

## Presentation Notes

Presentation EcologyLesson 4.4

Notes from Presentation:

Ecology – The study of the interaction of organisms with one another and their environment. –

Interconnectedness – plants and animals need each other – organisms need oxygen, water, nutrients, shelter  
Biomes – Large region with similar plants, animals, and other organisms adapted to the climate and other conditions, consist of many similar ecosystems, ex: aquatic, desert, grassland, taiga, temperate forest, tropical rainforest, tundra

Ecosystems – The interactions between the living things in a place and the nonliving things in a place: plants, animals, and other organisms rely on each other and on the physical environment.

Abiotic Ecosystem Components – nonliving factors, physical and chemical characteristics, ex: air, water, land, soil nutrients, temperature, sunlight, precipitation

Biotic Ecosystem Components – Living organisms, include: flora (plants), Fauna (animals), microorganisms

Interactions of Organisms – Food Chain: single path of feeding relationships, Food web: series of interrelated food chains

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 sequence of energy transfers, producers – 1<sup>st</sup> level, herbivores – 2<sup>nd</sup> level, carnivores – 3<sup>rd</sup> 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. Ecology is the study of the interaction of organisms with one another and their environment.
2. Roughly 10% of transferred energy is stored in the next level.
3. An ecosystem is the interactions between living things in a place and nonliving things in a place.
4. A biome is a large region with similar plants, animals, and other organisms adapted to the climate and other conditions.
5. Producers manufacture their own food while consumers obtain energy by eating other organisms.

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

1. We live in an ecosystem
2. We live in a biome.
3. Humans are a part of a food chain.

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

N/A