

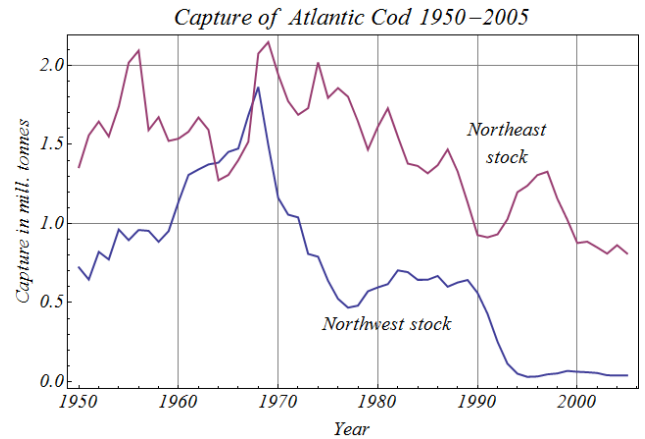
# The End of the Line

## Collapse of the Atlantic Cod

1. Fishermen in Newfoundland, Canada had been experiencing declining cod harvests for years when a sudden change was announced in 1992. What was the change? Mark it with a line on the graph.

2. What was the economic impact on Newfoundland of this decision? Did the stocks of Atlantic Cod recover?

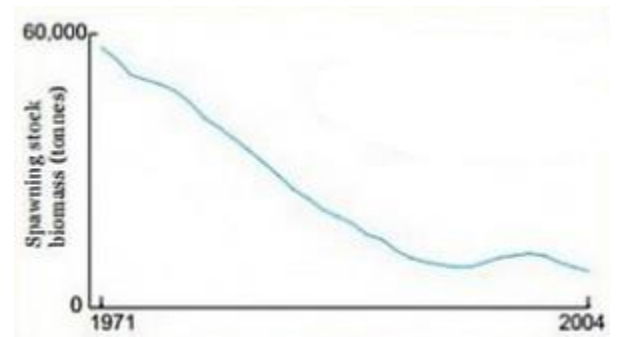
3. In 2001, records showed that local stocks of fish were down worldwide. Yet, records of harvests indicated that fish were being taken at record rates. What was actually happening?



## Plight of the Bluefin Tuna

4. Stocks of Bluefin tuna have dropped by 80%. What reasons are given for this and other population declines seen in commercial fish?

5. Why is Bluefin tuna particularly at risk?



6. List the recommended quota limit for Bluefin tuna, the recovery limit (so stocks could replenish), the quota set by the politicians, and the actual estimated catch.

Recovery Limit –

Recommended Limit –

Established Quota –

Actual Catch -

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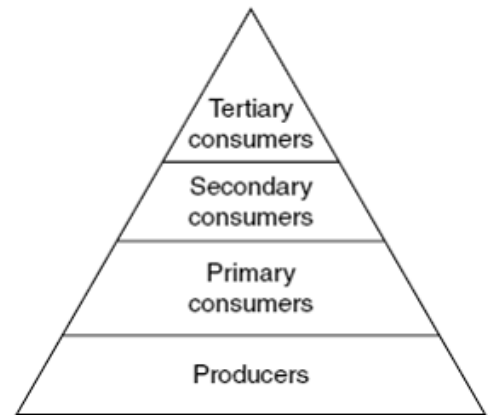
7. The documentary alleges that the Japanese corporation Mitsubishi is hoarding tons of frozen Bluefin tuna. Why would they?

## Fishing in Senegal

8. Why are native fishermen having such a difficult time making a living along the West coast of Africa?
9. What species of marine animals make up “bycatch”? What percent of total catch does this make up?

## The Coral Triangle

10. Which trophic level of fish is hunted in the Coral Triangle?
11. What impacts have been observed at Chesapeake Bay as a result of selective hunting like this?
12. Atlantic Cod in Newfoundland occupied a similar level on the ecological pyramid – how has their absence impacted the food web?



## A Time For Change

13. Describe four ways that fishing in Alaska is more tightly controlled and regulated, thus preventing a collapse of their fishing stocks.
14. What is Marine Stewardship Council (MSC) certification?

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15. What is the problem with fish farming or aquaculture? How many kilos of anchovy are needed to produce a kilo of salmon? What would be a better option for consumers?

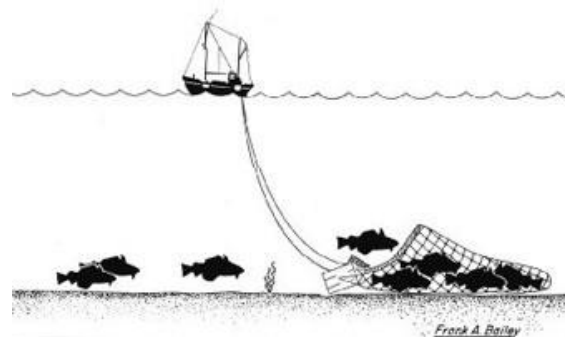
16. What are marine reserves? How do ecosystems respond once an area is declared a reserve?

17. What percent of the ocean would need to be reserves to maintain sustainable fishing stocks? What percent is currently part of a reserve?

## Discussion Questions

18. Are ocean fish as we are harvesting them a renewable or nonrenewable resource?

19. Bottom-trawling is frequently mentioned in the documentary as one of the worst, most damaging forms of commercial fishing. Explain why.



20. According to the documentary, 50% of Atlantic Cod is caught illegally. One quote given is “every other cod in your plate is stolen – from you.” Is this accurate? Are the oceans a *commons* area?

21. If a gourmet restaurant were to put dishes with endangered mammals on the menu – such as orangutan or lions, it would be a huge public scandal. Why isn’t there a similar reaction to endangered fish?