

Sea anemones & sea cucumbers

Many anemones have resident zooxanthellae living inside them and grow best in shallow, sunny waters. The zooxanthellae are photosynthetic organisms whose waste products are used by the anemone for food. Anemones are carnivores capable of catching fish and small crustaceans. Most anemones feed at night by using their tentacles to paralyse their prey and bring it towards their mouth.

Many sea anemones can clone themselves. This occurs either by breaking off a small part of their base, which then grows into an adult anemone, or by crawling in two directions at once and slowly tearing themselves in half.

Scientists have discovered that anemone fish can live within an anemone because they have a layer of mucous that keeps the tentacles from stinging them.

Sea cucumbers live in sandy and muddy areas. They have an unusual method of breathing: they take in water through their anus to breathe. Sea cucumbers feed like a vacuum on dead plant and animal material in the sand. They take sand in through their mouth, digest the food material and then expel clean sand through their anus. Some, like the beach-ball sea cucumber, use feather-like arms to filter food from the surrounding water.

When disturbed or frightened, some sea cucumbers pour out a mass of sticky white threads to confuse or trap their enemies. Others are capable of releasing toxins which have been known to kill their enemies as well as the sea cucumber themselves.

Clockwise from top: Anemonefish swimming among anemone; a variety of sea cucumbers; yellow anemone; sea cucumber defence system; sea anemone



Learn more about Jellyfish, anemones and corals

