

THREATENED TREASURES

To protect New Zealand's unique waterways and reduce the spread of aquatic pests, everyone needs to take responsibility.

Unwanted organisms such as Lagarosiphon and Didymo 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, footwear and equipment such as boats, trailers and fishing gear.

We all have a part to play.

In an effort to minimise the spread of aquatic pests, the Otago Regional Council regularly inspects waterways, especially high risk areas such as marinas and boat ramps.

Individual river users should take care not to transport plants, fish and other organisms from one waterway to another.

Always CHECK, CLEAN AND DRY your gear, before you leave a river or lake.



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 Otago, this pest plant is found in lakes Wanaka, Dunstan and Roxburgh, and in parts of the Clutha and Hawea rivers.

Lagarosiphon is a perennial plant with stems that can grow up 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:

Otago Regional Council: 0800 800 033



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. Biosecurity New Zealand has since declared the entire South Island an Outbreak Control Area for Didymo. This means waterways remain open to angling and other recreational activities, but all gear should be cleaned before going from one waterway to another.

In Otago, Didymo is found in Lake Dunstan, the Clutha, Hawea and Von rivers, and possibly their tributaries.

The alga can form massive blooms in streams, rivers and lakes, and its spread is highly undesirable. It attaches itself to the streambed 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.

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:

Otago Regional Council: 0800 800 033 or

Biosecurity New Zealand: 0800 80 99 66

CONTROL AND ERADICATION

Control of Lagarosiphon can be very expensive, and programmes must be well planned. Several methods have been tried, with varying degrees of success, including:

- suction dredging
- hand weeding - suitable only for small infestations
- chemical control - a diquat-based gel formulation, used for larger infestations.

There is no known way to get rid of Didymo. Now that it is in New Zealand, we need to learn more about this alga and how it will behave in local conditions.

Meanwhile, the emphasis is on minimising and slowing the spread of these waterway pests.

HELP STOP THE SPREAD

✓ CHECK

Before you leave any waterway, remove all visible threads or clumps of weed and algae from gear and clothing.

✓ CLEAN

Soak or scrub all items of equipment for at least one minute with either:

- hot(60°C) water
- 2% solution of household bleach
- 5% solution of salt
- 5% solution of nappy cleaner
- 5% solution of antiseptic hand cleaner, or
- 5% solution of dishwashing detergent.

✓ DRY

After cleaning equipment, or if cleaning is not practical (e.g. animals), dry until touch dry then leave for a further 48 hours before entering another waterway.



STOP THE SPREAD

For further information on aquatic pests contact:

Otago Regional Council

freephone 0800 474 082

info@orc.govt.nz

www.orc.govt.nz

Or see the **Biosecurity New Zealand** website:

www.biosecurity.govt.nz



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Waterway Pests

STOP THE SPREAD

