

Lab 11. Food Webs and Ecosystems: Which Member of an Ecosystem Would Affect the Food Web the Most If Removed?

1. Imagine an ecosystem where mice eat the grass and foxes eat the mice. Explain what will happen to the population of foxes if there is a severe drought and all the grass dies.

2. The images below represent two food webs from different ecosystems that have similar animals. Which population of foxes would be least impacted by a drought that caused the grass to die in their ecosystem? Explain your reasoning.

3. Society and culture often influence how scientists go about their work.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about food webs and ecosystems.

4. Scientists are very creative when they investigate the natural world.

- a. I agree with this statement.
- b. I disagree with this statement.

Explain your answer, using an example from your investigation about food webs and ecosystems.

5. Scientists develop models to help them understand the natural world. Explain how a food web acts like a model and explain why such a model would be useful to scientists.

6. When scientists study the natural world, they often need to keep track of how matter and energy move through a system. Explain why understanding the flow of matter and energy is important, using an example from your investigation about food webs and ecosystems.