

Weed Identification Guide

**CITY OF CASEY
CARDINIA SHIRE COUNCIL
CITY OF GREATER DANDENONG**



This Weed Identification Guide has been produced through the combined efforts of the City of Casey, Cardinia Shire Council and the City of Greater Dandenong.

This booklet assists with the identification of 90 of the worst environmental and agricultural weeds over the three Councils by providing coloured pictures of each species as well as information and control methods.



What is a weed?

A weed is a plant that is considered to be 'out of place'.

In this booklet weeds are considered as one of two distinct types:

Environmental weeds, which invade bushland and threaten indigenous biodiversity, or

Agricultural weeds, which invade crops and pasture.

Where do weeds come from?

Many current weed species were originally introduced to Australia during settlement, either accidentally or deliberately for horticulture, agriculture and forestry. Their ability to adapt to new conditions and vigorous reproduction methods has enabled them to become well established in most natural and agricultural systems.

The potential exists for new environmental and agricultural weeds to be introduced into Australia by the growing number of garden enthusiasts. Use of technology such as the internet to order and import plants and seeds of species, which in time may become a new threat, has encouraged this potential.

Once introduced to Australia, these species continue to invade natural systems and can displace indigenous plants. Many species are ornamental and therefore have a constant seed source from surrounding gardens.

Seed and plant material can also be spread by humans, animals, machinery, and through the inappropriate disposal of garden waste.

Native species also have the ability to become weeds if they become established outside of their naturally occurring range.

Controlling Weeds

There are a range of techniques and products that are effective in controlling weeds. These techniques can be grouped as either a 'non chemical' or 'chemical' treatment, as listed on the following pages.

Appropriate non-chemical techniques should be considered as alternatives to the more traditional approach of chemical application. Chemical controls can have negative impacts on the surrounding environment if applied incorrectly, and can kill non-target species.

When choosing a chemical control method, observe the following to minimise the impact on the environment:

- Identify the weed correctly.
- Choose an appropriate chemical for the target species.
- Choose the chemical that minimises damage to surrounding plants.
- Follow the directions specified on the label.
- Take appropriate precautions when using chemicals to protect yourself and others.
- Check to see if the chemical requires an Agricultural Chemical Users Permit.
- Do not spray on windy days, in high temperatures, or if rain is forecast within 24 hours.
- Apply chemical when plants are actively growing, or as otherwise specified.
- Do not apply excessive amounts of chemicals to plants.
- Follow label instructions on dilution and application rates.
- Contact the Department of Primary Industries for further information.



Methods of control

NON CHEMICAL METHODS



HAND PULLING

Hand pulling is a low impact, environmentally friendly method of weed control, and is very effective for controlling small infestations, or seedlings. It is important to ensure that all root matter has been removed, particularly if the plant is capable of reproducing vegetatively.



SOLARISATION

Another environmentally friendly method, that involves covering the area with black plastic sheeting to block light, which will heat or 'cook' the weeds. Edges of the plastic sheet should be buried and left in place for at least four weeks, and later removed.



SMOTHERING/MULCHING

This method involves using a thick layer of mulch to cover the weed species, limiting the light to the plants, which reduces germination and makes it difficult for them to penetrate the surface. It can also benefit any revegetation works that may follow weed control by retaining moisture. Care needs to be taken when using mulch in some situations, as it may increase nutrient levels, which can favour some weed species.



PASTURE IMPROVEMENT

This technique increases the competition with weed species through good grazing management and by addressing soil fertility.



REVEGETATION

This method can be applied to natural areas by densely planting locally indigenous species to increase competition with weed species.



MECHANICAL

Mechanical control of weeds is useful for the removal of large infestations of woody weeds. This is achieved through the use of heavy machinery, including chainsaws, but emphasis must be on minimising soil disturbance.

Slashing and mowing can be useful in delaying seed production and providing space for more desirable species to become established. This method is generally only a temporary solution but can be used until more permanent control methods can be undertaken. If native species are present, the slashed material should be removed to prevent smothering of the desirable plants. Ensure that the machinery is clean prior to and following use to prevent further spreading of weeds.



BURNING

Controlled burning across a site, or by using a weed burner can reduce seed set and kill some weed species with appropriate timing, depending upon the plant's ecology. Fire may initially encourage some weed species' seed to germinate, and so further burns, or other control measures may need to be employed.

Methods of control

CHEMICAL METHODS

For further information on appropriate chemicals contact the Department of Primary Industries, or your local supplier. Ensure the most environmentally friendly option is chosen, and follow the guidelines for use on the label. Use caution near water bodies to ensure water is not contaminated and aquatic life is not harmed.



CHEMICAL SPRAYING

An appropriate herbicide is sprayed onto the surface of the weeds. Wherever possible a selective herbicide should be used. Check herbicide type and timing eg. when plants reproduce from bulbs.



CUT AND PAINT

Suitable for woody plants. Involves cutting off the plant close to the ground, and immediately applying herbicide to the stem.



DRILL AND FILL

An angled drill hole, or frill made with an axe or tomahawk is made in the trunk of a woody weed close to the base. Herbicide is applied immediately to the exposed stem.



SCRAPE AND PAINT

Suitable for large woody, and vine-like weeds. Similar to the cut and paint method, the outside bark is removed with a knife and the inner tissue immediately painted with herbicide.

Methods of Weed Dispersal

- E** Animals (external)
- I** Animals, other than birds (internal)
- B** Birds (internal)
- A** Ants
- H** Water
- W** Wind
- V** Vegetatively
- S** Soil



African Box-thorn

Lycium ferocissimum

Description: Dense shrub to 3m with spines on branches and small fleshy green leaves. Round red berries in Autumn-Winter. Poisonous.

Reproduction: Seed; vegetative - root suckering, stem fragments (promoted by mechanical disturbance).

Invades: Invades a wide variety of vegetation types from riparian environments to dry forests.

Origin: South Africa. **Dispersal:** H, S, V, W.

Control Measures:



Agapanthus

Agapanthus praecox ssp. orientalis

Description: Perennial fleshy green leafy clumps with large blue-purple or white flower heads to 1m tall in Summer.

Reproduction: Seed; vegetative - growth of rhizomes or fragments. Cut off seed heads after flowering.

Invades: Bushland, roadsides and coastal environments.

Origin: South Africa

Dispersal: E, I, S, V, W.

Control Measures:



Alligator Weed

Alternanthera philoxeroides

Description: Dark green, opposite leaves on hollow stems forming thick floating mats. Small, white flowers on stems in Spring-Autumn. Contains moderate levels of poison.

Reproduction: Vegetative - creeping stems (stolons); seeds (rare).

Invades: Highly invasive in waterways or other seasonally moist environments.

Origin: South America

Dispersal: A, H, S, V.

Control Measures:



Angled Onion/ Three-corner Garlic

Allium triquetrum

Description: Strap-like leaves with drooping white flowers. Grows from bulbs in Autumn and has a strong onion aroma.

Reproduction: Seed; vegetative - bulbil.

Invades: Bushland, waterways and drainage lines.

Origin: Western Mediterranean

Dispersal: H, W.

Control Measures:





Annual Veldt Grass

Ehrharta longiflora

Description: Vigorous, erect annual, 30-70cm high, leaf blades dark green, rough, 8-15cm long. Inflorescence is loose, narrow and often one-sided. Seeds form through Spring.

Reproduction: Seed.

Invades: Most vegetation types, including: native grasslands, woodlands, heathlands, riparian areas, roadsides.

Origin: South Africa

Dispersal: B, H, I, S, V.

Control Measures:



Apple of Sodom

Solanum linnaeanum

Description: Shrub to 1m with spines on branches and irregularly shaped leaves. Purple to white flowers in Winter-Spring. Globular berries, green to yellow when ripe. Fruit is poisonous to humans and stock.

Reproduction: Seed.

Invades: Bushland, roadsides and waste areas.

Origin: South Africa; Mediterranean

Dispersal: B, E, I, S, V.

Control Measures:



Asparagus Fern

Asparagus scandens

Description: Highly invasive climbing plant with small fern-like leaves. White to pink flowers in Spring, with orange to red berries following. Forms dense mats, smothering herbaceous plants.

Reproduction: Seed; vegetatively - tuberous roots.

Invades: Bushland, dominating the ground-layer and lower canopy.

Origin: South Africa

Dispersal: B, I, S, V.

Control Measures:



Banana Passion-fruit

Passiflora mollissima

Description: Climbing plant with large, pink star-shaped flowers in Jan-March. Many edible, green to yellow, oblong fruit apparent in Autumn-Winter. Roots, and unripe fruit are suspected to be toxic.

Reproduction: Seed; vegetatively - stem layering.

Invades: Bushland, particularly moist areas in sunny locations; riparian areas.

Origin: South America; Africa

Dispersal: H, W.

Control Measures:





Berry-flower Heath

Erica baccans

Description: Erect woody shrub to 2m. Clustered white to pink flowers on the ends of side branches. 3mm capsules containing many dust-like seeds.

Reproduction: Seed.

Invades: High rainfall, heathlands, woodlands, forests and riparian environments.

Origin: South Africa

Dispersal: H.

Control Measures:



Bindweeds

Convolvulus spp.

Description: Prostrate twining perennial herb up to 2m long. Alternate 2-5cm leaves. White to pink funnel shaped flowers 3cm in diameter. Smooth globular, pointed capsule containing 1-4 seeds.

Reproduction: Seed.

Invades: Roadsides and disturbed environments.

Origin: Europe. **Dispersal:** B, I, S, V.

Control Measures:



Blackberry

Rubus fruticosus spp. agg.

Description: Widespread 'Weed of National Significance'. Forms thickets of prickly dark green foliage. Small white flowers in late Spring to Summer. Green berries changing to red or black when ripe.

Reproduction: Seed; vegetatively - root suckers, and daughter plants.

Invades: Most vegetation types, tolerates many conditions.

Origin: Europe

Dispersal: B, E, I, V.

Control Measures:



Black Nightshade

Solanum nigrum

Description: Annual herb with large flat green to black leaves and small white flowers in Spring to Summer. Black berries containing seeds. Suspected of being poisonous.

Reproduction: Seed.

Invades: Bushland, disturbed areas, riparian vegetation.

Origin: Europe

Dispersal: H, S, V, W.

Control Measures:





Bluebell Creeper

Sollya heterophylla

Description: Evergreen climber capable of strangling or smothering other plants. Pendent clusters of 2-5 small blue flowers. Black/blue cylindrical berry following flowers. Contains toxins responsible for causing irritation, or nausea.

Reproduction: Seed.

Invades: Heathland, grassland, forest, riparian areas and gardens.

Origin: Western Australia, Australia.

Dispersal: B, E, I, S, V.

Control Measures:



Blue Morning-glory

Ipomoea indica

Description: Perennial climber capable of growing to 15m. Paired or in clusters, flowers are large trumpet-shaped violet-blue, and appear in warmer months. 4-6 seeds contained in each 10mm diameter brown capsule. Suspected to be toxic.

Reproduction: Vegetative - rooting, along prostrate stems and long-running stems (stolons), stem fragments at nodes.

Invades: Disturbed bushland margins, favours sunny positions.

Origin: Tropical regions. **Dispersal:** B, E, H, I, S.

Control Measures:



Blue Periwinkle

Vinca major

Description: Prostrate climber, forms dense, low mats with lilac-blue flowers. Paired follicle fruit following flowering. Highly invasive, and difficult to control. Poisonous to cattle, horses and sheep if eaten.

Reproduction: Seed; vegetative - stem fragments rooting at nodes.

Invades: Prefers fertile soils, invades coastal, heathy and riparian environments.

Origin: Western/Central Mediterranean. **Dispersal:** B, I, V.

Control Measures:



Boneseed

Chrysanthemoides monilifera

Description: Erect perennial shrub to 3m high. Dull green paddle shaped leaves with bright yellow daisy flowers in Spring. Green berries in Summer turning to hard black seeds.

Reproduction: Seed.

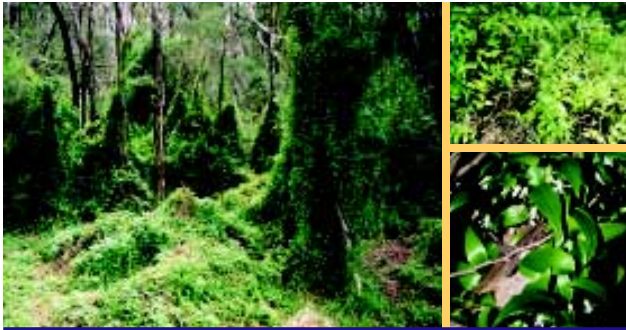
Invades: Coastal environments and bushland.

Origin: South Africa

Dispersal: E, H, S.

Control Measures:





Bridal Creeper

Asparagus asparagoides

Description: Highly invasive climber that smothers ground plants, shrubs and trees. Greenish white flowers in Spring. Green pea sized berries turning to red in November. One of Australia's worst ten weeds.

Reproduction: Seed; vegetative - from small detached rhizome sections.

Invades: Shaded areas, most vegetation types.

Origin: South Africa. **Dispersal:** B, I.

Control Measures:



Bulbil Watsonia

Watsonia meriana var. *bulbillifera*

Description: Erect perennial herb with pale green sword-shaped leaves that die back each year. Red-brown flowering stem develops Winter-Spring, with large pink to red trumpet shaped flowers.

Reproduction: Produces many bulbils. Vegetative - bulbus stem, corms and aerial corms; seed (rare).

Invades: Roadsides, coastal and grassy woodlands, heathland, forests and riparian environments.

Origin: South Africa. **Dispersal:** E, H, S.

Control Measures:



Cape/Montpellier Broom

Genista monspessulana

Description: Shrub to 3m with small green clover-shaped leaves and yellow flowers in clusters along stems. Flowers turning to silky pods with 5-8 seeds. Seeds are highly poisonous.

Reproduction: Seed.

Invades: Invades disturbed bushland margins and roadsides.

Origin: Mediterranean

Dispersal: B, I, E, H, S, W.

Control Measures:



Cape Ivy

Delairea odorata

Description: Invasive climbing plant with large fleshy green leaves. Small yellow daisy-like flowers in clusters. Red-brown seeds in Spring.

Reproduction: Seed; vegetative - creeping stems (stolons).

Invades: Dry to moist environments, disturbed areas.

Origin: South Africa

Dispersal: W.

Control Measures:





Cape Wattle

Paraserianthes lophantha ssp. *lophantha*

Description: Evergreen shrub to tree. Feathery leaves with bottlebrush-like yellow flower heads. Red-brown pods in Summer.

Reproduction: Seed.

Invades: Disturbed bushland margins initially, moving into undisturbed woodlands, coastal vegetation, forests and riparian environments.

Origin: Western Australia, Australia. **Dispersal:** B, H, A.

Control Measures:



Cape Weed

Arctotheca calendula

Description: Annual herb to 30cm with yellow daisy-like flowers in Spring-Summer. Seeds covered in pink, tangled woolly covering. Potentially a cause of nitrate poisoning.

Reproduction: Seed.

Invades: Bare areas, roadsides, pasture and bushland margins.

Origin: South Africa

Dispersal: H, W.

Control Measures:



Cedar Wattle

Acacia elata

Description: Tree to 15m tall. Feathery wattle leaves with bright yellow flowers from December to March.

Reproduction: Seed.

Invades: Undisturbed forests.

Origin: New South Wales, Australia.

Dispersal: B, A.

Control Measures:



Cleavers

Galium aparine

Description: Annual climber with narrow leaves in rings of 6 to 9. Small inconspicuous white flowers. Sticky seeds, and hairy stems.

Reproduction: Seed.

Invades: Bushland, roadsides and riparian vegetation.

Origin: Europe; Central Asia

Dispersal: A, E, H, S, V, W.

Control Measures:





Coast Tea-tree

Leptospermum laevigatum

Description: Indigenous to coastal regions, but has become a weed elsewhere. Shrub to tree with small grey-green leaves and white flowers. Cup shaped woody fruit capsule.

Reproduction: Seed.

Invades: Heathland, forests and roadsides.

Origin: Victoria, Australia

Dispersal: E, H, V.

Control Measures:



Coast/Sallow Wattle

Acacia longifolia ssp. *longifolia*

Description: Large bush or tree to 8m. Parallel veins on leaves. Flowers in dense, cylindrical, bright yellow spikes. Fruit contained within cylindrical pod, sometimes constricted between the seeds.

Reproduction: Seed (disturbance can stimulate mass seed germination).

Invades: Heathland, woodlands and forests.

Origin: Unknown prior to European settlement

Dispersal: H, V, W, A.

Control Measures:



Common Dipogon/ Dolichus Pea

Dipogon lignosus

Description: Twining perennial climber growing to 3m, with pink-purple or white flowers. Leaves are divided into 3 leaflets, and 2-4cm pods contain 3 to 6 black seeds ripening in Spring-Summer.

Reproduction: Seed.

Invades: Dry environments and coastal vegetation.

Origin: South Africa

Dispersal: H, S, V, W.

Control Measures:



Common Purslane

Portulaca oleracea

Description: Succulent prostrate annual. Shiny leaves and yellow flowers. Suspected of causing poisoning.

Reproduction: Seed.

Invades: Cleared and disturbed areas.

Origin: Unknown

Dispersal: A, H, S, V.

Control Measures:





Common Vetch

Vicia sativa

Description: Climbing annual with leaves ending in tendrils. Small paired leaf occurring opposite along branchlets. Pink-dark red pea-like flowers. Seeds forming in small pods.

Reproduction: Seed.

Invades: Disturbed areas, roadsides, bushland.

Origin: North America. **Dispersal:** E, H, V, W.

Control Measures:



Common Violet

Viola odorata

Description: Kidney-shaped leaves with small, fragrant, purple flowers.

Reproduction: Vegetative - rhizomes.

Invades: Moist areas.

Origin: Europe; North Africa; Middle East

Dispersal: H, V.

Control Measures:



Cootamundra Wattle

Acacia baileyana

Description: Small evergreen tree to 10m tall with distinct grey foliage. Profuse golden ball-shaped flowers in Winter, with seeds contained within pods.

Reproduction: Seed.

Invades: Woodlands and forests.

Origin: New South Wales, Australia. **Dispersal:** A, B.

Control Measures:



Cotoneasters

Cotoneaster spp.

Description: Evergreen shrub or small tree. Oval leaves and small white flowers in Spring. Potentially poisonous, large, orange-red berries.

Reproduction: Seed.

Invades: Bushland, and riparian areas. Tolerates most conditions.

Origin: China

Dispersal: B, H, I, S.

Control Measures:





Couch

Cynodon dactylon

Description: Rhizomatous perennial grass. Light green leaves often partly rolled. Windmill-like inflorescence.

Reproduction: Seed; vegetative - rhizomes, creeping stems (stolons).

Invades: Native vegetation communities, along disturbed edges.

Origin: Unknown

Dispersal: E, H, W.

Control Measures:



Creeping Buttercup

Ranunculus repens

Description: Rhizomatous perennial creeper. Large leaves divided into 3 with yellow buttercup flowers. Poisonous to stock.

Reproduction: Vegetative - creeping stems (stolons).

Invades: Moist areas and riparian environments.

Origin: Europe; Asia

Dispersal: E, H, S.

Control Measures:



Desert Ash

Fraxinus angustifolia

Description: Deciduous tree to 20m. Glossy green leaves. Winged seeds.

Reproduction: Seed; vegetative - root suckers.

Invades: Riparian and other moist environments.

Origin: Mediterranean; Southern/Western Asia

Dispersal: A, H, V.

Control Measures:



Docks

Rumex spp.

Description: Large rosette with oblong leaves crinkled on edges. Green or red seed stems to 1.5m.

Reproduction: Vegetative - underground root system.

Invades: Moist areas, open pasture, roadsides.

Origin: Europe; Asia. **Dispersal:** H, S, V, W.

Control Measures:





Drain Flat-sedge

Cyperus eragrostis

Description: Erect perennial herb to 80cm. Green to yellow, smooth slender leaves. Clustered yellow to brown flowers. Tiny brown, 3 angled pod.

Reproduction: Seed; vegetative - rhizomes.

Invades: Moist environments.

Origin: North/South America. **Dispersal:** E, I.

Control Measures:



Early Black-wattle

Acacia decurrens

Description: Small tree to 12m. Feathery green wattle leaves with round bright yellow flower heads (July-September). Seed held in long narrow pods. Not to be confused with late Black-wattle or Silver Wattle.

Reproduction: Seed.

Invades: Bushland.

Origin: New South Wales, Australia.

Dispersal: B, H, S, V, W, A.

Control Measures:



Elegant Poison-berry

Cestrum elegans

Description: Tree to 2 to 3m, with clusters of red trumpet-like flowers over Winter-Spring. All parts of this plant are poisonous.

Reproduction: Seed; vegetative - stem layering.

Invades: Cool moist forests and riparian vegetation.

Origin: Mexico

Dispersal: B, E, I, V.

Control Measures:



English Broom

Cytisus scoparius

Description: A large shrub to 4m. Small inconspicuous leaves spaced on long dark green branches. Large yellow pea shaped flowers in October to November. Flat oblong seed pods 4-6cm with hairs along margins turning black over Summer-Autumn. Flowers and seeds are toxic. Foliage can also cause problems in horses digestive systems.

Reproduction: Seed.

Invades: Disturbed bushland and roadside margins, and in cooler high rainfall environments.

Origin: Europe; Mediterranean. **Dispersal:** A, E, H, S, W.

Control Measures:





English Holly

Ilex aquifolium

Description: Evergreen shrub. Shiny leaves with spines and white/pink flowers in clusters of 3. Plump berries ripen from green to red in Autumn. Leaves are toxic, and its berries are poisonous.

Reproduction: Seed; vegetative - stem-layering.

Invades: Cool, moist environments, as well as woodlands and forests.

Origin: Western/Southern Europe. **Dispersal:** B, E, H, I, S, V.

Control Measures:   



English Ivy

Hedera helix

Description: Perennial, evergreen climber. Large green sword-shaped leaves, shiny on the upper surface. Green-yellow flowers in Autumn. Black fruit following flowers.

Reproduction: Seed; vegetative - spreading stems (stolons), rooting nodes and from stem sections.

Invades: Seasonally moist, shaded, or sunny vegetation, and riparian areas.

Origin: Europe; North Africa; Asia. **Dispersal:** B, I, V.

Control Measures:     



Fat Hen

Chenopodium album

Description: Erect annual to 1.5m. Leaves with coarsely toothed margins with tiny flowers. Shiny black seeds. Causes rare occurrences of death in livestock. May taint milk from dairy cows.

Reproduction: Seed.

Invades: Bushland, cleared areas, roadsides, riparian vegetation.

Origin: Europe; Asia. **Dispersal:** H, S, V, W.

Control Measures:   



Fennel




Foeniculum vulgare

Description: Erect perennial herb to 2.5m, smells of aniseed. Small clusters of yellow flowers in late Spring-Summer. 3-6mm yellow-brown seeds.

Reproduction: Seed.

Invades: Disturbed and degraded vegetation, along waterways, drainage lines and seasonally moist environments.

Origin: Southern Europe; Western Asia. **Dispersal:** V.

Control Measures:   



Flax-leaf Broom

Genista linifolia

Description: Shrub to 3m with grey-green slender leaves. Yellow flowers in clusters along stems in Aug-Nov. Flattened, hairy seed pods containing 2-3 seeds. Seeds are highly poisonous.

Reproduction: Seed.

Invades: Disturbed bushland margins, roadsides and cooler high rainfall environments.

Origin: Mediterranean

Dispersal: H, I, S, V.

Control Measures:



Flaxleaf Fleabane

Conyza bonariensis

Description: Annual or perennial herb. Erect in stature, and usually less than 1m in height. Flowers in Spring-Autumn, with white hairs evident.

Reproduction: Seed.

Invades: Bushland, roadsides, riparian vegetation, disturbed sites.

Origin: North/South America. **Dispersal:** B, H, I.

Control Measures:



Freesia

Freesia spp. hybrid

Description: Perennial herb to 40cm. 3-7 trumpet-shaped white-cream flowers with yellow and purple shading are sweetly scented. Long wrinkled green fruit containing brown seeds.

Reproduction: Seed; vegetative - corms, and bulbil.

Invades: Woodlands, roadsides and riparian areas.

Origin: South Africa. **Dispersal:** H, I, S, W.

Control Measures:



Gorse

Ulex europaeus

Description: Dense spiny shrub to 4m tall. Yellow pea-like flowers at branch tips throughout the year. Dark brown hairy seed pods containing up to 6 seeds.

Reproduction: Seed.

Invades: Disturbed environments, riparian areas and agricultural land.

Origin: Western Europe. **Dispersal:** B, H, I, V.

Control Measures:





Hawthorn

Crataegus monogyna

Description: Deciduous large shrub to tree. Scented white flowers in clusters October to December along spiny branches. Red berries with yellow flesh and one stone ripening in Summer.

Reproduction: Seed.

Invades: Common along creeks, rivers and roadsides.

Origin: Europe; Western Asia

Dispersal: H, S, V.

Control Measures:



Hemlock

Conium maculatum

Description: Perennial herb to 3m. White or pink flowers in an umbrella arrangement, between August-December. Many small seeds produced after flowering. All plant parts are poisonous to humans and animals.

Reproduction: Seed.

Invades: Roadsides, stream-sides and waste areas.

Origin: Europe; Western Asia; North Africa

Dispersal: B, I, V.

Control Measures:



Himalayan Honeysuckle

Leycesteria formosa

Description: Deciduous shrub with many hollow stems to 3-5m tall. Drooping flower spikes near branch tips with purple to white funnel-shaped flowers. Dark crimson berries ripe in Summer-Autumn. Fruit may be poisonous.

Reproduction: Seed; vegetative - stem layering.

Invades: Sheltered locations in gullies, stream sides and protected hillsides.

Origin: Himalayas; China. **Dispersal:** H, S, V.

Control Measures:



Japanese Honeysuckle

Lonicera japonica

Description: Climbing plant able to form large mats across the ground, can grow to 10m tall. Scented yellow/white flowers in pairs near branch tips. Shiny black berry 6-10mm long, which is very poisonous. Leaves may be toxic.

Reproduction: Seed; vegetatively - creeping stems (stolons), and stems rooting at nodes.

Invades: Forests, woodlands, heathlands and riparian environments.

Origin: Japan; China. **Dispersal:** H, V, W.

Control Measures:





Kikuyu

Pennisetum clandestinum

Description: Matted perennial grass with creeping stems or stolons. Concealed flowers.

Reproduction: Vegetative - from small pieces.

Invades: Bushland, grassland, grassy woodlands, roadsides and riparian environments.

Origin: Tropical Eastern Africa. **Dispersal:** V (also by seed).

Control Measures:



Large Quaking-grass

Briza maxima

Description: Annual grass with flat 20cm long leaves, drooping with age. Flowers, green changing to straw colour when mature, drooping on a very fine stalk. Light brown seeds.

Reproduction: Seed.

Invades: Degraded environments, grasslands, grassy woodlands, and roadsides.

Origin: Mediterranean. **Dispersal:** B.

Control Measures:



Large-leaf Privet

Ligustrum lucidum

Description: Evergreen shrub or small tree to 10m. Large shiny dark green leaves and white fragrant flowers in cone shaped clusters in Spring/Summer. Oval berries ripening from green to red/black in Winter. Leaves and fruit are poisonous.

Reproduction: Seed.

Invades: Grassland, forests, woodlands and riparian vegetation.

Origin: China. **Dispersal:** H, V.

Control Measures:



Madeira Vine

Anredera cordifolia

Description: Climbing plant, can cover trees up to 30m tall. Flowers drooping in long clusters are pale cream and blackening. Suspected of containing poison.

Reproduction: Vegetative - rhizome, stem tubers, stem fragments and leaves; seed (rarely).

Invades: Native ecosystems, riparian environments and moist woodlands.

Origin: Tropical South America. **Dispersal:** H, S, V, W.

Control Measures:





Madreira Winter-cherry

Solanum pseudocapsicum

Description: Erect shrub to 2m. Small white flowers in Spring-Autumn. Highly poisonous, small orange-red fruits.

Reproduction: Seed.

Invades: Bushland and riparian vegetation.

Origin: South America. **Dispersal:** B, H, I.

Control Measures:



Mirror Bush

Coprosma repens

Description: Erect perennial shrub to 8m tall. Oval, fleshy leaves with a glossy surface. Small green flowers in clusters September-December. Fleshy green berries ripening to orange-red in late Summer-Autumn.

Reproduction: Seed.

Invades: Grown in coastal areas, invading coastal bushland environments.

Origin: New Zealand. **Dispersal:** E, H, I, S.

Control Measures:



Montbretia

Crocsmia x crocosmiiflora

Description: Long sword like, evergreen leaves with mid-vein present. Bright orange trumpet-shaped flowers occur at the tip of stem from December-April. 3-lobed capsule, usually shrivelled.

Reproduction: Vegetatively - rhizomes, and corms; seed (generally not viable).

Invades: Moist, fertile environments.

Origin: South Africa. **Dispersal:** E, H, V.

Control Measures:



Myrtle-leaf Milkwort

Polygala myrtifolia var. *myrtifolia*

Description: Erect to spreading shrub, 2.5m tall, with predominantly deep pink or purple, pea-shaped flowers in clusters on branch tips. Oval-shaped leaves, and fruit a circular-shaped capsule.

Reproduction: Seed.

Invades: Dry coastal vegetation, riparian vegetation, heathland, grassland, woodland, forest.

Origin: Cape region, South Africa. **Dispersal:** B, H, S.

Control Measures:





Nasturtium

Tropaeolum majus

Description: Sprawling succulent annual herb with circular leaves. Bright yellow to deep orange flowers.

Reproduction: Seed; vegetatively - suckers, stems rooting at nodes, and small fragments.

Invades: Bushland and riparian vegetation.

Origin: Colombia to Bolivia. **Dispersal:** B, I.

Control Measures:



Onion Grass

Romulea rosea var. australis

Description: Perennial herb, to 35cm, with a few narrow grass-like leaves. Large pink or pale purple flowers August-November. Fruit, is in the form of a cylindrical capsule. A strong onion smell is evident. Potentially dangerous to stock.

Reproduction: Seed; vegetative - corms.

Invades: Dry coastal vegetation, grassland, woodland, bushland, freshwater wetlands (seasonal), disturbed areas, open spaces, and pasture.

Origin: South Africa. **Dispersal:** B, V, W.

Control Measures:



Pampas Grass

Cortaderia selloana

Description: Large tussock grass with flower stems to 3m. Long narrow leaves with white, feathery flower heads, each plume capable of producing 100,000 tiny seeds. Leaves are sharp, and may be an irritant.

Reproduction: Seed; vegetative - rhizomes.

Invades: Open areas, riparian vegetation and roadsides. hand pulling, chemical spraying, mechanical.

Origin: South America. **Dispersal:** B, H, W.

Control Measures:



Panic Veldt-grass

Ehrharta erecta

Description: Perennial green grass to 60cm tall. Flat leaf blade.

Reproduction: Seeds profusely all year round.

Invades: Grassy woodlands, forests, heathlands, riparian areas and roadsides.

Origin: South Africa. **Dispersal:** E, H, I, V, W.

Control Measures:





Paterson's Curse

Echium plantagineum

Description: Biennial herb, beginning as a green rosette, becoming erect with clusters of purple flowers in Spring. Poisonous to livestock.

Reproduction: Prolific seeder. Seed may remain dormant in soil for over 5 years.

Invades: Agricultural areas, edges of bushland and grasslands.

Origin: Western Europe; Mediterranean

Dispersal: B, H.

Control Measures:



Plantains

Plantago spp.

Description: Herb to 40cm with taproot. Flowering in September-April.

Reproduction: Seed; vegetative - creeping stems (stolons).

Invades: Most environments including bushland, grassland, open forests and wetlands.

Origin: Europe; North Africa; Asia. **Dispersal:** B, I, S.

Control Measures:



Prunus

Prunus spp.

Description: Deciduous tree with paddle shaped leaves. White flowers with 5 oval petals. Spherical red or yellow fruit, 15-25mm in diameter. Soft edible flesh.

Reproduction: Seed.

Invades: Grasslands, forests, riparian and coastal vegetation.

Origin: Europe; Southern/Western Asia. **Dispersal:** B, H, I.

Control Measures:



Radiata Pine

Pinus radiata

Description: Tree growing 25-50m tall. Needle-like leaves. Two winged woody seeds contained in large cones. Often grown in plantations for softwood timber.

Reproduction: Seed.

Invades: Native forests flanking softwood plantations, heathland, woodland, forests and riparian vegetation.

Origin: California/ Northern Hemisphere. **Dispersal:** W.

Control Measures:





Ragwort

Senecio jacobaea

Description: Erect biennial or perennial herb to 1.5m. Yellow flowers in clusters December-March. Up to 200,000 seeds produced by each plant. Poisonous to stock.

Reproduction: Seed.

Invades: Disturbed areas, agricultural land.

Origin: Europe

Dispersal: B, H, S, V, W.

Control Measures:



Red-ink Weed

Phytolacca octandra

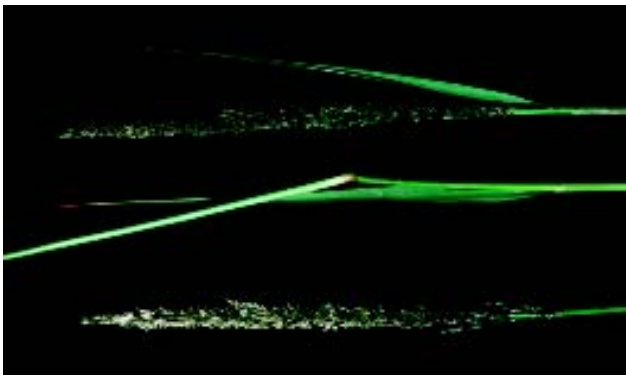
Description: Perennial herb or soft-wooded shrub to 2m. Stems red in colour, flowers November-May. Rank smelling. Shining black berries when ripe. Poisonous.

Reproduction: Seed.

Invades: Heathland and bushland.

Origin: Tropical America. **Dispersal:** H, V.

Control Measures:



Rat-tail Grass

Sporobolus africanus

Description: Perennial grass to 70cm. Flowers November-June.

Reproduction: Seed.

Invades: Degraded environments, grassland and grassy woodland.

Origin: South Africa

Dispersal: E, H, S, V, W.

Control Measures:



Sour sob

Oxalis pes-caprae

Description: Leaves green, divided into 3 heart-shaped leaflets. Bright yellow, trumpet like flowers mid-Winter to Spring. Prolonged consumption will result in kidney damage, and then death.

Reproduction: Vegetative - bulbs produced along rhizomes, or on tubers; seed (rare).

Invades: Disturbed environments, woodlands, grasslands, heathlands, forests and riparian environments.

Origin: South Africa. **Dispersal:** E, H, S, V, W.

Control Measures:





Spanish Heath

Erica lusitanica

Description: Erect woody shrub to 2m. Clustered, small, white to pink bell-shaped flowers, on the ends of side branches. 3mm capsules contain 80-100 dust-like seeds each.

Reproduction: Seed; vegetatively - stem layering or suckering roots.

Invades: High rainfall, heathlands, woodlands, forests and riparian environments.

Origin: Southern/Western Europe. **Dispersal:** B, H, I, S, V.

Control Measures:



Spear Thistle

Cirsium vulgare

Description: Annual or biennial herb to 1.5m. Divided leaves with spiny lobes. Purple flowers in Summer.

Reproduction: Seed.

Invades: Agricultural land and roadsides.

Origin: Europe; Asia; North Africa

Dispersal: B, E, S, V.

Control Measures:



St John's Wort

Hypericum perforatum

Description: Perennial herb to 1.2m. Numerous rust coloured branches with yellow flowers in Spring to Summer. Seeds black, 1 mm long, falling from capsules in Autumn. Toxic to stock if eaten.

Reproduction: Seed; vegetative - rhizomes.

Invades: Agricultural land, roadsides forests and grassland.

Origin: Europe

Dispersal: E, H, V, W.

Control Measures:



Sweet Briar

Rosa rubiginosa

Description: Large deciduous shrub with prickly stems and leaves. Aromatic pink-white flowers in Spring to Summer. Oval red-orange fruits, 2cm long, in Summer/Autumn.

Reproduction: Seed.

Invades: Grassland, woodland, forests, pastures and riparian areas.

Origin: Europe; Western Asia; Northern India

Dispersal: H, S, W.

Control Measures:





Sweet Pittosporum

Pittosporum undulatum

Description: Dense tree to 14m. Shiny leaves with wavy margins. White sweet-scented flowers in Spring. Orange berries in Autumn containing sticky seeds.

Reproduction: Seed.

Invades: Dry coastal vegetation, heathlands, forests and riparian areas.

Origin: Australia

Dispersal: B.

Control Measures:



Sweet Vernal-grass

Anthoxanthum odoratum

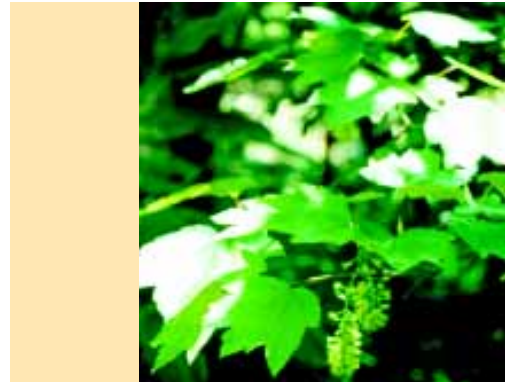
Description: Perennial tufted grass to 20cm tall. Dense spike-like flower head to 80cm tall. Can be toxic if large amounts are ingested.

Reproduction: Seed; vegetative (infrequent) - rhizomes.

Invades: Coastal and riparian vegetation, wetlands, heathlands, grasslands, woodlands and moist forests.

Origin: Eurasia. **Dispersal:** E, H, V, W.

Control Measures:



Sycamore Maple

Acer pseudoplatanus

Description: Large deciduous tree to 30m. 5 lobed, dark green leaves on red stalks. Small yellow-green clustered flowers in Spring. Reddish coloured, winged seeds in boomerang-like pairs.

Reproduction: Seed.

Invades: Damp and wet forests, and riparian vegetation.

Origin: Southern/Central Europe; Western Asia

Dispersal: S (encouraged by fire).

Control Measures:



Toowoomba Canary-grass

Phalaris aquatica

Description: Perennial grass to 1.6m. Dense cylindrical inflorescence. 2-3mm long brown and numerous seeds. Can be toxic to livestock.

Reproduction: Seed; vegetative - rhizomes.

Invades: Native grassland, woodlands, forests, roadsides, wetlands and riverine environments.

Origin: Mediterranean. **Dispersal:** B, E, H, S.

Control Measures:





Townsend's Cord-grass/ Common Cord-grass

Spartina x townsendii/anglica

Description: Perennial grass that invades inter-tidal zones. Stiff upright flowering stems consisting of 2 (-3 for *Spartina X townsendii*) to 12 spikes.

Reproduction: Seed; vegetative - rhizomes.

Invades: Coastal vegetation, mudflats and mangroves.

Origin: Southern England; France; Denmark/Europe

Dispersal: E, H, W.

Control Measures:



Tree Lucerne

Chamaecytisus palmensis

Description: Large shrub to small tree with drooping branches. Cream-white flowers June-October. Utilised as a fodder plant, though seeds are poisonous.

Reproduction: Seed.

Invades: Disturbed environments, roadsides, planted in agricultural land.

Origin: Canary Islands. **Dispersal:** B, H, S.

Control Measures:



Variegated Thistle

Silybum marianum

Description: Annual or biennial herb. Grows to 2.5m, leaves variegated and hairy. Large purple flowers in Spring-Summer. Flower heads produce many seeds. Can cause death of livestock.

Reproduction: Seed.

Invades: Coastal and riparian vegetation, wetlands, grassland, woodland and forests.

Origin: Mediterranean; Asia. **Dispersal:** H, V.

Control Measures:



Wall Fumitory

Fumaria muralis

Description: Rambling herb with much divided, alternate parsley-like leaves. Small tubular elongated pink flowers in Spring. Singular seeds contained in small drupes (fleshy fruit).

Reproduction: Seed.

Invades: Bushland, disturbed environments, and roadsides.

Origin: Europe

Dispersal: H, S, V.

Control Measures:





Wandering Creeper

Tradescantia fluminensis

Description: Evergreen creeper that forms dense mats to 60cm deep. Shiny dark green leaves and small white flowers in Spring-Summer. 3-chambered fruit with 6 seeds. Very toxic to cattle, causing rapid death if eaten, and promotes allergenic reactions in dogs.

Reproduction Vegetative - creeping stems (stolons).

Invades: Riparian environment, moist woodlands and forests.

Origin: South America. **Dispersal:** A, B, H, S, W.

Control Measures:



White Arum-lily

Zantedeschia aethiopica

Description: Fleshy green leaves with large white flowers for much of the year. Yellow seed head from July to November. Extremely poisonous if eaten.

Reproduction: Seed; vegetatively - rhizomes.

Invades: Moist environments including coastal and riparian vegetation.

Origin: South Africa

Dispersal: A, B.

Control Measures:



Wild Tobacco Tree

Solanum mauritianum

Description: Erect shrub to 4m. Large leaves grey-green on the underside. Purple flowers Autumn-Spring. Pale yellow round berries. All sections of the plant are likely to be poisonous.

Reproduction: Seed.

Invades: Coastal vegetation, grassland, woodland, moist environments and roadsides.

Origin: Argentina. **Dispersal:** A, H, S, W.

Control Measures:



Willows

Salix spp.

Description: Deciduous tree to 30m with single or multiple trunks.

Reproduction: Vegetative - stem fragments; seed (restricted to certain species).

Invades: Waterways and other moist environments.

Origin: Northern Hemisphere. **Dispersal:** A, B.

Control Measures:





Wood Forget-me-not

Myosotis sylvatica

Description: Perennial herb to 50cm tall. Leaves are narrow paddle-shaped and occur in a rosette. Flowers are bright blue, and evident from September to March. Seed capsules are about 2mm long.

Reproduction: Seed.

Invades: Moist environments including coastal and riparian vegetation.

Origin: Europe; Northern Asia. **Dispersal:** H, V, W.

Control Measures:



Yorkshire Fog

Holcus lanatus

Description: Perennial grass, erect to 1m. Flower head is initially narrow, becoming open as seed matures. Blade-like leaves are grey with reddish stripes on the stem. Seeds wind-pollinate and germinate in Autumn-Winter.

Dispersal: Seed.

Invades: Disturbed environments. Favours damp environments including riparian vegetation.

Origin: Europe; temperate Asia; North/West Africa

Dispersal: B, E, H, I, W, S.

Control Measures:



How can you help reduce weeds and improve our indigenous biodiversity?

- Familiarise yourself with the weeds in this booklet and consider using more appropriate species in your garden.
- Consider using indigenous species, which are less likely to become weedy. An indigenous species is a plant that was locally native to the relevant site prior to European settlement.
- Undertake appropriate weed control.
- Dispose of garden waste appropriately. Garden waste can be composted, burned, taken to your local transfer station or disposed of through your kerbside garden waste service (where applicable). **DO NOT DUMP GARDEN WASTE ON ROADSIDES OR IN BUSHLAND.**
- Control weeds on your property and roadside verges (abutting landowners are legally responsible for their roadsides).



FURTHER INFORMATION

City of Casey
9705 5200

Cardinia Shire Council
1300 787 624

City of Greater Bendigo
9239 5100

Department of Primary Industries
Customer Service
136 186

Useful websites:
www.dse.vic.gov.au
www.dpi.vic.gov.au
www.weeds.org.au
www.viridans.com.au



We acknowledge the following people for their technical assistance and photographs:
Bass Coast Shire Council, Department of Primary Industries: Primary Industries Research Victoria, Friends of Sherbrooke Forest, Royal Botanic Gardens Cranbourne, South Gippsland Landcare Group, Viridans Biological Databases.