

Ground Covers

These herbaceous, slightly woody or strap like plants may seem insignificant in reserves and bushland areas, but they displace native ground covers and thus reduce the biodiversity of natural areas, which alters the whole ecology of that community.

Many of these plants are still found for sale in nurseries and local markets. Like all categories of plants in this booklet, active management is a key issue which includes regular pruning to maintain plant health and vigour and the constant removal of spent flowers to prevent seed set.

In some ecological communities, lawn grasses such as Kikuyu, Buffalo Grass and Paspalum can be damaging and problematic e.g. Themeda grass headlands, Coastal saltmarsh (see grass weeds section)

The main weed species are featured on their own pages but below is a list of:-

Other Problematic Ground Covers

Common Name	Botanical Name
Canadian Goldenrod	<i>Solidago canadensis</i>
Coastal Spurge	<i>Euphorbia paralias</i>
Coreopsis	<i>Coreopsis lanceolata</i>
Creeping Lantana	<i>Lantana montevidensis</i> (Noxious - WoNS)
Crucifix Orchid	<i>Epidendrum radicans</i>
Evening Primrose	<i>Oenothera biennis</i>
Fireweed	<i>Senecio madagascariensis</i>
Ginger Lilies	<i>Hedychium gardnerianum/H. coronarium</i>
Japanese knotweed	<i>Persicaria capitata</i>
Obedient Plant	<i>Physostegia virginiana</i>
Opium Poppy	<i>Papaver somniferum</i>
Painted Spurge	<i>Euphorbia cyathophora</i>
Pennywort	<i>Hydrocotyle bonariensis</i>
Polka Dot Plant	<i>Hypoestes phyllostachya</i>

Blue Perrywinkle

Vinca major

Garden escapee. Mats of this species smother other ground vegetation and prevent growth of shrubs and trees. Grows best in fertile soil and well in shade.

Family: Apocynaceae

Origin: Central and southern Europe and northern Africa

Habit: Spreading perennial herb to 50cm high with stems that root at nodes and sometimes at tips Lacks milky latex that is common with its family.

Leaves: Opposite, ovate, 1.5-9cm long, 1.5-4.5cm wide, glossy green above, paler below; on leaf stalk 0.5-1.5cm long

Flowers: Violet-blue to mauve, 3-6cm wide, tubular with 5 spreading lobes 1.3-2.5cm long, stamens attached to inside of tube and within tube. Flowers mostly late Winter to late Summer.

Fruit: Produced in pairs joined at the base, membranous, cylindrical 3.5-5cm long, about 0.4cm wide. Seeds flat, hairless, 7-8mm long, 1-10 per fruit.

Roots: Fibrous. Stems root at nodes and sometimes at tips.

Dispersal: Seed is apparently rarely produced in Australia. Mainly spread by humans via garden refuse dumping.

Control: Hand Dig, bagging all plant parts and removing from site. Foliar spray.



Blue Stars

Aristea ecklonii

Naturalising in disturbed woodland. Taking up space where natives should be providing food and habitat for creatures.

- Family: Iridaceae
- Origin: Forest margins in western and southern Africa
- Habit: Perennial herb resembling a clump of grass.
- Leaves: Up to 60cm linear and leathery, red at the base.
- Flowers: Bright blue flowers in a loose panicle on a taller stem close early afternoon.
- Fruit: Pods 2cm long, three-sided, contain numerous small seeds.
- Roots: Aggressive root system of rhizomes developing into tubers, corms.
- Dispersal: Seeds spread by water.
- Control: Best removed by hand. If in abundance possible to spray.



Photo: Warringah Council

Butterfly Flower

Gaura lindheimeri

Gaura parviflora

Family: Onagraceae

Origin: USA and Mexico border region

Habit: Sprawling perennial herb, 0.6-1.2m high with a 0.6-0.9m spread.

Leaves: The leaves are simple, narrow, irregular and spoon shaped, 2.5-7.6cm long, with toothed margins. Often blotched red.

Flowers: Small, butterfly-like blooms adorn long willowy stems. Blooms are white when they open at dawn, fading to rose-pink by the end of the day and are produced for a very long period. Other varieties produce flowers of pinks and crimson. Spring-Autumn.

Fruit: Small 4 sided elongated capsule persisting after the flowers containing numerous tiny seeds.

Roots: Fibrous root system tolerant of a wide range of soil types from sand to clay.

Dispersal: Seed and vegetation spread by water, humans, contaminated soil (earthmoving/slashing equipment, car tyres etc) and garden refuse dumping.

Control: Hand pull/dig, Foliar spray.

A very popular cottage perennial. At the time of printing this booklet it is an offence to sell, propagate or knowingly distribute the plant without a permit.

A recent addition to the noxious weeds list in NSW. The ban on *Gaura* has been challenged by members of the nursery industry who are working on the development of safer sterile hybrids. Regardless of the decision these plants need to be actively managed.



Gazania

Gazania spp.

Gazania spp. have become naturalised on coastal dunes, parks and along roadsides from sthn Sydney to the Mid North Coast, the Eyre Peninsula and Mt Lofty region of Sth Australia and in the Moreton region of S.E. Queensland.

Family: Asteraceae

Origin: Mainly South Africa

Habit: Clumping, low-growing perennial herb to 15cm high. that withstands salt-laden winds and grows well in sandy soils

Leaves: Elliptic to narrow-oblongate, irregularly pinnatisect, dark green above white hairy underneath.

Flowers: Brightly coloured long stemmed daisy-like flowers to 8cm wide, in red, bronze, yellow and orange tones. Spring to Autumn.

Fruit: Achenes. 4mm long; pappus scales lanceolate 2-3mm long, with hairs covering achene.

Roots: Fibrous root system tolerant of a wide range of soil types from sand to clay preferring dryer to free draining conditions.

Dispersal: Abundance of seed spread by wind. Seed and vegetation spread by garden refuse dumping, contaminated soil (earthmoving/mowing equipment, car tyres etc).

Control: Hand pull/dig, Foliar spray.



Impatiens/Busy Lizzy

Impatiens walleriana vars.

Readily sold at most nurseries and local markets, these colourful plants spread easily by seed and fragments. Commonly found along drains and water courses.

Family: Balsaminaceae

Origin: Africa

Habit: Bushy, succulent-stemmed tender perennial that grows in a spreading mound 15-60cm tall depending on variety. Shade tolerant, favouring moist conditions.

Leaves: Ovate to elliptic leaves light to dark green, sometimes with a bronze-red cast and serrated edges. The opposite leaves are arranged spirally around a thick, green or brownish, brittle stem. Fragments of stem re-root readily.

Flowers: Large (to 5cm across), fleshy, with 5 petals. Pink, rose, red, lilac, purple, orange, white & bicolors. Spring-Autumn.

Fruit: Explosive capsules contain hundreds of small, viable seeds, which are expelled some distance when ripe.

Roots: Fibrous root system tolerant of a wide range of soil types from sand to clay.

Dispersal: Seed and vegetation is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping.

Control: Hand pull/dig, bagging all plant parts and removing from site. Foliar spray.



Lippia

Phyla canescens

Introduced as a lawn species and once used to stabilise soil on banks of irrigation canals and around weirs. Overruns native vegetation, and is capable of suppressing the growth of neighbouring plants.

Family: Verbenaceae

Origin: Americas from California to Argentina and Chile

Habit: Hardy, mat forming, perennial herb with stems that root at nodes.

Leaves: Ovate, with blunt short teeth; 0.5-3cm long, 2-10mm wide, without hairs or with short dense hairs; leaf stalk absent or short.

Flowers: Inflorescence a dense short cylindrical to globe-shaped spike of tubular flowers, on a stalk which is 1-6.5cm long and usually much longer than leaves at the stalk base; petals usually lilac or pink. Flower tubes 2-3mm long. Spring to late autumn.

Fruit: Ellipsoid to globose, 1.5-2mm long.

Roots: Dense and mat forming.

Dispersal: Seed and fragments spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping.

Control: Foliar spray, pasture improvement techniques.



Spiny Headed/Slender Mat Rush/River Reed

Lomandra hystrix

Family: Lomandraceae
Origin: Riverine
sub tropical
Australia

Still mistaken for local native *L.longifolia* and planted in bushland restoration sites. High potential to hybridise with local species leading to loss of vigour and genetic integrity. Damages ecosystems where it doesn't belong.

Habit: Tufted hardy plant with dark green, strappy leaves to 1.3m.

Leaves: Leaf tips pointed with 2-4 tiny side teeth lower down.

Flowers: Clusters of fluffy yellow green or cream scented flower spikes as tall as leaf blades.

Fruit: Clusters of fluffy yellow lemon scented flower spikes on female plants mainly in spring. Primary branches of the flower spikes are in fours.

Roots: Fibrous root system

Dispersal: Widely used in large scale revegetation projects along roadsides and watercourses. Seedlings spread readily into neighbouring bushland.

Control: Remove flower heads before seed set. Remove plants.



Nasturtium

Tropaeolum majus

Readily sold at nurseries and local markets, these colourful plants spread easily by seed and fragments. Active management in gardens is required to minimise the spread.

Family: Tropaeolaceae

Origin: South America

Habit: Quick growing, soft sprawling succulent annual herb.
Tolerates a wide range of soil conditions but prefers full sun.

Leaves: Broad circular leaves are arranged spirally around stem supported by long stalks joined at the centre of the leaf.
Leaves and stems are soft and fleshy.

Flowers: Large five-petalled funnel-formed flowers in shades of yellow red and orange. Spring – Autumn

Fruit: Green and succulent, 10mm long.

Roots: Fibrous and succulent.

Dispersal: Seed and vegetation is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping.

Control: Hand pull/dig bagging all plant parts and removing from site, Foliar spray.



Seaside Daisy

Erigeron karvinskianus

Highly tolerant of poor, dry soils and grows in a wide range of conditions.

- Family:** Asteraceae
- Origin:** South Mexico to Venezuela
- Habit:** An aggressive spreading perennial herb to about 50cm high. Grows vigorously smothering low native ground covers. Highly tolerant of poor dry soils and grows in a wide range of conditions. The plant is able to tolerate high salinity and drought.
- Leaves:** Simple, evergreen, elliptical to oval, pubescent on both sides, and reach 32mm long by 13mm wide.
- Flowers:** Small daisy flowers 1-2cm across are borne all year round. Each flower has a yellow centre, a corolla that is 5-lobed with white petals, which become pink and finally purple with age.
- Fruit:** Dandelion-like tufts; 1mm long hard dry seed (achene) attached to a pappus of fine whitish hairs, 2mm long.
- Roots:** Fibrous, shallow; rooting at the nodes.
- Dispersal:** Seed spread by wind, humans and contaminated soil (earth-moving equipment, car tyres etc) and garden refuse dumping. Plants will spread vegetatively by cuttings rooting at the nodes.
- Control:** Hand pull/dig bagging all plant parts and removing from site, Foliar spray.



Singapore Daisy

Sphagneticola trilobata

Introduced as an ornamental. Deliberately planted as a roadside and railway embankment stabiliser in Queensland, now spreading in coastal areas of New South Wales. Also naturalised in Florida, Malaysia and on Pacific Islands.

- Family: Asteraceae
Origin: Mexico to Argentina
Habit: Dense mat-forming perennial herb to 70cm high, with spreading stems to 2m or more long that root at nodes.
Leaves: Simple, dark green above, paler below, 3-11cm long, 2.5-8cm wide, with white hairs and toothed margins, sometimes trilobed.
Flowers: Solitary in leaf axils with yellow disc and ray florets; to 3.5cm wide on stalks 3-14cm long. Flowerheads with 4-14 petals 6-15mm long, inner (disc) florets tubular. Flowers Spring to Autumn.
Fruit: Seeds 4-5mm long, tuberculate and topped with Dandelion-like tufts.
Roots: Fibrous, shallow; rooting at the nodes.
Dispersal: Seed spread by wind, humans and contaminated soil (earth-moving equipment, car tyres etc) and garden refuse dumping. Plants will spread vegetatively by cuttings rooting at the nodes.
Control: Hand pull/dig bagging all plant parts and removing from site, Foliar spray.



Spider Plant/Ribbon Plant

Chlorophytum comosum

A very old fashioned plant the Spider or Ribbon plant is still popular in rockeries or hanging baskets because of its ability to withstand drought conditions.

Family: Anthericaceae

Origin: South Africa

Habit: A tufted grass-like perennial herb, to 60cm high.

Leaves: Linear strap/grass-like leaves to 1cm wide and 60cm long forming a point at the apex, leaves may be solid green, although the variegated form with pale green and white longitudinal stripes is more common.

Flowers: Small white flowers with six petals are borne along outward arching wiry stalks in branching heads for most of the year.

Fruit: Small plantlets are produced at the tips of the flowering branches. When the branches bend over and the plantlets come into contact with the soil they take root. Capsules are formed that contain many seeds.

Roots: Fleshy tuberous roots 5-10cm long form at the base of clumps.

Dispersal: Main method of reproduction is vegetative where by new plantlets take root. Spread by humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping.

Control: Hand pull/dig, bagging all plant parts and removing from site. Foliar spray.



Wandering Jew/Trad

Tradescantia albiflora, *T. zebrina*,
T. spathecea

- Family: Commelinaceae
Origin: South America
Habit: Weak, perennial, creeping succulent herb, rooting from distinct nodes. Grows vigorously, layering and smothering low native ground covers. Shade tolerant and moisture loving.
Leaves: Simple, alternate, ovate leaves that are glossy and dark green, to 6cm long. Slightly fleshy.
Flowers: Small (1-2cm) white flowers, with three petals and six hairy stamens. Spring-Summer.
Fruit: Papery capsule, seed not viable in Australia.
Roots: Stolons form underground, with weak, shallow roots forming at nodes.
Dispersal: Main method of reproduction is vegetative where by stem fragments re-root. Stem fragments spread by water, and contaminated soil (green waste dumping, earth moving etc). Common in watercourses.
Control: Hand pull/dig, bagging all plant parts and removing from site. Foliar spray.

This shade loving, weak rooted herb is often the cause of skin irritations in dogs. Many other forms of *Tradescantia* are well known garden plants including the popular "Moses in the cradle" (*Rhoeo*).

Similar native species: *Commelina cyanea* (pic. bottom R). This native ground cover has hairy leaf sheaths, blue flowers and a strong primary root system.



Wild Iris

Dietes bicolor
Dietes iridioides

Highly tolerant of poor, dry soils and grows in a wide range of conditions.

- Family: Iridaceae
Origin: South Africa
Habit: Perennial rhizomatous clumps of erect sword-shaped leaves. The adult plant is approximately 1m wide and 1m tall.
Leaves: Leathery, sword shaped, strappy leaves 1-2cm wide to 60cm long; arranged in flat fans.
Flowers: Short-lived, iris-like flowers that are either white, yellow and mauve or yellow with brown spots produced Spring-Summer.
Fruit: Green, three-celled capsule containing numerous hard angular seeds 1-2mm in diameter.
Roots: Rhizomatous and fibrous, will re-shoot from any rootstock left in soil.
Dispersal: Seed is spread by water, humans, contaminated soil (earthmoving equipment, car tyres etc) and garden refuse dumping.
Control: Hand pull/dig, Foliar spray.

A recent addition to weed lists in Sydney, these plants need active management in all gardens. This may be as simple as **actively removing spent flower stalks prior to seed set**, or as comprehensive as complete removal from gardens.

