

Basic terminology related to ecology

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Habitat	It is a place where an organism lives
Niche	<ul style="list-style-type: none">- It is the physical space occupied by an organism with its functional role in the community- Habitat is the address and niche is the profession of an organism (where it lives and what it does)- Organism under a niche is subjected to condition(s) like structural adaptation, physiological response and by born or aquired behavior.
Biota	Are the plant and animal lives of a habitat.
Biotic	Relating to life or living organisms.
Abiotic	<ul style="list-style-type: none">- The non-living factors of the earth which affect the ability of living organisms to survive in an environment.- These can include both physical and chemical factors.
Environment	The surroundings of an organism including the biotic and abiotic factors.
Sub-lethal	Not sufficient to cause death
Lethal	Sufficient to cause death
Sensitive	<ul style="list-style-type: none">- Can be affected by small change in the environment.- All the organisms are not equally sensitive.
Tolerant	<ul style="list-style-type: none">- Can not be affected by small change in the environment.- All the organisms are not equally tolerant.
Leibig's law of minimum	If one of the essential plant nutrients is deficient, plant growth will be poor even when all other essential nutrients are abundant.
Shelford's law of tolerance	<ul style="list-style-type: none">- It states that an organism's success is based on a complex set of conditions and that each organism has a certain minimum, maximum, and optimum environmental factor or combination of factors that determine success.- Tolerance limits consist of the the upper and lower limits of a particular environmental condition which allows a certain species to survive.
Limiting factor	<ul style="list-style-type: none">- A limiting factor is anything that constrains a population's size and slows or stops it from growing.- For example, if there are not enough prey animals in a forest to feed a large population of predators, then food becomes a limiting factor.

Food chain Transfer of food energy from it's source in plants by series of organisms through repeated eating and being eaten by others

Trophic level Trophic level is defined as the position of an organism in the food chain.
1st Trophic Level: Producer- makes it's own food
2nd Trophic Level: Primary Consumer- consumes producers
3rd Trophic Level: Secondary Consumer- consumes primary consumers
4th Trophic Level: Tertiary Consumer- consumes secondary consumers

Population regulation Describes predator-prey relationship

Trophic cascade Reciprocal effect of predator on prey

Food web A food web is the natural interconnection of food chains

Herbivore Animal that eats plants

Panktivore Animal that eats plankton

Carnivore Animal whose diet is mostly composed of animals

Omnivore Animal that eats both plants and animals

Piscivore Animal that eats fish

Macrophytophagous Animal that eats macrophytes/weeds/higher plants/vascular plants

Law of thermodynamics Describes the transfer of energy

1st law Energy cannot be created or destroyed' transfer from one form to another one

2nd law A significant amount of energy (as heat energy) is lost and the rest part is converted as protoplasm (to form biomass)

Biomass Weight of organism

Standing crop Weight of organism at a certain time

Carrying capacity Maximum weight/biomass

Individual size and metabolism Smaller size-larger metabolism-smaller biomass

Ecotone

- Junction place of two or more different communities
- E.g., estuary where river (freshwater) meets sea (marine/salt water)
- Productive zone in terms of sufficient nutrient/food availability and favourable water quality (suitable water flow and depth; sufficient dissolved oxygen content; less predation etc.)
- Many species shows tendency to stay/live here

Edge effect Tendency of the species to live in ecotone

Edge species Species available/living in the ecotone