

Predator prey relationships



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Sustainability means being able to keep up with the replacement of resources in balance with the demand. It is important to the ecosystem's sustainability that its resources are not depleted too quickly. Predator-prey relationships illustrate this concept. Prey species such as deer will continue to forage as long as food is available. Left unchecked, populations increase to the point where some members starve. Predators will take the weakest members of the herd as an efficient means to get food with the least amount of effort.

The prey population recovers and is stronger as the ecosystem's sustainability returns. A predator is an organism that eats another organism. The prey is the organism which the predator eats. Some examples of predator and prey are lion and zebra, bear and fish, and fox and rabbit. The words "predator" and "prey" are almost always used to mean only animals that eat animals, but the same concept also applies to plants: Bear and berry, rabbit and lettuce, grasshopper and leaf.

The prey is part of the predator's environment, and the predator dies if it does not get food, so it evolves whatever is necessary in order to eat the prey: speed, stealth, camouflage (to hide while approaching the prey), a good sense of smell, sight, or hearing (to find the prey), immunity to the prey's poison, poison (to kill the prey) the right kind of mouth parts or digestive system.

Likewise, the predator is part of the prey's environment, and the prey dies if it is eaten by the predator, so it evolves whatever is necessary to avoid being eaten: speed, camouflage (to hide from the predator), a good sense of

smell, sight, or hearing (to detect the predator), thorns, poison (to spray when approached or bitten). Predator and prey evolve together.