

Biotic Factors are the living or once-living organisms in the environment.



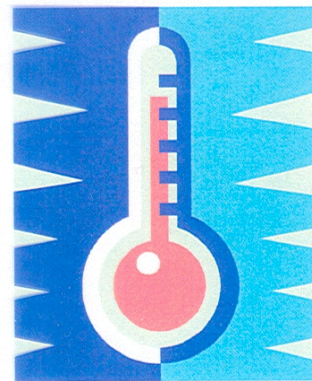
Abiotic Factors are nonliving, physical features of the environment such as soil, sunlight, water, temperature, and air.



Air



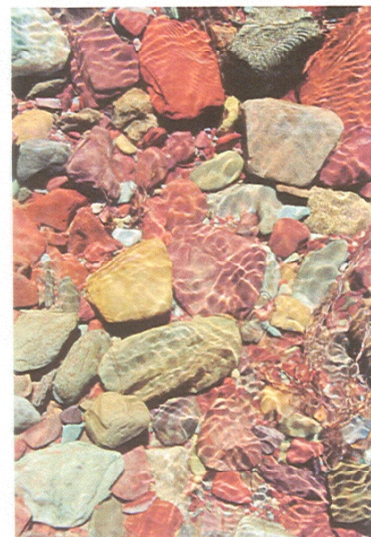
Sunlight



Temperature



Water



Rocks and Soil

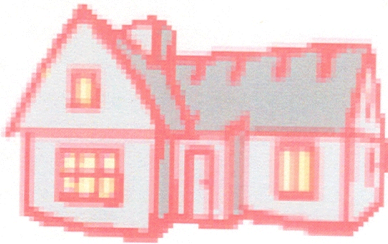
Limiting Factors are any biotic or abiotic factor that restricts the number of individuals in a population.



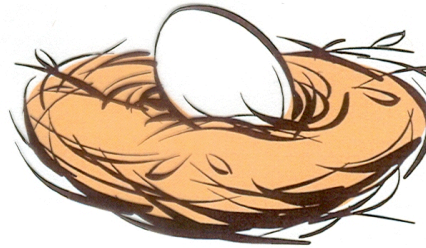
If there are no more houses for sale and no land to build more houses on in a town, the population of that town can't increase. In this case, housing would be a limiting factor.

A Habitat is the physical location where an organism lives.

A few habitats.....



Human

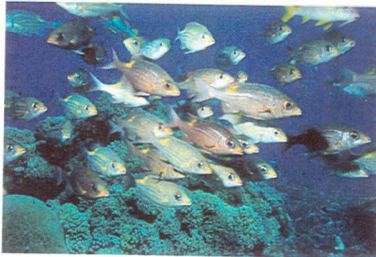


Bird

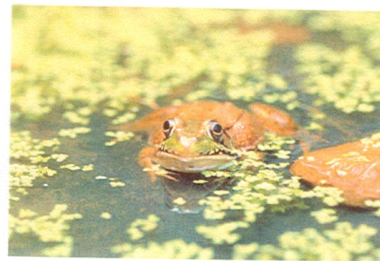


Lion

Fish



Frog



A **Niche** is the role of an organism in the ecosystem.

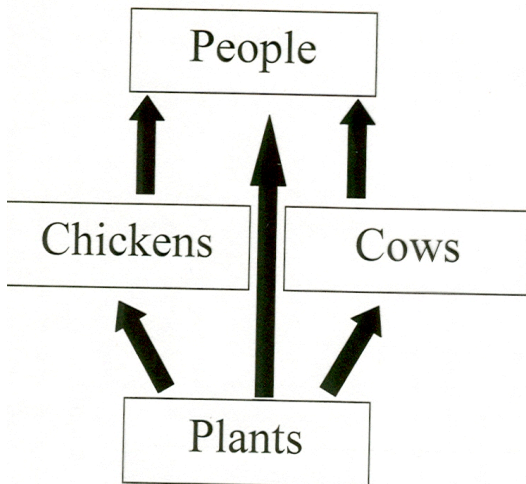


A niche is your role in your environment. Maybe you have certain chores around the house such as taking out the trash or doing the dishes, that is your role in your home environment.



Another role that you have is as a part of your family, maybe you are a brother, sister, son, or daughter- that is part of your role in your environment as well.

A food chain is a simple way of showing how energy in the form of food passes from one organism to another- usually have 3-4 links, no more than 5 because energy is lost at each transfer.



A food web is a series of overlapping food chains, which provides a more complete model for the way energy moves through a community, also more accurate because they show that many organisms feed on more than one level of an ecosystem.

Levels of Biological Organization:

An organism is a single individual from a population



A population is all of the individuals of one species that live and reproduce in the same area at the same time



A community is made up of populations of different species that interact in some way



An ecosystem consists of communities and the abiotic factors that affect them



A biosphere is the highest level of biological organization; it is made up of all of the ecosystems on earth.

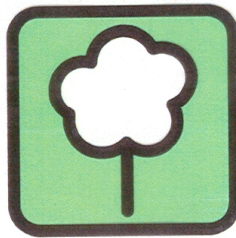


Succession is the process of gradual change from one community of organisms to another.



If a forest fire or other type of disturbance occurs, a community may be completely wiped out.

2. Next, slightly bigger and slower growing shrubs will grow.



1. The first plants to come back are going to be small and will grow quickly, we commonly think of these plants as weeds,



3. Finally larger tree will begin to come back to the area and eventually they will reform the forest!

Pioneer Communities are the first community of organisms to move into a new environment.

These are going to be the fast growing, small, weedy organisms.



A Climax Community is when a community has reached the final stage of ecological succession.

These are going to be the more complex mix of larger plants and trees that you would find in an old forest.



Disturbances:
Which are Natural? Which are Human
Caused? Which are both?



Erosion



Changing Water Flow



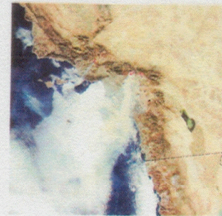
Drought



Fishing



Earthquake



Fire



Flood



Cutting Lumber



Mining (oil)



Hurricane



Farming



Sand Storm