

Living World

Biomes:

Biomes are large regions of the world with distinctive climate, wildlife and vegetation.

Terrestrial biomes: Tropical, boreal, temperate, grasslands, deserts, arctic tundra and alpine

Aquatic Biomes:

Freshwater: Lakes, rivers and wetlands

Marine Biomes: Estuary, oceans and coral reefs

Where fresh and marine water mix
Temperature and light varies on depth
Produces a large amount of the world's oxygen
Current flows in 1 direction
Has permafrost
Made from corals
Warm during the day and cold at night

Populations



A group of individuals of the same species, living in a shared space at a specific point in time. Population may vary depending on season.

Factors affecting population size



Stable population?

$\text{births} + \text{immigration} = \text{deaths} + \text{emigration}$

Population Distribution

The way individuals are dispersed within their habitat.

Clumped, uniform and random



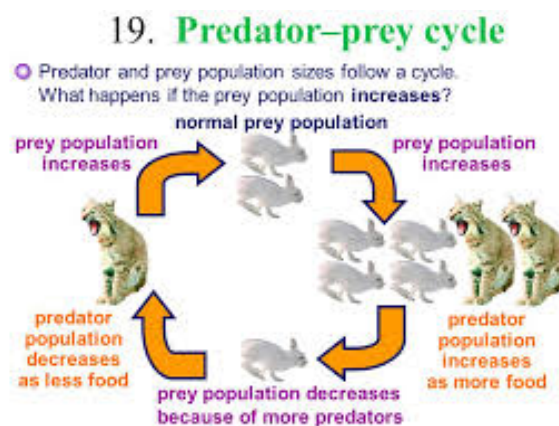
Ecological Factors

an aspect of a habitat that will affect the organisms living there.

Biotic	Abiotic	Limiting factor
Living-predation	Non-living-rain	Affects environment negatively

Biological Cycles

Population of a species in an environment varying due to the predator/prey relationship.



Communities

A set of populations of different species that share the same habitat.



Biodiversity:

- 1) # of different species
- 2) relative abundance (average # of each species)
- 3) total number of organisms in ecosystem



Interactions in a Community

1. Competition
2. Predation (parasitism)
3. Mutualism
4. Commensalism

Examples:

In winter, moose and deer look for the same food
A hummingbird builds its nest in a tree
A louse feeds on a dog's blood
People do volunteer work
A carnivorous plant feeds on small insects

Ecosystems

A community of living organisms interacting with one another and with the nonliving components in their habitat.



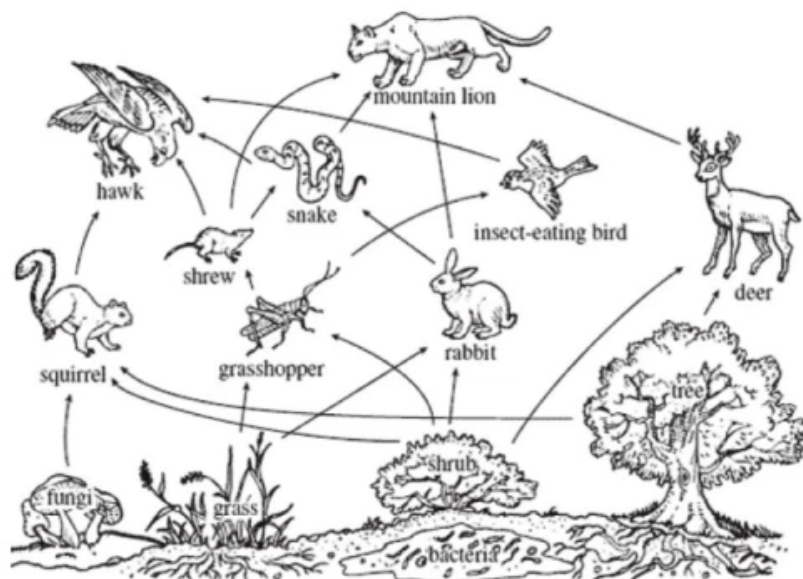
Trophic Relationships

Feeding connections among living organisms in an ecosystem

Producers	Consumers	Decomposers
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Using trophic levels to create food chains and webs

Food Web



Biomass

The mass of all living things in an environment.

Natural vs Human disturbances

