



Forest & Bird

TE REO O TE TAIAO | *Giving Nature a Voice*

YOUR WEED CONTROL GUIDE

Our gardens & reserves are suffering from out of control invasive weeds which may be in your backyard, business, local park or bush area.

We'd love your help.

Environmental weeds have been found in your neighbourhood.

Are they growing on your property? Someone may have ticked them to help you get started. Can you check your backyard or reserve?

Please be a good neighbour and rid your backyard of weeds which can spread and harm your environment. Get free tips, tools, and training from your local group.

These are some of the environmental weeds which have a habit of spreading widely, growing vigorously and destroying our precious natural environment.

Five minutes work this week, save hours of work next year.

NOTES

How To Use This Guide

The weeds are listed in alphabetical order within categories: trees, shrubs, climbers, palms, and ground covers. Indicated for each weed are codes for adverse effects and options for organic and herbicide control. The codes are explained in the key on page 2. Some of these weeds are really difficult to kill so repeated effort may be required.

Go to www.forestandbird.org.nz/weedguide for more information.

Key: How To Interpret The Codes



Organic Control

- O1** Dig out including roots (bulbs/ nuts/corms/tubers, etc) if small enough
- O2** Keep stems/roots off ground eg hang in a tree, or they may regrow or sprout new roots
- O3** Bag up seeds/seed pods and dispose of in rubbish or bury deeply
- O4** Deadhead flowers before fruiting/ seeding to avoid seed dispersal
- O5** Fell/Cut – no need to paint stump if >100mm diameter
- O6** Fell/Cut and cover stump with thick black polythene to exclude light, cover polythene and entire root zone with 150mm deep mulch for 12 months
- O7** Place in sealed black weed bags for 12 months or more to decompose. Store weed bags in shade and cover with thick black polythene. If direct sunlight reaches the bag, weeds will just keep on growing
- O8** Leave cut vines in trees to die, don't pull down
- O9** Use hook on long pole to retrieve seed pods before they open
- O10** Keep hedges well-trimmed to prevent fruiting

Is your property looking pretty good?

If you have your own property under good pest plant control, how about joining a weedbusting or restoration group in your area and help rid your neighbourhood or local reserve of pest plants?



Adverse Effect:

HOW DOES THIS PLANT ADVERSELY AFFECT OUR ENVIRONMENT?

- A1** Climbs up trees and shrubs and smothers them
- A2** Seeds blown a long distance by wind and can spread to offshore islands
- A3** Seeds eaten by birds and dispersed a long distance into other gardens and bush areas
- A4** Will regrow from small fragments
- A5** Health risk – eg injury from spines, breathing issues, allergies
- A6** Forms a dense ground cover which stops regeneration of native plants
- A7** Irritant sap
- A8** Sours soil preventing regrowth of many natives






Herbicide Control

OPTIONS FOR USING THE MIN. AMOUNT OF THE RIGHT HERBICIDE

- H1** Fell/cut stump and paint with **glyphosate gel**
- H2** Fell/Cut and paint stump with 1-2mm layer **double strength glyphosate gel** ensuring rim of stump is pasted
- H3** Fell/Cut and paint stump with 1-2mm layer of **metsulfuron gel** ensuring rim of stump is pasted
- H4** Cut and spray stump with **metsulfuron** 5g per litre and penetrant 1ml per litre of water
- H5** Paint stem for 30cm with **metsulfuron gel** and cut above the painted stem
- H6** 1) Cut the vines, paint stumps with **metsulfuron gel**. 2) Remove all vine material and tubers being careful to not spread tubers. 3) Revisit the site every few months for several years to find sprouting tubers and dig them out
- H7** Ring bark, paint edges of ring bark with **metsulfuron gel**. Avoid using metsulfuron near any fern species
- H8** Foliage spray with **glyphosate** 20ml per litre, with penetrant 1ml per litre
- H9** Foliage spray with **metsulfuron** 0.5g per litre, with penetrant 1ml per litre
- H10** Foliage spray with **triclopyr** (600g/l) 6ml per litre with penetrant 1ml per litre
- H11** Cut stems above waist height, wait for regrowth, then spray with **metsulfuron** 0.5g per litre with penetrant 1ml per litre
- H12** Drill and inject large trees with **glyphosate** at 500ml per litre if safe to do so - See guidelines for killing standing trees (may require a contractor). Drill 18mm holes (tangentially angled downwards) in a spiral up the trunk. For 50mm stems one hole. For 100mm – two holes. Larger stems – 150mm apart
- H13** Drill and inject large trees with **metsulfuron** 10g per litre if safe to do so- see guidelines for killing standing trees (may require a contractor). Drill 18mm holes (tangentially angled downwards) in a spiral up the trunk. For 50mm stems one hole. For 100mm – two holes. Larger stems – 150mm apart. A drench dosing gun can be used for drill and inject
- H14** Trees are best poisoned a few weeks before felling to prevent regrowth from small branches
- H15** Paint both the stump and cut stem if cut stems cannot be kept off ground
- H16** If stem is green, apply metgel direct to stem. If the bark has formed, lightly scrape bark then apply metgel to 30cm of stem
- H17** Place cut leaves over the top of painted stems to keep rain off
- H18** Before spraying, pull weeds away from valued trees eg tree ferns
- H19** Paint stem for 30cm with **double strength glyphosate gel** and leave to die, scrape larger stems with saw blade first
- H20** Cut and spray stump tubers with **metsulfuron** 0.5g/l + **penetrant** 1ml per litre of water
- H21** Ring bark and paint edges of ring bark with **double strength glyphosate gel**






Cotoneaster
Cotoneaster glaucophyllus

 A3
 O1 O6
 H3 H4 H9 H13






Loquat
Eryobotria japonica

 A3
 O1 O6
 H3 H9 H12 H21






Monkey Apple
Syzygium smithii (Acmena)

 A3
 O1 O6 O10
 H3 H4 H7 H9 H13






Privet - Chinese
Ligustrum sinensis

 A3 A4
 O1 O2 O6
 H2 H4 H9 H13 H15






Privet - Tree
Ligustrum lucidum

 A3
 O1 O2 O6
 H2 H3 H4 H9 H13






Wattle - Sydney Golden + Others
Acacia species

 A3 A8
 O1 O5
 H2 H8 H12 H21






Willow - Crack, Grey
Salix fragilis

 A4
 O1 O2
 H1 H8 H12 H14 H15






Woolly Nightshade
Solanum mauritianum

 A3 A5 A8
 O1 O3 O4 O6
 H2 H19






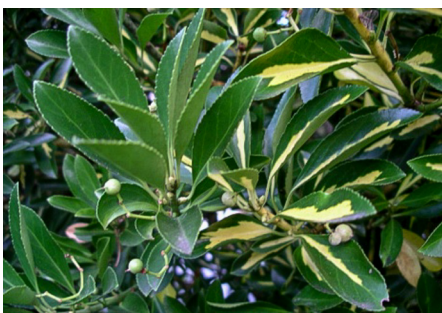
Evergreen Buckthorn
Rhamnus alaternus

 A3
 O1 O6
 H3 H4 H9 H13






Gorse
Ulex species

 A5
 O1
 H1 H3 H4 H8 H9 H10






Japanese Spindleberry
Euonymus japonicus

 A3
 O1 O2 O6
 H3 H9 H15



Queen of the Night
Cestrum nocturnum

 A3
 O1 O2 O6
 H1 H8 H15 H19






TREES

SHRUBS






Banana Passionfruit
Passiflora tripartita

 A1
 O1 O3 O7 O8
 H3 H9






Blue Morning Glory
Ipomoea indica

 A1
 O1 O2 O7 O8
 H3 H9 H11 H18






Climbing/Bushy Asparagus
Asparagus scandens/asparagoides

 A1 A3
 O1 O2 O7 O8
 H8 H18






Elaeagnus
Elaeagnus x reflexa

 A1 A3 A5 A6
 O1 O2 O6 O8
 H3 H4 H9 H13 H15






Ivy
Hedera helix

 A1 A3 A7
 O1 O2 O7 O8
 H2 H3 H9






Japanese Honeysuckle
Lonicera japonica

 A1 A3
 O1 O2 O7
 H3 H9 H10 H18






Jasmine
Jasminum polyanthum

 A1 A6
 O1 O2 O7 O8
 H3 H9 H10 H11 H18






Madeira Vine
Anredera cordifolia

 A1 A4
 O1 O2 O3 O7 O8
 H3 H6






Moth Plant
Araujia hortorum

 A1 A2 A7
 O1 O2 O3 O9
 H9 H16






Bangalow Palm
Archontophoenix cunninghamiana

 A3
 O1 O2 O3 O4 O6
 H1 H8 H12






Chinese Windmill Palm
Trachycarpus fortunei

 A3
 O1 O2 O3 O4 O6
 H1 H8 H12



Phoenix Palm
Phoenix canariensis

 A3 A5
 O1 O2 O3 O4 O6
 H1 H8 H12





Agapanthus
Agapanthus praecox

A6
 O1 O2 O4 O6 O7
 H10



Arum Lily, Green Goddess
Zantedeschia aethiopica

A3 A6
 O1 O2 O3
 H3 H9 H10 H17



Bamboo
Phyllostachys species

A6
 O1 O2
 H2 H8



Bears Breeches
Acanthus mollis

A6
 O1 O2 O4 O7
 H3 H9 H10 H17



Giant Reed
Arundo donax

A6
 O1 O2
 H2 H8



Ginger - Wild
Hedychium gardnerianum

A3 A4 A6
 O1 O2 O3
 H3 H9 H17 H20



Kikuyu Grass
Pennisetum clandestinum

A6
 O1
 H8



Montbretia
Crococsmia X crocosmiiflora

A3 A4
 O1 O2 O3 O7
 H8



Palm Grass
Setaria palmifolia

A6
 O1 O2 O3 O7
 H8



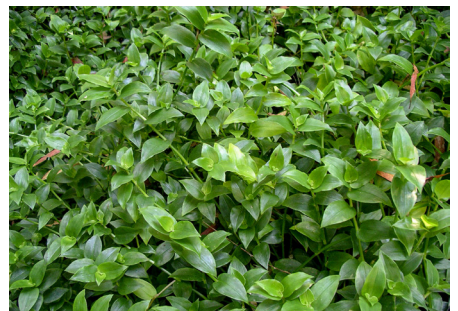
Pampas Grass
Cortaderia selloana, C. jubata

A2 A6
 O1 O2 O4
 H1 H8



Plectranthus
Plectranthus ciliatus

A4 A6
 O1 O2 O7
 H8



Tradescantia, Wandering Willie
Tradescantia fluminensis

A4 A6
 O1 O2 O7
 H10 H18



Control Methods



Composting Weed Bag / Ginger Barrel

Bag for onsite composting & barrel to break down by soaking.



Cut & Spray

Addition of marker dye helps show where you have been.



Backpack Sprayer

Use a long brass wand & brass cone nozzle (for a round, focussed spray) & anti drip filter.



Cut & Paint

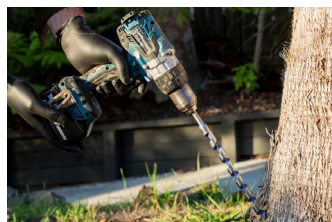
Take care if cutting weed trees not to damage emerging natives. Stack carefully.



Ring Bark & Paint



Scrape & Paint



Drill & Inject



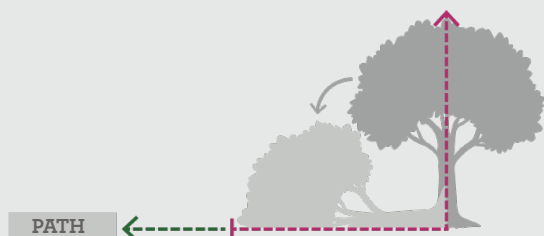
Dig Out & Hang in Tree

Herbicide Use Guidelines

- Keep herbicide use to a minimum
- Follow all precautions on product labels
- Before working on public land contact the relevant authority for guidance
- Know which herbicides can be used by volunteers in parks
- Know the pitfalls of herbicide use e.g. spray drift and damage to non-target plants. Take care around waterways and valuable trees
- A qualification e.g. Growsafe is required in order to use some herbicides
- Use marker dye (colour for spray) so you and others can see where you have been working
- Repeat applications may be needed
- Follow up every 3 months until you are sure you are successful – control may take years
- No single herbicide will kill all plants
- When stump is near valued trees consider using glyphosate as less toxic to surrounding species

Guide for Killing Standing Trees

Large trees must not be ringbarked or drilled that are closer than 1.5 times the height of the tree from paths, walkways and property.



Chemicals In This Guide

Glyphosate

- Liquid eg Roundup. Mixes calculated using 360g/l
- Gel eg Cut'n'Paste gel, Bamboo Buster gel (double strength)
- The only approved herbicide around waterways
- Glimax can be used in place of Metgel for many species

Metsulfuron

- Granules eg Escort
Formula calculations based on using 600g/kg product
- Gel eg Metgel. Moves through soil killing non-target plants. Cut and spray uses much less chemical than using gel. A 20mm countersink drilled every 50mm filled with metgel can be useful for some species
- Do not use around base of valuable trees or close to waterways

Triclopyr

- Eg Grazon 600 g/litre (Yates hydrocotyle killer is only 120g/litre). Effective on tradescantia and other broadleaf weeds. Will not kill grasses

Marker Dye

- Eg Envirodye – bright blue colour can be added to spray mix or gel so you and others can see where you have been working

Picloram

- Picloram not only poisons non-target trees, but can prevent forest regeneration in the nearby area for many years after being used. Picloram use is not recommended

This weed guide was developed by Forest & Bird North Shore Branch with assistance from Pest Free Kaipatiki and Restore Hibiscus & Bays.

More Resources:

www.weedbusters.org.nz

www.tiakitamakimakaurau.nz/protect-and-restore-our-environment/pests-in-auckland/pest-search

www.nrc.govt.nz/environment/weed-and-pest-control/strategies-and-resources/a-guide-to-northlands-pest-plants