

Algae are unicellular or multicellular organisms that photosynthesise, but lack features such as leaves, roots, seeds and flowers of the 'higher' vascular plants.

They are commonly found in freshwater and marine aquatic environments, but are also found in damp terrestrial environments and even dry environments where they exist in symbiosis with fungus as lichen. Algae species float through the water column and attach themselves to objects that are in the water or terrestrial.



Algae have cells called chloroplasts that take light energy from the sun and convert it into chemical energy that the organism can use. These chloroplasts can be anywhere from yellow to brown, blue-green to bright green and red. Over 3,000 species of algae have been reported so far. Most of these are too small to see with the human eye.

Types of algae:

Diatoms are delicate, single-celled organisms with cell walls made of silica making them almost look like little glasshouses. They can be found in almost all water types.

Green Algae (chlorophytes) is the most prevalent type of algae and most commonly responsible for pond scum. While mostly green, not all green algae is green.

Dinoflagellates (dinophyta) get their name from their flagella which is a hair-like covering used for movement. Dinoflagellates are the organisms responsible for the toxic 'red tides'.

Blue-Green Algae (cyanobacteria) is actually a bacteria that has the ability to photosynthesise. It is one of the most commonly known types of algae, probably due to the toxic conditions some species can create when they bloom in nutrient-rich, calm, warm water.

Values of algae: Algae plays a vital role in the aquatic ecosystem - they provide food and shelter for other organisms; absorb nutrients and toxins; fix carbon; and create atmospheric and dissolved aquatic oxygen.

Managing algae: Blue-green algal blooms can be quite hazardous to humans and animals due to the toxins some species produce. A variety of toxins may be produced depending on the species present and can have varied effects from skin and eye irritation, through to liver damage, and even death.

Well mixed waters may help reduce the risk of blue-green algae blooms, as will the management of nutrient inputs into waterways through changing land use practices and urban stormwater. Algal toxins break down over time so if the affected water body isn't used for human consumption or watering stock, one option is to simply let it run its course.