

## Algae

Algae are a very diverse group of organisms that vary widely in size, shape, colour and habit. Ten or so phyla are represented in freshwater. This page gives an overview of some commonly found freshwater algae. The algae have been grouped by their major features. Some of these are artificial groups (i.e. not necessarily related to their taxonomy) but are convenient ones for the pond dipper.

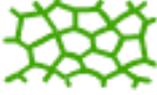
### Flagellated forms

Group		Key Features	
Euglenoids		green, flagella (whip-like cilia), free-swimming, red eye spot, flexible body (<0.4 mm)	<i>Euglena</i>
Dinoflagellates		brown, 2 flagellae (1 in girdle), free-swimming, tough armour (<0.4 mm)	<i>Peridinium</i> (Star of the Marshes)
Green Algae (Chlorophyta)		spherical colonies, cells with 2 flagellae, ( <i>Volvox</i> : 0.5-2 mm)	<i>Volvox</i> (Jewel of the Pond)
Not all green algae are green.		tiny, green / red, often in bird baths, (<0.05 mm)	<i>Haematococcus</i> <i>Chlamydomonas</i>

## Non-flagellated forms

Group		Key Features	
Blue-green algae (cyanobacteria)		blue-green, often slow locomotion, used to be considered algae but more closely related to bacteria. (cells <0.05 mm, colonies can be many mm.) The bigger cells are able to fixate nitrogen.	<i>Anabaena</i>
Diatoms		usually brownish, silica cell wall in 2 parts, solitary or colonial, some have a slow gliding motion. (<0.5 mm)	<i>Asterionella</i>
Desmids (Gamophyta) conjugating green algae		green, no flagella, mainly solitary, some colonial, various shapes, 2 semi-cells which are mirror images (<0.5 mm)	
Green algae (Chlorophyta)		green, don't move, no flagella, not attached to a surface. star-shaped colony: <i>Pediastrum</i> (<0.3 mm) bottom right: <i>Scenedesmus</i> <0.03 mm	<i>Pediastrum</i> (Star of the Pond)  <i>Chlorella</i> (symbiont in several organisms).

## Other algae of various growth forms

Group		Key Features	
Water net		a sock-like colony, green algae (related to <i>Pediastrum</i> )	<i>Hydrodictyon</i> (The Water Net)
<b>Filamentous forms</b>			
Pond scum (Gamophyta: conjugated green algae)		non-branching, green chains of cells with distinctly shaped cell contents. (cells <0.1 mm, chain - cms)	<i>Spirogyra</i> (helical chloroplast)
Other non-branching forms		several non-related groups	<i>Ulothrix</i>
Branching forms		mostly green algae	<i>Cladophora</i>
Red algae (Rhodophyta)		Mainly marine, but some freshwater forms, not always red.	<i>Porphyridium</i>