

Climbers and Creepers

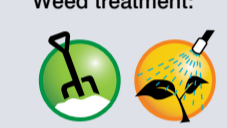


Asparagus Fern
Asparagus scandens LILIACEAE
Origin: South Africa

Description:
Twining, climbing perennial herb growing from underground tubers with aerial parts to 2m high on supporting vegetation.
Flowers: Small white to pinkish flowers, topped by yellow anthers, appear in late winter and spring.
Leaves: (Cladodes) Somewhat fern-like in appearance. Spear-shaped and pointed towards the tips. Usually grouped in threes at each node.
Fruit: Orange to red berries may remain on plant until next flowering season.

- Notes:**
- Becoming more common in townships, invading reserves and moister areas.
 - Twining stems are very strong and can strangle small indigenous plants.
 - Dense roots and tuber mats are thick and prevent moisture penetrating to the soil below.
 - Seeds are dispersed by birds, and new plants also form from dumping of roots in garden waste.

Status: Weed of National Significance.



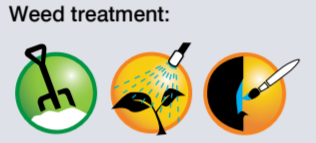
Banana Passionfruit
Passiflora tarminiana PASSIFLORACEAE
Origin: South American Andes

Description:
A perennial vine/climber.
Flowers: Pink petals joining to a long greenish floral tube at the centre. 6cm in diameter.
Leaves: Clearly-defined veins, velvety-hairy underside, toothed margins, 7-10cm long, clearly divided into 3 lobes.
Fruit: Green elongated or oval berry to 12cm long, turns yellow when mature. Hairy when young and contains many seeds in an orange-coloured pulp.

- Notes:**
- Smothers out native vegetation with its dense growth, and prevents recruitment of natives.
 - Fast growing and found in moist places.
 - Coiled tendrils are borne in the leaf forks, and help the plant climb.
 - Flowering can occur throughout the year.
 - Seeds are dispersed by birds and other animals that eat the fruit.

Status: Environmental weed in Colac Otway Shire

Weedy Facts: Banana Passionfruit is a vigorous climbing plant that can extend 20m into the forest canopy.

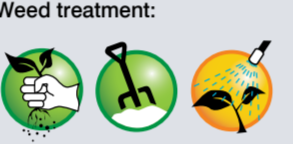


Blue Periwinkle
Vinca major APOCYNACEAE
Origin: Europe

Description:
A trailing perennial herb with long, tough stems capable of covering hundreds of square metres. Forms a dense intertwined ground cover.
Flowers: Solitary lilac-blue flowers to 50mm in diameter appear in spring in the leaf axils. Flowers have five petals widely spreading and squared at ends.
Leaves: Dark green, oval shiny leaves with pointed tips.
Fruit: A capsule to 50mm long, tapering, in pairs and joined at the base.

- Notes:**
- Produces little or no seed and is spread primarily by stems rooting at the tips.
 - The species can cover large areas, especially in shaded moist locations.
 - Will also grow in a wide range of conditions on moderately fertile soils provided there is seasonal moisture.

Status: Environmental weed in Colac Otway Shire



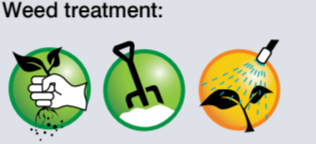
Bluebell Creeper
Billardiera fusiformis PITTOSPORACEAE
Origin: Western Australia

Description:
A dense, tangled shrub to about 2m high, or twining climber to 3m or more. Juvenile plants do not climb, but after establishing their root system the plants quickly convert to the mature form. Young stems shiny reddish-brown.
Flowers: Nodding, deep blue bell-shaped flowers on slender stalks from spring to summer.
Leaves: Smooth dark green, narrowly oblong to lance-shaped.
Fruit: Pendant, translucent grey-green sausage-shaped berries that darken as they ripen.

- Notes:**
- Large colonies, many metres wide, can be formed.
 - Thrives in a wide range of environments, including coastal heath, heathland, woodland and forest.
 - Birds disperse the seeds to new areas.

Similar native species: Common Apple-berry *Billardiera scandens*.

Status: Environmental weed in Colac Otway Shire



Bridal Creeper
Asparagus asparagoides LILIACEAE
Origin: South Africa

Description:
A twining, climbing perennial herb to 3m high with branching wiry stems growing from underground water-storing tubers. It has annual aerial parts.
Flowers: Solitary small white flowers with a green stripe on each folding-back petal, appear in winter to spring.
Leaves: (Cladodes) Are dense shiny with a pointed tip. As fruit ripens the leaves yellow and fall.
Fruit: Red berries in spring and summer.

- Notes:**
- Recognised as one of the worst environmental weeds in the region, invading various vegetation types and soils.
 - Forms huge masses of canopy over shrubs and trees, preventing regeneration.
 - Produces a thick mat of underground tubers that prevents penetration of moisture.
 - Dispersed by birds and also by dumping of roots as garden waste.

Similar native species: Apple-berry *Billardiera mutabilis*, Small-leaved Clematis *Clematis microphylla* and Climbing Lignum *Muehlenbeckia australis*.

Status: Weed of National Significance.



Herbs & Succulents



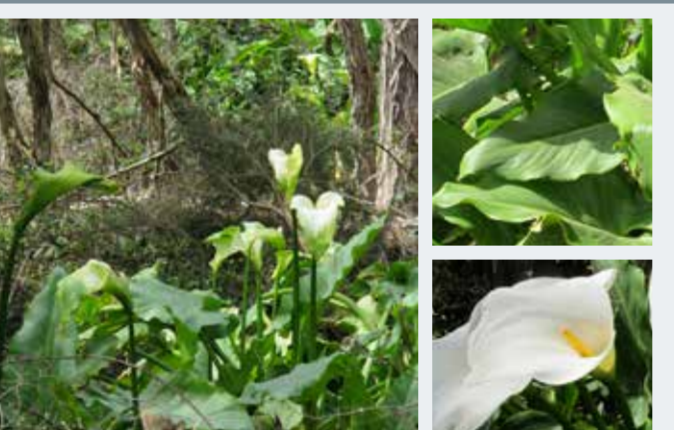
Agapanthus (African Lily)
Agapanthus praecox subsp. *orientalis* LILIACEAE
Origin: South Africa

Description:
Evergreen perennial herb growing in a leafy clump to 1m wide from a thick rhizome.
Flowers: Large blue or white flower heads on smooth, long, thick stems to about 1.2m high in summer.
Leaves: Glossy green, strap-shaped leaves form clumps up to 600mm high.
Fruit: Seed capsules release abundant glossy black winged seeds in late summer and autumn.

- Notes:**
- Commonly naturalises in a variety of coastal and inland situations where plants can often be seen growing along roadsides.
 - Reproduction is by seed or dumped garden refuse.
 - Seeds are wind and water dispersed, sometimes for many metres along drainage lines.

Similar native species: Black-anther Flax-lily *Dianella revoluta*.

Status: Environmental weed in Colac Otway Shire



Arum Lily
Zantedeschia aethiopica ARACEAE
Origin: South Africa

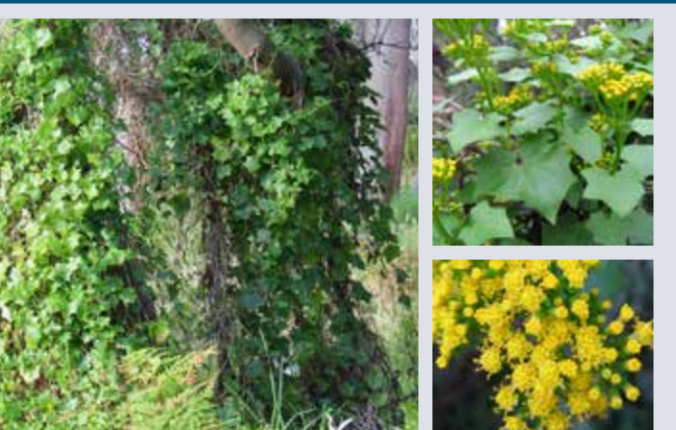
Description:
Perennial herb with large, starchy, tuber-like underground rhizome.
Flowers: The small, yellow male and female flowers arranged in the central column are surrounded by a large white spathe on an erect stem to 1m. Flowers mostly in spring and early summer, but often at other times.
Leaves: Large, leathery, dark green and arrow-head shaped. Clumps of juvenile leaves are often seen emerging from the underground rhizomes.
Fruit: Green or yellow berries that turn orange when ripe.

- Notes:**
- Considered extremely poisonous to all animals, and is also toxic and can cause irritations to humans.
 - Highly invasive in moist areas - along streams, drainage lines and in swamps or in inter-dune corridors.
 - Dispersed by birds or water and by fragmentation of rhizome.
 - Often spread by movement of contaminated soil and through dumping of garden waste.

Status: Environmental weed in Colac Otway Shire



Climbers and Creepers



Cape Ivy
Delairea odorata ASTERACEAE
Origin: South Africa

Description:
A robust climbing or scrambling perennial herb to 4m or more high. Stems and runners tend to be purple and are easily broken.
Flowers: Fragrant small, bright yellow, daisy-like flowers in small clusters in winter. They do not have ray florets (petals).
Leaves: Dense, pale green, slightly fleshy, smooth ivy-like leaves, silvery below.
Fruit: Reddish-brown, tiny with a ring of slender white hairs.

- Notes:**
- A dense, vigorous, fast-growing climber that twines or scrambles over associated plants.
 - Forms a dense ground cover to 300mm and an overhead canopy, eventually killing the vegetation over which it climbs.
 - Very shade tolerant and grows successfully in gullies, along river banks, in cool forests and in coastal scrub.

Status: Environmental weed in Colac Otway Shire.



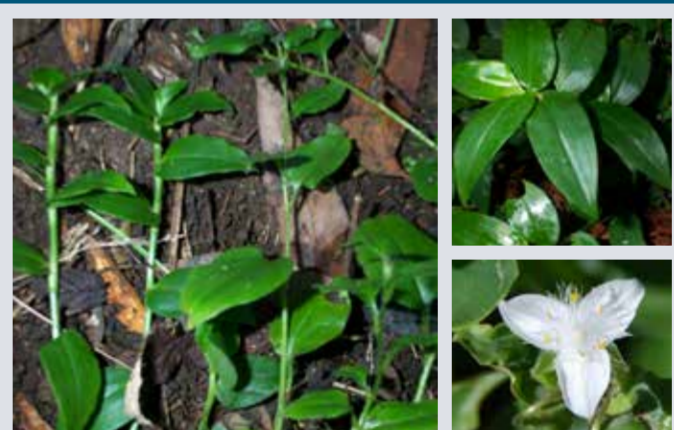
English Ivy
Hedera helix ARALIACEAE
Origin: Europe

Description:
A large woody climber attaching to trees, rocks and other surfaces by numerous fine stem roots. Horizontal stems root at the nodes when they contact the soil. This perennial evergreen grows to a height of 30m or more.
Flowers: Has small, yellowish-green flowers, star-shaped and usually in spherical clusters, in autumn.
Leaves: Glossy dark green on the upper surface, and often variegated. Veins are very conspicuous. Leaves on non-flowering stems are lobed, those on fertile flowering stems are unlobed.
Fruit: Small, black berries in winter.

- Notes:**
- Ivy is highly shade tolerant and forms a dense impenetrable ground cover.
 - Climbs and smothers shrubs and trees.
 - May occur in a variety of locations and is most seriously invasive in forests where it grows high into the canopy.
 - Birds eat the berries and disperse the seeds.

Similar native species: Climbing Lignum *Muehlenbeckia australis*.

Status: Environmental weed in Colac Otway Shire



Wandering Trad (Wandering Creeper)
Tradescantia fluminensis COMMELINACEAE
Origin: South America

Description:
A trailing, succulent perennial herb.
Flowers: Three spreading white petals with pointed tips, 7-10mm long, arranged in clusters at the top of stems.
Leaves: Dark green on top and slightly purplish underneath. Alternately arranged, oval, glossy and somewhat fleshy. 3-6.5 cm long and 1-3 cm wide.
Fruit: Papery capsules usually containing six seeds.

- Notes:**
- Spreads vegetatively by stolons and broken root fragments which disperse by water, machinery, vehicles and in dumped garden waste.
 - Invades damp shady areas, in particular along the banks of waterways.
 - Outcompetes native vegetation and prevents recruitment.
 - Causes skin irritation in humans and animals.

Similar native species: Forest Hounds Tongue *Cynoglossum latifolium*, Mountain Clematis *Clematis aristata*

Status: Environmental weed in Colac Otway Shire

Weedy Facts: Wandering Trad is poisonous to cattle in large quantities due to its high concentration of nitrate.



About this brochure

This brochure identifies the 20 most significant weeds for the coastal areas of Colac Otway Shire.

What are environmental weeds?

Environmental weeds are plants that pose a threat to our natural environment. They can be native to Australia, but most have been introduced from overseas. Some are well-known such as Gorse, while others are often overlooked and/or are emerging weeds, like Chilean Needle Grass. Some well-known weeds such as Blackberry have not been included in this brochure, though they still present a serious threat and must be controlled. Instead, less-familiar weeds have been included to raise awareness of the threat they present.

What impact do they have?

Environmental weeds degrade and displace native vegetation, which can lead to habitat loss, extinction of flora and fauna, increased bushfire risk, and decreased agricultural productivity. Each of the weeds described in this brochure represents either an existing or potential threat to Colac Otway Shire's environmental values.

- For example:
- Sweet Pittosporum, Banana Passionfruit and Bluebell Creeper attract birds which disperse their seeds into reserves and bushland. The ensuing plants can strangle and out-compete local plant species, causing their extinction and reducing wildlife habitat.
 - Coast Tea-tree, Spanish Heath and species of Broom are highly flammable and substantially increase fuel loads around homes and surrounding areas, which adds to the bushfire risk and can change long-term fire patterns.
 - Serrated Tussock and Chilean Needle-grass can quickly invade native grasslands which are already endangered, in addition to threatening the productive capacity of agricultural areas. Guarding against this threat requires Council, State and Federal Government, local landholders and community volunteers to invest significant time, effort and resources in controlling and eradicating weeds.

What can I do to help?

If you live in the shire you have a key role to play. **You can help by:**

- Choosing your garden plants wisely and selecting local indigenous plants where possible. Indigenous species lists are available on Council's website. Note: this is particularly important if you live within 500 metres of a natural area.
- Removing identified weed species from your garden and replacing them with local indigenous plants. This brochure aims to help you fulfil this role by describing the 20 most problematic weeds in your area and identifying appropriate treatment methods for each.
- Depositing your garden waste in your green-lidded Council bin or at your local landfill.
- Entering and leaving natural areas with caution. Check your shoes and clothes for seeds and ensure you enter clean and exit clean.
- Joining a local conservation group and volunteering to protect the natural areas that you know and love.



Coast





Montbretia
Crocsmia x crocosmiflora IRIDACEAE
Origin: South Africa

Description:
A corm-bearing perennial herb with annual leaves and flowers.
Flowers: Up to 20 yellow to orange trumpet-shaped flowers per stem with zigzag flower stalks to 900mm high.
Leaves: Soft, strap-like and mostly at the base with 6-12 leaves per plant, 300-800mm long and 10-20mm wide.
Fruit: A usually shrivelled brown capsule containing round, brown seeds.

Notes:

- Forms widespread and dense clumps to the exclusion of indigenous plants.
- Spread as corms and rhizomes are moved to new areas by water or machinery.
- Many populations have originated from garden rubbish dumping.

Status: Environmental weed in Colac Otway Shire

Weed treatment:



Ox-eye Daisy
Leucanthemum vulgare ASTERACEAE
Origin: Europe and Asia

Description:
An erect, sparsely-branched perennial herb to 90cm.
Flowers: Numerous white petals with yellow centre in a typical daisy formation, growing singly at ends of branches.
Leaves: Spoon-shaped, to 8cm long, irregularly toothed or lobed, alternately arranged.
Fruit: Small, ribbed and numerous. Dark brown, black or grey in colour.

Notes:

- Found in wetter, temperate regions, mostly along roadsides, in open bushland, or grassland, pasture, wasteland and other disturbed sites.
- A prolific seeder that is tolerant of a wide range of conditions, and can withstand frost.
- Forms dense patches that exclude almost all other vegetation.

Similar native species: Satin Everlasting *Helichysum leucosideum*. Blunt Everlasting *Argentipallium obtusifolium*. Leaves can look like that of native Fireweeds (*Senecio* spp.)

Status: Declared Noxious Weed

Weed treatment:



Boneseed
Chrysanthemoides monilifera subsp. *monilifera* ASTERACEAE
Origin: South Africa

Description:
A multi-branched shrub up to 3m with upright woody stems.
Flowers: Bright yellow, 5 to 8 petals, 20-30mm diameter, clustered at the end of the branches, appearing in winter and spring.
Leaves: Leathery, prominent mid-vein, on short, thick stalks. Toothed edges, often covered with a white cottony down.
Fruit: Round green berries that ripen to black. Each fruit contains one smooth, hard, bone-coloured seed.

Notes:

- Dense thickets eliminate the growth of indigenous species.
- Fire sensitive but regenerates massively after burning.
- Birds are the main agents for seed dispersal.
- Plants are at least 18 months to 3 years old before flowering, remove younger plants before setting seed.
- Fire stimulates the growth of seedlings.

Similar native species: Juvenile Boneseed can be confused with seedlings of the native Boobialla *Myoporum insulare*. Boneseed seedlings are covered in a white downy hair.

Status: Weed of National Significance, Declared Noxious Weed.

Weedy facts: One plant can produce up to 50,000 seeds per year and the seed can remain viable in the soil for over 10 years. Boneseed was originally introduced to prevent soil erosion in coastal and inland areas.

Weed treatment:



Broom
Cytisus scoparius (English/Scotch), *Genista monspessulana* (Montpellier/Cape), and *Genista linifolia* (Flax-leaf)
Origin: Europe

Description:
A woody shrub to 3m with upright or arching 5-angled stems. Sometimes loses its leaves in winter or dry conditions.
Flowers: Long, golden-yellow pea flowers, sometimes with reddish markings, appear in the leaf axils along the stems from spring to summer.
Leaves: Usually with 3 leaflets, surfaces hairy.
Fruit: A flattened pod, hairy along margins, to 60mm long, maturing to brown-black and containing up to 22 seeds.

Notes:

- Highly invasive species.
- Can fix nitrogen, altering soil fertility and growth of indigenous species.
- Seed is spread by birds, ants, animals, vehicles, machinery and in garden refuse.

Similar native species: English Broom - Narrow-leaf Bitter-pea *Daviesia leptophylla*, Golden Spray *Viminaria juncea*. Cape Broom - Large-leaf Bitter-pea *Pultenaea daphnoides*. Flax-leaf Broom - Common Wedge-pea *Gompholobium huegelii*
Status: Weed of National Significance.

Weedy facts: The seed pods of the English Broom explode, dispersing their seed up to 4m from the parent plant.

Weed treatment:



Coast Tea-tree
Leptospermum laevigatum MYRTACEAE
Origin: Native to Coastal NSW and Victoria

Description:
A shrub or small tree to 4m high. The bark flakes in thin strips.
Flowers: Large white flowers to 20mm in diameter appear in late winter to early summer.
Leaves: Dull grey-green leaves. Flat, stiff, oval-shaped to 10mm wide with a small point.
Fruit: A deciduous, flat-topped, wrinkled cup-shaped capsule to 8mm across.

Notes:

- Has invaded areas since the 1983 bushfires, forming thickets on dunes and heathlands, and smothering all indigenous vegetation.
- Spread by wind, water, planting and in dumped garden waste.
- Hybridises with Silky Tea-tree to produce another weed.

Similar native species: Silky Tea-tree *Leptospermum myrsinoides* and Prickly Tea-tree *Leptospermum continentale*.
Status: Environmental weed in Colac Otway Shire.

Weedy facts: Coast Tea-tree is a very serious environmental weed when it establishes outside its natural range.

Weed treatment:



Coastal Wattle
Acacia longifolia subsp. *sophorae* FABACEAE
Origin: Coastal eastern Australia

Description:
A spreading shrub or erect tree, to 1.5-10m.
Flowers: Bright yellow, arranged in dense, elongated cylindrical clusters.
Leaves: Short, wide and generally rounded at the tip. 5-12cm long and 5-15mm wide, often thick and leathery. Two to four prominent parallel veins. Younger stems are often reddish-green in colour.
Fruit: Coiled or contorted pods 5-15cm long, cylindrical and leathery.

Notes:

- Colonises coastal sand dunes, headlands and adjacent alluvial flats. Can also extend to coastal heath and sclerophyll forests, and sub-coastal or inland areas that have been disturbed. Commonly hybridises with subsp. *longifolia*, which is also regarded as an environmental weed in coastal south west Victoria.
- Fire stimulates mass germination of soil-stored seed.
- Soil seed-bank persists for many years.

Similar native species: Sallow Wattle *Acacia longifolia* subsp. *longifolia*, which has also become an environmental weed.

Weedy facts: Native to coastal eastern Australia, Coastal Wattle has become a serious environmental weed in coastal areas of south west Victoria.

Status: Environmental weed in Colac Otway Shire.

Weed treatment:



Mirror-Bush
Coprosma repens RUBIACEAE
Origin: New Zealand

Description:
A large shrub or small tree to 5m high.
Flowers: Small creamy-white clusters of flowers are present during summer months.
Leaves: Glossy, deep green, rounded leaves, slightly notched at the tip and almost fleshy, are a familiar characteristic of this plant.
Fruit: Flowers are followed by orange-red berries.

Notes:

- A vigorous, salt-tolerant species that thrives in coastal areas where it has often been planted as a hedge or windbreak.
- Spreads along roadsides and into reserves where it tends to grow in dense clumps, eliminating indigenous species.
- Birds, particularly blackbirds, feed on the berries and spread the seed to new areas.
- In coastal dunes, the species can become almost prostrate and new plants will form where branches touch the ground.

Status: Environmental weed in Colac Otway Shire.

Weed treatment:



Spanish Heath
Erica lusitanica ERICACEAE
Origin: Spain, Portugal and France

Description:
A shrub to 2.5m high with upright or arching stems.
Flowers: Masses of white or pink tubular flowers during winter and early spring.
Leaves: Tightly rolled leaves to 7mm long are crowded in whorls of 3 or 4.
Fruit: Seeds are produced during spring. Each fruit capsule contains up to 100 seeds.

Notes:

- An invasive plant spreading along roadsides and bushland reserves.
- Produces dense cover and prevents growth of indigenous plant species.
- Seeding is prolific and the small seeds are spread by water, wind, graders, slashing equipment and animals.
- Roots readily sucker.

Similar native species: Prickly Broom-heath *Monotoca scoparia*, Common Heath *Epacris impressa* and Peach Heath *Lissanthe strigosa*.

Status: Environmental weed in Colac Otway Shire

Weed treatment:



Sweet Pittosporum
Pittosporum undulatum PITTOSPORACEAE
Origin: East Victoria, New South Wales and Queensland

Description:
Densely foliated evergreen tree or shrub to 14m high.
Flowers: Perfumed creamy-white flowers appearing in clusters in spring.
Leaves: Shiny and oval-shaped with wavy margins and a prominent mid-vein. They are arranged in whorls.
Fruit: Flowers of Sweet Pittosporum are followed by large berries that turn orange when ripe.

Notes:

- Spreads quickly to bushland reserves forming a dense canopy, excluding light to understorey plants.
- High drought tolerance in shade – seedlings establish easily beneath canopy.
- Particularly invasive in damp gullies.
- The sticky seeds are eaten and dispersed to new areas by birds, especially currawongs, silvereyes and blackbirds.

Status: Environmental weed in Colac Otway Shire

Weedy facts: *Pittosporum undulatum* hybridises with indigenous *Banyalla Pittosporum bicolor*, producing a hybrid weed.

Weed treatment:



Pampas Grass
Cortaderia selloana POACEAE
Origin: South America

Description:
Large tussock-forming perennial to 4m high.
Flower/Seed head: Large white feathery flower heads appear on long stalks in autumn. Small seeds are produced in large quantities during winter and spring.
Leaves: Long, narrow, sharp-edged leaves grow from the base.

Notes:

- Commonly planted around dams and in gardens, this species forms dense, impenetrable thickets.
- Accumulated dead plant material increases fire fuel loads especially in residential areas.
- Individual flower heads contain huge numbers of seeds – up to 100,000 seeds per flower head.
- Spreads very easily along roadsides and into native vegetation as the seeds are dispersed freely by the wind for up to 25 kilometres. It also reproduces by underground rhizomes.
- The large root system on established plants can extend to 3.5m deep.
- Pink Pampas Grass *Cortaderia jubata*, is also invasive.
- Large plants may require mechanical removal.

Status: Environmental weed in Colac Otway Shire

Weed treatment:



This brochure identifies the recommended treatment methods for each specific weed as indicated by the icons below. Note that you should always seek professional advice in relation to using chemicals

- Hand Removal/Pulling**
Remove the weed via hand or mechanical means
- Cut Trunk and Stems**
Saw or lop trunk and branches of weed
- Grubbing**
Use a mattock to remove the weed and its roots
- Mulch/Smother**
Place newspaper/cardboard over weeds and then mulch
- Ringbark**
Chip a 2-5cm wide ring around the trunk of the weed
- Slashing**
Mowing or slashing weeds prior to flowering/seeding using a whipper snipper, lawnmower or tractor.
- Foliar Spray**
Apply herbicide to the leaves and stems of the weed
- Cut and Paint**
Cut weed close to ground and immediately paint herbicide on cut surface (within 10-30 seconds)
- Scrape and Paint**
Scrape bark of weed close to ground and paint with systemic herbicide
- Frilling**
Use an axe to cut "frills" in trunk of weed and apply herbicide immediately to the frill
- Solarisation**
Plastic bags or sheets are used to trap heat generated by the sun to kill weeds.

For more information on local weeds and appropriate control methods, please visit www.colacotway.vic.gov.au

Emergent Weeds
Emergent weeds are those that have only recently spread to an area. They are often present in such small numbers that eradication is still possible. They should be eliminated as a priority.

Weeds and Fire
Weeds, particularly those with woody stems and branches, can significantly increase bushfire risk by adding to fuel loads and contributing to a fire's intensity. Some possess certain characteristics (e.g. leaf oils, fine foliage, dense growth) that add to their flammability while others, particularly vines and creepers, can also act as 'ladder fuels', carrying fire from the ground up into the canopy or on to a structure.

Most weeds produce huge numbers of seeds throughout their lifetimes, many of which have growth cycles that are stimulated by fire. This can result in a massive weed response in the aftermath of a bushfire.

Weeds that increase fuel loads or contribute to a fire's intensity are identified in this brochure by a fire icon.

Local Advice
Landcare Networks have expertise in weed identification and management, and are available to provide advice and sometimes source financial assistance for their members. For information on your local Landcare Network, visit the Corangamite Catchment Management Authority website: <http://www.ccma.vic.gov.au/What-we-do/Community/Landcare.aspx>

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