

AN IDENTIFICATION GUIDE TO THE COMMON ENVIRONMENTAL WEEDS ON THE GOLD COAST AND THE NATIVE ALTERNATIVES.

CITY OF GOLDCOAST.

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Disclaimer

Whilst due care has been taken in the creation of this booklet, please note that it does not represent an exhaustive list of all environmental weeds found throughout the Gold Coast region, nor does it cover all possible removal and control techniques available. Recommendations in this book are for private land use only. No works are to be carried out on public land unless authorised by the relevant authority. The authors accept no responsibility for decisions and actions taken as a result of any content in this booklet. **Published June 2019**.

Cover image: Giant Devil's Fig

What's an environmental weed?

Environmental weeds are introduced or undesirable plants that have naturalised and invaded our bushland, beaches and waterways threatening our natural environment. Many environmental weeds were originally introduced and grown as ornamental garden plants. Most environmental weeds are not native to Australia but some native plants have also become environmental weeds after spreading outside their natural range.

While there are many different environmental weeds identified in this booklet not all of them have legislative requirements to control them.

The City recognises the impacts of environmental weeds and will consider managing them in specific situations such as high priority environmental areas and when budget expenditure and outcomes can be justified.

For further information on the management of biosecurity matter including pest plants and animals in the City please refer to the City's biosecurity management plan at cityofgoldcoast.com.au/pestweeds

Why environmental weeds are a problem

Weeds are the second biggest threat to our natural environment after land clearing. Environmental weeds degrade our natural environment by:

- out competing native plant species for available nutrients and light
- taking over and transforming native landscapes, often leading to local plant or animal extinctions and loss of biodiversity
- reducing the availability of food and other resources for many native animals whilst sometimes benefiting pest animals
- increasing the risk of destructive wildfire
- often being toxic to people and animals
- choking waterways and causing erosion
- reducing our access to and enjoyment of waterways, beaches and bushland.

Weeds are usually very hardy plants. They may grow very quickly, reproduce in large amounts and are often tolerant to a wide range of conditions. It is these qualities that make weeds so successful and also make them difficult to control. Weeds commonly thrive where there has been a disturbance to the natural system such as changes in light, nutrients, soil or hydrology. The spread of weeds can be due to animals, wind, water and human activities.

Human activities can encourage the spread of weeds through:

- planting invasive plants in gardens, especially near bushland and waterways
- clearing, mowing or slashing that spreads seeds and plant material from one area to another
- dumping soil and garden rubbish (prunings, lawn clippings, weeds, etc) into bushland
- roads and tracks. Where weed seeds or plant material are carried in on walkers' shoes, dog fur, horses, bikes and vehicle tyres
- lighting inappropriate fires.

The Gold Coast is one of the most biologically diverse cities in Australia. The city's varied wildlife habitats, ranging from mountain rainforest to coastal wetlands, are home to a great diversity of amphibians, birds, mammals, reptiles and fish. This diversity is being seriously threatened by environmental weeds.

What we can do about environmental weeds

The best way to deal with environmental weeds is to control them and prevent their spread.

- Learn to recognise environmental weeds, starting with the ones in this booklet.
- Do not buy or sell environmental weeds.
- Remove environmental weeds from your garden.
- Use local (to the Gold Coast) native plants in your garden.
- Dispose of garden waste responsibly. Never dump garden clippings or aquarium plants in the bush, in waterways or on roadsides.

- Talk to your family and friends about any weeds that may currently be in their gardens.
- Join a bushcare, landcare or beachcare group and help care for your local bushland. Private landholders with bushland may be eligible to obtain free advice on weed management through Council's Conservation Partnerships Program.

Control type	Methods and techniques
Prevention	LegislationQuarantineEducation
Manual	Hand pulling Crowning
Chemical	 Scrape and paint Cut, scrape and paint Foliar spraying – spot spraying and overspray Stem injection frilling/drilling Gouge and paint
Biological	 Introducing predatory insects Introducing specific biological diseases – i.e. fungi, bacteria. (Contact Biosecurity Queensland for more details)

Weed control methods

The appropriate weed control method or combination of methods will depend on a range of factors including:

- the aim of your project
- size and growth habit of plants to be controlled
- surrounding plants, landscape and land use
- scale and density of the weed infestation
- other weed species impacting the site
- seasonal and weather conditions

- habitat considerations and surrounding native vegetation
- safety considerations
- available resources including follow up and maintenance
- level of skill and experience of the people carrying out works.

It is important to note that weeds are usually the first plants to re-establish in an area after initial weed control is carried out. Successful long term weed control requires planning, working methodically, and ensuring follow up control and maintenance is on going.

Manual control methods

Hand removal of weeds

Hand removal of weeds is an option when the infestation is clustered in one small area or scattered throughout native species. Hand removal can be used to prepare an area prior to spot spraying, for example where native seedlings or sensitive plants exist.

A walk through a site prior to spraying and hand weeding around natives can allow better visibility during spray activities, minimising off-target damage.

Hand weeding is suitable for seedlings, herbaceous weeds and some grasses and is best carried out when the soil is moist. Prior to working an area, seeds and fruits of weed species can be bagged and moved off site to prevent further spread.

Note that some weeds such as lantana, umbrella tree, mistflower, ground asparagus and coastal morning glory can re-establish if their roots or growing parts are left in contact with moist soil. These weeds need to be hung up or elevated off the ground to dry out. If you are hand pulling weeds that grow vegetatively from fleshy parts or tubers they need to be carefully removed and disposed of in the garbage. For example succulents, some groundcovers, and madeira vine. Hand removal may not be suitable along banks or areas where erosion could occur.

Crowning method

This method is suitable for weeds that have their growing points at ground level or below the surface such as plants with corms, bulbs, rhizomes, clumped or fibrous root systems. For example *Asparagus sp.* and grasses.

- Cut climbing vines at head height and remove them from native plants carefully before again trimming them near ground level. Leave enough plant intact to perform the next stage.
- 2. Grasp the leaves or stems and hold them tightly and close to the ground so that the base of the plant is visible.
- Insert a knife close to the base of the plant at a slight angle with the tip well under the root system.
- Cut through the roots close to the base. Depending on the size of the plant two or more cuts may be needed to sever all the roots.
- 5. Remove the plant. Make sure that the base of the plant where the roots begin is completely removed.
- Shake off excess soil and hang the rhizome or bulb up off the ground to prevent it from reshooting or remove it totally from site and dispose of it in an appropriate manner. Some grasses can be left on the ground to act as mulch.



Herbicide control methods

The following information describes different weed control techniques using herbicide as well as some general pointers for use in agricultural non-crop situations and environmentally sensitive areas.

When selecting a suitable herbicide control method there are a number of factors to consider including:

- the type of herbicide appropriate for the job
- the recommended rate of herbicide use
- the aim of your weed control program or project
- correct identification of the weed(s) you are targeting
- the growth habit of the weed. This is important in deciding the application technique and product for its control
- the size and density of weeds you are targeting
- the type of application equipment you have access to
- whether the infestation is in an environmentally sensitive area
- · how regularly can you follow up or maintain the area.

When to treat with herbicides

For best results, the following rules generally apply.

- Apply herbicides when the plant is actively growing.
- Do not apply the herbicide when the plant is under stress, for example extreme heat or cold, drought, water logging or diseased.
- Do not spray when wet or windy weather are anticipated, particularly with techniques such as over-spraying.

Cut-scrape and paint method

This method applies to all woody shrubs, trees and some vines that are too small to be injected. Examples include groundsel bush, broad-leaved pepper tree and smaller camphor laurels.

 Cut the plant low (approximately 1–2 centimetres above soil level) and level to the ground so the herbicide does not run off the cut.

- 2. Apply the herbicide immediately, at the recommended rate, with a paintbrush.
- Lightly scrape the sides of the remaining stump with a knife to reveal green tissues and apply the herbicide, to the scraped area.
- Other methods of application include swabbing the cut or immediately spraying the cut and sides with the correct rate of herbicide. Take care that the brush is not contaminated with soil.



Scrape and paint method

This method is applicable to a number of species of vines where it is desirable to treat the vines in position, particularly those with aerial tubers such as madeira vine (*Anredera cordifolia*) or those which will propagate from segments.

- Remove and bag tubers before scraping to avoid dislodging them during treatment.
- 2. Scrape the stem tissue on one side starting at the base of the stem (up to one metre if possible) before leaving a small gap (approximately five centimetres) and changing sides and scraping another one metre. In the case of madeira vine it is necessary to scrape heavily to expose the white inner tissue. Scrape as much of the stem as possible.
- Apply undiluted herbicide with a paintbrush within seven seconds of first scraping the stem, that is, scrape and paint in sections.

4. In the case of madeira vine it is essential that ground tubers and lateral roots are also treated with a heavy scrape and paint. If the tuber is of substantial size a gouge can be made into the tuber with a knife and herbicide applied. Any side roots must also be scraped and painted.



Gouge-paint method

This method applies to those plant species that have a fleshy root system of rhizomes or large bulbs such as kahili ginger or canna lily.

- 1. Cut the stems off at ground level.
- 2. Gouge out sections of the fleshy base with a knife and liberally apply an appropriate herbicide solution.

Stem injection (drilling) method

To treat larger woody weeds and shrubs a cordless drill or tomahawk can be used.

- Drill or chisel holes around the base of the tree into the sapwood at a 45 degree angle at 5-10 centimetre intervals. The holes should be approximately four centimetres deep, though deeper holes may be drilled on larger specimens.
- 2. Within a few seconds of drilling each hole, fill it with appropriate herbicide at the recommended rate. Use this method only when falling branches will not be a safety hazard as the tree dies. This is especially important with Chinese celtis as they are known to fall within 6–12 months of injection.

Note that residents and landowners should refer to information on tree removal on the following pages before carrying out works on large shrubs or trees. Restrictions apply and City of Gold Coast approval may be required.



Low volume foliar spraying/spot-spraying

This method uses low pressure to apply a herbicide and water mixture to target weed plants. This method is applicable to a wide variety of plant species. The plants need to be actively growing and not under stress for the herbicide to have the best effect.

In a natural area, spot-spraying using a modified spray nozzle that gives an accurate and easily adjustable spray pattern should be used to minimise off-target damage. Ensure thorough coverage of the plants is achieved. Penetration into larger thickets, of lantana for example, can be achieved by increasing the pressure in the pack and adjusting the nozzle stream.



Aquatic weed control

Herbicides in or around waterways

There are many restrictions on the use of herbicides in and around aquatic areas. Always read the label and follow directions. The type of chemical you use must be approved for aquatic use or under a Australian Pesticides and Veterinary Medicines Authority (APVMA) permit. It is imperative that all withholding periods for the particular herbicide being used are adhered to. Take care to avoid or minimise herbicide entering the water. Herbicide must be applied to the target plant material not the water. Spraying large infestations of aquatic weeds is not recommended as dead and decaying plants can cause deoxygenation of the water, potentially killing fish species. It is highly recommended that advice is sought prior to the use of chemicals in and around waterways.

You will need to consider the following factors prior to undertaking aquatic weed control works.

- Growth habit: emergent, submersed or floating.
- Biological aspects: correct identification, species, timing, density, growth stage and reproduction.
- Water use: potable, irrigation, livestock, wildlife, etc.
- Physical aspects: size, water quality, clarity, water depth and movement.
- Hygiene: ensure all equipment is washed down correctly.

Control options

If possible use a combination of two or more control techniques. This will provide more efficient and effective control long term. Ensure the correct management of nutrient rich run off is considered as it can encourage aquatic weed growth. When removing aquatic plants ensure that all parts of the plant are removed as many are capable of rapid regrowth from small pieces. A variety of control options can be used including the following:

- prevention monitor, early detection, limit inflow of nutrients
- mechanical harvesting, excavator and aerators

- manual or physical hand removal, booms and the use of shading
- biological control introduce predatory insects, for example the Salvinia weevil Cyrtobagous salviniae.
 Utilise biological agents if available (for further information contact Biosecurity QLD)
- chemical spot spraying or overall spraying techniques when required. Refer to above information on herbicide use around waterways.

It is highly recommended that a site is continually monitored and follow up maintenance occurs to prevent reinfestation.

Protected trees and vegetation

The preservation of trees and vegetation within the City of Gold Coast is largely managed through the City Plan's Vegetation Management Code.

The City Plan defines vegetation as a tree or trees, plants (including palms) and all other organisms of vegetable origin (whether living or dead). Vegetation regulated by the City Plan is referred to as assessable vegetation which is defined as vegetation throughout the city that is:

- 1. greater than 4 metres in height; or
- equal to, or in excess of 40 centimetres in girth (circumference) measured at 1.4 metres above ground level; or
- remnant vegetation and its native under-storey as identified on the Vegetation Management Overlay Map; or
- disturbed/re-growth/wetland vegetation and its native under-storey as identified on the Vegetation Management Overlay Map.

Prior to undertaking any damage to assessable vegetation or interference with its natural growth (including, but not limited to, ring-barking, cutting down, topping, removing, poisoning, interfering with the trunk or severely reducing its height or trimming its branches so severely its likely to die) land owners must make an application to the City of Gold Coast. Exemptions do apply and mean an application is not required if the proposed works comply with the required outcomes of the Vegetation Management Code.

For instance an application is not required if the assessable vegetation is identified by an Australian Qualification Framework (AQF) – Level 3 – Arborist as a prohibited or restricted invasive biosecurity matter under the Queensland Biosecurity Act 2014 or is one of the following species:

- Cocos Palm, also known as Queen Palm (Syagrus romanzoffiana);
- Coral Tree (*Erythrina indica/E. cristra galli* and *Erythrina x sykesii*);
- Cadaghi (Corymbia torelliana);
- Slash Pine (Pinus elliotii); and
- Umbrella Tree (Schefflera actinophylla).

For further information about trees and vegetation please contact the City of Gold Coast on 1300 GOLDCOAST (1300 465 326) or visit cityofgoldcoast.com.au/treesandvegetation

Declared pests

Some of the environmental weeds profiled in this booklet are prohibited or restricted matter and are marked as category 2, 3, 4, 5. These plants are banned by the Queensland State Government under the Biosecurity Act and Regulation.

Prohibited matter includes invasive plants that are not yet found in Queensland. There are 29 species/species groups of invasive plants listed as prohibited matter in Queensland. If you think you have found prohibited matter please contact Biosecurity Queensland on 13 25 23.

Restricted matter includes invasive plants that are currently found in Queensland. There are more than 100 species/ species groups of invasive plants listed as restricted matter in Queensland. If you think you have found category 2 restricted matter please contact Biosecurity Queensland on 13 25 23.

Categories of restricted matter

There are 4 categories assigned to restricted invasive plants that prescribe actions required if you come into contact with them.

CATEGORY 2

RESTRICTED INVASIVE PLANTS

The Act requires that all sightings of category 2 restricted invasive plants be reported to Biosecurity Queensland within 24 hours of you becoming aware of its presence.

CATEGORY 3

RESTRICTED INVASIVE PLANTS

You must not distribute this restricted invasive plant i.e. it must not be sold, given as a gift, traded or released into the environment, unless authorised in a regulation or under a permit.

CATEGORY 4



RESTRICTED INVASIVE PLANTS

You must not move this restricted invasive plant to ensure that it is not spread into other areas of the state.

CATEGORY 5



RESTRICTED INVASIVE PLANTS

You must not possess or keep this restricted invasive plant under your control due to the high risk of negative impacts to the environment.

More information on the Biosecurity Act 2014 and Regulation 2016 can be found at the Department of Agriculture and Fisheries website: daf.qld.gov.au/biosecurity



GROUND COVERS

Balsam/Busy lizzy

Impatiens walleriana

A perennial herb growing to 60 centimetres. Stems are erect, succulent and thick. Leaves are ovate (oval-shaped) and serrated with a pointed tip. Brightly-coloured flowers appear in spring, varying in colour between pink, purplish pink, red or rose. Plants can regrow from a stem part containing a node (leaf joint) and can also spread by seed. It grows in moist, shady areas and is particularly invasive along creeks and is often spread by garden dumping.



Canna lilies

Canna indica

A large, herbaceous perennial to 2 metres tall. Canna is a clump-forming plant with large green leaves that sheath the stem at their bases. The red and/or yellow flowers are borne in clusters at the top of its stem. The fruits are covered in small protrusions, crowned by three persistent sepals. Spread laterally by means of fleshy underground rhizomes, it has naturalised in many parts of eastern and south-eastern Australia. Commonly spread by garden dumping and birds.



Coral berry

Rivinia humilis

A shrub or perennial herb from 60 to 100 centimetres in height with pinkish-white flowers all year. Fruit are glossy bright red berries. It grows mainly near the coast in or on the margins of rainforest often common in lowland, dry rainforest, creek banks and associated wetland systems.





Creeping lantana

Lantana montevidensis



A perennial, sprawling, lantana species growing up to 25 centimetre tall with thin wiry stems. Leaves are opposite pairs, dark green, 2 to 3 centimetres long, oval-shaped with finely serrated edges and are strong smelling when crushed. Flowers are small and either purple with a yellow or white centre in symmetrical clusters or completely yellow. Small purplish to black berries appear in autumn. Often spread by dumping of garden waste or by seed. Invades the understorey of open forest and woodland surviving on dry ridge tops and slopes with shallow, stony soils.





Creeping ruellia

Ruellia squarrosa

A low sprawling perennial groundcover that spreads more by underground runners than seeds. It grows in bushland close to urban sprawl, including damp areas close to waterways. It blooms in deep shade and does well even when overgrown by other plants. The stems are hairy with ovate to narrow ovate leaves to 7 centimetres long and 2.5 centimetres wide that are soft and fuzzy. Flowers are Corolla blue/purple with linear lobes joined only at the base. It is thought to be limited to south-eastern Queensland and the coastal districts of central New South Wales.



Crofton weed

Ageratina adenophora

An erect, perennial herb growing to one metre with woody roots. Leaves are opposite, trowel-shaped, bright green, 5 to 8 centimetres long and 2 to 5 centimetres wide with toothed edges. White flowers in small dense clusters at the ends of branches appear in spring. Seeds are slender, angular, two millimetres long and almost black with fine white hairs at their tip. Colonises forest margins, stream banks and disturbed areas, preferring shaded wetter areas.



Cuphea

Cuphea carthagenensis

An erect or spreading herb growing to 60 centimetres. Stems are covered in dense sticky hairs. Small rough leaves, opposite, one to six centimetres long and 5 to 30 millimetres wide, ovate (oval) in shape with pointed tips. Small pink or purplish flowers usually found in the leaf axil (the angle between the stem and leaf). Fruit is a tiny round capsule, with between four and eight brown seeds. Found in moist areas and spread via seed.



Fishbone fern

Nephrolepis cordifolia

A widely cultivated native plant now growing as a weed outside its pre-European range. Wiry, scaly stems branch and spread over the ground sometimes bearing fleshy tubers. Can grow densely and expand rapidly to dominate the ground surface. Fronds erect or arching to 75 centimetres long. Spread by dumping garden waste and by spores carried by wind or water. Where fishbone fern appears to be growing naturally in undisturbed bushland and is not apparently a garden escapee it should not be removed.





Formosa lily

Lillum formosanum

A deciduous perennial herb from Taiwan. Alternately arranged leaves are stalkless, mid to dark green and widely spaced along the stems. Leaves are hairless with entire margins and pointed tips. The plant has an underground bulb with numerous fleshy scales. Flowering in late Summer with large trumpet-shaped highly fragrant flowers pure white on the inside, pink or purple/brown stripes on the outside. The flowering stems are erect and can reach from 1.2 to 1.8 metres in height. Seeds and bulbs are spread by water, wind, humans, contaminated soil and in dumped garden waste.





Glory lily *Gloriosa superba*

A herbaceous perennial with stems to four metres that flower, produce fruit and then returns to its dormant form over winter. Leaves grow directly from stems, they do not have a leafstalk and the tips form a tendril. Large flowers with yellow/orange/red petals appear October to May. Produces large green capsule fruit that dries and opens to expose bright orange/brown seeds. Extremely difficult to control (regrow's readily from seed and underground tubers). Spread by birds, garden and soil dumping.





Ground asparagus

Asparagus aethiopicus



A herbaceous perennial with persistent multi-branched stems up to two metres in length. 'Leaves' which are actually short stems can be up to 2.5 centimetres, extend singularly or in clusters, appear pale green with a distinct mid-rib and abrupt point. Flowers are small to 0.5 centimetres, bell-shaped and white to pale pink. Fruit is a pale green berry that matures to bright red in late winter/early spring. Able to form dense mats. Spread by birds and garden dumping.





Kahili ginger Hedychium gardnerianum



A perennial herbaceous plant usually growing 1-2 m tall. It forms vast, dense colonies that smother and displace native groundcover vegetation. It reproduces by seed and also vegetatively via its creeping underground stems. The seeds are dispersed by birds and other animals that are attracted to their bright colours. The large leaves are alternately arranged along the stems up to 45 cm long, relatively narrow in width with pointed tips. The flowers are bright yellow large spike-like clusters at the tips of the stems.





Mistflower

Ageratina riparia

A sprawling, perennial herb to 60 centimetres. Numerous branching stems produce roots at ground level. Leaves opposite to eight centimetres long and 2.5 centimetres wide with toothed edges. Flowers appear white in small dense clusters at the ends of branches in winter. Seeds are slender, angular, two millimetres long and black with fine white hairs at the tip. Grows on damp hillsides and creek banks and rapidly invades disturbed areas.



Mother-in-Law's Tongue

Sansevieria trifasciata

A dense, clumping groundcover preferring moist shady sites. Long, succulent, mottled greenish-yellow leaves that grow to one metre. Often introduced to bushland by garden dumping and can be difficult to control once established.



Mother of millions /Resurrection plant



Bryophyllum delagoense, Bryophyllum pinnatum and Bryophyllum daigremontianum X B. delagoense

Bryophyllums are succulent, perennial herbs. All species have fleshy stems and leaves. Flowers can be orange, yellow or red on stalks held above the foliage. Plantlets may form on the parent plant or regrowth may occur from tiny leaves or stems on the ground. Numerous seeds. Spread by water, garden dumping and vegetative spread.





Polka dot plant/Freckle face

Hypoestes phyllostachya

A small, shade-tolerant perennial herb growing to approximately half a metre. A number of plants raised in cultivation display different foliage colours and patterns but typically have soft green leaves with white to pink spots or mottled patterns. Small lavender blue flowers appear in summer.



Singapore daisy

Sphagneticola trilobata



This plant forms dense mats of runners on the ground that smother native plants. Leaves are glossy, notched, somewhat fleshy and often lobed. Flowers are a bright yellow daisy. Able to reproduce by small seeds but are more likely to grow from a section of stem or root. Spread by water, garden dumping, mowing and vegetative spread.



Striped trad

Tradescantia zebrina

A succulent, perennial creeper with stems that branch and spread over the ground. Able to put down roots at each node (leaf joint). Leaves grow to six centimetres in length and are purple underneath with silvery-white stripes above. Small pink-purple flowers appear in spring/summer. Produces seed but more commonly spread in garden waste.



Tradescantia

Tradescantia fluminensis

Also known as trad. A vigorous perennial creeper forming dense mats up to 60 centimetres deep. Stems are succulent and brittle and grow up to four metres in length. Flowers are small, white and grow in clusters at the ends of branches. Leaves are glossy, somewhat fleshy up to 2.5 centimetres long with parallel veins and fine hairs along the edges. Spread by water, garden dumping, mowing and vegetative spread.







GRASSES

Elephant grass and Bana grass

Pennisetum purpureum and P purpureum x P typhoides

Tufted perennial grasses growing to four metres, resembling sugar cane in general appearance. Pale green leaves up to four centimetres in width with a strong mid-rib tapering to a fine point. The flower heads are up to 30 centimetres in length and range in colour from yellow to purple. Forms bamboo-like, densely tufted clumps on creek banks and roadsides.





Bamboo

Phyllostachys spp. and Arundanaria spp.

A perennial woody grass of varying heights between 1 and 15 metres high forming dense groves. Stems are erect and woody. Leaves are alternating and grass-like. Reshoots from underground stems or suckers enabling it to escape from gardens. Dense growth smothers other vegetation.



Molasses grass

Melinis minutiflora

A spreading, densely smothering perennial mat grass. Stems are branched and grow up to 90 centimetres in length. Foliage is usually sticky with a strong odour resembling molasses. Slender flower heads in winter are 10 to 20 centimetres long and purplish in colour when young. Grows thickly from rooted runners. Spreads from disturbed areas adjacent to native forest, for example roads and tracks.





Mossman river grass

Cenchrus echinatus

A clumping, annual grass growing to 80 centimetres high. Flowers in a cylindrical spike of up to 50 burrs. Each burr is approximately 4 to 10 millimetres in length. Leaves grow to about 12 millimetres wide. Burrs attach to animal fur and clothing and are also spread by water. Often found on sandy coastal soils.



Palm grass

Setaria palmifolia

A robust tufted perennial with palm like leaves up to 1.5 metres in height. Dark green leaves are blade like with fine dense hairs on both surfaces that can cause irritation to the skin. It is found predominantly along creek lines and in dark, shady, damp areas usually in large clumps. Flowers are greenish/white spikelets up to 50 centimetres. Seed heads can grow up to 2 metres in height.



Para grass

Urochloa mutica

A perennial grass up to one metre in height. Robust, hollow stems that grow flat along the ground, sprouting new roots wherever nodes touch the ground. End of stems are erect. Leaves are hairy and dark green, growing up to 15 centimetres long and one centimetre wide, tapering to a long, fine point. Leaf sheaths also hairy where they join stem. Flower heads grow to 18 centimetres long and are composed of several spikes about five centimetres long. Thrives on creek banks and in wetlands.



Paspalum grass

Paspalum conjugatum, P. dilatatum and P. wettsteinii

A tough, clumping perennial that grows to approximately one metre in height with leaves to 15 millimetres wide. Seed head on apex stalks with three to seven long, thin, finger-like spikes carrying many seeds in summer. Spikes grow horizontally outwards from stalk. Seeds are sticky and are spread by disturbance such as mowing and slashing and via birds.



South African pigeon grass

Setaria sphacelata and other introduced Setaria spp.

A tufted perennial grass growing to 1.8 metres, commonly found bordering waterways and in damp areas. Flower spikes grow up to 25 centimetres long. Leaves are bluish-green up to two centimetres wide.







Vines

Arrowhead vine

Syngonium podophyllum

A rampant creeper or climbing plant that grows over other vegetation, often reaching 5–10 metres or more in height when climbing larger trees. It's leaves vary in size, shape and colour depending on their position on the plant. The lower leaves are generally arrowhead-shaped and either entirely green or with some silvery-white markings. The upper leaves are generally light or dark green and divided into three segments or 5–9 separate leaflets. The flowers consist of an elongated whitish spike that is surrounded by a creamy-white to greenish structure the fleshy fruit are red to reddishorange in colour and usually hidden. Prefers moist shady conditions and fertile soils.



Balloon vine

Cardiospermum grandiflorum



A perennial climber to ten metres or more. Stems are hairy and green with ribs often streaked red, becoming thick and woody with age. Leaves divided into nine leaflets arranged in groups of three. Leaflets are soft, hairy, clearly-veined with broadly toothed edges. Flowers are small, have four white petals arranged in clusters. Fruit is a papery green capsule maturing to light brown in autumn which is dispersed by water, wind and gravity.





Black-eyed Susan

Thunbergia alata

A herbaceous perennial twiner. Leaves are three-pointed, triangular or shaped like an arrow head up to seven centimetres long. Leaf stalks grow up to four centimetres. Flowers borne on stalks up to six centimetres long and are orange or yellow, usually with a black centre. Fruit is a hairy capsule with few small seeds. Spread by garden dumping and vegetative spread.



Brazilian nightshade/Climbing nightshade

Solanum seaforthianum

A perennial shrub or twining climber from South America. Stems are mostly hairless. Leaves are deeply lobed and hairless except the edges. Flowers are mauve-blue, 2 to 3 centimetres across in groups of up to 50, appearing in spring and autumn. Fruit are a bright red berry approximately one centimetre across. Seeds are spread by birds and water.





Canary Creeper

Senecio tamoides

A perennial, vigorous, climbing vine with hair-less fleshy leaves and succulent stems. The broad leaves have coarsely teethed to shallowly lobed margins. Flowers are bright yellow, sweetly fragrant with several obvious petals, forming large clusters at the end of the stems and present in Autumn. Each seed has a crown of white hairs that aid in wind dispersal. The plant also propagates from stem fragments, enabling it to spread via dumped garden waste.





Cat's claw creeper Dolichandra unguis-cati



A tuberous perennial climber growing to 30 metres or more. Stems can be up to 15 centimetres thick and are red-brown maturing to green, then becoming woody. Leaves are divided into three. The tip leaflet forms a small, three–clawed tendril. Other leaflets grow to eight centimetres and are red-brown maturing to dark green above and paler below. Flowers can be singular or form small clusters. Flowers are yellow, trumpet-like, have five petals and grow to eight centimetres. Thin capsule fruit grow to 45 centimetres, are green in colour, ripening to brown in summer with winged seeds. Tuberous, deep, extensive roots dispersed by floods and humans. Seeds dispersed by wind and water.





Climbing asparagus fern



Protasparagus africanus and Asparagus plumosus

A perennial twining climber with scattered spines on it's stems. Branches are more or less horizontal. 'Leaves', which are actually short stems called cladodes, grow up to 0.7 centimetres long. Small green-white flowers grow on the tips of branches followed by berries approximately 0.5 centimetres across and are blue-black, ripening in autumn/winter. Roots (rhizomes) are fibrous and fleshy. Spread by birds and garden dumping.



Dutchman's pipe





A fast growing perennial creeper. Stems age to become woody. Leaves are fleshy, heart shaped, paler underneath and grow to 10 centimetres with long, kinked leaf stalks. Leaves and stems are strongly scented. Flowers appear roughly pipe shaped, a striking maroon colour with white thread-like markings. Fruit are a green capsule shape maturing to brown and open like a parachute to release many fertile seeds. Mainly spread by wind, water and gravity.





Glycine

Neonotonia wightii

A vigorous, twining, perennial vine with a woody base. Leaves consist of three leaflets which are dark green and broadly egg-shaped. Prolific, bean-like seed pods grow up to 3.5 centimetres long and contain rectangular-shaped seeds. Inconspicuous creamy flowers appear in late autumn. Can smother native trees and understorey vegetation.



Horse gram

Macrotyloma uniflorum

A climbing legume vine with a strong woody taproot and base of approximately one to three centimetres in diameter. Stems are slightly hairy with three green, lobed leaflets. Flowers appear yellow-green, usually in clumps of three or four. It is mostly found near pastural land and in open forests. It has the ability to grow very quickly and establish over native plants, also inhibiting the growth of native seedlings. Readily germinates after fire or disturbance.



Kudzu

Pueraria lobata



A vigorous trailing or twining perennial herb with a large tuber. Stems are hairy and grow up to three metres long. Large leaves divided into three leaflets. Leaflets are often lobed, the upper surface green and greyish underneath. Flowers appear purple, blue or pink and there can be up to 90 per stem in summer. Fruit are a hairy pod up to nine centimetres in length. Kudzu dies down for up to six months a year, so the opportunities for controlling this plant are limited. Spread mainly by water, soil dumping and vegetative spread.





Madeira vine Anredera cordifolia



A vigorous climber growing up to 30 metres. Stems become softly woody with age. Mature stems produce aerial tubers which is how the plant reproduces. Leaves are a fleshy heart shape with rounded tips or a shallow-indent with lobed base. Flowers appear cream in numerous drooping clusters up to 20 centimetres long and are short-lived. Spread vegetatively by water, garden and soil dumping, shoe and tyre tread and animals.





Mile-a-minute/Coastal morning glory

Ipomoea cairica

A perennial trailing or climbing vine growing up to five metres. Stems are hairless, readily set root when in contact with the ground. Leaves are hairless and nine centimetres long with between five and seven lobes. The middle lobe is the largest. Flowers are purple, pink or whitish-pink, eight centimetres across and grow solitary or in groups of between two and three. Fruit are a four-valved capsule and approximately one centimetre across with wispy hairs. Each valve has one seed. Spread by wind, water and vegetative spread.



Morning glory

Ipomoea indica, I. purpurea and I. alba (moon flower)

A vigorous, perennial climber growing to 15 metres. Stems twining. Flowers appear blue, purple or violet and are up to eight centimetres across. They are grouped together with the sepals up to 1.5 centimetres long. *I.alba* has white flowers. Leaves are broadly egg shaped with smooth or three lobed edges. Stems readily set new roots even from small segments. Spread by wind, water and vegetative spread.





Moth vine

Araujia sericifolia

A fast growing, perennial, twining vine growing to 10 metres long. The vine smothers supporting vegetation and is poisonous to livestock. Stems contain large amounts of toxic white sap (latex) which is a skin irritant. Leaves are paired and are mostly an elongated triangular shape, with dark green upper surface and whitish densely hairy undersides. The pointed leaf tip is often twisted. Bell shaped flowers are white, cream or pale pink. Fruits are large, egg shaped and bluish green resembling chokoes. The fruit dry at maturity and split lengthwise, releasing hundreds of wind-borne seeds. Seeds are also dispersed by water and gravity.





Passionflower

Passiflora suberosa (corky passionflower) and P. subpeltata (white passionflower)

A slender vine with tendrils and raised glands on leaf stalks. Leaves are usually three-lobed. Leaf tips on the white passionflower are more rounded. Corky passionflower has green stems becoming corky with age and small white to green flowers and a 1.5 centimetre purple-black berry. White passionflower has larger flowers approximately five centimetres across, tinged with green, inedible fruit approximately four centimetres in length. Spread by soil and vegetative dumping, birds, animals, water and gravity.





Silverleaf desmodium/Velcro vine

Desmodium uncinatum

A perennial, scrambling legume vine with deep taproot and thick stems, rooting at the nodes. Leaflets are egg-shaped and covered in fine hairs with a pale silver stripe along the mid-rib. Flowers are pink, mauve or blue and grow up to one centimetre long, usually appearing in early autumn. Brown seed pods have many fine velcro-like hooked hairs which attach to clothing or animals. This is how the plant spreads. It can also cause a skin reaction.





Siratro

Macroptilium atropurpureum

A creeping or climbing legume with bright green leaflets grouped in threes. The two lower leaflets often have a rounded lobe. Dark red-purple flowers are borne on long spikes most of the year, followed by narrow pods 5 to 10 centimetres long. These pods burst open to release and spread numerous seeds that also have long viability. This plant smothers native vegetation adjoining disturbed areas and disused pastures.







Shrubs

Awabuki sweet viburnum

Viburnum odoratissimum var. awabuki

This shrub or small tree usually grows 1–4 metres tall, but may occasionally reach up to 6 metres in height at maturity. It develops brownish-grey bark on its older stems while its younger stems are green or reddish-tinged and hairless. It has become popular as a garden ornamental in recent years, with a cultivar known as 'Emerald Lustre' the most common in cultivation. It is different from typical Sweet Viburnum (Viburnum odoratissimum var. odoratissimum), which has been grown for many years in Australia and does not seem to be invasive.





Brazilian cherry

Eugenia uniflora

An evergreen tree growing to eight metres. Stems are brown with reddish new growth. Leaves usually grow in pairs, bases rounded, dark green, glossy, aromatic and up to five centimetres in length. Flowers consist of four petals and are white appearing in early spring and summer/autumn. Fruit is an orange-red berry maturing to crimson, approximately two centimetres in diameter. Spread by birds, animals, water and as ornamental plantings.





Buddleia/Butterfly bush

Buddleja madagascariensis and B. davidii

A scrambling shrub growing up to four metres or climbers up to 10 metres. Branches can be white or grey when young and sometimes hairy. Leaves grow to 20 centimetres and can be notched, scalloped or finely toothed. Leaves are a dark green above and white or yellow below. Flowers are small and tubular or funnel-shaped, yellow-orange (B. madagascariensis) or white to lilac purple (B. davidii) and sweetly scented in spring-summer. Mainly spread through dumping garden clippings and vegetative growth.



Castor oil plant

Ricinus communis

A perennial shrub growing to five metres. Stout hollow branches are dull, pale green or red and turn grey with age. It has large leaves up to 60 centimetres across and divided in up to nine pointed triangular segments with toothed edges and conspicuous veins. Leaves are glossy, dark red-green when young and a glossy green when mature. Fruits grow to approximately 2.5 centimetres diameter and are spiny, exploding when ripe to throw seeds several metres. This shrub can be found in high densities along creeks and floodplains. Seeds can be toxic to humans and animals.





Coral berry

Ardisia crenata and A. humilis. Also known as: A. crispa and A. crenulata

Note: Description is for A. crenata not A. humilis.

A compact shrub growing to one metre, often singlestemmed. Leaves are dark green, thick, glossy and have tightly waved edges. Flowers are small, white or reddish, fragrant and are in clusters. Fruit is glossy, bright red and remain on the plant for a long time if not removed. Seeds germinate readily under dense canopy. Spread by birds.



Duranta

Duranta spp. eg D. erecta. Also known as: Sky flower, Pigeonberry, Geisha girl and Sheena's gold

A shrub or small tree with drooping, occasionally spiny branches. Leaves grow in pairs or threes and are oval, occasionally toothed, growing up to eight centimetres long with a short leaf stalk. Flowers are blue or pale purple often with two darker stripes, trumpet shaped and found in clusters. Flowers in summer/autumn. Fruit is round, orange or yellow, approximately one centimetre in diameter and found in large clusters. This plant colonises forested areas, especially near waterways. Spread mainly by birds and ornamental plantings.





Easter cassia

Senna pendula var. glabrata

A shrub that may scramble up to three metres. It has compound leaves. Leaflet tips are rounded. Flowers are a showy yellow. Fruit is a long green pod, drying with age. Seeds can grow to 0.5 centimetres across. Seeds spread by birds, insects, gravity and garden dumping.



Giant devil's fig

Solanum chrysotrichum

A shrub or small tree growing to four metres. Densely covered in star-like hairs with sparse, wide-based, curved prickles (three to nine millimetres long) on stems. Veins can be seen on the surface of the leaf. White flowers appear in spring. Occurs in disturbed areas. Dispersed by birds and bats eating the fruit, gravity and rubbish dumping.





Groundsel bush

Baccharis halimifolia



A perennial shrub growing to four metres. Densely branched. Leaves dull or pale green, alternate, wedge-shaped and lobed in the upper part, approximately 2.5 to 5 centimetres long. Flowers are six millimetres wide and numerous. Male flowers (yellow, globular) and female flowers (white florets at end of branches) are present on different plants. Fruit is straw-coloured or brown, ribbed, three millimetres long, topped by tufts of fluffy white hair, making it readily wind-dispersed. Flowers in autumn.





Lantana

Lantana camara



A scrambling evergreen, thicket-forming shrub growing to four metres, though it can climb to a height of 20 metres. Stems are woody, prickly and often four-sided. Leaves are coarse, veins prominent, edges serrated, finely haired and strongly scented. Flowers in combinations of pink, yellow, red, orange and cream. Fruit is round growing to 0.8 centimetres across, green in colour maturing to shiny black clusters. Roots are shallow. Mainly spread by birds, animals, water and garden dumping.

Please note – Hybrid varieties of lantana have been promoted as ornamentals including so-called 'sterile varieties'. All forms of lantana are considered environmental weeds and should not be planted.



Leucaena

Leucaena leucocephala

A shrub or small tree growing to six metres. Leaves are compound (bipinnate). Flowers are greenish to creamy-white in round flower heads approximately two centimetres across, appearing in summer. Fruit are a flat pod growing to 18 centimetres long with 10 to 25 seeds. Seeds are numerous and long-lived. A particularly bad weed along watercourses. Spread by animals, gravity and water.





Mauritus hemp/False agave

Furcraea foetida and Furcraea selloa,

Large succulent with long green or variegated sharply pointed fleshy leaves. it can grow up to 2 metres tall and 3 metres wide. It forms dense clumps in bushland and is often spread by garden dumping. It usually flowers once, producing a massive, branched flowering stalk that forms thousands of plantlets before dying soon after. Similar to Century plant (*Agave Americana*).





Ochna/Mickey Mouse plant

Ochna serrulata

A shrub growing to three metres. Bark on branches has numerous lenticels (small corky spots). Leaves grow to six centimetres long, edges toothed and often wavy. It has a short leaf stalk. Flowers are yellow in colour and the petals are one centimetre long. After flowering sepals turn red as fruit develops. Fruit are black, glossy and single-seeded. Seeds germinate readily in deep shade. A difficult weed to control as it readily re-shoots. Spread mainly by birds.







Opuntioid cacti/Prickly pear

Opuntia stricta (Common prickly pear), Opuntia monocantha (Drooping prickly pear), Opuntia microdasys (Bunny ears), Opuntia rufida (Blind prickly pear), Opuntia tomentose (Velvet tree pear)



Opuntoid cacti, also known as Prickly pear, is a drought resistant succulent that rapidly invades pastures and natural areas. It can vary significantly in habit and form, ranging from small shrubs under 50cm to large trees up to 8m. The stems are spiny, flattened, leafless and divided into segments also known as pads. Flowers can be white, yellow, orange, pink red or purple and most species produce yellow-red pear shaped fruit. They are distinguished from other cacti by the presence of detachable barbed bristles on the areoles.





Privet (small leaf)

Ligustrum sinense



A shrub growing to four metres or more if supported. Leaves are in pairs, vary in size and shape growing to seven centimetres long. Short hairs on veins and stalks of young leaves. Flowers are small and white with four petals heavily scented and appear in masses. Fruit are an oval berry growing to 0.6 centimetres across in dense clusters, green in colour maturing to purple-black in winter. Spread mainly by birds, animals and seed fall.



Shoebutton ardisia

Ardisia elliptica

A branched shade-tolerant shrub 1 to 4 metres tall. Its alternately arranged leaves are reddish in colour when young. Flowers (6-13 mm across) are borne in clusters in the upper leaf forks (i.e. axils) of the main branches. They have five pinkish petals with tiny black spots on the outer surfaces. Berries are round (5-9 mm across) which turn from green to red when immature, and purplish to black at maturity. Mainly grows in wet forests (e.g. rainforests), riparian areas and disturbed sites. Spread by fruit-eating birds and other animals attracted by the berries.





Smooth senna

Senna septemtrionalis

A leafy shrub or small tree between 1 to 5 metres tall. Leaves have 3–5 pairs of bright green leaflets with pointed tips. The leaflets are large at 45–70 millimetre and relatively broad 15–35 millimetre. Flowers spring to autumn with five bright yellow or golden yellow petals. Fruit is a cylindrical green pod up to 10 centimetres long that matures brown. Found in moist forests, rainforests and riparian vegetation. Abundantly produces seeds that are easily dispersed by machinery, vehicles, birds and animals.





Tobacco bush

Solanum mauritianum

A shrub to small tree growing up to four metres. Large furry green leaves that are pungent to smell. Pale to deep violet flowers most of the year with dull yellow berries. Spread mostly by birds, water, gravity, bats and flying foxes.







Trees

African tulip tree

Spathodea campanulata



An evergreen tree growing to 25 metres. Bark is rough and green-grey. Leaves are a glossy green made up of between 7 and 19 oval leaflets. Flowers are scarlet fringed with yellow and bell-shaped. Fruit are a long, woody capsule. Spreads by suckering and seed.



Alexander palm

Archontophoenix alexandrae

Tall self-shedding palm to 30 metres, greyish trunk with noticeable leaf scar rings. The large green leaf fronds are up to 4 metres in length with 60–80 leaflets. The prominent whitish underside of leaves and the swelling of the base of the trunk distinguish this palm from the locally native Bangalow palm. Large clusters of tiny white flowers, one centimetre ovoid fruit, turning bright red when ripe. This species is not locally native, but are found from Gladstone to North Queensland. These palms are spread by flying foxes, birds and garden dumping.





Broad-leaf pepper tree

Schinus terebinthifolius



A tree growing to 10 metres with a short trunk and multiple branches. Stems are pink-brown in colour and hairy with lenticels (small corky spots). Leaves are compound with a small 'wing' along the leaf stalk. Leaflets grow to eight centimetres long, mid to yellow-green, sometimes red tinged and have a pepper aroma when crushed. Flowers are small with cream to white petals growing in clusters. Numerous green round fruit ripening to orange/red Spread mainly by birds and water.





Cadaghi

Corymbia torelliana

An evergreen tree from North Queensland growing to 30 metres. Trunk has a stocking of grey scaly bark at the base and smooth pale green bark above. Leaves are pale green, sometimes with a pink tinge, vary in shape and have wavy edges growing to 16 centimetres long. Flowers grow in masses of scented, cream-coloured balls. Fruit are almost round, woody capsules with many tiny seeds. Mainly spread by wind and ornamental plantings.





Camphor laurel

Cinnamomum camphora



A large spreading tree growing to 20 metres. Bark is grey with prominent vertical cracks on the trunk. Young leaves and stems have a reddish tinge maturing to a green above and dull green below. Strong scent of camphor when crushed. Small pale flowers. Fruit are a one centimetre green berry ageing to black. Mainly spread by birds and seed fall.





Chinese celtis

Celtis sinensis



A large, semi-deciduous (shedding of leaves) tree growing to 20 metres. Stems are smooth and light grey with prominent lenticels (small corky spots). Leaves grow to eight centimetres long, are dark green above and paler below. Upper leaf edge is coarsely toothed and leaf bases are uneven. Flowers are tiny, green in colour, appearing in spring/summer. Fruit are approximately 0.5 centimetres, green and age to orange/red in summer/autumn. Spread mainly by birds and water.





Cocos palm

Syagrus romanzoffiana

A fast growing tree up to 21 metres. Sturdy ridged trunk. Leaves are green and grow to 4.5 metres long with long, strappy leaflets radiating from the central leaf stem. Flowers are small and inconspicuous. Fruit are a fleshy orange berry that grow up to 2.5 centimetres long. Spread by flying foxes, birds, garden dumping and other animals.





Coral tree

Erythrina indica, E. crista-galli and Erythrina x sykesii

A thorny deciduous (shredding of leaves) tree with bright red flowers. Ability to spread by suckering or from broken off pieces (the wood is soft) of the trunk or branches. Leaves are bright green consisting of three large leaflets, the central one on a longer stalk. Thrives on disturbance and is spread by dumping, water and suckering.







Golden rain tree/Chinese rain tree

Koelreuteria elegans ssp. formosana

A hardy, fast growing, deciduous tree (shredding of leaves) between 6 to 15 metres in height. Compound leaves that grow opposite each other on a larger stem are narrow, ovate (pointed at one end and rounded at the other) and have irregular toothed edges and a long tapering point. Bark is corky, furrowed lengthwise and peeling in square plates. Small yellow flowers. Fruit are an inflated papery capsule that splits into three parts, is light pink to deep rose in colour, up to 50 millimetres long and appear in large drooping clusters.





Privet (large leaf) /Broad-leaf privet





A fast growing large evergreen shrub or tree up to 10 metres. Stems have many lenticels (small corky dots). Leaves grow up to 12 centimetres long and are dark shiny green above, paler and dull below, hairless with a pointed tip. Leaf stalk is hairless and between one and two centimetres long. Flowers are white, scented, approximately 0.5 centimetres forming conical clusters up to 25 centimetres on branch tips. Fruit are fleshy and round growing up to 0.9 centimetres and ripening in winter from green/red/black. Spread by birds, animals, and water.



Slash pine

Pinus elliotii/Pinus radiata

An evergreen, resinous and aromatic tree growing up to 50 metres. Leaves are 20 to 30 centimetres long and appear in needle-like bundles. Flowers in separate male and female cones. Female cones open to release dark seeds with wings two to three centimetres long. Spread by wind and from old plantations and gardens.







Umbrella tree

Schefflera actinophylla

A tree growing up to 10 metres, often multi-stemmed. Leaves are compound with stalks up to 40 centimetres long. Leaflets are arranged in an umbrella-like (palmately) manner and grow up to 30 centimetres long. Small red flowers in sprays held above the foliage. Fruit are dark red growing up to 0.5 centimetres long with a single seed. North Queensland native invading local bushland. Spread readily by birds, bats and garden dumping.





Yellow bells

Tecoma stans



A shrub or tree growing up to seven metres high. Leaves are compound with up to 13 leaflets. Leaflets grow to 10 centimetres with pointed, toothed edges. Flowers are showy and yellow with reddish lines in throat, appearing in spring/summer. Fruit are a long narrow capsule growing up to 22 centimetres, splitting when mature to release the seeds. Seeds are winged, approximately 1.5 centimetres long. Spread mainly by wind.







Aquatic Weeds

Alligator weed

Alternanthera philoxeroides



Alligator weed can grow on the banks of water bodies, anchored to the bottom of shallow water bodies or floating freely on the water surface. Floating stems can extend for several metres and floating mats may be up to one metre thick. Stems are hollow and take root at the nodes. Leaves are glossy, opposite and spear-shaped. Papery ball-like white flowers grow on short stalks in leaf axils. Seeds are not viable in Australia. Spread by plant fragments.



Cabomba

Cahomba caroliniana



A perennial, submerged aquatic herb. Stems grow beneath the water surface up to 10 metres in length but usually range up to five metres. Leaves and stems have a thin jelly-like coating. Leaves are opposite and divide repeatedly to form feathery fan-shaped structures. Whitish flowers form above the surface and flower most of the year. Escaped aquarium plant.



Dense waterweed

Egeria densa

A submerged, aquatic plant with stems up to 1.5 metres long. Leaves grow in whorls of four to five and are densely clustered. Flowers are small, white and have three petals. Can form dense masses and restrict water flow. Spreads vegetatively.



Elodea

Elodea canadensis

A submerged, aquatic, perennial freshwater herb. Vertical stems grow up to three metres long with brittle joints. Leaves are bright green, growing in whorls of three. Long white threadlike roots. Solitary white flowers with three sepals and petals, forming in the axils of the leaves and growing towards the surface on threadlike stalks about 30 centimetres long. Reproduces vegetatively as stems readily break into pieces which are easily transported. Introduced as aquarium plant.



Glush weed

Hygrophila costata



An erect emergent herb growing up to one metre. Forms dense floating mats on the edges of water bodies. Leaves grow in opposite pairs and have prominent veins and a distinct midrib. Papery white flowers in whorls borne in the axil of the leaves. Able to grow and spread very rapidly. Stems can set new roots where they come in contact with soil.





Kidney leaf/Mud plantain

Heteranthera reniformis

A floating or emergent water plant. Grows between 20 and 50 centimetres tall. Kidney shaped leaves growing up to 10 centimetres wide on long stems. Small, white to pale blue flowers. Can form dense mats. Spreads vegetatively.



Parrot's feather

Myriophyllum aquaticum

A submerged to emergent perennial herb with erect spreading stems growing up to five metres in length. Bluegreen emergent leaves that form whorls. Grows very well in nutrient enriched waters and forms dense stands that impede water flow. Spread by stem fragments.



SagittariaSagittaria platyphylla



A perennial aquatic plant growing up to 1.2 metres. Submerged leaves are translucent. Flowers are white with three petals, flowering mainly in spring/autumn. Spread by seed, rhizomes, tubers and floating plants. Forms dense infestations. Introduced as an ornamental garden plant.



Salvinia

Salvinia molesta



A free-floating aquatic fern often forming dense mats. Spongy bright green leaves, oval in shape, approximately two centimetres wide. Young leaves are flat on the water surface while older leaves bend at the mid-rib. Leaf surface covered with long, stiff, water-repellent hairs. Found in still and slow-moving water bodies. Prefers high nutrient levels and high water temperature. Escaped aquarium plant. Spreads by plant fragments.



Senegal tea

Gymnocoronis spilanthoides



An erect or sprawling bushy herb growing up to 1.5 metres. Leaves are dark green with serrated edges and arranged in opposite pairs along the stem. Stems are ribbed and hollow between the joints. Flowers are white and pom-pom-like, growing in clusters. Grows rapidly in shallow water, forming dense stands and tangled mats. Spreads via plant fragments and seed.



Water hyacinth

Eichhornia crassipes



An erect, free-floating, perennial aquatic herb. Leaves are thick, glossy, dark green and waxy with spongy leaf stems. Flowers are light purple with a dark purple to blue centre with yellow spot which grow in clusters. Black fibrous root system grow up to one metre long. Found in stagnant or slow-moving water bodies, preferring water which is nutrient enriched. An escaped ornamental pond plant, spread by fragments and seed. Seed is viable for up to 20 years or more.



Water lettuce

Pistia stratiotes



A floating, perennial aquatic herb, resembling a small open head of lettuce. Leaves are a dull green colour, fan-shaped, thick and covered in short hairs. Flowers are small and inconspicuous. Fruit resemble a small berry. Found in slow-moving waterways. Forms large mats on the water surface. Escaped aquarium plant.



Water mimosa

Neptunia oleracea

An aquatic herb that takes root at







the edges of waterways and grows out over the water surface. Stems grow up to 1.5 metres long. Floating stems develop a thick white spongy covering which aids with flotation. Leaves are olive green and arranged in opposite pairs along the stem. Bright yellow ball-shaped flowers are borne in rounded clusters. Spread via seed or broken stem fragments.

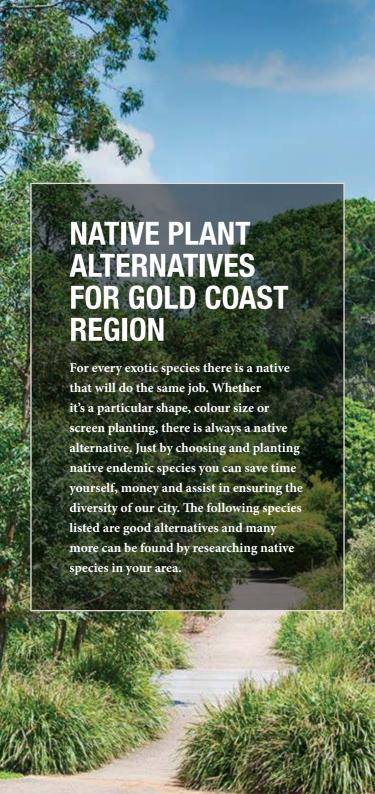


Yellow waterlily

Nymphaea mexicana

A submerged and floating perennial. Leaves are broad oval with wavy edges. Leaf stalks rise from vertical rhizomes up to 30 centimetres long. Flowers are yellow and grow up to 12 centimetres in length. Spreads vegetatively. This plant has been known to block waterways.





Responsible gardening

It is important when considering plants for your garden to choose the correct plant species for your area. Sourcing locally grown plants that are suited to the vegetation and soil type of your area will ensure a healthier, stronger plant. You may also want to consider planting a wide range of plant types such as vines, groundcovers, shrubs and trees to create different fauna habitats and food sources for native animals that use your garden and add colour and texture to various parts of the garden. Whether you're looking to plant your own private urban native oasis or undertake landscape scale bush regeneration projects, you can download the free GroNative App developed by Griffith University, Natura Pacific and the Queensland Government. It uses postcode geo-location and tailor-made gardening styles to allow you to hand-pick a native planting palette that will flourish in the chosen area.

Find out more and download the GroNative App from cityofgoldcoast.com.au/nativegardening

Planting a garden with native plants has many positive benefits and outcomes including:

- once established, only minimal garden maintenance is required
- native gardens require less water
- they attract native birds, butterflies and frogs
- they provide a food source and habitat for local fauna
- a variety of garden styles can be created e.g. formal, informal and native edible gardens
- insecticides and fungicides are not needed as native plants are adapted to the local conditions
- land containing native bush is aesthetically attractive which can increase its real estate value and
- native gardens can provide addituinal habitat to nearby bashland.

Flora and fauna database

Our flora and fauna database is a useful tool to see the plants and animals found locally in your area. Recognising the huge diversity of plant and animal life in our region, the City provides a comprehensive website that lists all species known to occur on the Gold Coast. The website features a searchable database of species, detailed information on the species, images, Google mapping tools to help locate wildlife, as well as references to useful related reports and documents.

goldcoastflorafauna.com.au



Native plant lists

The plants listed overleaf are indicative of the range of native species generally available from native plant nurseries and provide a starting point when planning your garden or undertaking bush regeneration works on your property.

Before you plant it is recommended you get to know the plant species already naturally present on your property or research vegetation types and individual plant species to ensure they are suitable for your location, property and soil type.

You may also want to consider garden style and physical attributes of the plants such as growth habit, flower colours, wildlife attracting etc.

This list does not represent an exhaustive list of all native plants found throughout the Gold Coast region and is to be used as a guide only.





Pigface Carpobrotus glaucescens

COMMON NAME



Native violet Viola hederacaea

SCIENTIFIC NAME

GRASSES, GROUNDCOVERS AND HERBS

COMMON NAME	SCIENTIFIC NAME
Barbed wire grass	Cymbopogan refractus
Basket grass	Oplismenus
Kangaroo grass	Themeda triandra
Birds nest fern	Asplenium australasicum
Blue flax lily	Dianella caerulea
Crinum	Crinum pedunculatum
Cunjevoi	Alocasia brisbanensis
Everlasting paper daisy	Xerochrysum bracteata
Hop gardenia	Goodenia ovata
Knobbly club rush	Isolepsis nodosa
Long-leaved matrush	Lomandra longifolia
Creek mat rush	Lomandra hystrix
Mat rush	Lomandra confertifolia
Mangrove boobialla	Myoporum acuminatum
Native commelina	Commelina cyanea
Native ginger	Alpinia caerulea
Native leek	Bulbine bulbosa
Native violet	Viola hederacea
Pigface	Carpobrotus galucescens
Pollia	Pollia Crispata
Sawsedge	Gahnia aspera
Short-flowered flax lily	Dianella brevipedunculata
Tall sedge	Carex Appressa
Warrigal greens	Tetragonia tertragonoides
Yellow buttons	Chrysocephalum apiculatum



Sarsparilla vine Hardenbergia violacea



Bower of beauty Pandorea jasminoides

VINES AND CREEPERS

COMMON NAME	SCIENTIFIC NAME
Beach Fan flower	Scaevola calendulacea
Fan flower	Scaevola aemula
Sarsparilla vine	Hardenbergia violacea
Birdwing butterfly vine	Pararistolochia praevenosa
Bower of beauty	Pandorea jasminoides
Common waxflower	Hoya australis
Guinea flower	Hibbertia scandens
Hoya	Hoya australis
Kangaroo vine	Cissus Antarctica
Native raspberry	Rubus moluccanus
Native wisteria	Milletia megasperma
Wonga vine	Pandorea pandorana

SHRUBS

COMMON NAME	SCIENTIFIC NAME
Blue tongue	Melastoma malabathricum
Bolwarra	Eupmotia laurina
Broad-leaved palm lily	Cordyline petiolaris
Coffee bush	Breynia oblongifolia
Dogwood	Jacksonia scoparia
Finger lime	Citrus australasica
Geebung	Persoonia virgata
Grass tree	Xanthorrhea johnsonii
Hairpin banksia	Banksia spinulosa



Purple pea bush Hovea acutifolia



Hairy pea bush Pultenaea villosa

SHRUBS

SCIENTIFIC NAME
Pultenaea villosa
Hakea acitites
Dodonaea triquetra
Leptospermum petersonii
Austrmoyrtus dulcis
Pipturus argenteus
Trema tomentosa
Cordyline congesta
Dillwynia retorta
Alyxia ruscifolia
Acacia ulicifolia
Melaleuca nodosa
Hovea acutifolia
Cordyline rubra
Ozothamnus diosmilfolius
Banksia robur
Xanthorrhea fulva
Melaleuca thymifolia
Sannantha similis
Banksia aemula
Melaleuca pachyphylla
Leptospermum polygalifolium



TREES

Dry Eucalypt (large trees)

For a list of Koala food trees visit cityofgoldcoast/aboutkoalas

COMMON NAME	SCIENTIFIC NAME
Blackbutt	Eucalyptus pilularis
Broad-leaved ironbark	Eucalyptus fibrosa
Broad-leaved white	Eucalyptus carnea
mahogany	
Brush box	Lophostemon confertus
Forest red gum	Eucalyptus tereticornis
Forest she-oak	Allocasuarina torulosa
Grey gum	Eucalyptus propinqua
Grey ironbark	Eucalyptus siderophloia
Narrow-leaved ironbark	Eucalyptus crebra
Pink Bloodwood	Corymbia intermedia
Silky oak	Grevillea robusta
Smooth-barked apple	Angophora leiocarpa
Spotted gum	Corymbia citriodora
Swamp mahogany	Eucalyptus robusta
Tallowwood	Eucalyptus microcorys
Turpentine	Syncarpia glomulifera



SCIENTIFIC NAME

Creek lilly pilly Syzygium australe

COMMON NAME

Subtropical rainforest, wet Eucalypt forest, moist gullies and creek banks

COMMON NAME	SCIENTIFIC NAME
Bangalow palm	Archontophoenix cunninghamiana
Black bean	Castonospermum australe
Brown kurrajong	Commersonia bartramia
Celerywood	Polyscias elegans
Cheese tree	Glochidian ferdinandi
Creek lilly pilly	Syzgium australe
Creek sandpaper fig	Ficus coronata
Foambark	Jagera pseudorhus
Macaranga	Macaranga tanarius
Hard quongdong	Elaeocarpus obovatus
Hoop pine	Araucaria cunninghamii
Lily Pilly	Syzygium smitthi
Moreton bay fig	Ficus macrophylla
Native quince	Guioa semiglauca
Native tamarind	Diploglottis australis
Native tulip	Harpulia pendula
Pink euodia	Mellicope elleryana
Plum pine	Podocarpus elatus
Red kamala	Mallotus phillepensis
Silky oak	Grevillea robusta
Small-leaved fig	Ficus obliqua
Small-leaved lilly pilly	Syzygium leuhmannii
Teak	Flindersia australis
Three veined Laurel	Cryptocarya triplenervis
Turpentine	Syncarpia glomulifera
White beech	Gmelina leichhardtii
Yellow kamala	Mallotus discolor

Coastal sites

COMMON NAME	SCIENTIFIC NAME
Beach acronychia	Acronychia imperforata
Blueberry ash	Elaeocarpus reticulatus
Broad-leaved paperbark	Melaleuca quinqernervia
Cabbage palm	Livistonia australis
Coastal banksia	Banksia integrifolia
Coastal cypress pine	Callitris collumellaris
Corkwood	Endiandra sieberi
Cottonwood tree	Hibiscus tiliaceous
Snow in summer	Melaleuca linarifolia
Tuckeroo	Cupaniopsis anacardioides
Wallum banksia	Banksia aemula

Small to medium trees suitable for urban backyards

COMMON NAME	SCIENTIFIC NAME
Blueberry ash	Elaeocarpus reticulatus
Coastal banksia	Banksia integrifolia
Fine-leaved tuckeroo	Lepiderema pulchella
Grey Myrtle	Backhousia myrtifolia
Lemon-scented myrtle	Backhousia citriodora
Long-Leaved tuckeroo	Cupaniopsis newmannii
Native frangipani	Hymenosporum flavum
Pink euodia	Mellicope elleryana
Tuckeroo	Cupaniopsis anacardioides

Trees for hedging or screening

COMMON NAME	SCIENTIFIC NAME
Blue lilly pilly	Syzygium oleosum
Broad-leaved lilly pilly	Syszygium helialamprum
Creek lilly pilly	Syzygium australe
Grey Myrtle	Backhousia myrtifolia
Lilly pilly	Syzygium smitthii
Riberry lilly pilly	Syzygium luehmannii
Silky myrtle	Decaspermum humile



Knobbly club rush Isolepsis nodosa

AQUATIC

Common name	Scientific name
Common rush	Juncus usitatus
Creek mat rush	Lomandra hystrix
Frogmouth	Phylidrum lanuginosum
Gahnia	Gahnia aspera
Grey Rush	Lepironia articulate
Jointed twig-rush	Baumea articulata
Knobbly club rush	Isolepsis nodosa
Nardoo	Marsilea mutica
Native waterlily	Nymphyaea violacaea
Red azolla	Azolla pinnata
Red fruit saw sedge	Gahnia sieberiana
River lily	Crinum pedunculatum
Swamp lily	Ottelia ovalifolia
Swamp rice grass	Leersia hexandra
Tall sedge	Carex appressa
Water primrose	Ludwigia peploides ssp montevidensis
Water snowflake	Nymphoides indica

More information

Websites:

City of Gold Coast

cityofgoldcoast.com.au/environment

City of Gold Coast trees and vegetation cityofgoldcoast.com.au/treeesandvegetation

Conservation Partnerships Program cityofgoldcoast.com/conservationpartnerships

Department of Agriculture and Fisheries daf.qld.gov.au

Grow Me Instead Queensland growmeinstead.com.au

NaturallyGC

cityofgoldcoast.com.au/naturallygc

Department of Environment and Science environment.des.qld.gov.auww

Queensland Department of Natural Resources and Mines

dnrm.qld.gov.au

SEQ Ecological Restoration Framework cityofgoldcoast.com.au/restoration

The Weed Society of Queensland wsq.org.au

Books:

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Mangroves to Mountains. Leiper, G., Glazebrook, J., Cox, D. and Rathie, K. 2008, *Mangroves to Mountains. Second edition*, Logan River Branch SGAP (Qld region), Queensland.

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Acknowledgements

Images contributors: City of Gold Coast, Queensland Government Department of Natural Resources and Mines, Department of Agriculture, Fisheries and Forestry, Louisiana Department of Wildlife and Fisheries and Redland City Council.

Some material in this booklet has been used with the permission of Queensland Government Department of Natural Resources and Mines.

This booklet is an education and awareness tool and has not been adopted by the City of Gold Coast as a policy. Readers should seek professional advice prior to undertaking weed control works.

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HOW YOU CAN HELP?

You can play a part by joining one of the City of Gold Coast Environment volunteering programs.

Join a bushcare or Landcare group through the City's Beaches to Bushland program or help care for our beaches by joining Beachcare.

Private landholders with bushland may be eligible to obtain free advice on weed management through Council's Conservation Partnerships Program. Support includes weed and native plant identification and training in weed control and habitat restoration techniques.

For information or to obtain a copy of this booklet contact:

City of Gold Coast

P 1300 694 222

W cityofgoldcoast.com.au/environmentalweeds

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