Algae

Scientific name
Rhodophyta

Photo: Department of Fisheries WA

Description

Algae are organisms that can be found all over the world and support highly productive and varied ecosystems. It can range from tiny, single celled organisms to huge kelps that form undersea forests. Algae can grow in a variety of forms, shapes and colours including green, brown and red. Algae is essential for humans as it is used for food, stock feed, medicines, cosmetics and fertilizers.

Diet & Habitat

Algae grows on hard surfaces such as beach rock and coral reefs in nutrient rich waters, with tidal exposure to light. Without algae the waterways would become barren deserts with few life forms. The algae provides the main source of food for many species being the first stage on the food chain. It is also a source of shelter and breeding habitat/nursery for many marine organisms.

Did you know?

There are over 20,000 known varieties of algae!

In the Wild

Seagrasses and algae produce energy from photosynthesis. This is when sunlight is converted into energy, and therefore both must live in shallow water that is touched by the sun. Reproduction of seagrass occurs by pollination with pollen transported to other plants by water. Algae produces much of the earth's oxygen. It is estimated they produce between 50 and 75 per cent.

Algal Blooms

Within Western Australia, the long and hot summers create shallow and slow moving waters which provide ideal conditions for an increased population of algae in an aquatic system, this is called algal bloom. When this occurs it absorbs large quantities of oxygen from the water which causes marine life to suffocate and die and water to become discoloured and toxic. Algal blooms can also be caused by high levels of nutrients in the water from fertilisers, animal wastes, sewage and septic tank waste and industrial waste entering the waterways. They accelerate the growth of algae.

For many years the Peel inlet and estuary suffered from severe algal blooms, caused primarily by discharge of nutrients from agricultural land and piggeries along the rivers. To solve this problem a man-made channel from the Estuary to the ocean was constructed to the south at Dawesville and opened in 1994. This channel is named the Dawesville Channel and has the effect of allowing salt water from the ocean to enter and regularly flush the estuary using tidal flows, which in turn prevents the buildup of algae.