

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.
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

Weed treatment:



Hemlock

Conium maculatum APIACEAE
Origin: Europe, Asia and northern Africa

Description:

An erect biennial plant to 3m, but often less than 2m.
Flowers: White to greenish-white, 2-4mm diameter, 5 petals, occurring in dense umbrella-like clusters at the ends of stems.
Leaves: Fern or carrot-like, 12-15cm long but up to 50cm. Hairless, alternate, emitting a strong acrid odour when crushed. Stems are hollow with purple blotches and fine longitudinal grooves.
Fruit: Small, greyish-brown capsule. Green when immature.

Notes:

- Prefers damp areas; invades native habitat including waterways, wetlands, marshes, floodplains, gullies, forest margins and roadsides.
- Spread by water, wind, machinery, vehicles and dumped garden waste.

Status: Declared Noxious Weed

Weedy facts: Hemlock is highly toxic to humans and livestock.

Weed treatment:



Montbretia

Crocosmia 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 *Helichrysum leucopsideum*. Blunt Everlasting *Argentipallium obtusifolium*. Leaves can look like that of native Fireweeds (*Senecio* spp.)

Status: Declared Noxious Weed

Weed treatment:

Ragwort

Senecio jacobaea ASTERACEAE
Origin: Europe

Description:

An erect biennial or short-lived perennial herb up to 1m tall.
Flowers: Bright yellow flower-heads usually appear in large clusters at the end of branches in late spring and summer.
Leaves: The young plant develops as a rosette of leaves. Stem leaves are deeply cut and wrinkled, dark to mid-green on upper surface, lighter and slightly downy underneath.
Fruit: Pale brown with a tuft of slender white hairs.

Notes:

- A pasture weed capable of invading roadsides, disturbed sites and bushland reserves.
- A prolific seeder – the seed can remain viable in the ground for many years.
- Seed is spread by wind and water, and also by animals and vehicles.
- Reproduces from crowns, roots and seeds.
- Is poisonous to most types of livestock.

Similar native species: Similar to many indigenous Senecio species, such as Fireweed *Senecio linearifolius*.

Status: Declared Noxious Weed

Weedy facts: One large plant can produce over 250,000 seeds per year.

Weed treatment:

About this brochure

This brochure identifies the 20 most significant weeds for the foothills and ranges 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.



St John's Wort

Hypericum perforatum CLUSIACEAE
Origin: Europe

Description:

A perennial herb to 80cm, with two-ridged stems. Forms tangled thickets.
Flowers: Golden-yellow with black dots (glands) on edges of petals, 2cm diameter, occurring in numerous terminal clusters.
Leaves: Oval to linear, hairless, upper margin curled, paler underside, black dotted, with translucent oil glands. Occurring in opposite pairs 5-30mm long and 1.5-5mm wide.
Fruit: Sticky, narrowly ovoid, reddish-brown capsule to 8mm long.

Notes:

- Potential to out-compete natives and restrict overstorey recruitment.
- Spreads by seed, rhizomes, and movement of cut sections of rhizomes.

Similar native species: Two native *Hypericum* species. Distinguished by stems with four ridges, smaller leaves, and no black dots on flowers.

Status: Declared Noxious Weed

Weedy Facts: One St John's Wort plant can produce thousands of seeds, which can remain dormant in the soil for 20 years.

Weed treatment:



Wild Watsonia

Watsonia meriana 'Bulbillifera' IRIDACEAE
Origin: South Africa

Description:

A perennial, summer-dormant herb to 1m high with large underground corms and small stem bulbils.
Flowers: Salmon pink to orange-red trumpet-shaped, curved flowers to 70mm long appear in summer in flower spikes. The flower stalk is unbranched and bears 10-15 flowers.
Leaves: Basal leaves are sword-shaped and grow 500-800mm in length. They are rigid and strap-like. Stem leaves are much smaller and sheath-like.
Fruit: Seed capsules are rarely produced, but bulbils 6-7mm in diameter are produced in clusters on the lower part of the spike.

Notes:

- A very serious environmental weed capable of spreading rapidly by bulbils - particularly along roadsides and drainage lines.
- 1-3 new corms are formed above and beside the old corm each year.

Status: Declared Noxious Weed

Weed treatment:



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 three's 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.

Weed treatment:

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.

Weed treatment:

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

Weed treatment:

Significant Weeds

Colac Otway SHIRE

Foothills and Ranges

Climbers and Creepers



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

Weed treatment:


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

Weed treatment:



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.

Weed treatment:

Trees & Shrubs



Sweet Briar (Briar Rose)

Rosa rubiginosa ROSACEAE
Origin: Europe

Description:
A spiny perennial shrub to 3m high arising from shallow rootstock. Has multiple stems with backward facing spines along their length.
Flowers: Vary from white to pink with five petals. Flowers measure to 40mm. Appear in late spring to summer.
Leaves: Consist of pairs of shortly-stalked, oval leaflets along the leaf stalk with a single terminal leaflet. The leaflets contain glandular hairs on the underside and finely-serrated margins that secrete an apple-like fragrance.
Fruit: Smooth reddish-orange elliptical capsules or hips in which the seed is contained mature in late summer and are shed in autumn. Seeds are numerous.

Notes:
- Sweet Briar has the potential to invade native bushland.
- Dense infestations provide food and harbour for pest animals, such as rabbits and foxes.
- Seeds are spread by fruit-eating animals and birds, and also by water. Regenerates by re-suckering from roots.

Status: Declared Noxious Weed.

Weed treatment:



Gorse

Ulex europaeus FABACEAE
Origin: Europe

Description:
A large shrub to 3m, easily recognised by its flowers and its many-branched stems armed with numerous spines to 50mm long.
Flowers: Bright yellow, fragrant pea flowers appear in clusters in winter and early spring.
Leaves: True leaves on seedlings have 3 leaflets, replaced by scales on mature plants.
Fruit: Flowers are followed by dark brown, oblong, hairy seed pods, 10-20mm long. Pods explode to release seeds.

Notes:
- Gorse forms dense thickets that harbour vermin and exclude growth of indigenous plants.
- Seeding is prolific and the seeds have a hard, water-resistant coating.
- Seeds remain dormant in the soil for up to 30 years.
- Seeds are dispersed by birds, animals, ants, water, vehicles, machinery, gravel, dumped garden waste and contaminated soil.

Similar native species: Prickly Acacia *Acacia paradoxa.*

Status: Weed of National Significance, Declared Noxious Weed.

Weedy facts: Gorse is regarded as one of the worst weeds in Australia because of its potential for spread, and economic and environmental impacts. It is a major agricultural weed in Tasmania and parts of Victoria and is becoming an environmental threat in national parks and other bushland areas.

Weed treatment:

Treatment methods

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.

Trees & Shrubs



Flax-leaf Broom

Genista linifolia FABACEAE
Origin: Europe

Description:
Woody shrub to 3m forming dense stands. The ribbed stems are green and softly haired when young becoming greyish-brown and woody with age.
Flowers: Yellow pea flowers in tight clusters at the end of the branches in late winter to spring.
Leaves: The leaves are formed in 3 narrow leaflets that are dark green above, and silvery grey-green and hairy below. Margins are rolled under.
Fruit: Bears seeds in downy pods. Seeds mature in late spring-early summer and the pods become grey-black.

Notes:
- Highly invasive, can become dominant in disturbed or degraded areas.
- Prolific seeder forming large seed banks remaining in the ground for at least 10 years.
- Seed is dispersed by wind and animals.

Status: Weed of National Significance, Declared Noxious Weed.

Similar native species: Common Wedge-pea *Gompholobium huegelii*

Weedy facts: Reproduces by seed with pods exploding to disperse up to 3m from the parent plant.

Weed treatment:



English Broom (Scotch Broom)

Cytisus scoparius FABACEAE
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: Golden Spray *Viminaria juncea.*
Narrow-leaf Bitter-pea *Daviesia leptophylla*

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:


Cape Broom (Montpellier Broom)

Genista monspessulana FABACEAE
Origin: Europe

Description:
Forms dense stands of shrubs to 3m high. Stems are ribbed and covered with short hairs.
Flowers: Yellow pea-like flowers at the end of the branches in late winter to spring.
Leaves: The leaves are formed in 3 leaflets that are broadly oval. Upper surface is mid to dark green - underside is lighter.
Fruit: Brown or black flat narrow pods that are densely covered with hairs.

Notes:
- Similar to Flax-leaf Broom but with broader, flat-margined leaflets and leaves on short stalks.
- Often found on roadsides, disturbed areas and following fire.
- Can be a harbour for rabbits and other vermin.
- Is a prolific seeder, forming large seed banks that will remain in the ground for many years.

Status: Weed of National Significance, Declared Noxious Weed.

Similar native species: Large-leaf Bitter-pea *Pultenaea daphnoides*

Weedy facts: Cape Broom is the most widespread of several species of Broom that have invaded southern Australia.

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 foliaged 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:

Further information

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

Acknowledgements

The Colac Otway Shire would like to acknowledge the Surf Coast Shire for their generosity in sharing resources and publication designs, and those people who provided input to the Surf Coast Shire weed publications.
Photographs supplied by:
Margaret MacDonald;
Victorian Resources Online photos by Mark Imhof (www.dpi.vic.gov.au/vro);
Kevin Walsh;
Steve Smithyman.
Michael Moerkerk
Gary Summers
Yarra Ranges Shire Council

Gillian Brew for graphic design.

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Released November 2015.