



Think like an Ecologist... a scientist who studies the relationships between living things and their environment



Language of the Discipline:

Abiotic: Nonliving or not containing any living organisms.

Aerobic: Living or occurring only in the presence of oxygen.

Agroforestry: Production of tree crops in a manner similar to agriculture.

Anaerobic: 1. Lacking or seriously depleted of oxygen. 2. Organisms, such as certain bacteria, that can live without oxygen (indeed, for most anaerobic bacteria, oxygen is toxic).

Autotroph: Literally, "self eater." Organisms capable of producing their own food- primary producers. Contrast with heterotroph .

Biodegradable: 1. Able to be broken down into simpler substances by naturally occurring decomposers. 2. Nontoxic and able to be decomposed in relatively short period even on a human time scale.

Biodiversity: The combined differences of living things, generally classified in four broad categories of diversity: Genetic, Species, Culture, & Ecosystem.

Biome: A specific type of terrestrial region inhabited by well-defined types of life that generally cannot live outside that specific region. Examples include deserts, grasslands, & forests.

Biosphere: The portion of the earth and its atmosphere in which living organisms exist.

Carrying capacity: The number of individuals that the resources of a habitat can support.

Deforestation: Removal of trees from a forested area without adequate replanting.

Ecosystem: An ecological community of plants, animals, and other organisms, interacting with each other and with the nonliving resources in their environment, all functioning as a unit.

Ecotourism: Environmentally, culturally, and scientifically responsible tourism of unusual or interesting ecological sites. It safeguards the nature of the attraction and serves to strengthen conservation and scientific research efforts in the area.

Endangered species: Wild species with so few individual survivors that the species could soon become extinct in all or most of its natural range.

Extinct: A species that is no longer living on earth. We know of their existence through studying the fossil record.

Food web: The combination of all the feeding relationships that exist in an ecosystem. Most prey species are eaten by many different predators and most predators eat more than one prey item.

Gene pool: The sum total of all the genes that exist among all the individuals of a species.

Habitat: Place or type of place where an organism, population, or community lives.

Hybrid: The offspring of two parents from separate though closely related species. An example is a mule, which is produced by breeding a horse with a donkey. Hybridization is common among wind-pollinated plants, but quite uncommon among higher animals.

Indicator species: Species that serve as early warnings that an ecosystem is being degraded. Fish and amphibians are excellent indicator species as are large predators.

Keystone species: Species that play roles affecting many other organisms in an ecosystem.

Lichen: A symbiotic relationship between a fungus and a moss.

Nonrenewable resource: Resource that exists in a fixed amount and has the potential for renewal only by geological, physical, and chemical processes taking place over hundreds of millions to billions of years. Examples are copper, aluminum, coal, and oil.

Overfishing: Harvesting so many fish of a species that there is not enough breeding stock left to replenish the species.

Pioneer species: First hardy species (often microbes, mosses, and lichens) that begin colonizing a site as the first stage of ecological succession.

Primary producer: An organism, such as a plant or microbe, that makes its own food. This is done by capturing the sun's energy through photosynthesis (plants) or by harnessing the energy in chemical bonds through chemosynthesis (some microbes).

Runoff: Surface water effluent (usually from precipitation but may be from human activities such as irrigation) that moves too quickly to be absorbed into the ground. It flows into stream and river systems, picking up things in its path- which may be light after a small rain or tremendous in the wake of a storm, when even large boulders and trees get swept up in the runoff.

Salinization: Accumulation of salts in soil that can eventually make the soil unable to support plant growth.

Specialist species: Species with a narrow ecological niche. They may be able to live in only one type of habitat, tolerate only a narrow range of environmental conditions, or use only one or a few types of food.

Species: a group of organisms that resemble one another in appearance, general behavior, ecological niche, chemical makeup and processes, and genetic structure.

Sustainability: Ability of a system to survive for some specified (finite) time.

Taxonomy: The classification of living organisms according to the heirarchy of relationships.

Resource: Biodiversity and Human Health: Glossary of Ecology Terms. Website.
http://ecology.org/biod/library/glos_TZ.html