Hook, Line, and Sinker

The world's seafood supply may soon be wiped out, scientists warn.

Can fish get off the hook? The world's seafood supply may run out by 2048 if a decline in marine species continues at its current rate, according to a recent report published in the journal *Science*.

An international team of 14 researchers spent four years analyzing fish populations, catch records, and other marine studies. They discovered that 29 percent of all fish species have nearly disappeared. Fish populations have dropped to at least 90 percent below their historical highs.

"If the long-term trend continues, all fish and seafood species are projected to collapse within my lifetime," says research leader Boris Worm of Dalhousie University in Halifax, Canada. "Our children will see a world without seafood if we don't change things."

What's to Blame?

The study cites overfishing and pollution for the *depletion*, or reduction in quantity, of edible seafood. Also contributing to the drop are environmental factors, such as habitat loss and *global warming*—the gradual rise in Earth's average temperature.

The fishing industry generates $80 billion a year. Some fishing industry experts have questioned the report's dismal predictions. Despite the team's gloomy findings, the authors say it's not too late to
reverse the trend. The researchers have called for measures to protect current fish populations, such as having nations set limits on large-scale fishing, reducing pollution, and creating protected areas called marine reserves.

Ripple Effect

The loss of ocean life will cause more than just a shortage of seafood. Overfishing can damage the entire ocean ecosystem. An ecosystem is a community of organisms functioning as a unit with its environment. The disappearance of one species can throw the entire system out of balance and cause disaster up and down the food chain. If smaller fish disappear, larger creatures would find themselves in big trouble.

Catch of the Day

Americans like their seafood. On average, they consumed, or ate, 15.8 pounds each in 2010, according to the National Oceanic and Atmospheric Administration.
1. According to the passage, the author says measures to protect current fish populations include all the following EXCEPT

   - A setting limits on large-scale fishing
   - B creating protected areas
   - C depleting edible seafood
   - D reducing pollution

2. Read these two sentences from the passage:

“The study cites overfishing and pollution for the depletion, or reduction in quantity, of edible seafood.”

“The world’s seafood supply may run out by 2048 if a decline in marine species continues at its current rate.”

Which of the following describes the relationship between these two sentences?

   - A The first and second sentences make a comparison.
   - B The first sentence explains the reasons for the second.
   - C The first and second sentences describe a two-step process.
   - D The first and second sentences provide both sides of an argument.

3. Why does the author include the third paragraph (“If the long-term trend continues ...in Halifax, Canada) in the article?

   - A to show how much the fishing industry generates
   - B to show how serious the problem is
   - C to explain an ocean ecosystem
   - D to show how much Americans like seafood

4. Read the following sentence: “The study cites overfishing and pollution for the depletion, or reduction in quantity, of edible seafood.”

In this sentence the word edible means

   - A fit to be caught
   - B fit to be eaten
   - C polluted
   - D worthless
5. Which statement supports the main idea of the passage?

A The supply of seafood may run out if the marine population decline continues.
B The fishing industry generates $80 billion a year.
C Overfishing can damage the entire ocean ecosystem.
D Some fishing industry experts have questioned the report's dismal predictions.

6. What did the team of researchers study in order to reach their findings about fish species?

_____________________________________________________________

_____________________________________________________________

_____________________________________________________________

7. Why are fish important? How can you tell? Give specific examples from the passage that support your answer.

_____________________________________________________________

_____________________________________________________________

_____________________________________________________________
8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

_______________ researchers analyzed fish populations, catch records, and other studies, they discovered that 29 percent of all fish species have almost disappeared.

A  Otherwise
B  But
C  From
D  When

9. Answer the following questions based on the sentence below.

People can reverse the current fish population trend and save the world’s fish supply by setting limits on large-scale fishing, reducing pollution, and creating marine reserves.

Who? people

(can do) What? ____________________________

Why? ____________________________

How? ____________________________


Use the vocabulary word in a sentence: ____________________________

______________________________

______________________________
Teacher Guide and Answers

Passage Reading Level: Lexile 1130

Featured Text Structure: Cause/Effect – the writer presents the reason an event happened and its results

Passage Summary: The world’s seafood supply may run out by 2048 due to overfishing, pollution, and habitat loss. Researchers say we can protect current fish populations by setting limits on large scale fishing, reducing pollution, and creating protected areas for fish.

1. According to the passage, the author says measures to protect current fish populations include all the following EXCEPT
   A  setting limits on large-scale fishing
   B  creating protected areas
   C  depleting edible seafood
   D  reducing pollution

2. Read these two sentences from the passage:

   “The study cites overfishing and pollution for the depletion, or reduction in quantity, of edible seafood.”

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C  Overfishing can damage the entire ocean ecosystem.
D  Some fishing industry experts have questioned the report's dismal predictions.

6. What did the team of researchers study in order to reach their findings about fish species?

Suggested answer: Researchers analyzed fish populations, catch records, and other marine studies.
[paragraph 2]

7. Why are fish important? How can you tell? Give specific examples from the passage that support your answer.

Suggested answer: Fish provide seafood to the world’s people. Fish are an important part of the ocean ecosystem and with other ocean animals, help keep that system in balance. [paragraphs 1, 3, & 7]

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Who? people
(can do) What? reverse the current fish population trend
Why? to save the world’s fish supply
How? by setting limits on large-scale fishing, reducing pollution, and creating marine reserves


Use the vocabulary word in a sentence: answers may vary.