



Algae

Periphyton - The Algae

There are thousands of species of algae and they come from the classification group **Kingdom Protista** and also **Kingdom Monera** (the very primitive blue-green algae or **Cyanobacteria**).

Algae are simple primitive plants that mostly photosynthesise (make their own food from the sun's energy). They are not specialised into roots, stems and leaves like the “higher” plants.

Size

Algae can be one-cell big or form colonies of many cells. Some marine algae like kelp can get very large. In streams they do not reach these sizes but can still provide habitat.

Habitat

Algae are found everywhere – freshwater, seawater, soils, inside other plants and animals, even inside rocks! The many algae found growing on the bed of flowing waters are called **periphyton**.

Growth Habit

The algae that make up periphyton are found on rocks and stones and as floating clumps, tufts and streamers in our creeks and rivers. They may be **motile** (move around) or attached in strands or **filaments**. When they form colonies, the cells are not specialised like other plants. They are simply a collection of cells all carrying out the same life processes.

Special Features

- Algae absorb nutrients from the stream and help to “purify” the water in streams, rivers and lakes.
- Algae provide the principal food source for most aquatic invertebrates.
- Over growth of algae can be caused by too many nutrients (eg from fertiliser) coming into the stream; and by higher water temperatures and too much light. When this happens the habitat can be smothered.
- Algae usually add more **oxygen** to the water than they take out but when they grow too much they can reduce the amount of oxygen at night.
- The effects of algae overgrowth can be reduced by planting trees and plants in the **riparian** zone. These will provide shade, lower temperature and absorb some of the excess nutrient runoff.