Articles and Questions

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1) a PDF file

*and*

2) a Word file

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This **Word** file allows students to complete assignments using a computer either at school or at home. Teachers can assign all or parts of the file by email attachment or a school website. The **Word** file also allows teachers to:

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<https://support.google.com/docs/answer/187189?hl=en&co=GENIE.Platform=Desktop>

**End of the Cod Fishing Moratorium**

Some 32 years ago, Canada closed the Newfoundland and Labrador cod fishery. The move wiped out 30,000-plus jobs. It was Canada’s biggest layoff ever.

Northern cod, a subspecies of Atlantic cod, had provided Newfoundland with a rich fishing industry for 500 years. Suddenly the fishing boats sat at the dock, empty.

The depletion of the Northern cod is one of the biggest fisheries disasters of all time. The fishery was “the engine of the coastal economy” and “the heart of the social fabric,” says Tony Charles of Dalhousie University.

That heart was torn out. The loss of the fishery was also the loss of a way of life. In 1992 Newfoundland’s population was about 580,000. The province was already poor, unemployment was high, and the birth rate was Canada’s lowest. With the cod fishery closed, about 60,000 Newfoundlanders left the province over the next ten years.

A 2002 Royal Commission looked at the challenges facing Newfoundlanders after the cod fishery closed. It found that the impact of the cod **moratorium** hurt the province’s culture, identity, economics, families, and population.

**Some fishing resumes**

Indigenous people and sport fishers have been allowed to catch some cod since 1998. This June, Ottawa said other limited cod fishing could resume. Newfoundland MP Churence Rogers called it a great day.

But others worried. Greg Pretty leads the inshore fishers’ union. He believes that letting large offshore fishing boats operate will prevent cod stocks from rebuilding to a healthy level.

“We need to protect our plant workers, our owner-operator harvesters, and the long-term sustainability of our coastal communities,” he stated.

**The industry's history**

When English explorer John Cabot first visited the region in 1497, the sea teemed with cod. It was a valuable food source. Salted and dried, it could survive the long journey to Europe. Many boats traveled to the rich fishing grounds. Fishing outposts grew into settlements.

An inshore fishing industry developed. Mostly, these were small family-run operations. Boats used handlines baited with worms or **capelin**. Families pitched in to prepare the catch.

Demand for Newfoundland cod was high in Europe, so the industry expanded. In 1750, Newfoundland’s population was about 10,000. That grew to 46,000 by 1825.

Early signs of overfishing appeared as catches decreased. So boats tried more efficient methods, like **seine nets**, trawl lines, **gill nets,** and cod traps.

**Modernization**

Fisheries and Oceans Canada (DFO) controls the nation’s fishing industry. Newfoundland joined Canada in 1949, just as new technology was improving. Sonar tracked schools of fish. Huge **factory freezer trawlers** with large nets and big motors fished 24/7. So fishers caught more and more cod. Between 1647 and 1750 they took in around eight million tonnes of cod. It took factory trawlers 15 years to catch the same amount.

The new technology caused Newfoundland’s cod industry to surge. In 1968 the catch peaked at 810,000 tonnes. Between 1975 and 1980, the number of fishers went from 15,000 to 35,000. The number of fish processing plants grew from 100 to 175.

**Faulty math**

Then, the pattern reversed. So scientists tried to keep the stock healthy by setting an annual Total Allowable Catch (TAC). The DFO hoped this would help cod numbers increase in the 1980s.

Meanwhile, large mechanized factory fishing trawlers were vastly overfishing the cod. And Canada couldn’t stop foreign vessels from ransacking fish outside its 200-mile fishing territory area.

In the late 1980s, the yearly TAC was set at 250,000 tonnes. Yet fishers reported decreased catches and smaller fish. New data now showed that the DFO had grossly overestimated fish populations. Scientists wanted the TAC to be cut in half, but Ottawa ignored the advice. By 1992, the number of breeding-age Northern cod had fallen to one percent of its peak. So Ottawa imposed a total ban and the fishery was shut overnight.

**A cautious beginning**

Now, numbers have gone up – a little. Northern Cod is no longer endangered: it’s on the ‘cautious’ list. One expert said that’s “like going from being really terribly sick to being just terribly sick.”

The 2024 TAC is 18,000 tonnes, a minor change from 13,000. Some 84 percent will go to inshore fishers. Trawlers will be allowed six percent of the catch.

Is increasing the catch the right decision? Time will tell. After all, global warming, microplastics, and pollution also play a role in the fate of the Northern cod.

**About Atlantic Cod**

Atlantic cod is a groundfish species found as far south as North Carolina and as far north as Greenland. They live and feed near the shallow waters of the continental shelf. They have large heads and three dorsal (back) fins and two anal fins. They are yellow-green, reddish, or olive green-brown, with speckles or spots. They have pale bellies and stripes down the sides. Atlantic Cod typically grow about a metre long but can reach up to 180 centimetres. They mature in 3-7 years.

Cod spawn in winter and early spring. A large female can lay up to nine million eggs. Cod larvae feed on plankton and live near the surface. Juveniles (1-4 years old), settle on the ocean floor and stay in the shallows. Juvenile cod eat shrimp and krill. As they grow, they hunt larger prey including squid and fish. Mature cod venture into deeper waters where they can live up to about 20 years. Cod do not migrate long distances and normally stay within a specific region.

**capelin:** a small marine food fish that lives in northern oceans

**factory freezer trawlers:** large trawling vessels with powerful motors and freezers on board to preserve their catch

**gill net:** a net that hangs in the water to catch fish by their gills

**seine net:** a type of fishing net which hangs down in the water and is pulled together at the ends to catch fish

**moratorium:** a temporary stop an activity by official order

**Comprehension Questions**

1. Describe the range of Atlantic cod.

2. Where do they live when they are young? Where do they move when they mature?

3. How old is the cod fishing industry in Newfoundland and Labrador? When did it begin?

4. Describe how fishing methods have changed over the years.

5. When did Newfoundland and Labrador join Canada?

6. Which government department took over regulation of the cod fishery after this occurred?

7. What does **TAC** stand for?

8. What were the annual TAC targets during the late 1980s?

9. What did later DFO projections show? What did scientists say should happen to the TAC quota?

10. What did the federal government announce in 1992 regarding the cod fishery?

11. How many Newfoundlanders were impacted by this decision?

12. What decision did the federal government recently announce regarding Northern cod?

**Questions For On Line Exploration**

*Note:* The links below are listed at **www.lesplan.com/links** for easy access.

1. Learn more about the end of the 32-year cod moratorium in June 2024:
**https://www.cbc.ca/news/canada/newfoundland-labrador/nl-northern-cod-fishery-2024-1.7246735**

What questions do you have?

2. Listen to two podcasts that review the history of Northern cod fishing.:
**https://www.cbc.ca/listen/live-radio/1-122-the-broadcast/clip/16078242-ocean-choice-international-gearing-commercial-cod-fishery** [25:00] (podcast)
**https://www.yout-ube.com/watch?v=6bkMd0M4AA0** [22:41] (podcast)

What impact did cod fishing have on Newfoundland and Labrador?

3. Review the data that Fisheries and Oceans Canada (DFO) used to reinstate cod fishing in Newfoundland and Labrador:
**https://www.cbc.ca/news/canada/newfoundland-labrador/2j3kl-new-stock-assessment-model-1.7007858
https://www.cbc.ca/news/canada/newfoundland-labrador/northern-cod-stock-assessment-1.7156719** [2:18]
**https://www.cbc.ca/news/canada/newfoundland-labrador/northern-cod-migration-1.7215931**

What did you learn?

4. Hear from fishing producers who advocated for an end to the cod moratorium:
**https://www.cbc.ca/news/canada/newfoundland-labrador/northern-cod-ffaw-dfo-harvesters-moratorium-1.7186027
https://www.cbc.ca/player/play/audio/1.7185960** [24:59] (podcast)

For what reasons might producers applaud the June decision to lift the cod moratorium?

5. Hear from representatives of Newfoundland's fisheries union, fish harvesters, and the premier of Newfoundland, who are all calling for a reversal on the DFO’s decision to end the moratorium on cod fishing:
**https://www.cbc.ca/news/canada/newfoundland-labrador/ffaw-cod-moratorium-reinstatement-1.7251938
https://www.cbc.ca/news/canada/newfoundland-labrador/cod-moratorium-protesters-1.7259735** [1:35
**https://www.cbc.ca/news/canada/newfoundland-labrador/furey-letter-lebouthilier-1.7254148**

For what reasons might these parties disagree with the June decision to lift the cod moratorium?

 **Questions For Further Thought**

1. The article tells us that not everyone is happy about the federal government's decision to lift the moratorium on cod fishing. Newfoundland MP Churence Rogers said, “Today is a great day. This fishery is coming back with the hopes of sustaining this industry and our future generations.” Others, like Greg Pretty, the union leader who represents inshore fishers, said that cod stocks have not recovered. “We need to protect our plant workers, our owner-operator harvesters, and the long-term sustainability of our coastal communities.”

As you see it, what interests might be behind these very different perspectives toward the June 2024 decision? Give reasons to support your response.

2. Professor Tony Charles of Dalhousie’s Marine Affairs Program describes the cod fishery as “the engine of the coastal economy” and “the heart of the social fabric.” What is your understanding of these descriptions? For what reasons do you agree with Professor Charles? For what reasons do you disagree?

3. DFO (Fisheries and Oceans Canada) recently reclassified Northern cod stocks from ‘critical’ to ‘cautious'. That means the population still needs careful management, but limited fishing can occur.

As you see it, is the decision to lift the moratorium on cod justified by this new classification? Explain.

 **Putting It All Together**

**A. Write the letter that corresponds to the best answer on the line beside each question:**

\_\_\_\_\_\_ 1. **Northern cod live near the shallow waters of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ shelf.** a) Greenland b) continental
 c) tectonic d) Atlantic

\_\_\_\_\_\_ 2. **When did the federal government close the cod fishery off Newfoundland and Labrador?** a) 1914 b) 1939
 c) 1967 d) 1992

\_\_\_\_\_\_ 3. **How many Newfoundlanders lost their jobs after the cod fishery closed?** a) 5000 b) 12,000
 c) 24,000 d) 30,000

**B.** Mark the statements **T** (**True**) or F (**False**). If a statement is **True**, write one important fact to support it on the line below. If a statement is **False**, write the words that make it true on the line below.

\_\_\_\_\_\_ 4. **True** or **False?** Newfoundland's population grew from 10,000 in 1750 to 46,000 by 1825.

\_\_\_\_\_\_ 5. **True** or **False?** Newfoundland and Labrador joined Canada in 1867.

\_\_\_\_\_\_ 6. **True** or **False?** Fisheries and Oceans Canada manages saltwater fishing on the East Coast.

**C. Fill in the blanks to complete each sentence.**

7. After fish stocks crashed, Ottawa imposed a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_on cod fishing off Newfoundland and Labrador.

8. TAC: Total \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Catch.

9. A factory freezer \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with a large net and a powerful motor can fish for weeks.

**D. Respond to the following question in paragraph form. *(Use a separate sheet of paper if necessary.)***

10. ***Do you believe that Ottawa made the right decision to allow more cod fishing? Why or why not?*** Give reasons to support your response.

**Assessment Rubric**

This rubric may be helpful in providing students with formative, strength-based feedback and/or assessing students’ responses holistically. This easy-to-modify activity is included in the doc file which you can download from:
**www.lesplan.com/subscribers**

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| --- | --- | --- | --- | --- |
|  | **Emerging** | **Developing** | **Proficient** | **Extending** |
| **Supports thinking** | Answers or reflections are brief and include obvious facts/details/ evidence. | Answers or reflections are general and supported with some relevant facts/details/evidence. | Answers or reflections are clearly supported with specific, relevant facts/details/evidence. | Answers or reflections are insightful and supported with specific, relevant facts/details/evidence. |
| **Shows understanding** | Responses show a basic understanding of the text, topic, issue or message. | Responses are thoughtful and show a general understanding of the text, topic, issue or message. | Responses are thoughtful and show a complete understanding of the text, topic, issue or message. | Responses are insightful and show a deep understanding the text, topic, issue or message. May synthesize ideas or explain the ‘so what’. |
| **Thinks critically** | Makes straightforward connections or inferences. Focuses on retelling. | Makes logical connections to self (T:S) and/or background knowledge (T:S). Inferences are logical | Makes meaningful connections to self. Considers ideas between texts (T:T).Inferences are plausible. | Makes powerful connections that go between texts and/or beyond the text (T:W). Inferences are plausible and insightful. |