Standard: SB4 a

EQ: How do organisms show interdependence in an ecosystem?

Crocodile and Plover

The Egyptian plover (small bird) hops right into the open mouth of the Nile crocodile to remove parasites. After the job is done, whether the crocodile is hungry or not the bird always leaves unscathed.

Sharks and Remora

Small fish called *Remora* safely clean the teeth of sharks to remove food remains and parasites imbedded around their teeth that can produce disease or a dangerous build-up of matter that can hinder eating.

Mycorrhizae

Mycorrhizae are fungi which live on the roots of plants. They receive nutrients from the plant. In exchange, the fungi increase the surface area of the root for water absorption and help it absorb phosphorus from the soil.

Dodo Bird and Calvaria Major

Dodo birds ate the seeds and leaves of a plant called calvaria major. The bird's gizzard scratched its seeds as they passed through its digestive system promoting germination. When the bird became extinct, the plant nearly disappeared.

Clownfish and Sea Anemones

Clown fish secrete a layer of mucus which makes them immune to the poison in the sea anemone's tentacles.

Bees and Flowering Plants

Bees pollinate dozens of species of flowers and agricultural crops. Without the bees, plants wouldn't produce fruits or vegetables. Farmer's often rent bee hives to ensure pollination of their crops during flowering.

Lichens

Fungi provide vital protection and moisture to algae. The algae nourish the fungi with photosynthetic nutrients that keep them alive.

Termites and Protists

Zooflagellates in the intestine of termites allow them to digest the cellulose that makes up wood fibers.

<u>Herbivores and Gut</u> Bacteria

Symbiotic bacteria, in the stomach of herbivores, have enzymes that digest the cellulose in the plant material. Ruminant animals re-chew cud to aid this chemical digestion

Orchids, Wisteria and Spanish Moss

Tropical orchids and hanging mosses use trees as points of attachment.

Birds and Water Buffalo

Birds eat the ticks off the backs of the water buffalo as a food source.

Ticks, Fleas, Lampreys, and Leaches

Temporarily live attached to fish, amphibians, birds, and mammals

Cow Birds and Cows

Birds that stay on the ground near cows and feed on the insects around them.

Tapeworms, Hook worms, Roundworms, Heart worms

live inside the bodies of fish, amphibians, birds, and mammals. Often their life cycles require two or more host organisms

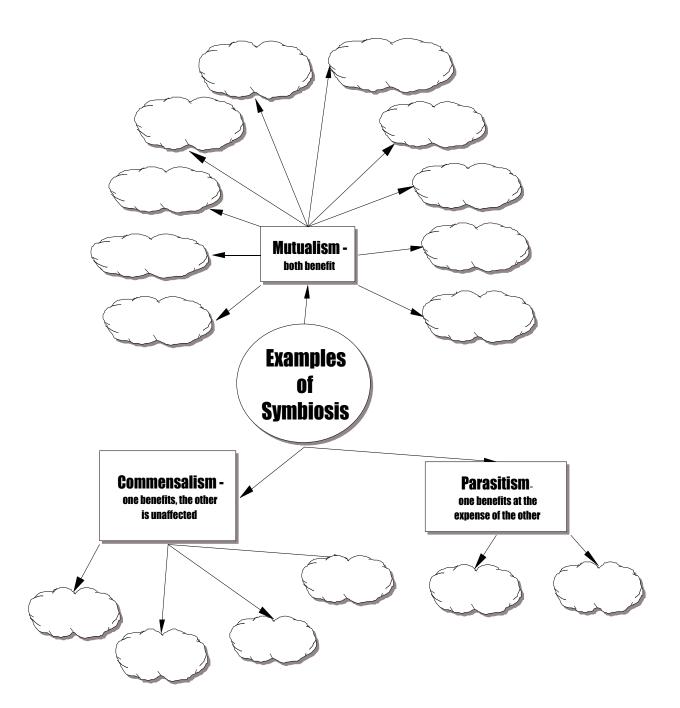
Pilot fish and Sharks

Pilot fish often travel with sharks as they swim conserving energy and eating small amounts of food scraps as the shark feeds

Yucca Plants and Yucca Moths

The yucca plant is physically incapable of pollinating itself to grow more seeds and perpetuate. The yucca moth (Pronuba) pollinates the yucca plant while laying its eggs inside the plant.

List the examples from the previous page in the appropriate location on the web



<u>Key</u>

