

THE IMPORTANCE OF BIODIVERSITY

What is biodiversity, and why do we care so much about it?

For an ecosystem to thrive, there needs to be biodiversity, or the variety of life in a particular ecosystem. In this activity, we will take a look at how different levels of biodiversity react to a change in its ecosystem.

A. The diagram below is a food chain, which shows how energy travels through an ecosystem. In this ecosystem, there are four species. The harvester ants eat the star grass, the aardvarks eat the harvest ants, and the hyenas eat the aardvark.



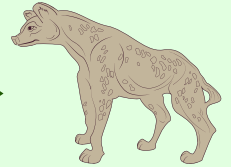
Star grass



Harvester ants



Aardvark



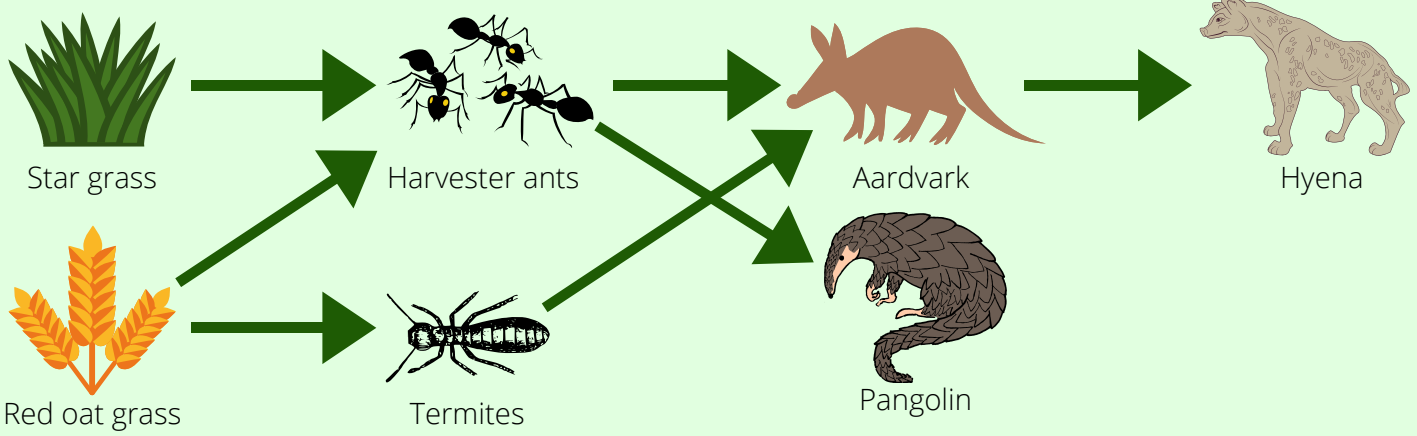
Hyena

1. What can you say about the biodiversity in this ecosystem?

2. Suppose there is a flood, causing all the star grass to die. What happens to the other organisms in this ecosystem?

3. Do you think the level of biodiversity in this ecosystem had an effect on what happened to the ecosystem after the flood? Why or why not?

B. A food web, on the other hand, shows interconnected food chains.



1. What can you say about the biodiversity in this ecosystem?

2. Suppose there is a flood, causing all the star grass to die. What happens to the other organisms in this ecosystem?

3. Do you think the level of biodiversity in this ecosystem had an effect on what happened to the ecosystem after the flood? Why or why not?

4. Compare and contrast the effects of the flood on the food chain in Part A and the food web in Part B. Did the two ecosystems react differently? Why or why not?
