

Energy in Ecosystems Outline

Lesson 4: What Are Food Chains and Food Webs?

I. Food Chains

A. Food Chains

1. Energy is important for all organisms to survive

Def *2. Food Chain is the flow of energy through a community

3. Example: sun -> grass -> grasshopper -> frog -> snake

4. food chains always begin with the sun's energy

B. Predators and Prey (two paragraphs combined)

Def.*1. A predator is an animal that hunts and kills other animals for food.

Def.*2. Prey are the animals that predators hunt

3. Example: A frog is a predator when it eats a grasshopper.

4. Example: A frog is prey when it is eaten by a snake.

II. Food Webs

A. Food web

Def* 1. A food web is all the food chains in a community.

2. Ecosystems have many food chains

3. Organisms can be part of many different food chains

4. Example: voles can be the prey of many different animals

III. Changes in Food Webs

A. Weather can affect food webs (paragraphs two and three)

1. Anything that changes the size of a population affects food webs

2. Storms and fires can damage and kill plants

3. With less plants, plant-eaters can't find food and some die

4. Then carnivores must also move or die

B. Pesticides can affect food webs

Def.*1. Pesticides are chemicals that are used to kill harmful insects.

2. Pesticides can harm other animals also

3. If one organism in the web is harmed, it affects those above it in the web.

C. Waste dumping

1. Dumping waste in oceans and rivers harms animals that live there.

2. *Example:* Animals may drink water and get sick. Fish swimming in polluted water may die.

D. Overfishing

Def.*1. Overfishing is when too many of one kind of fish are taken

2. If all the small fish are gone, bigger fish have no food.

E. Deforestation

Def.*1. Deforestation is clearing of large area of trees.

2. Insects, birds, other animals depend on the forests.
3. When trees are cut down, these animals lose their habitats.

F. People can help (Last two paragraphs)

1. People are trying to help animals that are affected by habitat loss.

Example: Children are learning about how monarch butterflies live. They are finding their eggs, helping them hatch, feeding them and releasing them. Hopefully, there will be more monarch butterflies.