

Parasitism, Mutualism or Commensalism?
Classify the type of symbiotic relationship shown and described below.

Organisms	Description	Type of relationship(s)?
Sea anemone & clownfish	The clownfish is immune to the sting of the anemone. By hiding in the tentacles, the fish is protected from predators.  The territorial clownfish protects the anemone from anemone-eating predators.	
Catalpa worm & wasp larvae	The adult wasps sting the caterpillar, injecting their eggs. The eggs hatch and eat the caterpillar from the inside. The caterpillar eventually dies.	3
Oxpecker bird & mammals	The oxpecker feeds in herds of large mammals eating ticks, fleas and flies but also consuming scab tissue, blood and other secretions. The oxpecker will also hiss to alerts the mammals when danger is near.	
Corals & zooxanthellae (algae)	Corals have algae that live inside and give the coral its bright coloration. The algae use the coral's waste products (ammonia & CO <sub>2</sub> ) for photosynthesis while the coral is provided with food (glucose) and oxygen. If the algae dies, the coral will bleach and may also eventually die.	
Brown headed cowbirds & songbirds	The cowbirds lay their eggs in other birds' nests, and trick the other birds into raising your young. The cowbirds hatch out first, push the other eggs out of the nest, and the nest-builders end up feeding it instead of their own young.	
Cactus wren & cactus	The cactus wren builds its nest in different types of cactus, yucca plants or mesquite trees. The nest and young gain protection from the spikes or thorns of the cactus.	

White-winged dove & Saguaro cactus	The cactus provides food for the bird in the form of a large fruit.  The bird eats the fruit of the cactus, ingesting the seeds. The bird then flies off, and later deposits the seeds in a new location so the cactus gets its seeds transported allowing it to potentially colonize new places.	
	The thorny acacia tree provides food and shelter for the ants. In return for the room and board the ants chase off herbivores and destroy any plants that try to compete with the acacia.	
Acacia tree & ants		
	The cattle egret is often seen in the company of grazing animals. The grazers stir up insects, which the egret then eats. The cattle seem unaffected by the birds.	
Cattle egret & livestock		
Honey bees & flowers	Bees (and other insects) are attracted to the scents and bright colors of flowers. The bees feed on the pollen and nectar of flowers. The pollen sticks to the bee and is then deposited on the next flower causing pollination to occur.	
Remora fish & shark	The remoras attach themselves to a shark or other large marine organism and use it for transportation, protection and also feed on any food scraps dropped or left over.	
Sea lamprey & fish	The lamprey uses its teeth to latch onto a fish and rasp away the skin, leaving an open wound for the lamprey to suck body fluids from. The lamprey will eventually drop off the fish leaving it weakened.	