

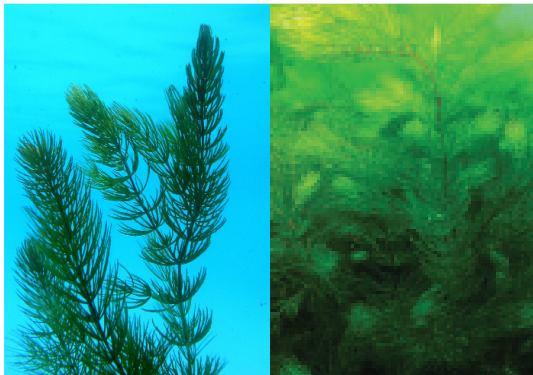
HORNWORT

Hornwort (*Ceratophyllum demersum*) is a submerged freshwater weed found in still and flowing waters. Leaves are finely divided, with minute teeth which make the plant feel rough to the touch. It lacks roots but has modified leaves that anchor the plant in bottom sediments.

New plants can form from each piece of the easily broken stems. Hornwort rapidly invades water of varying clarity, temperature, light and nutrient level, and its dense growth habit crowds out native species.

Hornwort is currently widely established in the North Island. In the South Island, it has been found in the Moutere Stream and some private ponds in Motueka and has been eradicated. In February 2006, a small population was discovered in Centennial Park Lake in Timaru and this too is thought to have been eradicated.

MAFBNZ aims to eradicate and exclude hornwort from the South Island as part of its National Interest Pests Response programme. It is an unwanted organism under the Biosecurity Act 1993 and is banned from sale, propagation, and distribution.



**REPORT ALL SIGHTINGS IN THE SOUTH ISLAND TO MAF BIOSECURITY
NEW ZEALAND 0800 80 99 66.**

DIDYMO

Didymo (*Didymosphenia geminata*) – known as 'rock snot' – is a freshwater diatom (a type of algae). It is a native of northern Europe and North America and was first reported in New Zealand in 2004. Didymo is currently found in a number of South Island rivers. Biosecurity New Zealand has since declared the entire South Island a Controlled Area for Didymo. This means waterways remain open to angling and other recreational activities. You must clean your gear when going from one waterway to another in the South Island and before you enter a North Island waterway also.

The alga can form massive blooms on the bottom of streams, rivers and lakes. It attaches itself to the stream bed by stalks, and can form a thick brown layer that smothers rocks, submerged plants and other materials. It forms flowing 'rats tails' that can turn white at their ends and look similar to tissue paper. As the 'tails' of the alga get longer they become white in colour.

This microscopic pest can be spread by a single drop of water. Even if you can't see it, you could be spreading it.



**TO REPORT A SUSPECTED FIND OF DIDYMO, CONTACT BIOSECURITY
NEW ZEALAND 0800 80 99 66.**

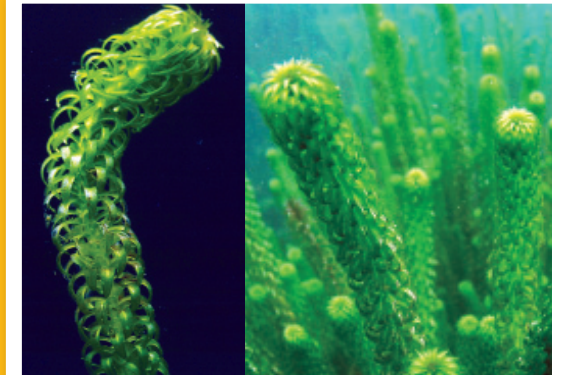
LAGAROSIPHON

Lake weed (*Lagarosiphon major*) is a fast-growing aquatic plant originally brought into New Zealand from South Africa as an aquarium or ornamental pond plant. It has since become established in many lakes and rivers throughout the country.

In the South Island it is found in some lakes and rivers.

Lagarosiphon is a perennial plant with stems that can grow upright to 4 metres. Leaves are dark green and curl downwards back towards the stem and are arranged spirally around the stem. Optimum establishment, growth and spread of Lagarosiphon occur in 2 to 4 metres water depth.

Tiny fragments as small as 4cm can easily break off and establish in new areas, helped by water currents, wave action and boating activities. Its vigorous growth displaces more desirable native plants and disrupts recreational activities by choking and blocking waterways. If left uncontrolled, large beds can form, come adrift and leave unsightly heaps on the shore.



**TO REPORT A SUSPECTED FIND OF LAGAROSIPHON, CONTACT YOUR
LOCAL REGIONAL COUNCIL.**

CHECK CLEAN DRY

CHECK

Remove all obvious unwanted material from items that have been in contact with the water.

CLEAN

Clean all equipment with a detergent solution ensuring surface contact for one minute. You can use a five percent solution of dishwashing liquid that you can buy from a supermarket.

DRY

Drying the item to touch and leaving for at least 48 hours will kill Didymo.



TO PROTECT NEW ZEALAND'S UNIQUE WATERWAYS, EVERYONE NEEDS TO TAKE RESPONSIBILITY NOT TO SPREAD FRESHWATER PESTS.



Unwanted organisms such as Didymo, Hornwort and Lagarosiphon pose a serious threat to the environmental, recreational and aesthetic values of our lakes and rivers. Once in a waterway they can disperse rapidly, provided conditions are suitable.

If you are moving from one waterbody or catchment to another, without realising it you could be carrying these pests. They "hitchhike" on clothing and equipment such as boats, trailers and fishing gear.

HELP SLOW THE SPREAD

Check your boat or fishing equipment for weed before leaving the waterway or remove all water pests from boats and recreational equipment when leaving waterways.

For further information on aquatic pests contact your local Regional Council. Or see the Biosecurity New Zealand website at www.biosecurity.govt.nz

PROTECT OUR WATERWAYS

CHECK CLEAN DRY

