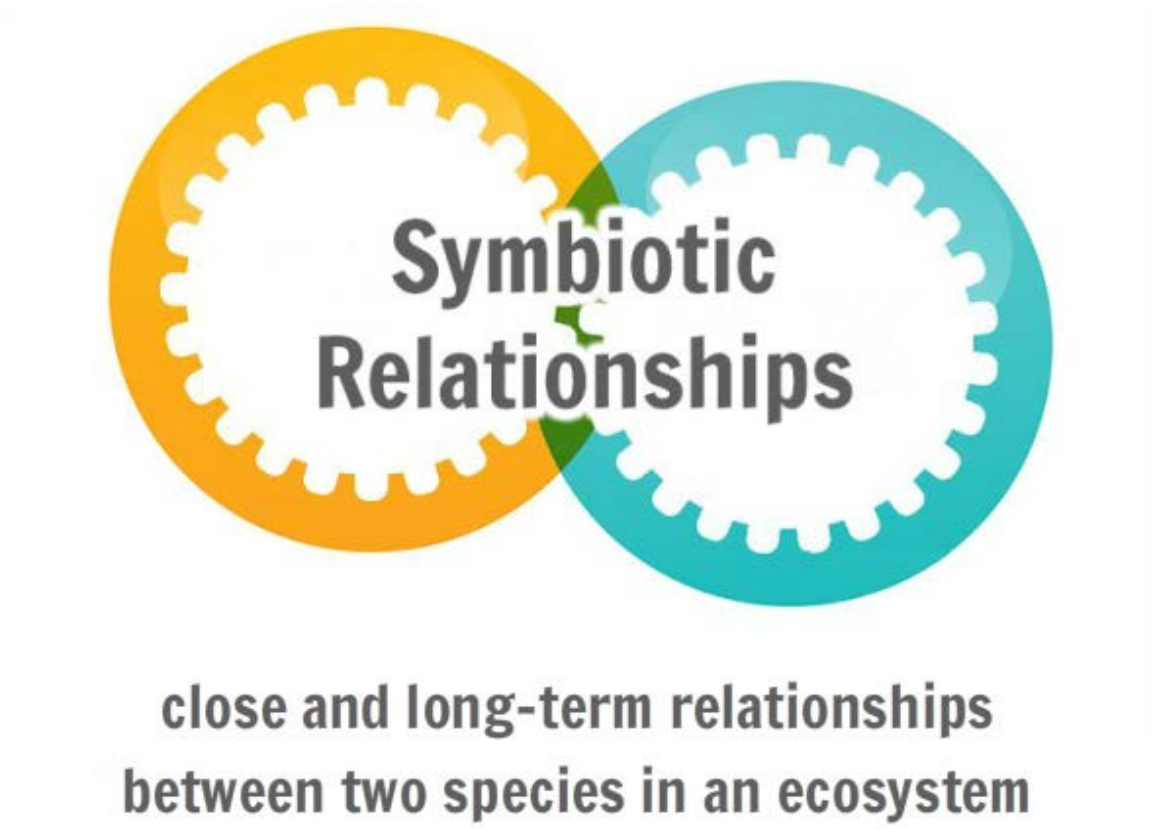
Module 11: Ecology
Topic 1 Content: Symbiotic Relationships Notes



Symbiotic relationships are close and long-term relationships between two species in an ecosystem. There are three main symbiotic relationships: commensalism, parasitism, and mutualism. Click on each of the different icons to learn more about these symbiotic relationships.

Commensalism

one species benefits and the other species is unaffected

Example: Clownfish and anemones

Commensalism occurs when one species benefits and the other species is unaffected. An example of commensalism is the partnership between clownfish and anemones. Clownfish burrow into the anemone tentacles, and when predators try to hunt the clownfish, the anemone stings them.

Parasitism

one organism benefits from the relationship, while the other organism is harmed

Example: Ticks and mammals

Parasitism occurs when one organism, the parasite, benefits from the relationship, while the other organism is harmed. In nature, ticks are parasites that live by feeding on the blood of other animals, like deer, dogs, birds, humans, and more. While the tick benefits from the relationship, they can pass on diseases to their host organism.

Mutualism

a symbiotic relationship in which both organisms benefit

Example: Oxpecker and rhinoceros

Mutualism is a symbiotic relationship in which both organisms benefit. An example of mutualism is the relationship between the oxpecker, a bird, and the rhinoceros. The oxpecker lives on the back of the rhino and removes any insects from the rhino's skin. This provides the oxpecker with a ready source of food, but protects the rhino from parasites.