

African Boxthorn

Lvcium ferocissimum SOLANACEAE Origin: South Africa

Description:

A large multi-branched shrub to 4m high with brown to grey stems with fleshy leaves and spines. Flowers: White or pale lilac flowers, often with darker purple blotches in the centre, appearing mainly in spring and summer. Leaves: Oval-shaped, smooth, fleshy, short-stalked leaves forming in clusters along the branches Fruit: Green berries turn orange-red, mainly in the summer.

Notes

- Boxthorn is an aggressive plant, its spines making it a formidable barrier to people.
- Thickets often provide good habitat for both pest and indigenous animals. Commonly harbours rabbits.
- Grows densely, eliminating the growth of indigenous vegetatior
- The fruit is commonly eaten and spread by birds and also

Similar native species: Sweet Bursaria Bursaria spinosa.

Status: Weed of National Significance, Regionally Controlled

Weedy facts: Was used widely as a hedge plant in Australia. Weed treatment







Blackberry

Rubus fruticosus spp. aggregrate ROSACEAE Origin: Europe

Description:

A sprawling shrub or climbing plant growing in thickets from 2 to 3m high with stems arching and entangling, and covered in large, sharp prickles

Flowers: White or pink flowers, 20-30mm in diameter, appear in late spring or summe

Leaves: The large dark green leaves are alternate and divided into 3 or 5 leaflets, often with whitish hairs on the light green underside. There are short prickles on the leaf stalks and the underside of veins

Fruit: Globe-shaped, 10-30mm diameter. Ripening in summer to autumn.

Notes:

- Blackberries are highly invasive plants, reproducing by seed and root suckers, and from trailing stems that take root and make new plants
- Forms dense, impenetrable thickets that exclude light from the soil surface, suppressing growth of indigenous species. · Fruit is attractive to birds and foxes which play a major role in
- dispersior Similar native species: Small-leaf Bramble Rubus parvifolius.

Status: Weed of National Significance, Regionally Controlled Weed





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 springearly 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, Regionally Controlled

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





Gorse

Origin: Europe **Description:** winter and early spring

Notes:

- coating



Trees & Shrubs



Peppercorn Tree

Schinus molle ANACARDIACEAE Origin: South America

Description:

Broad-crowned evergreen tree to about 12m high with hanging branchlets

Flowers: Small, greenish-white, male and female flowers on separate plants in hanging clusters throughout the year Leaves: Fern-like leaves are divided into 15-41 alternatelyarranged, shiny, narrow leaflets that are sticky and aromatic when crushed.

Fruit: Shiny round pink fruit to 7mm in diameter with a crusty skin developing on the female plants.

Notes:

- Peppercorn trees have been planted along roadsides where they have spread into disturbed or degraded areas. Capable of invading grasslands, woodlands, dry forests and
- agricultural land. Mature trees cover large areas of ground with seed often
- covering the ground beneath them.
- Seed is dispersed by birds, animals and water.

Status: Environmental weed in Surf Coast Shire.

Weedy facts: Mature trees are resistant to drought and are able to sprout from the rootstock if damaged

Weed treatment:





Sweet Briar

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: Environmental weed in Surf Coast Shire.





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

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.

Weed treatment:

 The sticky seeds are eaten and dispersed to new areas by birds, especially currawongs, silvereyes and blackbirds. Status: Environmental weed in Surf Coast Shire.

Banyalla Pittosporum bicolor, producing a hybrid weed.

Weedy facts: Pittosporum undulatum hybridises with indigenous



Ulex europaeus FABACEAE

A large shrub to 3m, easily recognised by its flowers and its manybranched stems armed with numerous spines to 50mm long. Flowers: Bright yellow, fragrant pea flowers appear in clusters in

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.

 Gorse forms dense thickets that harbour vermin and exclude growth of indigenous plants.

• Seeding is prolific and the seeds have a hard, water-resistant

• 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, Regionally Controlled 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.





Honey-myrtle - Giant

Melaleuca armillaris MYRTACEAE Origin: Native to eastern NSW and Gippsland

Description:

A large spreading shrub or tree to 6m high with firm, rough bark. Flowers: Creamish yellow bottlebrush-like flower heads in a dense spike, about 30-70mm long and 20-30mm wide, appear in spring and summer

Leaves: Slender with re-curved pointed tips. Fruit: Capsules are 3-5mm wide - pointed to wavy on the capsule rim. They have quite a wide opening.

Notes:

• A very serious environmental weed as it is fast growing and quick to invade coastal heathlands, reserves and other areas.

- Seedlings are often seen growing along roadsides.
- Seed is dispersed by wind and water

Similar native species: Giant Honey-myrtle can be confused with Moonah Melaleuca lanceolata an important indigenous plant. Flower spikes of this species are smaller, 20-40mm long and 15mm wide and capsules are urn-shaped with a constricted opening.

Status: Environmental weed in Surf Coast Shire.



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:

- One of the Surf Coast Shire's most devastating environmental weeds
- 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 Surf Coast Shire.





About this brochure

This brochure identifies the top 20 weeds for the Surf Coast townships of Moriac, Freshwater Creek, Winchelsea and Barrabool Hills. Weeds are a threat to our natural environment. 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.

As a Surf Coast resident, you also have a key role to play, starting with the plants you choose for your garden and working to remove - or at least manage - any weeds that have taken root there. This brochure aims to help you fulfil this role by describing the 20 most common weeds in your area and identifying appropriate treatment methods for each

For more information about each treatment method, refer to the information sheet Treating Weeds in Your Surf Coast Garden: Your guide to chemical and non-chemical methods. A companion booklet, Weeds of the Surf Coast Shire, provides a more comprehensive guide to local weeds. Go to http://www.surfcoast.vic.gov.au to access these publications.

The weed threat and you

Each of the weeds described in this brochure represents either an existing or potential threat to the Surf Coast's environmental values. For example

- Agapanthus, Arum Lily, Gazania and Freesia are renowned for escaping from local gardens and quickly taking over natural areas, much to the detriment of our native flora and fauna.
- Sallow Wattle and Coast Tea-tree are highly flammable, which substantially increases fuel loads around homes and surrounding areas, adding to the bushfire risk.
- Sweet Pittosporum and Bluebell Creeper attract birds which disperse their seeds into reserves and bushland. The ensuing plants can out-compete local plant species, causing their extinction and reducing wildlife habitat.
- Serrated Tussock and Chilean Needle-grass can quickly invade agricultural areas and threaten their productive capacity.

You can help by:

- · Choosing your garden plants wisely and selecting local indigenous plants where possible. 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.
- Familiarising yourself with your fire risk and removing those woody weed species which increase the fuel load and fire intensity around your home. (Refer to Landscaping your Surf Coast Garden for Bushfire, which is available at www.surfcoast.vic.gov.au).
- 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.



Top 20 Weeds

Moriac, Freshwater Creek, chelsea, Barrabool Hills



See also Weeds of the Surf Coast Shire which is available online at www.surfcoast.vic.gov.au



Willows Salix sp. SALICACEAE Origin: Northern Hemisphere

Description:

Notes:

C

- Deciduous trees, usually growing along waterways, varying in height from 5-30m with either single or multiple trunks.
- There are many different species.
- Flowers: Catkins, often fragrant, flowering in late winter and
- spring. Male and female flowers on separate trees.
- Leaves: Variable in colour and shape, deciduous. Fruit: Seed is viable for only a few days - falls in late spring.
- Increases erosion and flooding and damage to nearby infrastructure.
- Reduces quality and flow of water.
- Reduces habitat available for fish, birds, insects and spiders. • Most willows are easily spread by stems and twigs breaking off and taking root.
- Some varieties of willow can also spread by seed that can be carried up to 100km by wind or water.
- Status: Weed of National Significance.
- Weedy facts: Although a familiar icon of the Australian landscape, Willows Salix sp. are now among the most serious riverbank and wetland weeds in temperate Australia.







Herbs & Succulents



Agapanthus (African Lily)

Agapanthus praecox ssp. 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 Surf Coast Shire.

Herbs & Succulents

Weed treatment:



Spear Thistle

Description:

on the margins.

Weed treatment:

Status: Restricted Weed.

its stems

Cirsium vulgare ASTERACEAE

by greenish, spine-tipped bracts.

Origin: Europe, Asia and North Africa

An annual or biennial herb to about 1.5m with spiny wings on

Flowers: 20-50mm across, reddish to purple, solitary or in

groups of 2 or 3 at the ends of branches. They are surrounded

leaves to 250mm long have many small prickles on the upper

surface. Older leaves are deeply lobed and armed with spines

Leaves: Rosette leaves are stalked and up to 350mm long. Stem



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 Surf Coast Shire.



Wild Watsonia

Origin: South Africa

smaller and sheath-like.

Notes:

lines.

each year.

Weed treatment:

Status: Regionally Controlled Weed.

Description:

Watsonia meriana 'Bulbillifera' IRIDACEAE

flower stalk is unbranched and bears 10-15 flowers.

underground corms and small stem bulbils.

A perennial, summer-dormant herb to 1m high with large

Flowers: Salmon pink to orange-red trumpet-shaped, curved

flowers to 70mm long appear in summer in flower spikes. The

Leaves: Basal leaves are sword-shaped and grow 500-800mm

A very serious environmental weed capable of spreading

• 1-3 new corms are formed above and beside the old corm

rapidly by bulbils - particularly along roadsides and drainage



Cape Tulip (One-Leaf)

Moraea flaccida IRIDACEAE Origin: South Africa

Description:

A perennial herb to 700mm high with stiff, erect stems that zigzag as they branch. Grows from underground corms, and produces new corms each year.

Flowers: Salmon-pink to orange flowers with yellow centres are at the tips of the flowering stems. Flowers in spring. Leaves: Folded, ribbed, linear, to 1m long extended and drooping above the flowers. Fruit: Narrow, cylindrical capsule to 50mm long, splitting into

three parts to release numerous seeds.

Notes:

- All parts of Cape Tulip are toxic to humans as well as animals including cattle, sheep and goats.
- · Cape Tulips are primarily associated with agricultural lands, but are also invasive on roadsides, native grasslands, woodlands and heathlands. Numbers can expand rapidly following disturbance.
- Severely impedes the growth and regeneration of indigenous ground flora.
- · Seeds germinate in autumn and plants regrow from corms at the same time
- · Plants are spread by seed and movement of corms.

Status: Regionally Controlled Weed.

Weed treatment:



Grasses



Chilean Needle-grass

Nassella neesiana POACEAE Origin: South America

Description:

A tussock-forming perennial grass, up to 1.2m high. Flower/Seed head: Loose, open, drooping panicle at the end of the flowering stems. The bracts holding the flowers are purple, giving the whole plant a distinctive purplish colour. Flowers and sets seed during spring and early summer. Seeds: pale brown and sharply pointed. Between the seed and its tail (awn) there is a characteristic raised ring (corona) 1-1.5mm long with small teeth encircling the awn. Cleistogenes (hidden seeds) are also produced at the stem nodes (elbows) and base of the plant beneath the leaf sheath. Leaves: Narrow, coarse leaves 5mm wide and 300mm long, with tinct ribs running from base to tip and slightly serrated edges At the base of each leaf is a 3mm long smooth membranous ligule with two small tufts of erect hairs.

• As a vigorous competitor, it is a major threat to both conservation and agricultural lands.

• Capable of producing up to 22,000 seeds per square metre with

- The "needle-sharp" seeds can cause physical harm to both animals and humans.
- easily spread by wind, machinery, vehicles, animals, clothing and
- The stem seeds enable the plant to reproduce even if flowering is

Similar native species: Similar to several native Australian Spear grasses Austrostipa sp. The seeds of native Austrostipa sp. appear

Status: Weed of National Significance, Restricted Weed.

Weedy facts: Thought to have entered Australia from South America as a contaminant of wool or fodder. Trials have shown that Chilean Needle-grass can out-compete Serrated Tussock.





Description:

- 3.5m deep.

Weed treatment:



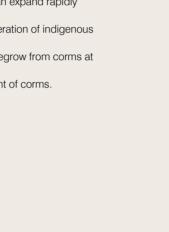
in length. They are rigid and strap-like. Stem leaves are much Notes: Fruit: Seed capsules are rarely produced, but bulbils 6-7mm in diameter are produced in clusters on the lower part of the spike.

- a long-lived seed bank.
- Seeds with their long corkscrew-like awns and sharp tip are
- footwear.
- prevented by slashing or grazing.

similar except that they don't have the corona.









- Notes:



Galenia

Galenia pubescens AIZOACEAE Origin: South Africa

Description:

Notes:

A perennial greyish mat-forming plant, up to 300 mm high and spreading 1.6m or more across, with thick, woody stems. Flowers: Small white or pink inconspicuous fragrant flowers appear from spring to summer. They are hairy on the outside. Leaves: Semi-succulent, oval to spoon-shaped, hairy and flat with a slightly re-curved tip.

Fruit: Pentagonal cup-shaped capsules contain shiny black seeds to 1mm in length.

· Galenia or Blanket Leaf is often found on disturbed sites, wasteland and roadsides

• Forms dense mats of foliage and stems displacing native grasses and other understorey species.

· Disrupts light and prevents moisture getting to other species, and forms a monoculture.

Similar native species: Nodding Saltbush Einadia nutans.

Status: Environmental weed in Surf Coast Shire.

Weedy facts: Said to threaten the honey industry as bees utilise it but the honey becomes tainted.





Paterson's Curse

Echium plantagineum BORAGINACEAE Origin: Europe

Description:

An erect, many-branched, hairy annual herb usually to 1.2m

Flowers: Purple to bluish trumpet-shaped to 30mm long, with two of its five stamens much longer than the others. Flowers are crowded along one side of a curved flower spike.

Leaves: Initially has rosette leaves to 300mm long, hairy and broadly oval. Stem leaves are smaller and also hairy. Fruit: Capsule is in segments of four, black to greyish-brown and wrinkled

Notes:

- A major agricultural weed, also occurring in various natural habitats including grasslands, woodlands, heathlands and along roadsides
- · Poisonous to grazing animals and horses in particular.
- Can form very extensive, persistent populations in disturbed
- areas. A single plant produces over 10,000 seeds.
- · Seed is dispersed by animals, water, machinery, contaminated agricultural produce and by movement of soil.
- Similar native species: Austral Bugle Ajuga australis.

Status: Regionally Controlled Weed.

Weedy Facts: Also known as 'Salvation Jane' in South Australia. It is considered a resource for bee-keepers.



Types of weeds

Weeds generally fall into one or more of the following three broad categories

- Weeds of National Significance
- Declared Noxious Weeds (State Prohibited; Regionally Prohibited; Regionally Controlled; Restricted Weed)
- Environmental Weeds

weed treatment methods

This brochure identifies the recommended treatment methods for each specific weed as indicated by the icons below. More information about each method is contained in Treating Weeds in Your Surf Coast Garden: Your guide to chemical and non-chemical methods. 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



Use a mattock to remove the weed and its roots

Grubbina

Mulch/Smother

Place newspaper/cardboard over weeds and then mulch



Ringbark

Chip a 2-5cm wide ring around the trunk of the weed



Foliar Spray Apply herbicide to the leaves 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



Use an axe to cut "frills" in trunk of weed and apply herbicide immediately to the frill

Weeds and fire

Weeds, particularly those with woody stems and branches, can significantly increase bushfire risk by adding to fuel loads around your home 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.



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Gillian Brew for graphic design.

Disclaimer

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Cortaderia selloana POACEAE Origin: South America

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.

 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 • Pink Pampas Grass Cortaderia jubata, is also invasive.

• Large plants may require mechanical removal. Status: Environmental weed in Surf Coast Shire.



Notes: A major agricultural weed in the region that has also invaded native grasslands, pastures, grassy woodlands, roadsides and riparian areas. Large, vigorous plants can produce 100,000 seeds annually. Seed remains viable in the soil for 10-15 years.

the fingers from the tip to the base.

Serrated Tussock

Origin: South America

Description:

Nassella trichotoma POACEAE

The awn is attached off-centre to the seed.

• Seeds are easily spread by wind, machinery and vehicles, and by slashing, and also by adhering to animals, clothing and footwear.

A fine-leafed perennial tussock-forming grass to about 600mm high.

long and at each junction there are two or three branches with a

single seed on each branch. It has a weeping appearance when it

full flower and changes in colour as it matures from purple through

to gold. Spring flowering. Seed: Hard and small with a ring of white

hairs at one end and a twisted tail (awn) 25mm long at the other end.

Leaves: Blades are thin, up to 500mm in length, and tightly-rolled

with small serrations which can be felt when running the leaf between

Flower/Seed head: The multi-branched seed head is up to 350mm

 Ripe seed heads break off and disperse on winds for several kilometres

Similar native species: Can be mistaken for native Tussock Grasses Poa sp., and Wallaby Grasses Austrodanthonia sp.

Status: Weed of National Significance, Regionally Controlled Weed.

