

Presentation Notes

Presentation EcologyLesson 4.4

Notes from Presentation:

What is Ecology

- the study of the interactions of organisms with one another and their environment
- interconnectedness
- plants and animals each other
- organisms need oxygen, water, nutrients, shelter, et. cetera

Biomes

- large region with similar plants, animals, and other organisms adapted to the climate and other conditions
- consist of many similar ecosystems
- aquatic. desert, grassland, taiga, temperate forest, tropical rainforest, tundra

Ecosystems

- the interactions between the living things and the nonliving things in a place
- plants, animals, and other organisms rely on each other and on the physical environment

Abiotic Ecosystems Components

- nonliving factors
- physical and chemical characteristics
- air, water, land, soil nutrients, temperature, sunlight, precipitation

Biotic Ecosystems Components

- living organisms
- flora (plants), fauna (animals), microorganisms

Interactions of Organisms

- food chain- single path of feeding relationships
- grass to mouse to snake
- food web- series of interrelated food chains
- bug to fish to beaver

Producers and Consumers

- producer- manufacture their own food, such as plants
- consumer- obtain energy by eating other organisms
- herbivores- eat plants
- carnivores- eat animals
- omnivores- eat plants and animals

What is Energy

- the ability to do work or cause changes to occur
- organisms need energy for life-sustaining processes

Trophic Levels

- an organism's position in the sequences of energy transfers

-producers- 1st level

herbivores- 2nd level

-carnivores- 3rd level or higher

Energy Flow

- as energy moves through the trophic levels, energy is lost
- energy to maintain body heat
- movement

- energy for body processes- digestion, etc.
- roughly 10% of transferred energy is stored in the next level

AFNR Reflection Page

List five key points that are important to remember from this presentation.

1. many ecosystems
2. plants
3. animals
4. energy flow
5. trophic levels

List three ideas or concepts that this new information has in common with previous things learned.

1. food chain
2. energy
3. movement

List questions or ideas that remain unclear about the information presented that should be asked for clarity at the appropriate time.

N/a