natural selection—the process by which, according to Darwin's theory of evolution, only the organisms best adapted to their environment tend to survive and transmit their genetic characteristics in increasing numbers to succeeding generations, while those less adapted tend to be eliminated.

Net Primary Productivity (NPP)—the amount of energy that plants pass on to the community of herbivores in an ecosystem.

niche—the total sum of a species' use of the biotic and abiotic resources in its environment.

nitrification—the process in which soil bacteria convert ammonium (NH_4^+) to a form that can be used by plants; nitrate, or NO_3.

nitrogen fixation—the conversion of atmospheric nitrogen into compounds, such as ammonia, by natural agencies or various industrial processes.

omnivores—organisms that consume both producers and primary consumers.

parasitism—a symbiotic relationship in which one member is helped by the association and the other is harmed.

precipitation—any form of water, such as rain, snow, sleet, or hail, that falls to the Earth's surface.

photosynthesis—the process in green plants and certain other organisms by which carbohydrates are synthesized from carbon dioxide and water using light as an energy source. Most forms of photosynthesis release oxygen as a byproduct.

pioneer species—organisms in the first stages of succession.

population—a group of organisms of the same species that live in the same area.

predation—when one species feeds on another.

primary consumers—this category includes organisms that consume producers (plants and algae).

primary succession—when ecological succession begins in a virtually lifeless area, such as the area behind a moving glacier.

producer—an organism that is capable of converting radiant energy or chemical energy into carbohydrates.

realized niche—when a species occupies a smaller niche than it would in the absence of competition.

reproductive isolation—the phenomenon in which two populations evolve such that they are incapable of reproducing.

reservoir—a place where a large quantity of a resource sits for a long period of time.

respiration—the process in which animals (and plants!) breathe and give off carbon dioxide from cellular metabolism.

residency time—the amount of time a resource spends in a reservoir or an exchange pool.

secondary consumers—organisms that consume primary consumers.