

ECOLOGY NOTES  
DAY 2 OF NOTES

Sep 5-7:30 AM

**Community** = where more than one animal or plant lives in a specific area.

**Population** = is the total number of each specific type of biotic factor in that area.

Sep 5-8:16 AM

**Habitat:** An area within an ecosystem that a specific living organism lives. "Home".

**Niche:** The role or job that an organism does in an ecosystem.

It is what they are good at.

Sep 5-8:22 AM

**Ecology** = The Study of how living and non-living things interact within an ecosystem.

**Conservation** = the science of the ethical protection and management of the natural environment

Jan 30-12:49 PM

**Renewable Resource** = Any resource that can be replaced in under 100 years.  
(Ex. = Trees, Animals, Water)

**Non-Renewable Resource** = Any resource that will take over 100 years (up to millions of years to replace)  
(Ex. = Oil, Coal, Natural Gas)

Ex. = oil, coal, natural gas

Jan 30-12:54 PM

**Adaptation** = A physical trait that allows an organism a better chance of survival.

**Symbiotic Relationships** - when two organisms interact with one another in an ecosystem. Some times this is good for both and other times it may only be good for one.

Jan 30-12:59 PM

**Predator - Prey Relationship** = when one organism is hunted by another. The organism doing the hunting and killing is the **predator**. The organism being stalked and killed is the **prey**.

Ex. Coyote and Rabbit

Feb 4-7:15 AM

**Parasitism** - When one organism lives on another (feeding off of it) often bringing it pain, illness, or death. 😊 😞

**Mutualism** - when one organism lives on another and BOTH organisms are better off. 😊 😊

**Commensalism** - When one organism lives on another for its own benefit and the other is unharmed. 😊 😐

Feb 4-7:01 AM

Parasitism	
Mutualism	
Commensalism	

Feb 4-7:08 AM

**Population Density** = Number of a specific species of living organism found in an area. You calculate by taking the count and dividing by the area.

Ex. 150 deer on 100 acres  
= 1.5 deer per acre.

Jan 30-1:02 PM

- Ecosystem Needs:**
1. Sun
  2. Water Cycle
  3. Atmosphere - gases (Oxygen/Carbon Dioxide)
  4. Food (Carbon/Nitrogen) - plants/animals
  5. Decomposers

Sep 9-7:19 AM

**Biosphere** = The portion of the planet where all life exists (upper atmosphere to deep oceans)

**Biotic factor** = living things in an ecosystem.

**Abiotic factor** = non-living things in an ecosystem.

Sep 5-8:07 AM

Food Chain vs Food Web

Food Chain - starts with the sun and in ONE direct path of energy to the decomposer.

Food Web - many food chains woven together showing a variety of paths that energy can travel through an ecosystem.

Feb 5-7:27 AM

Food Chain

Sun → Oak Tree → Squirrel → Fox → Wolf → Decomposers

Feb 5-7:29 AM

Sun

Producer - Plant

1st Level Consumer - animal that eats producer

2nd Level Consumer - animal that eats 1st Level Consumer

3rd Level Consumer - animal that eats 2nd Level Consumer

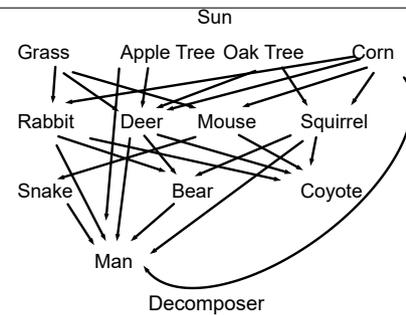
4th Level Consumer - animal that eats 3rd Level Consumer

etc. until you get to the Decomposer

Feb 5-7:42 AM

Food

Web



Feb 5-7:31 AM

Autotrophs - producers (plants)

Heterotrophs - consumers (animals/ decomposers)

Competition - when two or more species need the same resource (water, food, habitat, etc.)

Feb 5-12:16 PM