Tuesday, April 2/13
Intro to Environmental Science 120

Speaker

http://204.82.220.48/view/index.shtml

1. Owl Pellet Dissection: Was Due - Wed., March 27/13
2. Research Topic
3. Interactions in Ecosystems - Pictures/Video
   - Finish Notes

Ways in Which Species Interact

- Interactions are categorized by how one population interacts with another
- These interactions depend on whether they harm or help one another
- Some interactions are direct, others are indirect
- This is still being studied to better understand its complexities

Competition

- A relationship in which different individuals or populations attempt to use the same limited resource
- Each individual can be harmed by the competition
- Can occur within or between species
- Ex. Fox and coyote compete for the same prey

Competition

Indirect Competition

- Some species may never come in contact with each other and still compete
- Ex. One type of insect during the day and another at night

Adaptations

- Some species reduce competition with each other by adjusting their niche
- This is called *niche restriction*

Predation

- An organism that feeds on another organism is the **predator**
- The organism that is fed upon is called the **prey**
- Ex. Coyote and deer
- Many species have evolved some mechanisms to avoid or defend against predators

Parasitism

- An organism that lives on or in another organism and feeds on the other organism is a **parasite**
- The organism that provides the nourishment is the **host**
- Ex. Ticks, fleas, tapeworms, sea-lice

Mutualism

- A close relationship between two species in which each species provides a benefit to the other
- Ex. Humans and certain types of bacteria in the intestines
  - Humans are better able to digest food and bacteria have a place to live

Commensalism

- A relationship in which one species benefits and the other species is neither harmed nor helped
- Ex. Sharks and remoras
  - Sharks are unharmed and fish are able to eat what the shark doesn't

Symbiosis and Coevolution

- A relationship in which two organisms live in close association is called **symbiosis**
- Symbiosis is often used to describe at least one species benefiting from another
- Over time, species may **coevolve**
- They develop adaptations that reduce the harm or improve the benefit of the relationship