lead line. This action pulls the bottom of the net into a huge purse, preventing the fish from escaping. A big powered **drum** then hauls the net closed and the fish are scooped out of the net, into the hold, with a power operated dip net. Seine boats have tall poles called **booms** mounted behind the **wheelhouse**, which are sometimes used to lift the large nets on and off the boats.

Can You Find?

Skiff Cork Line Lead Line Purse Line Drum Boom Wheelhouse Winch

Draw a line from the word to the object.



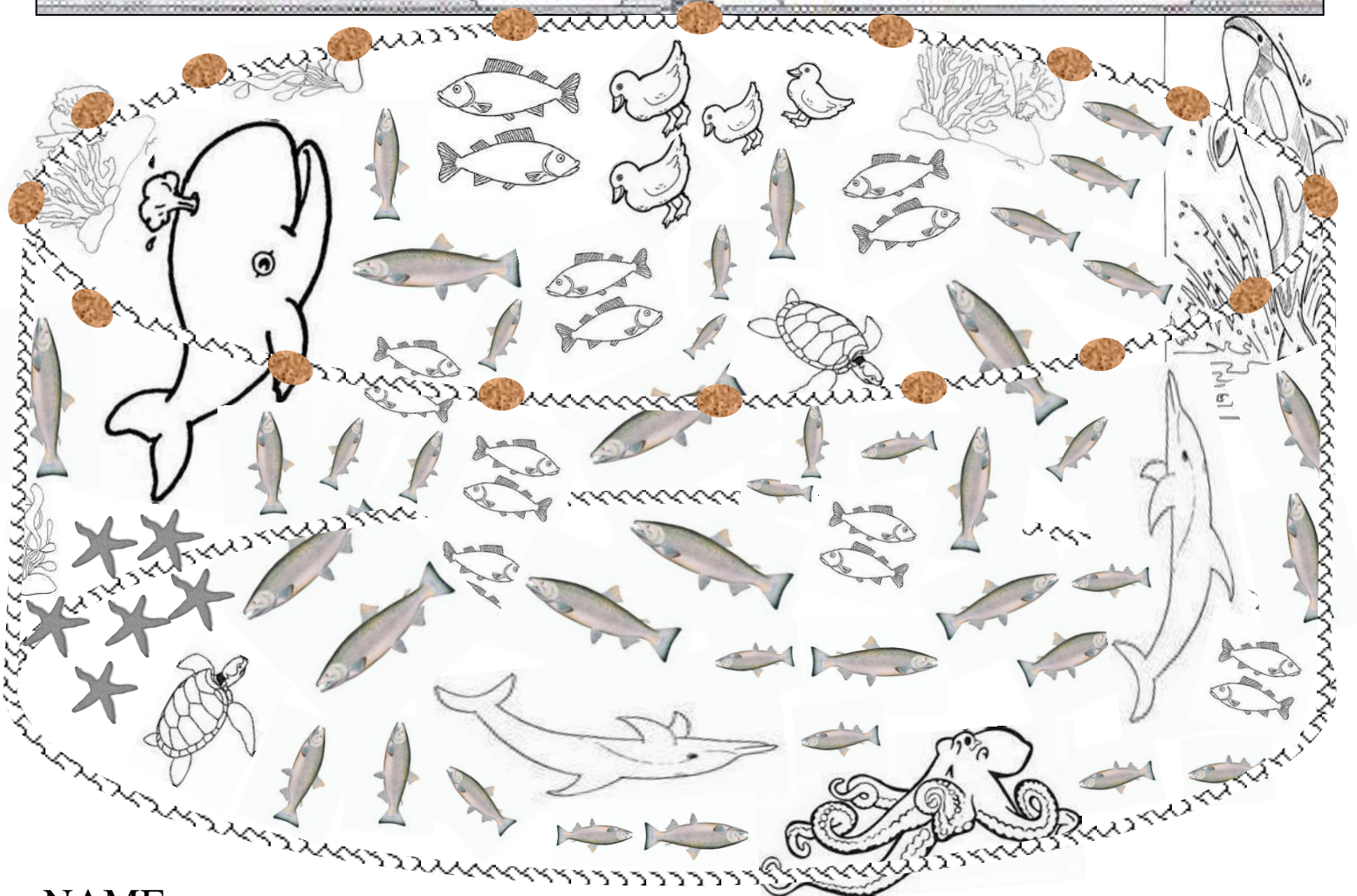
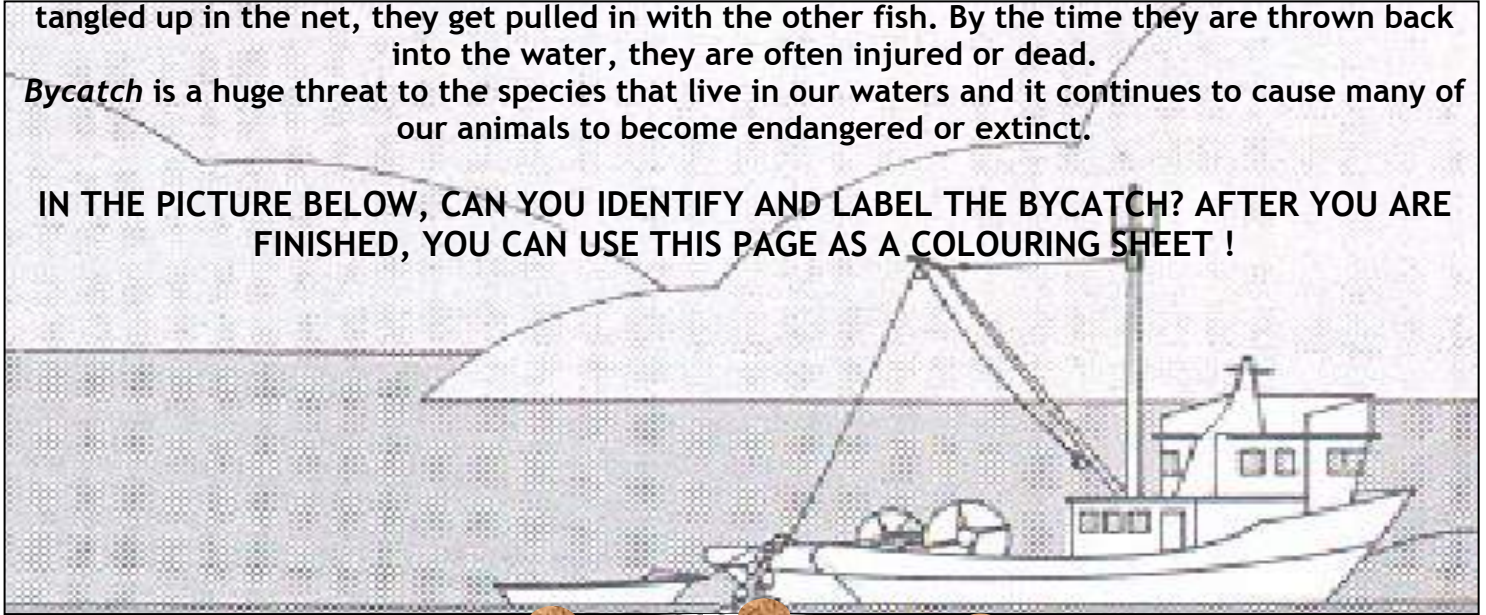
Bycatch - What's that ?!

In the fishing industry, BYCATCH is a word used to describe anything that is accidentally caught when trying to catch a certain type of species.

In the picture below, the *Seine Boat* is out to catch salmon. *Purse Seining* is one of the many types of fishing where it is easy to catch other creatures by mistake. When those creatures get tangled up in the net, they get pulled in with the other fish. By the time they are thrown back into the water, they are often injured or dead.

Bycatch is a huge threat to the species that live in our waters and it continues to cause many of our animals to become endangered or extinct.

IN THE PICTURE BELOW, CAN YOU IDENTIFY AND LABEL THE BYCATCH? AFTER YOU ARE FINISHED, YOU CAN USE THIS PAGE AS A COLOURING SHEET !



NAME: _____