## sea cucumber

## classification

Kingdom: Animalia

Phylum: Echinodermata

Class: Holothuroidea

Subphylum: Echinozoa

Genus: Holothuroidea



For Further details link

## Habit and habitat

**Benthic Lifestyle:** Sea cucumbers are bottom-dwelling creatures, spending most of their time on the seafloor.

**Deposit Feeders:** Many species are deposit feeders, ingesting sediment and extracting nutrients from it.

**Global Distribution:** Sea cucumbers are found in all oceans, from shallow coastal areas to deep-sea trenches.

**Indo-Pacific Region:** This region is particularly rich in sea cucumber diversity, with many species inhabiting coral reefs.

**Coral Reefs:** They are commonly found in coral reef ecosystems, where they help process sediments and recycle nutrients.

## characteristics

- Sea cucumbers are found in shallow water but sometimes they are found at depths of thousands of metres.
- Since sea cucumbers are invertebrates, they lack a backbone. The animals are between 0.4 and 8 inches (1 and 20 centimetres) thick and 0.75 inches to 6.5 feet (2 to 200 centimetres) long.
- Five rows of tube feet are found on most species. Tube feet resemble miniature legs. Typically, sea cucumbers move quite slowly. Some creatures that live in the deep sea can swim.
- The mouth of a sea cucumber is encircled by ten or more tentacles that are employed for eating or digging. They eat mud that is rich in nutrients or algae.
- Inhalation and expulsion of waste products both occur through the anal orifice.
- The sea cucumber uses its tentacles to capture plankton and other tiny particles, then sweeps the food into its mouth.
- Sea cucumbers spawn by releasing eggs and sperm into the water, where the eggs are fertilized. During spawning, sea cucumbers develop a cobra-like appearance, with their front end raised up from the bottom. Larvae spend several weeks floating in the water.
- They eventually settle to the bottom and morph into tiny juveniles. Juveniles take several years to grow to their adult size. Sea cucumbers can live up to eight years.