

Pest Plants

of the Wellington Region



greater WELLINGTON
REGIONAL COUNCIL

Biosecurity

How to control common environmental pest plants



A QUICK GUIDE



www.weedbusters.co.nz

www.gw.govt.nz

Control

The following treatment techniques are recommended by Greater Wellington to control these pest plants effectively.

Key



Remove the entire plant, including all below parts of the plant either by hand or using tools. Dispose of all plant parts at a landfill. (Best suited for small areas)



Stem/stump treatment Cut the plant as close to the ground as possible and apply herbicide immediately to the stump using a spray pack or ready mixed bottle



Spray the entire plant with herbicide, ensuring that all foliage is sprayed. The addition of a sticking agent may help the plant absorb the chemical, and dye may help you see where you have been



In addition

Biological control This symbol indicates that there are natural enemies from their country of origin in New Zealand attacking the plant. The effect of these varies and should not be regarded as an alternative to any of the above methods for immediate control

Types of chemicals referred to in this publication

General chemical use

Ensure that you read the label on any herbicide before opening and mixing.

When mixing and spraying chemicals, always ensure that you use safety equipment for the type of chemical you are using eg spray mask, goggles, gloves, and overalls.

Many chemicals can be extremely harmful to your health and aquatic life. They can also persist in the soil for a long time.

If possible, cut and treat climbers to avoid using large quantities of spray and spraying desirable species.

Most chemicals only last for a day or two, so work out what can be sprayed in the time you have available and mix up less rather than more.

Use a dye to see where you have been so that you save time and chemicals by spraying areas only once.

Metsulfuron (Escort[®], Muturon[®], Mustang[®], etc)

Will spread through entire plant to roots. Very active residue in the soil, apply with extreme care as works at very low rates. Recommended for stem/stump treatment.

Triclopyr (Grazon[®], Brushhoff[®], etc)

Short soil residue meaning that a site can be replanted after seedlings appear naturally. Useful for stem/stump treatment.

Glyphosate (Roundup[®], Trounce[®], etc)

Non-selective, generally kills most plants leaving bare soil. Foliar contact active only, cannot be taken up by roots. Not residual in the soil. Site can be planted immediately. Preferred for grasses.

Tordon[®] Brushkiller (contains Triclopyr + Picloram)

Will spread through entire plant to roots, apply with extreme care, long soil residue, works at very low rates, recommended for stem/stump treatment.

Haloxyfop (Gallant[®] NF, Ignite, etc)

Recommended for selective control of grass weeds. Generally kills grasses only, foliar active with minimal soil activity, short soil residue.

Sticking agent (Pulse[®], Boost[®], etc)

An additive used to improve the ability of herbicide to stick to the leaf surface, raising the effectiveness of the herbicide. Add to spray pack last to avoid foaming.

Crop Oil (C-Dax Oil[®], Uptake, etc)

An additive that improves spray wetting and increases herbicide uptake. Used with Gallant. Best added to the spray mix last.

Vigilant[®]

Kills a wide range of species. Acts systemically, will spread through entire plant to roots. Long term soil residue. May also move across roots to another plant. Apply with care. Only a small amount of gel is required across the stem surface. Avoid using excessively in one area. Very useful for stem/stump treatment.

This guide provides information on identifying and controlling a selection of common environmental pest plants. It is intended to be used by gardeners and anyone wanting to take an active role in restoring our natural areas. Controlling pest plants will not only benefit the immediate land but also nearby ecosystems by slowing weeds from spreading to other areas.

How to use this guide

This guide mentions only a selection of the hundreds of recognised environmental pest plants in the Wellington region. These plants suppress the regeneration and growth of native plants both on land and in water.

Generally, the control techniques given can be used on similar plants. For example if you are controlling a vine the technique used should work for treating another vine.

For the purposes of this guide pest plants are divided into the following categories:

1 GROUNDCOVERS

2 CREEPERS AND CLIMBERS

3 TREES AND SHRUBS

4 GRASSES

5 WATERWEEDS

Disclaimer:

The control methods given are a guide only and should not be used as a substitute for manufacturer's label instructions. Mention of product trade names does not endorse these products nor imply criticism of similar products not mentioned.

Greater Wellington takes no responsibility for any damage to any person, property or thing that may occur as a result of the use of chemicals in accordance with this guide.

Tips for control

Know your weeds. Before undertaking weed control it is best to know which weeds you are dealing with and how they reproduce. This is so that you know which weeds are the greatest threats to the area and what their defences are. If you are unsure, contact Greater Wellington or your local DOC office.

Prioritise. Generally, climbers should be treated first as they will be smothering mature plants. Removing mature pest plants (those with flowers and fruit) next will put an end to reinvasion.

Choose control methods wisely. All plants can be removed by hand, it often depends on how much of the plant there is and whether you can afford the time and effort needed to do this.

Follow up. Regular follow up is essential to control weeds and make the most of your initial control.

Progress. Take before and after photos to remind yourself of what you have achieved.

Disposal

Even though you may have removed the plant from the ground, it still may have the ability to grow again from its roots. Be careful when moving vegetation around the site, and use bags or containers to dispose of them. Dispose of any plant material at your local landfill or transfer station. Be aware that composting may not kill persistent weeds.

Contractors

Often the most cost-effective way to control a severe weed problem on a large site is to employ the assistance of a

contractor for a few hours. A reputable contractor will have the training, expertise and equipment for large scale work.

Timing

The best time for spraying is in spring and summer when plants are actively growing, have lots of leaves to uptake chemical, and the weather is generally better. Spraying after rain can help remove any salt or dirt on the plant, leading to improved herbicide uptake.

Use over and around water

As a general rule spraying should not take place near or over a water course or waterbody.

Growsafe® and Approved Handler certification

Greater Wellington recommends being trained in the safe handling and use of agrichemicals. Even if you have used chemicals for years there is still much that you can learn from these courses.

Anyone that uses chemicals for commercial purposes is required to hold a standard Growsafe® certificate. Check out www.growsafe.co.nz for more information.

The Greater Wellington Regional Air Quality Management Plan

RULE 1 of the plan explains the conditions that apply to land-based agrichemical sprays and powder applications.

You can read Rule 1 on the Greater Wellington website www.gw.govt.nz



1. GROUNDCOVERS

Can smother low-growing plants and prevent seedlings from growing



Aluminium plant

Galeobdolon luteum

🔪 Dispose of vegetation at landfill

🧴 5g metsulfuron **plus**
10ml sticking agent
per 10 litres of water



Arum lily

Zantedeschia aethiopica including "Green Goddess"

🔪 Dispose of underground tubers and vegetation at landfill

✂️ 1g metsulfuron **plus**
100ml glyphosate **plus**
10ml sticking agent
per 1 litre of water

🧴 3g metsulfuron **plus**
150ml glyphosate **plus**
10ml sticking agent
per 10 litres of water



Montbretia

Crocosmia x crocosmiiflora

🔪 Dispose of underground corms and vegetation at landfill

🧴 4g metsulfuron **plus**
100ml glyphosate **plus**
10ml sticking agent
per 10 litres of water



Periwinkle

Vinca major

🔪 Dispose of vegetation at landfill

🧴 200ml glyphosate **plus**
20ml sticking agent
per 10 litres of water



Tradescantia

Tradescantia fluminensis

🔪 Remove every fragment of the plant and dispose of at landfill

🧴 60ml triclopyr **plus**
10ml sticking agent **OR**
300ml glyphosate **plus**
30ml sticking agent
per 10 litres of water



Wild ginger

Hedychium gardnerianum; *H. flavescens*

🔪 Dispose of underground rhizomes and vegetation at landfill

✂️ 1g metsulfuron
per 1 litre of water

🧴 5g metsulfuron **plus**
10ml sticking agent
per 10 litres of water

2. CREEPERS AND CLIMBERS


Can smother and strangle trees and shrubs, causing them to die and collapse


Note: Ensure that any vines that are cut do not touch the ground as they may resprout. Also, that plants are in full leaf to allow best results.



Banana passionfruit

Passiflora mixta, P.mollissima, P.tripartita

 1g metsulfuron **OR**
200ml glyphosate
per 1 litre of water
OR vigilant gel

 60ml triclopyr **plus**
10ml sticking agent **OR**
100ml glyphosate **plus**
10ml sticking agent
per 10 litres of water



Blackberry


Rubus spp.


 5g metsulfuron **OR**
20ml Tordon® BK **OR**
60ml triclopyr **plus**
10ml sticking agent
per 10 litres of water



Climbing asparagus

Asparagus scandens

 Dispose of all underground tubers at a landfill

 200ml glyphosate **plus**
20ml sticking agent
per 10 litres of water

 Smilax rust (for smilax only)




Smilax

Asparagus asparagoides



Old man's beard

Clematis vitalba

 1g metsulfuron **OR**
200ml glyphosate
per 1 litre of water
OR vigilant gel

 5g metsulfuron **OR**
200ml glyphosate **OR**
60ml Tordon® BK
per 10 litres of water




Cathedral bells


Cobaea scandens



English ivy

Hedera helix

 5g metsulfuron **OR**
50ml Tordon® BK
per 1 litre of water
OR vigilant gel


 5g metsulfuron **plus**
10ml sticking agent
per 10 litres of water



Japanese honeysuckle

Lonicera japonica

 5g metsulfuron **OR**
50ml Tordon® BK **plus**
10ml sticking agent
per 1 litre of water
OR vigilant gel

 5g metsulfuron **plus**
60ml Tordon® BK
per 10 litres of water

3. TREES AND SHRUBS

Can replace other species, preventing areas from regenerating


Note: Ensure that cut stems are treated with an appropriate herbicide otherwise they will grow again.




Boneseed

Chrysanthemoides monilifera

 All but very large trees should be able to be pulled by hand

 1g metsulfuron **OR**
100ml glyphosate
per 10 litres of water


 5g metsulfuron **plus**
20ml sticking agent **OR**
100ml glyphosate **plus**
20ml sticking agent
per 10 litres of water
OR vigilant gel


 Boneseed leaf roller





Broom

Cytisus scoparius

 All but very small seedlings are very difficult to remove by hand

 5g metsulfuron **OR**
50ml triclopyr
per 1 litre of water
OR vigilant gel


 5g metsulfuron **plus**
10ml sticking agent **OR**
100ml glyphosate **plus**
20ml sticking agent
per 10 litres of water


 A range of insects have been released for both of these plants. Contact us if you would like to learn more




Evergreen buckthorn

Rhamnus alaternus

 All but seedlings are very difficult to remove by hand

 5g metsulfuron **OR**
100ml Tordon® BK
per 10 litres of water
OR vigilant gel


 60ml triclopyr **plus**
10ml sticking agent
per 10 litres of water




Sweet pea shrub

Polygala myrtifolia

Note: Check under your polygala for seedlings of the plant. If there are seedlings it is probably a pest ploygala species.

 All but very large trees should be able to be pulled by hand

 1g metsulfuron **OR**
100ml Tordon® BK
per 1 litre of water
OR vigilant gel

4. GRASSES

Can form dense cover which excludes other plants



Kikuyu

Pennisetum clandestinum

Note: Hand removal is largely ineffective due to underground roots and stems breaking off and resprouting

- 60ml haloxyfop plus
 - 50ml crop oil OR
 - 100ml glyphosate plus
 - 20ml sticking agent
- per 10 litres of water



Marram grass

Ammophila arenaria

- Only small infestations should be attempted to be dug out and all underground vegetation should be taken to a landfill

- Spray after rain if possible to avoid salt contamination
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- 300ml haloxyfop plus
 - 100ml crop oil OR
 - 125ml glyphosate plus
 - 20ml sticking agent
- per 10 litres of water



Pampas

Cortaderia selloana, C. jubata

Note: If the seed heads are erect, dead leaves look like wood shavings or the leaves break easily, you have pampas. If not, you have native toe toe.

- Only small plants will be able to be dug out.

- 150ml haloxyfop plus
 - 100ml crop oil OR
 - 200ml glyphosate plus
 - 20ml sticking agent
- per 10 litres of water



Bamboo

Phyllostachys spp, Bambusa spp.

- Cut down close to the ground and remove all underground parts otherwise the plant will grow back

- 300ml haloxyfop plus
 - 100ml crop oil OR
 - 200ml glyphosate plus
 - 20ml sticking agent
- per 10 litres of water

Usually requires further treatments before regrowth ceases

5. WATERWEEDS

Fast growing and can take over entire water bodies

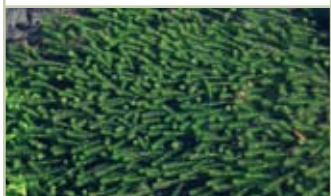
Note: There are very few options for the control of weeds that grow in water. You must remove all parts of the plant or the plant will grow back.



Hornwort

Ceratophyllum demersum

Note: Most waterweeds can grow from very small fragments so be careful to remove every last piece



Lagarosiphon

Lagarosiphon major



Parrot's feather

Myriophyllum aquaticum

🛠️ For small areas: Using a rake or by hand remove the weed and leave it on the side of the water body to dry out. If possible lower the water level or wait until drier months to ensure that all the plant is removed. Old carpet or weedmat may also be useful for shading out waterweeds but will require being left for several months to have any effect.

Caution:

When using any herbicide
PLEASE READ THE LABEL THOROUGHLY
to ensure that all instructions and safety requirements are followed

For more information about pest plants and their control including their identification

Contact us at
Greater Wellington
Regional Council
0800 496 734

pest.plants@gw.govt.nz
www.gw.govt.nz

Photos

Front cover:
Spraying tradescantia at a Key Native Ecosystem in the Wairarapa
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