PERIPHYTON / ALGAE ID SHEET

Periphyton or commonly known as algae is a natural material that grows on submerged surfaces in freshwater. It is essential for for the functioning of a healthy ecosystem, however if it becomes too abundant it can cause waterways to be clogged and degrade the health of the entire habitat.

Periphyton is grouped into two different categories filaments and mats (which includes cynobacteria (microcoleus which is a toxic algae) and didymo (also called rock snot).

Filaments

These can be long (more than 2cm in length) or short (less than 2cms long) filament fibres, they are usually green or brown in colour. Green filaments can be long or short and may look like wet wool. Brown filaments tend to be fine and stringy looking.

Green filaments





Brown filaments





Mats

Can be found in a variety of colours ranging from brown, yellowish, reddish or dark brown, green and sometimes almost black.

They can look fuzzy, smooth or granulated covering a surface and can be classed as thin (< 0.5mm), medium (0.5-3mm) or thick (>3mm) mat cans appear as jelly like nodules.

Thin - can appaear as a slimy film on surface but barely any material comes off if scraped





Thick - >3mm) can solid looking or as nodules and can be slimy





Medium - (0.5 -3mm) can appear as bobbles with film inbetween







Sludge

Usually a light to dark brown colour and can be confused with mats, sludge easily falls apart when touched will fall off the rock.



Didymo

Didymo is an introduced species that has become a problem some South Island rivers, it has not yet been found in the North Island. Despite its appearance it is not slimy but has a tough fibrous texture when squeezed.



Cynobacteria

Is a form of mat periphyton that is toxic. It is smooth and peels of easily from rocks. usually dark green or black but can be lighter green or grey. It has a distinctive musty / earthy smell.



More than one type of periphyton

It is likely you will have a mix of different periphytons in your waterways and it is even common to find different types growing on the same surface.

Mixture sludge & filaments











