

Humans and Food Webs

ANSWER

Read the passage below about how humans can impact food webs, and then answer the questions.

Food webs are complex systems that must stay in balance, and since humans are the dominant species on the planet, we have an impact on food webs everywhere. You already know that if a part of a food web disappears, that affects the entire food web. Imagine this scenario: Humans cut down all the trees in a forest. Soon, the animals that feed on the trees, like deer, die from too little food. Next, the consumers that eat the deer, like wolves, also die from too little food. In this way, the whole food web is destroyed by human action.

Ecology is the study of the Earth and how to take care of it so that humans, plants, and animals can all live together healthfully. One way we can positively impact our Earth is through conservation. Conservation means using the planet's resources wisely so that they don't run out and there is enough for all living things, not just humans.

We can practice conservation by not wasting resources, like water, and by reducing the amount of waste we produce. Waste is any trash like soda bottles, tossed-out food, broken electronics, and old clothes. Americans create 220 million tons of trash every year. Paper makes up a lot of our trash, so much that we can use the paper we throw away each year to build a 12-foot tall wall going from New York to San Francisco. That's 10,000 sheets of paper per person! To reduce waste, you can recycle and compost. That way, we'll all use less paper and cut down fewer trees, leaving food webs in balance.

Follow-up Questions:

1. The word ecology comes from the Greek word that means "the study of the house." Now, ecology has a new meaning. How would you define ecology today?

Ecology is the study of the Earth and how to take care of it so that humans, plants, and animals can all live together healthfully.

2. What does conservation mean?

Conservation means using the planet's resources wisely so that they don't run out and there is enough for all living things, not just humans.

3. List three ways that you can reduce the amount of waste you produce?

[Student's choice.]

4. Write two to three sentences explaining why it is important to reduce waste and conserve our Earth's resources.

Reducing waste means we won't use up as many resources. If we use up all the resources, other living things on Earth won't have enough. Without enough resources, food webs will be destroyed.

5. Write two to three sentences explaining how over-fishing (fishing a species to near extinction) can impact the food web.

If one portion of a food web disappears, other species that depend on it will die out. This can wreck the food web.