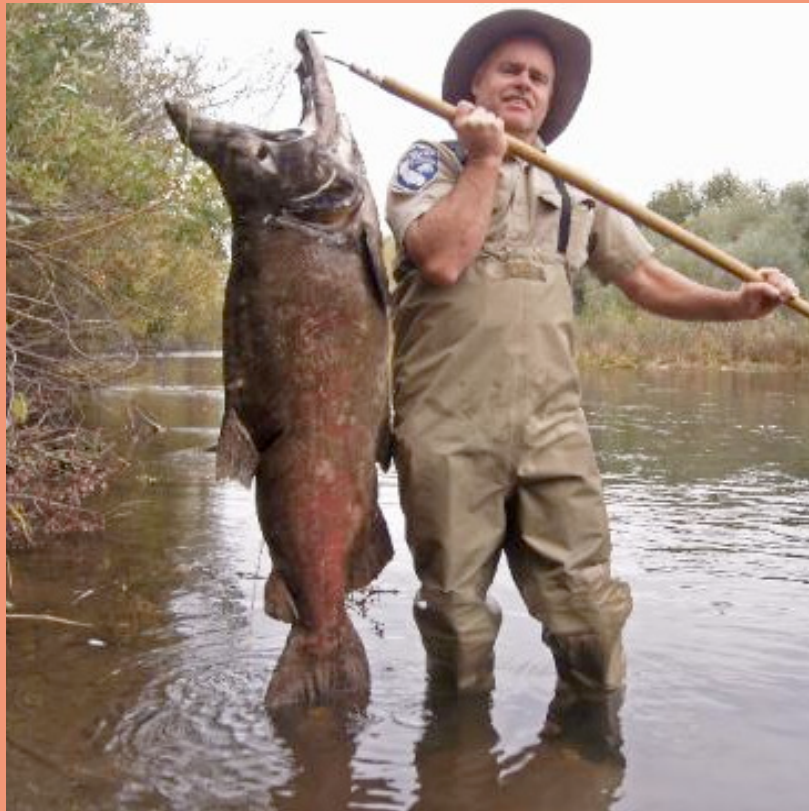


STEM *Sims*™

Fisheries



Fisheries

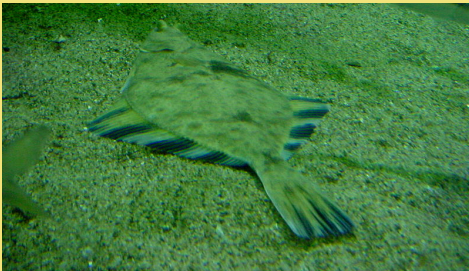
**Do you need an idea for a scientific study?
Try out one of our ideas or make one of your own.**

Start right now learning about the basics of managing a modern fishery. Take the following brief quiz to see how much you already know about fisheries. See the bottom of page 4 to check your answers.

1. The consumption of fish is greater in industrialized nations than in developing countries.
 - a. true
 - b. false
2. About how many people worldwide depend on fishing as their livelihood?
 - a. 200,000
 - b. 2,000,000
 - c. 20,000,000
 - d. 200,000,000
3. About how many tons of unmarketable fish are caught, killed, and then thrown back overboard each year?
 - a. 270,000
 - b. 2,700,000
 - c. 27,000,000
 - d. 270,000,000
4. Some food fish are now raised on fish farms instead of being caught in the natural habitat of the ocean, lakes, or rivers. This process is called aquaculture. About what percentage of fish brought to market are now raised on commercial fish farms?
 - a. 5%
 - b. 28%
 - c. 49%
 - d. 75%
5. Most fish grown on fish farms must be fed a diet of other fish. About how many pounds of ocean-caught fish are required to feed one pound of farmed fish in bringing the farmed fish to maturity?
 - a. $\frac{1}{2}$ pound
 - b. 1 pound
 - c. 5 pound
 - d. 11 pounds

Fish Schticks!

1. A boat with ten sailors was traveling down the Amazon River. Unfortunately, the boat ended up sinking in piranha-infested waters. What happens?



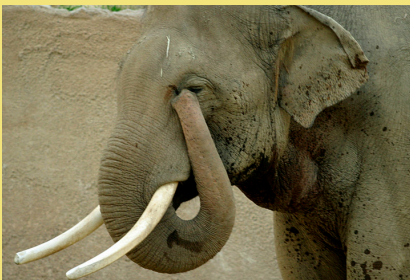
2. Flounders are unusual fish in that they have both eyes on the same side of their body. This enables the fish to lay flat on the bottom and bury itself in the sand with only its eyes exposed. Other fish have different eye adaptations. What do you call a fish with no eye?

3. Many SCUBA divers perform complex operations while underwater. In one such case, a diver needed to close up an envelope while she was underwater. How did the diver keep the envelope's flap down?



A Monster of the Abyss

4. Many legends have persisted for centuries regarding sea creatures. While at sea for extended voyages, some sailors have reported seeing sea monsters. If such a sea monster did indeed exist, what would you expect the sea monster to eat?



5. A cargo ship was transporting a herd of very large Asian elephants across the Pacific Ocean. During this particular trip, the waves were very large and the ocean was tossing the ship around. The up/down and rolling motion of a ship can bother elephants, just like humans. Many of the elephants became seasick during the trip. What should you give a seasick elephant?

Please visit our site for more helpful information:
STEMsims.com

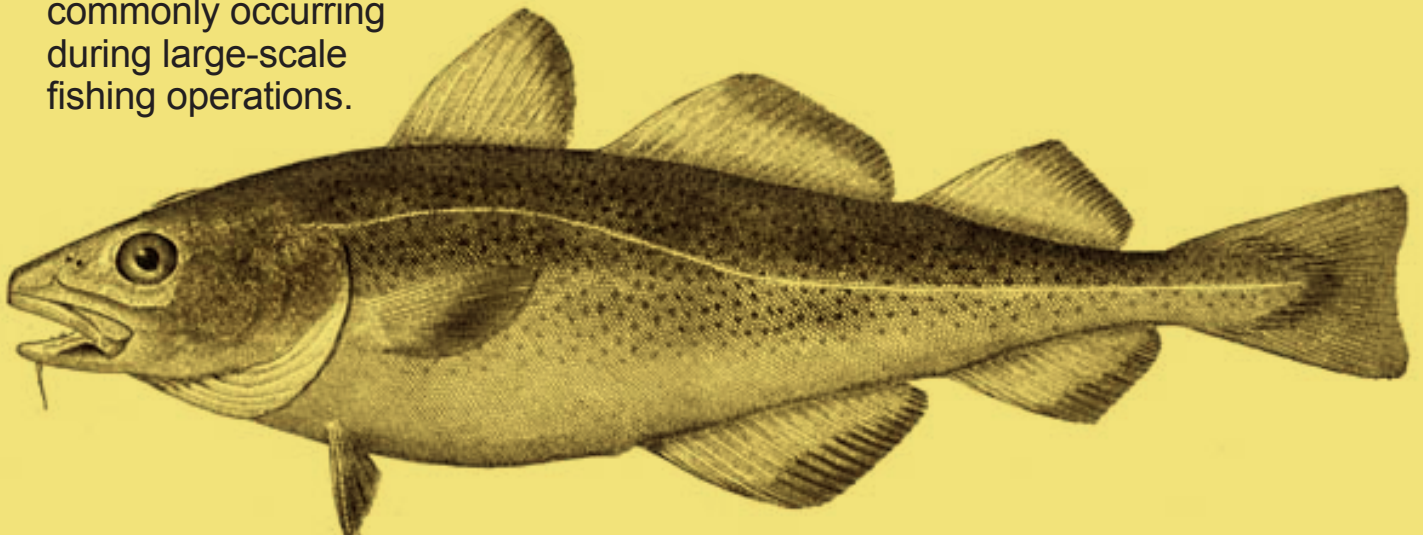
Fisheries

Managing Fisheries

Did you know that the United States has 30 states that have coastal boundaries? Each state is responsible for managing their fisheries of inland waters as well as 3 miles out to sea. Fisheries must be maintained to make sure that future generations have adequate supplies of fish for both food and recreational activities. Individual states regulate when, where, how, and how much fish both personal and commercial fishing vessels may catch.



The federal government is responsible for the management of fisheries from 3 miles away from the coastline outward to 200 miles. The Magnuson-Stevens Fishery Management and Conservation Act of 1976 was created to maximize the amount of fish taken each season, while maintaining fish stocks large enough to satisfy the needs of future generations. The act makes use of the latest scientific findings to help manage fish populations and reduce the waste by-catches commonly occurring during large-scale fishing operations.



Answers: Page 2 Answers: 1) b, about 3 times greater in industrialized countries than in developing nations. 2) d. 3) c. 4) c. 5) d. Page 3 Fish Schicks Answers: 1) The boat ends up with a skeleton crew. 2) FSH. 3) With a seal. 4) Fish and ships. 5) Lots of room.

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