



Relationship #8



Anemonefishes (sometimes called clownfishes) are a beautiful group of tropical, reef fishes from the Pacific and Indian Oceans. These fishes are unusual because they have a close relationship with sea anemones. Sea Anemones belong to the class Anthozoa which includes the hydras, corals, and jellyfish. The simple structure of the sea anemone consists of a hollow cylinder surrounded by a crown of tentacles. The tentacles are equipped with specialized cells called nematocysts. Nematocysts are shaped and function like small harpoons and contain a poison sufficient to paralyze or kill small fish and other reef inhabitants.

The anemonefish lives among the forest of tentacles of an anemone and is protected from potential predators not immune to the sting of the anemone. The anemonefish is protected from the sting of the anemone tentacles by a substance contained in the mucus on its skin. The exact nature of this protective substance is not known, but is believed to be a combination of a partial natural secretion and chemicals the fish harvests by rubbing up against the anemone's tentacles. Whatever the case may be, the anemone treats the fish as part of itself and does not sting it. The anemone fish gains the protection of the stinging cells in the tentacles of the anemone, and may feed on scraps from prey captured by the anemone. There is no apparent benefit to the anemone.