

Glossary

Algae: non-flowering plants that live in water. These can be marine or freshwater.

Algal bloom: rapid increase in the growth of algae, usually in response to excess nutrients.

Benthic: describes plants or animals living on or near the seafloor.

Bioturbation: turning over of sediments by animal activity. In the ocean, this can be done by small animals such as burrowing shrimp and worms, or by larger fish and animals looking for food. This helps to replace oxygen in the sea floor and recycle nutrients.

Bivalve: a group of molluscs with soft bodies enclosed by two shells consisting of two hinged parts. Marine examples of these include cockles, mussels and oysters. They all have muscular bodies; some are able to use their bodies to move through sand or water, while others like oysters settle on rocks following the larval stage and filter feed.

Carnivore: an animal that feeds on other animals.

Cartilage: smooth elastic tissue found in the ear and nose in humans, but which makes up the entire body of animals like sharks, rays and skates.

Catchment: land basin drainage area from which rainfall runs off to rivers and eventually into the sea.

Caudal fin: the tail fin of a fish or mammal.

Cephalopod: a group of marine invertebrates including the octopus, squid, cuttle and nautilus. The name means 'head foot' in Greek, and references the structure of their body, in which the head is joined to many arms or tentacles. They are widely regarded as the most intelligent group of invertebrates, have excellent vision and can change the colour of their skin.

Cetacean: a group of aquatic mammals including whales, dolphins and porpoises.

Cnidarian: pronounced with a silent 'c'. A group of aquatic invertebrates including corals, sea anemones and sea jellies (jellyfish). They have no eyes but some sensory organs, and each have stinging cells to help capture their prey.

Consumers: organisms which obtain their energy by eating other organisms.

Crustacean: a group of animals found on both land and in the sea. Examples of these marine invertebrates include crabs, lobsters, shrimp and barnacles. They have an exoskeleton, jointed legs and antennae.

Dorsal fin: a fin attached to the upper edge of a fish or mammal.

Echinoderm: a group of marine invertebrates including sea stars, sea urchins and sea cucumbers. The name means 'spiny skin', a characteristic shared by all animals in this group. They only occur in marine habitats.

Ecosystem: a biological community of interacting organisms and their physical environment.

Endemic: a species restricted or unique to the area.

Epiphyte: a plant that grows attached to another plant.

Eutrophication: when excessive dissolved nutrients cause algal blooms, build up of decaying plant material and microbes and ultimately oxygen depletion.

Filter feeder: an animal that feeds by straining suspended matter and food particles from the water using a special body structure. For example: sponges, krill and baleen whales.

Food chain: the way that energy and materials flow through a community of plants and animals. This begins with energy from the sun, through to plants, herbivores and carnivores.

Food Web:

Gastropod: a group of invertebrates found on land and in salt and fresh water. Examples of marine gastropods include sea snails, nudibranchs and sea slugs. They all have a muscular foot and a radula (small scraping teeth) used for feeding, while only some have protective shells.

Habitat: a type of natural environment in which an animal lives and in which all of its needs are met.

Herbivore: an animal that feeds on plants.

Holdfast: the base structure of macroalgae/seaweed that anchors the plant to seabed or reef.

Intertidal zone: where the land and the sea meet between the high and low tide lines. This area is rich in nutrients and is periodically inundated with water and left dry as the tide comes in and out.

Invertebrate: animal with no backbone.

Juvenile: the young of an animal with similar form to the adult.

Larva: early free-living stage of an animal before it becomes a juvenile or adult.

Lateral line: the row of scales along the side of the bodies of fish acting as sense organs used to detect movement, vibration and pressure gradients in the surrounding water.

Macroalgae: another name for seaweed.

Mollusc: a group of invertebrate animals which are soft-bodied, unsegmented, with a body organized into a muscular foot or tentacles and a mantle which can create or secrete a shell. Most, but not all, of these have an internal or external shell and a radula. This group includes gastropods, bivalves and cephalopods.

Nacre: also called 'mother-of-pearl', an iridescent or shiny coating on the inside of some shells of snails and bivalves.

Omnivore: an animal that feeds on other animals and also plants.

Operculum: a rounded structure used to seal the entrance to snail shells when the animal hides inside.

Oviparous: describes an animal that lays eggs.

Pectoral fins: the paired fins attached to the side of a fish or mammal behind the head.

Pelagic: describes plants or animals living in open water, at or near the surface of the ocean, but far from the coast.

Photosynthesis: a process through which plants use sunlight, carbon dioxide from the air and water to make organic molecules used as energy.

Phytoplankton: drifting microscopic plants such as diatoms and single celled algae that can make their own food using sunlight.

Plankton: plants and animals that live in open water and are primarily transported by currents.

Prehensile: able to grasp.

Producers: organisms which produce their own food using light energy, such as plants and bacteria.

Radula: the replaceable teeth of molluscs, generally arranged in a belt like structure within the mouth.

Salinity: the amount of salt dissolved in water, usually measured in milligrams per litre (mg/L). Sea water is generally around 35 mg/L.

Scavenger: an animal that feeds on dead animals.

Sessile: describes an organism fixed in one place or immobile.

Spiracle: an opening to the gills in some sharks and rays, located behind the eye, which allows them to breathe while buried in sand or resting on the sea floor.

Subtidal: below the low tide mark in the ocean.

Swim bladder: gas-filled sac in fish that allows them to adjust their buoyancy or move up and down in the water column.

Symbiosis: a relationship between two organisms that results in benefits for both.

Temperate: relating to a region of ocean between the poles and the tropics, with mixed water as currents of warm tropical water moves toward the poles and cold polar water moves toward the equator.

Tropical: relating to a region of ocean in a band around the equator with constant warm temperatures throughout the year.

Turbidity: a measure of how cloudy or clear the ocean is due to the number of small particles in the water column. This can tell us about the quality of the water.

Upwelling: area of ocean where currents move upwards from the depths, bringing nutrients with it to the surface.

Vertebrate: animal with a backbone.

Viviparous: describes an animal that gives birth to live young.

Zooplankton: drifting microscopic animals which obtain their energy by eating other living things. Some spend their whole life floating through the ocean, while others are the larval stages of larger marine animals such as sea stars, fish and crabs.