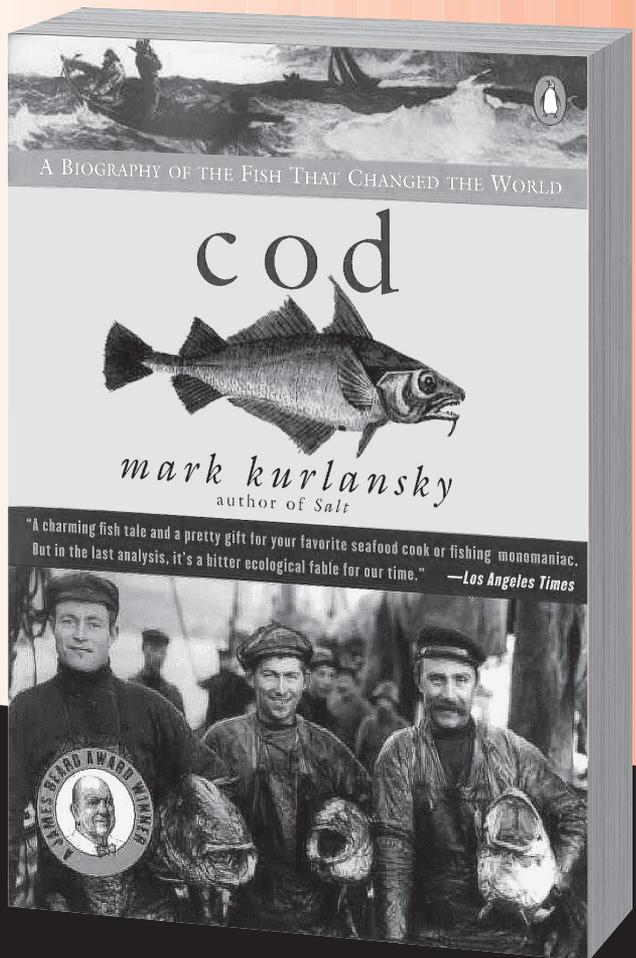


AN EDUCATOR'S GUIDE TO

# COD: A BIOGRAPHY OF THE FISH THAT CHANGED THE WORLD

BY MARK KURLANSKY



BY JEANNE M. McGLINN  
AND JAMES McGLINN

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Dear Educator:

The information and themes in *Cod* will lead students to develop their ability to read, think, and write about topics that are relevant and cross disciplinary. This text focuses on the biology of the cod fish, the geography of the fishing grounds and trade of cod, the impact of this resource on historical events, and the environmental, economic, and cultural effects of its over-exploitation. The interweaving of these topics provides students with a unique perspective for understanding the complexity of contemporary issues, such as sustainability and the exploitation of natural resources.

*Cod* can be used as supplemental reading in several different discipline areas, including Language Arts, History, and Biology. It can be chosen for small group reading circles or as a whole class text. If used with the whole class, excerpts that may be especially interesting to students are: the Prologue, all of Part I, and chapters 12 and 14 of Part III.

This guide provides a range of activities aligned with the **Common Core Standards (CC) for Language Arts and Social Studies** which can be selected as appropriate to meet the learning needs of students. This text is identified in the CC Standards as an exemplar informational text for history/social studies, grades 9-10.

## ABOUT THE BOOK

*Cod* chronicles the history of this fish which provided food for the Vikings on their far-ranging voyages and was later salt cured by the Basques who developed an extensive trade in cod. In time other nations got into the race to develop fisheries for cod. The resulting international cod trade had a significant influence on economic and political developments, including the slave trade and the fight for independence on the part of the American colonists.

By the mid-twentieth century, the once prolific populations of cod were reduced to such an extent that nations were forced to impose moratoriums on fishing for cod, to turn to cod farming, and to look for other species of fish to meet demand. Post WWII, nations imposed 200 mile limits on their cod and fishing grounds to claim what was left of this resource. Kurlansky concludes with a description of the imposition of quotas and regulations as well as the effect of the depletion of cod on the places and people who have traditionally fished the seas for cod.

## ABOUT THE AUTHOR

Journalist and writer, MARK KURLANSKY is acclaimed for a series of books which trace the history and impact of a resource on cultural, economic, and historical developments around the world. In addition to *Cod* (1997), he has written *Salt: A World History* (2002) and *The Big Oyster: History on the Half Shell* (2006).

He explores the impact of cultural change in other books, such as *1968: The Year that Rocked the World* (2004), *Nonviolence: The History of a Dangerous Idea* (2006), and *Ready For a Brand New Beat: How "Dancing in the Street" Became the Anthem for a Changing America* (2013).

## CLASSROOM LESSON PLANS

### PRE-READING ACTIVITIES

Introduce the subjects of cod fishing, exploration and trade, and environmental degradation and protection by engaging students in one of the following pre-reading activities.

1. Assign students to read the following Problem Situation and write their response as a journal entry. Have students share their journals and then discuss the issues as a class. Make a chart listing students' ideas to which the class can return as they read *Cod* to add to or revise their ideas about this dilemma.

You have been an ocean fisherman all of your life as your father and grandfather before you. You own a small fishing boat and have loved this life that has supported your family. Now, however, the government has closed the waters where your family has fished for generations because overfishing has reduced the fish population to a dangerously low level. How do you cope with this loss of your livelihood? What will you and your family do to survive?

Correlates to Common Core Standard: RI 9-10.3.

2. An Anticipation Guide gets students thinking about and discussing ideas they will encounter in the text. Have students mark the statements as true or false on their own. Then ask students to free write about the statement to which they reacted the most strongly, either positively or negatively. Students can share their ideas in pairs and then engage in a whole class discussion about their reactions. It is important for the teacher to facilitate discussion without giving an opinion. After reading the complete text, the class can return to the statements and discuss whether their opinions have changed and why.
  1. No matter how much humans consume the earth's natural resources, we will never run out of the essentials for

human life on earth.

2. The government should control the fishing industry to ensure the preservation of healthy populations of fish.
3. Wars have been fought over the rights to fish in certain geographic areas.
4. Farm-raised ocean fish are just as healthy and delectable as wild-caught fish.
5. The consumption of farm-raised fish is more beneficial to the ocean environment than the consumption of wild-caught fish.

Correlates to Common Core Standard: RI 9-10.8.

3. To gauge your students' ability to read the text without reaching their frustration level, give students the following Informal Reading Inventory on vocabulary and comprehension before assigning reading in the text. More than one right answer is possible for questions four and five. For students who score lower than 75% on this inventory, the text is probably at frustration level. These students should be assigned to read a text at a more suitable readability level for them, unless they are highly motivated to read this one and are assisted in developing comprehension skills. The activities and questions in this guide are designed for students for whom this text may be challenging but readable.

### Vocabulary Knowledge

Before reading the text, write the meaning of the underlined words in the sentences below:

1. The cod is impervious to disease and cold.
2. It was the perfect commercial fish.
3. Our fisheries will continue to be fertile.
4. The cod is omnivorous.
5. Whiteness is the nature of sluggish muscle tissue.
6. The cod will try to swim in front of a trawler net.

**Test of Comprehension**

After reading pp. 32 to the top of p. 34 ending with “pounce on its prey,” answer the questions below as completely as you can, citing evidence from the text.

1. What factors made cod “the perfect commercial fish”?
2. What enables fishermen to catch cod so easily?

3. Why are the muscles of bluefish different from those of cod?
4. Why might bluefish be less susceptible than cod to nets dragged by trawlers?
5. Before the advent of steam-driven ships, how do you think cod were caught for commercial trade?

Correlates to Common Core Standards: RI 9-10.1, 9-10.10; L9-10.1.

**PROLOGUE: SENTRY ON THE HEADLANDS & PART 1: A FISH TALE**

1. Students can read the Prologue as a whole class, using the Directed Reading-Thinking Strategy in which they engage in a cycle of reading, predicting, checking for comprehension, and revising their predictions. Have the class read the quote by Yeats on p. 1. Ask: What do you predict the Prologue will be about? Have students read the first few pages silently. Ask what is this section about? What do you predict will be covered in the rest of the Prologue? Have students silently read the rest of the Prologue, taking notes on key ideas. Discuss the following questions:

- What are key ideas in the Prologue?
- How must it feel to be a fisherman in a village like Petty Harbour which has depended on fishing for centuries but from which now most of the fish, whales, and squid have disappeared?
- Show students images of Icelandic cod and Newfoundland cod. Ask: Did the author describe the differences between these fish accurately?

Newfoundland cod <http://www.thebaitshop.ca/wp-content/uploads/2011/09/Newfoundland-2011-177-585x438.jpg>

Icelandic cod [http://kstp.com/kstpImages/repository/2013-02/C\\_Cod\\_Fish.jpg](http://kstp.com/kstpImages/repository/2013-02/C_Cod_Fish.jpg)

- How has civility between citizens of neighboring communities been affected by the declining fishing stocks around Petty Harbour? What examples does the author give to support this opinion? What does the author

mean in saying that the people in Petty Harbour are “at the wrong end of a 1,000 year fishing spree”?

Correlates to Common Core Standards: RI 9-10.1, 9-10.2; RH 10.1, 10.2; SL 9-10.1, 9-10.2.

2. Using classroom laptops or the computer lab, access Google Maps and have students identify the locations of the fishing ports mentioned and the routes fisherman from the various countries followed in hunting and trading cod, including: the route followed by the Vikings, Basque country, Iceland, Greenland, Canada, Newfoundland, Nova Scotia, Maine, Bristol (England), John Cabot’s voyage, Jacques Cartier’s voyage.

Using Google Images, assign students in small groups to capture pictures of assigned terms: Newfoundland, Petty Harbour, Bay of Biscay, Newfoundland cod, cod otolith, cod tagging, cod fishing methods: traps, handlining, longlining, gillnetting, trawling, and bottom dragging. For later in the unit, one group can be assigned to collect images of cane sugar production in the West Indies and the West Indies’ slave trade.

Have students use presentation software and prepare to explain their maps or images to the class. As an alternative, students can create a free Pinterest account at [pinterest.com](http://pinterest.com) and post their images there for the class to view.

Correlates to Common Core Standards: WHST 9-10.6, 9-10.8; SL 9-10.5.

3. Have students begin keeping vocabulary notebooks by self-selecting difficult words in the text and being prepared to share these words and definitions with the class. Have one or two students report on their “most interesting word” each day.

As an alternative activity, throughout the reading of each part of the text, have students collect key words and then create a Wordle using these words at [www.wordle.net](http://www.wordle.net). Have students post their images to the Wordle gallery to share. Ask students to comment on similarities and differences in Wordle lists at different times in the unit.

Correlates to Common Core Standards: L 9-10.4, 9-10.6.

4. “With Mouth Wide Open” presents a broad discussion of the cod’s physical characteristics, name associations, its place in the food chain and its life cycle. As students read, have them record their responses to the following questions, making sure to note the evidence for their conclusions:

- What characteristics enable the cod to be such a prolific and enduring fish? What characteristics make the cod vulnerable to fishermen?
- How might the warming of the oceans affect the location of cod populations and why?
- What accounts for the high mortality rate of cod’s eggs after spawning?

Students can do additional background research and provide a summary of key ideas in two useful articles available on line.

- Maps and graphs of cod populations are available at the Gulf of Maine Area Census of Marine Life in an article, “Atlantic Cod –Distribution and Abundance in Relation to Bottom Temperature, Fall Surveys, 1963-2004” at <http://www.gulfofmaine-census.org/data-mapping/visualizations/atlantic-cod-and-temperature/>

- The Food and Agriculture Organization of the United Nations Fisheries and Aquaculture Department provides a detailed explanation of the historical background of cod and practices of farming cod at [http://www.fao.org/fishery/culturedspecies/Gadus\\_morhua/en](http://www.fao.org/fishery/culturedspecies/Gadus_morhua/en)

Correlates to Common Core Standards: RI 9-10.1, 9-10.7; RH 9-10.1, 9-10.2, 9-10.3, 9-10.10

5. After students have read “The Cod Rush,” discuss the following questions:

- What dangers did sea explorers face that resulted in large numbers of ships never returning home?
- Why do you think that cod became the leading fish consumed in Europe by the middle of the 16th century?
- What was the strategic importance of cod to the British? Why did it become strategically important to the Spanish and Portuguese?

Correlates to Common Core Standards: SL 9-10.1; RH 9-10.3.

6. “1620: The Rock and the Cod” describes the importance of cod fishing to the New England colonists. Ask students to write journal responses to the following prompts: What were some of the reasons that the Pilgrims were starving during their first few years in the New England colonies? How did the New Englanders solve their food production problems and begin to develop a thriving trade?

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3; RH 9-10.1, 9-10.2, 9-10.3

7. Using a comparison grid, compare and contrast the lands in Canada’s eastern provinces with those of the New England states with respect to geography, climate, fishing seasons, farming, and trade. Discuss the following questions:

- What factors enabled New England to thrive and increase in population while Newfoundland remained a frontier with a small year-round population?

- Why did European explorers persist in thinking there was a western route to China when all previous voyages met with land masses in North and Central America?
- How did the growth of the fishing industry in New England create friction with England?

Correlates to Common Core Standards: RI 9-10.5; RH 9-10.5; SL 9-10.1.

8. Using the Guided Reading Procedure, have students read the paragraph on p. 88 beginning “The British had good reasons to worry about North America....” Tell students to read to remember as much detail as they can and to close their books. Brainstorm together everything they can remember in the reading. Then have students look back to the text to see if they have left out important information.

Have students in pairs organize the details collected by grouping them and labeling each group. Have students report their organizational schemes, and discuss: What was the argument presented by the colonists? How might representatives of the British Crown respond to the colonists’ note? What reasons might they give that colonists must obey the laws of England?

As a follow-up to students’ discussion of arguments for the colonists to obey the English Parliament, have students read an excerpt from a letter by Daniel Leonard, an American Loyalist in 1776. Ask students to summarize Leonard’s argument and to evaluate its validity.

[http://oll.libertyfund.org/?option=com\\_staticxt&staticfile=show.php%3Ftitle=1332&chapter=104695&layout=html&Itemid=27](http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=1332&chapter=104695&layout=html&Itemid=27)

Students can read opposing arguments in John Adams’s “Novanglus” writings at: [http://oll.libertyfund.org/?option=com\\_staticxt&staticfile=show.php%3Ftitle=2102&chapter=159719&layout=html&Itemid=27](http://oll.libertyfund.org/?option=com_staticxt&staticfile=show.php%3Ftitle=2102&chapter=159719&layout=html&Itemid=27) Again, ask students to summarize and evaluate what they consider the

most convincing arguments made by Adams.

Correlates to Common Core Standards: RI 9-10.1, 9-10.6, 9-10.8, 9-10.9; RH 9-10.1, 9-10.6, 9-10.8, 9-10.9; SL 9-10.1, 9-10.4; WHST 9-10.1, 9-10.7, 9-10.10.

9. Students may be somewhat familiar with the Atlantic Slave Trade and the triangular exchange of goods. Here, Kurlansky describes the trade which included cod fish. Ask students to draw the trade routes on a map, listing the products traded in each market. Then ask students to analyze the following quotes in dialectic journal format where they write, exchange journals, and respond to the ideas of a peer.

“In trade, it is almost an infallible natural law that a hungry low-end market, an eager dumping ground for the shoddiest work, is an irresistible market force” (p. 81).

“New England society was the great champion of individual liberty and even openly denounced slavery, all the while growing ever more affluent by providing Caribbean planters with barrels of cheap food to keep enslaved people working sixteen hours a day” (p. 82).

Discuss the following questions:

- How did New England salt cod merchants profit from the slave trade in the Caribbean?
- How were Massachusetts and Rhode Island rum producers directly involved in the trading of slaves?
- Are there any modern day parallels to the West Indies’ demand for inferior salt cod? What markets are involved?

Correlates to Common Core Standards: RI 9-10.3, 9-10.4; RH 9-10.3, 9-10.4; WHST 9-10.10; L 9-10.5; SL 9-10.1.

10. Ask students to list commonly stated reasons for the Revolutionary War in America. Then determine which of these ideas connects to what was happening with the cod trade.

Kurlansky states: “All revolutions are to some degree about money” (p. 93) and

“Massachusetts radicals sought an economic, not a social, revolution. They were not thinking of the hungry masses and their salaries. They were thinking of the right of every man to be middle class...to conduct commerce and make money” (p. 93). Ask students to evaluate the validity of these statements. What can students point to as evidence that these were the motives of the founding fathers? What were the implications of this way of thinking for the future of the new American state?

You can create a blog site for students to post their ideas at: <http://edublogs.org/> Students could also post their answers to the questions below on the blog site:

- How was John Adams a champion for the New England cod fishing industry?
- What factors led to the decline of the trade of New England's fisheries after the Revolutionary War?
- How was salt cod instrumental to the success of Union forces during the Civil War?

Correlates to Common Core Standards: RI 9-10.1, 9-10.8; RH 9-10.1, 9-10.8; WHST 9-10.6.

## PART TWO: LIMITS

1. Chapters 7 and 8 contrast traditional cod fishing with modernized fishing in the nineteenth century. Have students create a graphic organizer as they read these two chapters. Then discuss: What are the major ways in which fishing for cod changed? What was the immediate and long range impact on the supply of fish? What was the reaction of fishermen to new technologies? Why does Kurlansky say, “Distrust of new fishing techniques is endemic to fishing” (p. 120)?
 

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3; RH 9-10.1, 9-10.2, 9-10.3; SL 9-10.1, 9-10.6.
2. To begin a discussion on sustainability, ask students to create Frayer Vocabulary Cards (definition, characteristics, example, nonexample) for the following terms: extinction, critically endangered, threatened, species richness, species diversity, biodiversity. Students can add to their vocabulary as they continue to read about what happened to the cod. Discuss with students: What causes a species to become extinct? Why did people in the nineteenth century believe there was an unlimited supply of fish? Why was this idea false?
 

Correlates to Common Core Standards: RI 9-10.4; RH 9-10.4; SL 9-10.1; L 9-10.4, 9-10.6.
3. In chapters 9 and 10, Kurlansky offers Iceland as a case study of the struggle between tradition and technology. He says, “Throughout the century, when modest inshore fishermen have been confronted with powerful, efficient foreign fleets, invariably local government has decided to subsidize a competitive local fleet” (p. 150). Have students list the pros and cons behind this decision. What did Iceland hope to gain by embracing the new technologies? What did they have the potential to lose? How did they go about securing their “rights” to their only resource, cod? What was the response of other nations? What does this show about the role of the United Nations following World War II? What were the advantages and disadvantages to the expansion of a nation's fishing zone?
 

After the whole class discussion, ask students to draft an editorial taking a position about whether Iceland should have modernized their fleet or expanded their fishing zone, listing the strongest arguments to support their position.

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3, 9-10.6, 9-10.8; RH 9-10.1, 9-10.2, 9-10.3, 9-10.8; WHST 9-10.1, 9-10.4, 9-10.10; SL 9-10.1, 9-10.4; L 9-10.6.

## PART 3: THE LAST HUNTERS

1. On Google Maps locate Newfoundland and Iceland. Show the class details of the geography of each island. Ask students to read pp. 177-178 and in pairs create a grid comparing the islands with respect to: geography, population, arable land, growing season, economy, fishing industry, and history as a colony.

Correlates to Common Core Standards: RI 9-10.1, 9-10.3; RH 9-10.1, 9-10.3; SL 9-10.1.

2. After reading chapter 11, have students individually outline their answer to: What factors caused the commercial extinction of the northern cod stock in the Grand Banks? Then have students form groups of four to share their answers and discuss: What measures could the Canadian government have taken to ensure a sustained northern cod stock? Follow this up with a whole class discussion of students' ideas for both questions.

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3; RH 9-10.1, 9-10.2, 9-10.3; WHST 9-10.2, 9-10.9, 9-10.10; SL 9-10.1, 9-10.4.

3. Using class laptops or the computer lab have students in pairs research recent economic development in St. John's, Newfoundland. What industry has replaced fishing? What similarities does this development have with the Canadian government's management of the fishing industry? Ask students to project the future for St. John's by creating a Power Point or Prezi depicting its harbor and industry in the year 2050. Will the cod be back?

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3, 9-10.7; RH 9-10.1, 9-10.2, 9-10.3; WHST 9-10.1, 9-10.2, 9-10.6, 9-10.7, 9-10.9; SL 9-10.1, 9-10.2, 9-10.5.

4. Divide students into jigsaw groups to read chapter 12 and to share answers to assigned questions:

- What are positive signs that cod stocks may be restored by a moratorium on fishing? What are reasons a moratorium may not work to restore fish stock?

What is the "perception problem" that hinders maintaining a moratorium on fishing for cod? ( pp. 192-194)

- What are the advantages and the dangers of cod farming? (pp. 195-198)
- Why is the interdependence of species an important factor to consider when attempting to restore a sustainable cod population as demonstrated by attempts to manage the population of the harp seal? (pp. 200-202)
- What are some of the "strange" occurrences that northern fishermen are seeing? Why do people not see that their actions have had a negative effect on sustainable fish populations? (pp. 203-205)

Assign a team of students for each question. After they have answered the question in their assigned "expert" group, have the groups divide and form new groups consisting of at least one person from each of the original groups. Each person in the new groups should then "teach" the other group members the answers to their questions. Teachers can assess student learning through a whole class discussion of the questions.

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3; RH 9-10.1, 9-10.2, 9-10.3; SL 9-10.1, 9-10.4, 9-10.6.

5. Have students write in their journals a response to "Man wants to see nature and evolution as separate from human activities. There is the natural world and there is man. But man also belongs to the natural world. If he is a ferocious predator, that too is part of evolution" (p. 204). Have students share their responses in pairs and then discuss with the whole class: How does this quote apply to diminished cod populations? How does it apply to other environmental issues today?

Correlates to Common Core Standards: RI 9-10.4, 9-10.8; RH 9-10.4; WHST 9-10.1, 9-10.2, 9-10.4, 9-10.9, 9-10.10; SL 9-10.1, 9-10.4, 9-10.6.

6. To focus student thinking on the plight of British fishermen, show them images contrasting Newlyn with Mousehole. Images of Newlyn, Cornwall England are at <http://www.penwith.co.uk/newlyn/thumbs.htm>; images of Mousehole, Cornwall England are at <http://artistresidencehotelpenzance.blogspot.com/2011/10/mousehole-possibly-prettiest-fishing.html>. Discuss: How might life be different for residents in Newlyn compared to Mousehole?

Correlates to Common Core Standards: SL 9-10.1, 9-10.2, 9-10.5, 9-10.6.

7. To think about the impact of market forces on fish populations, show images of British fish and chips ( [http://en.wikipedia.org/wiki/Fish\\_and\\_chips](http://en.wikipedia.org/wiki/Fish_and_chips)) and ask: How might this favorite British food be affected by declining cod populations?

Have students read about dogfish at <http://www.boydski.com/diving/photos/Sharks/spinydogfish.htm> or a more detailed

coverage at: [http://en.wikipedia.org/wiki/Spiny\\_dogfish](http://en.wikipedia.org/wiki/Spiny_dogfish). Discuss: Why has the dogfish replaced cod as a targeted fish in New England? What is happening to dogfish populations and why?

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3; RH 9-10.1, 9-10.2, 9-10.3; SL 9-10.1, 9-10.4, 9-10.6.

8. Kurlansky asks: “Are we headed for a world where nothing is left of nature but parks?” (p. 233). Have students debate this question in groups of four with one pair taking a pro stance and the other pair taking the con stance. Give students time to prepare their arguments and then have them debate. Afterward discuss with the whole class: What pressures are being applied to wild fish populations? How might these pressures be alleviated? What can be done in the local community to preserve the wilds of nature?

Correlates to Common Core Standards: SL 9-10.1, 9-10.3, 9-10.4, 9-10.6.

## ENRICHMENT ACTIVITIES

1. The International Union for Conservation of Nature (IUCN) is a global environmental organization with a mission to conserve biodiversity. IUCN believes that “biodiversity is fundamental to addressing some of the world’s greatest challenges such as climate change, sustainable development and food security.” With your students review the list of 3,240 threatened and endangered species at <http://www.iucnredlist.org/search>.

Ask students to select one of the animals or species on the list (such as African Forest Elephant, Blue Whale, a species of salamanders or bats) or another fish from the list of overfished species on pp. 198-199 in *Cod* and conduct research on the pressures experienced by the species. Have students present their findings to the class using presentation software.

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3, 9-10.7; RH 9-10.1, 9-10.2, 9-10.3, 9-10.7; WHST 9-10.1, 9-10.2, 9-10.4, 9-10.7, 9-10.8, 9-10.9, 9-10.10; SL 9-10.2, 9-10.4, 9-10.5, 9-10.6.

2. Have students conduct a survey of several local grocery stores to research the fish being sold locally. Make a chart of the most popular fish found at the store, price, source (farm raised or wild), frozen or fresh, and any information provided to consumers. Interview the grocer to determine the consumer demand for fish. Is it on the increase or decrease? What is the impact of price on consumption? What is the vendor doing to meet demand?

Then have students create an ad or poster which will inform consumers about issues they need to consider when purchasing fish.

Correlates to Common Core Standards: RH 9-10.7; WHST 9-10.2, 9-10.4, 9-10.7, 9-10.10; SL 9-10.1, 9-10.6; L 9-10.1, 9-10.2, 9-10.3.

3. Ask students to interview an official from the local EPA or Wildlife Agency or Conservation Group about species that are threatened in your particular locale. Using this information and additional research, students can write a newspaper

feature article or editorial describing the issues surrounding the survival of this species, the impact of its extinction, what is being done to protect it and why. After peer review and editing, have students submit their articles or editorials to a local paper for publication.

Correlates to Common Core Standards: RH 9-10.7; WHST 9-10.1, 9-10.2, 9-10.4, 9-10.5, 9-10.6, 9-10.7, 9-10.10; SL 9-10.1, 9-10.6.

4. *Cod* has many recipes for how to prepare the fish. If cod is available, have small groups of students prepare one of the recipes, creating a video showing how they cooked the fish and describing both the process and how the cod tastes. As an alternative, have students purchase another type of fish and prepare it, writing up their recipe and bringing samples to share with the class.

Correlates to Common Core Standards: RI 9-10.3; RH 9-10.3; WHST 9-10.2, 9-10.4; SL 9-10.1, 9-10.6.

5. Show students a video commenting on the diminished cod population off of the coast of New England, “Cod: The Fish that Made New England” at <http://www.youtube.com/watch?v=cLE56imBjJs>. Then ask students to individually research other cod fishing videos on YouTube or other sites. Have them report their findings to the class. Discuss with students what scientific solutions there are to increasing the cod population off New England. Is achieving a sustainable cod (or other ocean fish) population an apparent concern in Iceland or other countries? Students might be specifically directed to “Cod Fishing in Iceland 2012 Net Fishing” at <http://www.youtube.com/watch?v=FQxdixSNxBc>

Correlates to Common Core Standards: RI 9-10.1, 9-10.2, 9-10.3, 9-10.7; RH 9-10.1, 9-10.2, 9-10.3, 9-10.7; WHST 9-10.1, 9-10.2, 9-10.4, 9-10.7, 9-10.8, 9-10.9, 9-10.10.

## OTHER BOOKS THAT EXAMINE THE HISTORY OF SPECIFIC RESOURCES

Now that students have read about the history of cod, they may be interested in studying about the impact of other resources. Students can select from this list for independent reading or group projects.

Aronson, Marc & Budhos, Marina. *Sugar Changed the World: A Story of Magic, Spice, Slavery, Freedom, and Science*. Clarion Books, 2010.

Greenberg, Paul. *Four Fish: The Future of the Last Wild Food*. Penguin, 2011.

Kurlansky, Mark. *Salt: A World History*. Penguin, 2003.

Kurlansky, Mark. *The Big Oyster: History on the Half Shell*. Random House, 2007.

Macy, Sue. *Wheels of Change: How Women Rode the Bicycle to Freedom*. National Geographic Children's Books, 2011.

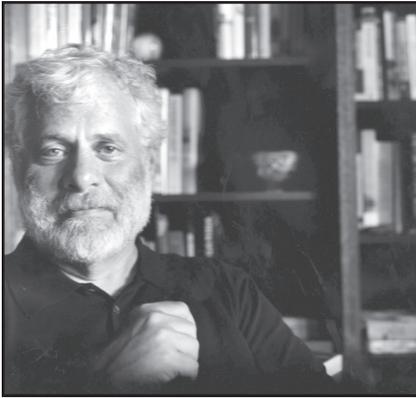
Pollan, Michael. *The Omnivore's Dilemma: A Natural History of Four Meals*. Penguin, 2006.

Pollan, Michael. *The Omnivore's Dilemma for Kids: The Secrets Behind What You Eat*. Dial, 2009.

Standage, Tom. *History of the World in Six Glasses*. Walker, 2006.

Turner, Jack. *Spice: The History of a Temptation*. Vintage, 2005.

## INTERVIEW WITH MARK KURLANSKY



**1. What first got you interested in the topic of cod? What was the stimulus for writing this book?**

I come from New England where cod always meant a lot. Despite having worked as a commercial fisherman, I always found the New England cod obsession to be odd, one of a number of peculiar facets to New England culture. But then I found the same obsession in so many other places I wrote about—the French, the Basques, the English, the West Africans, Caribbeans. What forces of nature, economics and history had collided to create this cod passion? While writing an environmental story on fishing in Cornwall, England and seeing a cod fervor even nuttier than that of New Englanders, I started thinking about the book and realized that it was a great story. Great stories are what make books work.

**2. Please talk a bit about your research process. How long did you conduct the research? What were your primary sources?**

The key to my research is usually going to places, even places I have been to many times before. There is no substitute for seeing places and talking to people. My entire understanding of the Roman Empire fell into place when I saw the destroyed city of Carthage on the Tunisian coast. So this was Rome, not the art and culture and ideas but the ruthless expression of power in excessive violence and cruelty, an entire civilization systematically

destroyed by the Romans. For *Cod* I traveled to New England, Newfoundland, Nova Scotia, Iceland, England, France, Basque country and several Caribbean countries. I spent more than two years researching. Then there were books and documents. In addition to archives in a number of the places I visited, I happen to live near one of the world's great research facilities, The New York Public Library. There I find far more material, and far more accurate material, than is available on the internet. I have found this to be true for book after book. One of the problems with the internet is that papers get their material from other papers on the internet, so that an inaccuracy on one website can turn up everywhere. Be extremely distrustful of Wikipedia and other websites.

**3. You have also written about salt and oysters and their impact on history and culture—are there other resources or commodities on which you have thought about writing and why?**

I don't sit around looking for commodities to write about. Most commodities would not make very interesting books. It is only by chance that I have written about a few commodities. Most of my books are not focused on a commodity. The few that are were not chosen because I like the commodity but because it seemed a good story and an effective way to get to a point I was making. My oyster book, by focusing on the fate of the famous oyster beds of New York City, is a book about urban pollution that asks the question, "Can a city live with nature or does it necessarily destroy it?" There are inductive minds and deductive ones. I tend to look at a small thing and reflect on its broad implications, while others reflect on a broad issue and then focus on specifics. I used *Cod* to show what was happening to the oceans while others have written about what is happening and then used several fish to illustrate their point. There isn't a right way and a wrong way. It is simply a question of how your mind works.

## ABOUT THE AUTHORS OF THIS GUIDE

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**NOTES**

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