



Recognising and managing environmental weeds in Boroondara



BOROONDARA

City of Harmony

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Definitions

- **Indigenous species** are native plants that occur naturally in the local area.
- **Environmental weeds** are plants that aggressively invade natural bushland and displace native flora and fauna.
- **Noxious weeds** are plant species declared under state legislation that cause environmental or economic harm or have the potential to cause such harm.
- **Naturalised species** are exotic or alien species that have established self-sustaining populations outside gardens, farms or plantations.

Environmental weeds pose the most significant threat to local biodiversity

Environmental weeds are plants that invade natural ecosystems such as bushlands, waterways and native grasslands. They may be native or introduced species and are often common garden plant 'escapees' that produce prolific seed and establish easily.

This booklet contains information on the most serious environmental weeds that are currently threatening local biodiversity. It includes descriptions and photos of each of the weeds, strategies for removing them and suggests a replacement species.

How environmental weeds affect local biodiversity

Environmental weeds compete with local plants for light, nutrients, water, space and pollinators. They can shade, smother, and crowd local plants, filling natural gaps that are required for native plant regeneration. They generally provide poor habitat for local wildlife.



How weeds spread

Plants have evolved many specialised ways of successfully reproducing and spreading to ensure their establishment and survival.

Seeds can be carried large distances by animals, wind and water. Birds and animals eat fruit and seeds and disperse seeds over many kilometres. Sticky seeds and burrs caught in pet fur and on people's clothes and shoes can be carried from gardens into bushland. Weed seeds can persist in the soil for many years and then germinate when conditions are just right.

Control and disposal

Accurate weed identification is critical to the appropriate control and disposal of weeds. The timing of treatment is also important to gain the best results. This brochure identifies suitable control and removal techniques for each of the respective weeds.

Weeds should be disposed of carefully. Some weeds can be composted, however those with long lived seeds, bulbs, and those that reproduce from stem fragments are not suitable for composting and should be placed in your green waste bin.

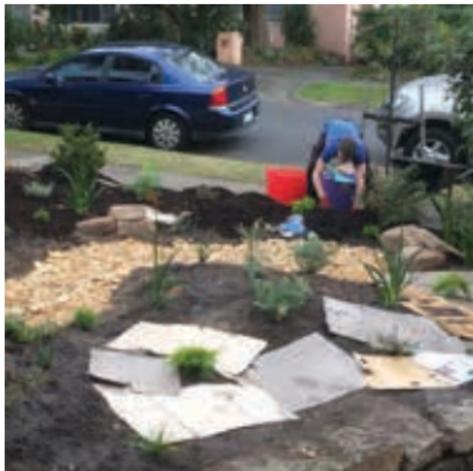
Dumping of garden waste on roadsides or in parklands is illegal and can lead to new weed infestations.

To report dumping of green waste or rubbish please call Council on 9278 4444.

Bare ground — a magnet for weeds

When you have successfully removed a weed, it's important to quickly replant and mulch in order to fill the empty space and inhibit weed regrowth. Indigenous plants make ideal replacements for weed species in the home garden or bush area. Some replacement species have been suggested in this brochure to assist your selection.

Sheet mulching can significantly reduce weed growth in your garden. After weeding, lay several layers of newspaper, cardboard or cotton sheets on the soil and then apply mulch. This will block light and prevent weed seeds germinating.



Weed control strategies

In the context of a home garden, most weeds can be managed without herbicides. Regular hand pulling, digging out of roots and tubers and suppressing weed growth by mulching garden beds, can work effectively. Keeping weeds 'at bay' requires ongoing vigilance and persistence!

Symbols used in the booklet



Manual removal

Pull out small weeds or seedlings by hand. Remove larger weeds with a fork, spade or mattock including roots and rhizomes. Suitable for small or scattered weed infestations. Manually remove any time of the year.



Flower and fruit removal

Flowers: cut off and dispose of spent flower heads before the seeds ripen and fall during seeding time.
Fruit: cut off and dispose of fruit prior to maturity.



Solarise

Use the heat of the sun to kill shallow rooted weeds by covering weeds with black plastic in summer.



Mow or brushcut

Remove flower heads using a mower or brushcutter before the seeds ripen and fall during seeding time. Suitable for grasses. Clean equipment to prevent weed spread.



Spray

Spray or paint diluted herbicide according to manufacturer's directions directly on to leaves and stems when the plant is actively growing.



Cut & paint

Cut the stem at ground level and immediately apply herbicide to the cut surface with a paintbrush or eye-dropper. Suitable for “woody” weeds such as climbers, shrubs & trees. Cut and paint when plant is actively growing.



Drill & fill

Drill and fill small holes at regular spacing around the base of the trunk at a downward angle. Immediately apply herbicide directly into the holes as per the manufacturer's directions. Suitable for “woody” weeds such as climbers, shrubs & trees. Drill and fill when plant is actively growing.

Tips for successful weed management

- Remove or treat weeds before they set seed or fruit.
- Pull weeds from the ground when soil is moist (i.e. after rain).
- When removing weeds by hand, begin at the outer edge of a weed infestation and work 'in' to reduce patch size.
- Begin weed removal efforts around plants that you value most.
- Mulch garden beds with organic mulch around 7-10cm in depth.

Use herbicides sparingly and with care

City of Boroondara staff and contractors use a variety of weed control strategies to reduce herbicide use where possible. These strategies include hand weeding, brush cutting, solarisation, burning and steaming. When herbicides are used, they are diluted to the lowest effective dose.

If you believe that herbicide use is warranted, please read the label carefully and follow instructions. If using herbicides:

- Cut back large creepers or woody shrubs and trees to reduce the bulk of plant growth then 'cut and paint' or 'drill and fill'.
- Avoid using herbicides on plants that are stressed e.g. during periods of drought, as plants may not 'take-up' the chemical.
- Avoid spraying on windy days to prevent spray 'drift' onto nearby plants.

Weedy trees



Box Elder
(*Acer negundo*)

Removal/treatment



Slender, multi stemmed deciduous tree.
Flowers hang in clusters. Fast growing.
Produces masses of 'winged' seeds.

Origin North America

Flowering Spring

Fruits/seeds Summer-Autumn

Spread by Wind dispersed.



- **Hazel**
Pomaderris
(*Pomaderris aspera*)



Weedy trees



Broad-leaved Privet (*Ligustrum lucidum*)

Removal/treatment



Large tree, shallow rooted. Glossy green leaves. Clusters of white flowers and black berries. Pollen linked to allergies.

Origin Asia

Flowering Spring-Autumn

Fruits/seeds Spring-Autumn

Spread by Birds eat berries and spread seed. Also spreads by suckering.

Do not treat in hot weather. Before using drill-fill or cut-paint on stumps, peel away bark. Spray saplings <2m.



- **River Bottlebrush**
(*Callistemon sieberi*)



Weedy trees



Desert Ash (*Fraxinus angustifolia*)

Removal/treatment



Deciduous tree with bright green toothed leaves. Inconspicuous flowers that appear when tree is bare of leaves.

Origin Mediterranean and Western Asia

Flowering Winter-Spring

Fruits/seeds Spring

Spread by Wind and water dispersed seeds and root suckers.



- **Blackwood**
(*Acacia melanoxylon*)



Weedy trees



Sweet Pittosporum (*Pittosporum undulatum*)

Removal/treatment



Large spreading native tree with creamy yellow flowers. Very common garden tree.

Origin Queensland, NSW, Eastern Victoria

Flowering Spring-Summer

Fruits/seeds Autumn-Winter

Spread by Fruit eaten by blackbirds, currawongs, possums and foxes that then spread seed.

When seedlings emerge in autumn, they are easy to remove by hand. If using drill-fill method, clear soil from base and drill into the root crown. Treat in spring.



- **Golden Wattle**
(*Acacia pycnantha*)



Weedy trees



TOXIC



Tobacco Bush (*Solanum mauritianum*)

Removal/treatment



Dense small tree. Leaves grey/green with soft hairs. Clusters of purple flowers turn to yellow berries.

Origin South America

Flowering Autumn-Spring

Fruits/seeds Spring-Autumn

Spread by Birds eat berries and spread seed.

Wear gloves when handling.



- **Lightwood Wattle**
(*Acaia implexa*)



Weedy shrubs



Cotoneaster - various forms
(*Cotoneaster species*)

Removal/treatment



Large woody shrub. Small white flowers turn to red berries.

Origin Asia

Flowering October/November/December/January

Fruits/seeds February-August

Spread by Birds eat berries and spread seeds.

Dig small seedlings. Treat before flowering.



- **Sweet Bursaria**
(*Bursaria spinosa*)



Weedy shrubs



TOXIC



Madeira Winter-cherry
(*Solanum pseudocapsicum*)

Removal/treatment



Small shrub with yellow/red fruit that look similar to cherry tomatoes.

Origin Central/South America

Flowering Spring-Summer

Fruits/seeds Autumn

Spread by Birds eat berries and spread seeds.



- **Austral Indigo**
(*Indigofera australis*)



Weedy shrubs



Mirror-bush
(*Coprosma repens*)

Removal/treatment



Large fast growing shrub with fleshy, shiny leaves. Small white flowers turn to orange berries.

Origin New Zealand

Flowering Spring-Summer

Fruits/seeds Summer-Autumn

Spread by Birds eat berries and spread seeds.

Treat before flowering.



- **Prickly Currant Bush**
(*Coprosma quadrifida*)



Weedy shrubs



NOXIOUS WEED



Montpellier Broom (*Genista monspessulana*)

Removal/treatment



Fast growing, woody shrub with yellow pea flowers. Hard brown seeds in pods.

Origin Africa, Southern Europe

Flowering Spring

Fruits/seeds Spring-Summer

Spread by Seeds caught in animal fur and in soil and garden refuse.



- **Gold Dust Wattle**
(*Acacia acinacea*)



Weedy shrubs



Oyster Plant / Bear's Breeches (*Acanthus mollis*)

Removal/treatment



Spreading plant with large glossy dark green leaves and white and purple flower spikes.

Origin Europe, Africa

Flowering Spring-Autumn

Fruits/seeds Spring-Autumn

Spread by Rhizomes beneath the ground.

Remove plant bulk before applying herbicide.
Ongoing treatment needed.



- **Tasman Flax Lily**
(*Dianella tasmanica*)



Weedy creepers and climbers



Blue Periwinkle
(*Vinca major*)

Removal/treatment



Dark Green leaves and bluish purple flower. Low growing perennial creeper that forms dense mats on ground.

Origin Europe and North Africa

Flowering Winter

Fruits/seeds No seeds produced

Spread by Stem runners.

Dig out seedlings. Spray when plants are actively growing in autumn and winter.

- **Cut Leaf Daisy**
(*Brachyscome multifida*)



Weedy creepers and climbers



Bridal Creeper
(*Asparagus asparagoides*)

Removal/treatment



Glossy green leaves and small greenish white, fragrant flowers. Small red berries.

Origin South Africa

Flowering Spring

Fruits/seeds Spring-Summer

Spread by Birds eat berries and spread seeds.

Remove mat of tubers underground.



- **Common Appleberry**
(*Billadiera scandens*)



Weedy creepers and climbers



Cape Ivy/Ivy Groundsel
(*Delairea odorata*)

Removal/treatment



Ivy-shaped leaves. Clusters of small daisy-like flower heads. Seeds profusely.

Origin South Africa

Flowering Winter-Spring

Fruits/seeds Spring

Spread by Stem runners. Seeds dispersed by wind, water and animals.

Treat before flowering.



- **Old Man's Beard**
(*Clematis aristata*)



Weedy creepers and climbers



Ivy/English Ivy
(*Hedera helix*)

Removal/treatment



Climber and groundcover. Short aerial roots on stems adhere to climbing structures. Small yellow-green flower clusters.

Origin Europe

Flowering Autumn-Winter

Fruits/seeds Winter-Spring

Spread by Birds eat berries and spread seeds.
Also, stem runners and plant fragments.

Cut aerial growth to prevent seeding.



- **Purple Coral-pea**
(*Hardenbergia violacea*)



Weedy creepers and climbers



Madeira Vine
(*Anredera cordifolia*)

Removal/treatment



Fleshy heart-shaped leaves. Fragrant white flowers in bunches.

Origin South America

Flowering Autumn-Summer

Fruits/seeds Seeds not viable

Spread by Underground tubers and aerial tubers (bulbils) that form on the stem then fall to the ground to form new plants.

Pick up bulbils from ground. Remove all of the roots.



• **Wonga Vine**
(*Pandorea pandorana*)



Weedy creepers and climbers



TOXIC



White Bladder-Flower/Moth Plant (*Araujia sericifera*)

Removal/treatment



Twining, finely hairy stems with milky sap irritating to skin and eyes. Large pods split to reveal seeds with long silky hairs.

Origin South America

Flowering Summer

Fruits/seeds Summer-Autumn

Spread by Wind

Remove and bag fruit. Follow up treatment necessary.



- **Common Appleberry**
(*Billardiera scandens*)



Weedy creepers and climbers



Morning Glory Vine
(*Ipomoea indica*)

Removal/treatment



Light green heart shaped leaves and large pink/purple flowers.

Origin Central/South America

Flowering Spring-Summer

Fruits/seeds No viable seed

Spread by Stem runner and plant fragments.

Vines can be severed at base and left to dry in canopy.



- **Purple Coral-pea**
(*Hardenbergia violacea*)



Weedy creepers and climbers



Wandering Creeper/Wandering Trad (*Tradescantia fluminensis*)

Removal/treatment



Dark green glossy leaves and white flowers form thick mats that smother ground plants. Sap is an irritant for dogs.

Origin South America

Flowering Spring-Summer

Fruits/seeds No seed production.

Spread by Stem runner and plant fragments.

If removing manually, ensure all stem fragments are removed.



- **Creeping Boobiolla**
(*Myporum parvifolium*)



Weedy grasses and herbs



NOXIOUS WEED



Angled Onion/Three-cornered Garlic (*Allium triquetrum*)

Removal/treatment



Strap-like leaves growing from perennial bulb with white bell-shaped flowers. Strong onion/garlic smell.

Origin Africa and southern Europe

Flowering Spring

Fruits/seeds Spring-Summer

Spread by Spreads by seeds and bulbs that persist in soil.

Best sprayed in winter and spring.

- **Pale Flax Lily**
(*Dianella laevis*)



Weedy grasses and herbs



TOXIC



Agapanthus (*Agapanthus praecox*)

Removal/treatment



Long strappy leaves and large purple or white flowers. Very hardy and popular garden plants but increasingly common in reserves.

Origin South Africa

Flowering Spring-Summer

Fruits/seeds Autumn

Spread by Spreads by seed and root runner.

Deadhead flowers before seeds form.



- **Tasman Flax Lily**
(*Dianella tasmanica*)



Weedy grasses and herbs



Black Nightshade
(*Solanum nigrum*)

Removal/treatment



Small plant with dark green leaves, star shaped flowers and small black berries.

Origin Europe/Asia

Flowering Spring-Summer

Fruits/seeds Summer

Spread by Animals eat fruit and spread seed.



• **Rock Correa**
(*Correa glabra*)



Weedy grasses and herbs



NOXIOUS WEED



Bulbil Watsonia

(Watsonia meriana var. bulbillifera)

Removal/treatment



Clumping plant with strappy leaves and slender reddish flowering stems 0.5m to 2m.

Origin South Africa

Flowering Spring-Summer

Fruits/seeds October, November, December

Spread by Underground corms produce new plants. Aerial tubers (bulbils) drop from the flower and sprout.

Hand pull corms in winter. Cut and paint before flowering.



- **Pale Flax Lily**
(Dianella laevis)



Weedy grasses and herbs



NOXIOUS WEED

✘ Chilean Spear-grass/Serrated Tussock (*Nassella neesiana*) + (*Nassella tenuissima*)

Removal/treatment



Forms small tussocks. Young leaves are tightly rolled. Grass turns brown in winter. Produces purple florets.

Origin South America

Flowering Spring

Fruits/seeds Spring-Summer

Spread by Animals, on clothing, footwear, water and machinery

Dig out large tussocks, hand pull smaller plants.



- **Kangaroo Grass**
(*Themeda triandra*)



Weedy grasses and herbs



Cleavers Stickyweed (*Galium aparine*)

Removal/treatment



An annual sticky scrambling herb with small white star-shaped flowers and small sticky seed pods.

Origin Europe
Asia

Flowering Spring-Summer

Fruits/seeds Autumn-Winter

Spread by Hooked hairs on leaves, stems and fruit cling to fur and clothing.

Remove before seeding.



- **Running Postman**
(*Kennedia prostrata*)



Weedy grasses and herbs



Fumitory
(*Fumaria muralis*)

Removal/treatment



Delicate annual herb, soft twining stems, finely divided leaves and red/purple tubular flowers.
Fruit is a small nut.

Origin Europe, Africa, Asia

Flowering Winter-Spring

Fruits/seeds Spring-Summer

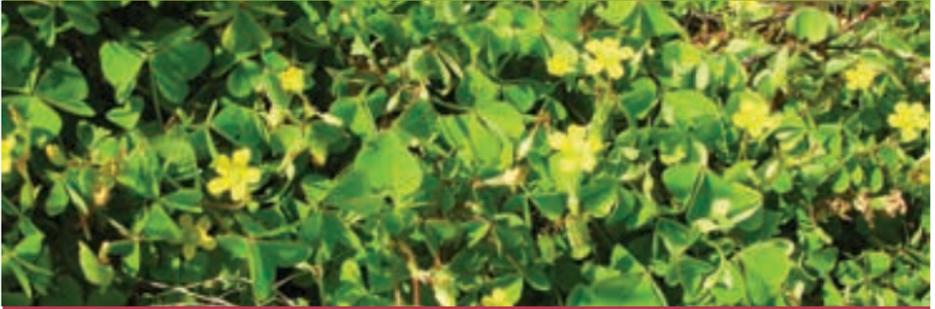
Spread by Seeds remain viable in soil for years.



- **Austral Storksbill**
(*Pelargonium australe*)



Weedy grasses and herbs



Oxalis Soursob
(*Oxalis pes-caprae*)

Removal/treatment



Low growing yellow/white, flowered herb that spreads aggressively especially in disturbed sites.

Origin Southern Africa

Flowering Winter-Spring

Fruits/seeds N/A

Spread by Underground bulbs

Carefully dig plants and remove all bulbs.
Do not hand pull. Spray when flowers appear.
Needs repeat treatment.



- **Ivy-leaved Violet**
(*Viola hederacea*)



Weedy grasses and herbs



Panic Veldt Grass
(*Ehrharta erecta* - 60cm)



Annual Veldt Grass
(*Ehrharta longiflora* - 30cm)

Removal/treatment



Common perennial bright green grass. Can scramble up through shrubs. Plants flower and seed within 10 weeks of germinating.

Origin South Africa

Flowering All year

Fruits/seeds All year

Spread by Wind, water and in animal fur.
Also spreads by rhizomes.

Plants are easy to dig out as rhizomes are shallow, but seeds persist in soil.



- **Sticky Everlasting**
(*Xerochrysum viscosum*)



Weedy grasses and herbs



Pampas Lily-of-the-Valley (*Salpichroa organifolia*)

Removal/treatment



Oval leaves and small bell-shaped flowers and white/pale yellow berry. Low growing and creeping plant. Aerial shoots die in autumn and regrow in spring.

Origin South America

Flowering Spring-Autumn

Fruits/seeds Spring-Summer

Spread by Birds eat fruit and spread seeds.
Also by root fragments.

Need follow-up treatment.



- **Old Man's Beard**
(*Clematis aristata*)





The beautiful replacement plants featured in this booklet are available at the following nurseries:

- Victorian Indigenous Nurseries Cooperative (VINC), Fairfield: www.vinc.net.au
- Greenlink Nursery, Box Hill: greenlinkboxhill.org
- Kuranga Native Nursery: kuranga.com.au

Useful information on weeds

The Australian Government maintains the national weeds list. Their website page *Weeds in Australia* (www.environment.gov.au/biodiversity/invasive/weeds) provides useful information for gardeners.

Flora of Melbourne, A guide to the indigenous plants of the Greater Melbourne Area, 4th edition, Marilyn Bull, 2014.

Weeds of the South-East – an identification guide for Australia, 3rd edition, F.J. Richardson, R.G. Richardson and R.C.H. Shepherd, 2016.

Bush invaders of South-East Australia, Adam Muyt, 2001.

Sustainable Gardening Australia: www.sgaonline.org.au

Grow Me Instead: www.growmeinstead.com.au

Local 'Friends of' Groups

Joining and working with our friendly 'Friends of' Groups provides an opportunity to help protect local native flora and fauna and to learn about indigenous plants in our reserves and managing common weed species.

For further information visit: www.boroondara.vic.gov.au/local-environment-groups .

Council biodiversity resources

Urban Biodiversity Strategy for Boroondara (2013-2023)

Inventory and Assessment of Indigenous Flora and Fauna in Boroondara (2006), Lorimer G.

Backyard Biodiversity: A guide to creating wildlife-friendly and sustainable gardens in Boroondara, available at Council Customer Service Centres and Boroondara libraries.

To view these resources online, please visit:
www.boroondara.vic.gov.au/biodiversity .





*Indigenous (locally native) wildflowers
along Welfare Parade, Ashburton*

Postal address:

City of Boroondara
Private Bag 1
Camberwell, VIC 3124

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Camberwell, 8 Inglesby Road
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Printed in June 2018 on 100% recycled paper