



Nursery & Garden Industry
NSW & ACT

A Guide for Gardeners in New South Wales



grow me™



instead



**The Nursery Industry -
Protecting Our Environment**



**Nursery & Garden Industry
Australia**



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This edition of 'Grow Me Instead' has been produced by NGIA in conjunction with the Australian Government.

We sincerely thank all of the people who generously contributed their time and expertise and who provided a wealth of information towards the production of this booklet; with special thanks going to the members of the original NSW GMI Committee.



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Australian Government

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Introduction from the Ministers

The nursery and gardening industry has joined with the Australian Government in the fight against invasive garden plants. In championing this initiative, Nursery and Gardening Industry Australia (NGIA) is taking a significant step forward in tackling one of the nation's most serious environmental problems – the spread of weeds.

The Grow Me Instead campaign is a great industry-driven initiative providing relevant local information to nursery operators and gardeners about plants which are potential weeds in their area and less invasive plants for gardeners to use.

This cooperation between the horticulture and nursery industries, the Australian Government and weed management bodies will help ensure horticulturalists and gardeners receive the information they need to combat the spread of weeds.

It is estimated that weeds cost the Australian agricultural industry around \$4 billion a year. The real cost of weeds to the environment is difficult to calculate, however it is likely to be at least equal to the cost to agriculture.

Of the almost 3000 introduced plant species now known to be established in the Australian environment, 65% are 'escaped' garden plants. An important step in preventing the spread of weeds is public education to help change attitudes and behaviours that contribute to the weed problem.

The Government is committed to investing in initiatives that have real on-ground benefits for the environment and for industry. We commend this initiative to you.

The Hon Peter Garrett AM MP

Minister for the Environment, Water, Heritage and the Arts

The Hon Tony Burke MP

Minister for Agriculture, Fisheries and Forestry



The Nursery and Garden Industry in Australia employs about 45,000 people in some 22,000 businesses across the country. For many years the Industry has been conscious of their environmental responsibilities and they have been proactive in furthering educational programs, including those concerning invasive garden plants. Garden escapes are not a new issue: weeds have been around since the first settlers brought along reminders of 'home' to help them settle into a new and strange land. How strange the Australian landscape must have seemed then, and how natural it would have been for the settlers to want only the tried and true familiar garden plants of the British Isles. Despite the difficulties of creating a garden in the Antipodes, it took many years for the average Australian to appreciate the native flora of this great land

Then, there were the early 'acclimatisation society' who thought it a good idea to introduce plants and animals from the old country, and also to spread Australian native plants from State to State.

Although great damage to the environment has occurred as a result of these indiscriminate introductions, this has not been solely the fault of the horticultural industry: certainly other industries have contributed. Graziers have imported new grasses and fodder crops and there were 'accidental' imports that came about unwittingly through inappropriate packaging, movement of plant and machinery, as seed in fodder and in ships ballast.

However the weed issue and who is actually responsible should not become a 'blame game'. Together, we must seek to repair what damage we can, and to work together as a community to prevent similar damage occurring in the future.

The Nursery & Garden Industry is actively participating in lessening the availability of invasive plants in Australia by preventing their production and sale. The Industry has recently established a greater understanding and cooperation with both State and Federal governments, culminating in this important 'Grow Me Instead' booklet.

Greater awareness and education of the home gardener is the answer to this problem, by using the information the 'Grow Me Instead' booklet provides as a guide. By consulting with your local garden centre or plant nursery you can help to minimise garden escapes and create a better environmental future for following generations of gardeners.

What is Grow me Instead?

The original GMI booklet developed by NGINA has now been extended as a National program by NGIA, in partnership with the Federal government, to reduce the numbers and impact of invasive plants in Australia.

'An environmentally invasive plant' is just another term for a weed. Quite simply, a weed is any plant that poses a threat to the environment, adversely impacts human or animal health, or causes crop or stock losses. For most gardeners, many of the characteristics we most desire in garden plants are the same as those that make them weedy: i.e. plants that are fast growing and disease resilient, and those which reproduce easily by the distribution of seeds or plant parts.

A modern definition of a weed is "a plant that requires some form of action to reduce its effect on the economy, the environment, human health and amenity"

Many of the plants that are now considered to be 'environmental weeds' were introduced by early settlers, or by gardeners and farmers who had little or no knowledge of their future impact on the native environment. It is only in recent years that this threat has become apparent.

Weediness is not confined to introductions from overseas. Some Australian native plants, including those introduced from other regions, may impact adversely on the natural environment of another region. Non-indigenous (that is, not local) species may invade and displace species natural to that area or they may cross pollinate to produce new species which may in time, alter regional biodiversity. Cootamundra Wattle *Acacia baileyana* is a good example of the former, while many eucalypts are known to interbreed.

Introduced species may sometimes be controlled in a foreign climate by various vectors such as small animals, insects, diseases or climatic conditions such as frost, reducing their potential invasiveness.

To gardeners, farmers or botanists, the term 'weed' may mean different things. Pasture weeds reduce the productivity of agricultural land, and may also have negative effects on human and animal health. Environmental weeds cause various problems in natural areas and ecosystems and the cost of control for both farmers and government is estimated at billions of dollars per annum.



The purpose of this Grow Me Instead booklet

is to identify common garden plants that have now become environmental weeds in your local area, and to suggest better, alternative plants that benefit garden diversity while lessening their potential to become weeds of the future.

Apart from garden centres or the resources of the local botanic gardens, valuable information may be provided by the Bushcare section of your local council or you may wish to check out your local council website. Here you will find lists of noxious weeds for the local area, as well as contact details for council's environmental weeds officer, should you need further information regarding garden plant identification and approved methods of disposal.

It is important to reduce the spread of environmental weeds because...

Better and more effective management of invasive plants will help to reduce the high cost of chemical control, and to reduce the amount of time and energy lost in management of weeds in productive land for food crops, grazing land, cut flowers and forestry. Weed management in public spaces and on natural heritage land is costly, laborious and at times seems overwhelming.

Invasive plants are defined and grouped as follows.

- 1. Noxious weeds** - are those legally declared as noxious plants by the various state or territory governments. The declaration of noxious weeds will vary from state to state and from council area to local council area within a state or territory. In general, most state legislation will say that declared noxious plants cannot be grown, sold or transported or transposed, and removal is desirable.
- 2. Weeds of National Significance ('WONS')** - are those plants which have been legally declared by the Federal government, with restrictions on their propagation, trade or sale applying to all States and territories.
- 3. Environmental weeds** - Plants that are or have the potential to impact the natural environment by destroying habitat or over-running indigenous species and altering local biodiversity. Many of our worst environmental weeds are garden escapes.
- 4. Agricultural & Horticultural weeds** - are those plants that have a negative effect on crop or animal production. This may be through the infiltration of weed seed in grain crops, burrs in wool production or weeds which make animals sick or cause death. In the horticultural industry, weeds within cut flower crops can harbour pests and diseases which reduce productivity.

Establishing the criteria for Grow Me Instead:

It has been very important to establish a set of consistent 'weediness' criteria which could be adhered to across all Regions and States. Thus the original GMI Committee of NGINA established the following:

A) The Invasive Plants

NGINA, in consultation with its members, state and federal governments, and interested environmental groups has developed a list of 25 invasive garden plants. There are weed lists in existence provided by a variety of environmental and conservation organisations. Including all garden escapes in a National list was considered not to be appropriate. Therefore, the criteria for inclusion in 'Grow Me Instead' were determined as follows:

1. The plant must be shown to be invasive across more than one area or part of the State.
2. It can be either an Australian native or imported (exotic) species.
3. The plant must be shown to or have potential to, damage the environment, human or animal health or create stock or crop losses.
4. The plant must be proven to have naturalised in bushland to the detriment of the natural environment.

This Grow Me Instead list is not definitive for each area or region of ACT and NSW. There may be other problem plants in your locality; most of these being included in lists prepared by your council. In addition to the plants listed in 'Grow Me Instead', you should also be aware of your local problem plants.

B) The Alternatives

Not all alternatives would be suitable across the broad range of soils and climates, so consideration of these differences and adaptation to your local area or Region will be necessary.

For this booklet to be of benefit in helping you select 'good' garden plants, it should be used as a guide to plant selection. There will be many other plant selections available to you at your local garden centre and together with their help, expertise and guidance you need have no fear that your garden will become an environmental hazard in the future.

Selection criteria for the 'non-weedy invasive plants' included:

- Must be recognised as non invasive by the GMI committee
- Must be readily available to the gardening public.
- Must be reliable garden plants.

We have endeavoured to recommend at least one Australian native plant alternative for all of the invasive species listed in the booklet.



The role of the nursery industry

In more recent years, the Nursery and Garden Industry has been environmentally responsible by encouraging the production of plants that are non-invasive; that do not require copious amounts of reticulated water; or depend on excessive amounts of fertiliser or other chemicals to thrive in the garden.

The Nursery and Garden Industry in Australia instigates accreditation programs among its members, and it continually strives to establish standards of excellence in plant production in order to provide trustworthy products.

The Nursery and Garden Industry provides information not only through publications such as the 'Grow Me Instead' booklet, but also through its education programs. Many educational and self-help programs are also offered by local nursery or garden centres.

Your **local** nursery or garden centre can help you in the following ways:

- By helping with identification of suspected 'weedy' plants.
- By providing information concerning local invasive plants.
- By offering alternatives and naturally friendly plants.
- By providing information concerning good weed management, disposal of unwanted plant material, further preventing the spread in your garden and neighbourhood.

On a broader scale the Nursery and Garden Industry can assist in:

- Increasing public awareness through education programs;
- Promoting the sale of superior, alternative plants thereby reducing the number of invasive plants grown and sold; and
- By working with government, with research organisations, the media and other key stakeholders to help reduce the distribution and sale of undesirable plants.

What you can do!

By checking the plants in your garden with the help of the GMI booklet you may identify plants you should replace, while at the same time finding others you may enjoy growing more!

Your **local** garden centre plant specialists will have additional suggestions of plants proven to be successful in your area. Plants purchased in another Region, no matter how lovely, may not always prove hardy in yours, and in doing so, you may unwittingly introduce another environmental weed!

It is also a good idea to consider your garden setting and to then make a list of the plants to fill your specific house and garden needs. For example, aspects of the house exposed to hot western sun will benefit from a deciduous tree to provide summer shade and will allow penetration of winter sun, while privacy from neighbours can be provided by carefully chosen hedging plants. Or you may simply want to create beds or borders of colourful flowers and dramatic foliage to enhance your home décor. All of these wishes and needs are valid and they will vary between gardeners.

Garden plants provide many useful purposes, and in time they will become an integral part of your environment, chosen to suit the architecture of both your home and your personal lifestyle. Good garden cultivation is your contribution to establishing a special microclimate and will help to protect and preserve the local environment.

In recent times, many new plant varieties have been introduced through modern production methods and the work of plant breeders, resulting in plants which are attractive and hardy but which are non-invasive. These may be plants which are sterile or rarely produce seed. Many new varieties have low water needs or are tolerant of the air pollution found in the urban environment. In this way the nursery industry is contributing to the elimination of damaging or invasive species.

Purchasing plants from markets and other dubious sources, as well as plant swapping and trading between friends may also result in inadvertent movement of environmental and/or declared or noxious weeds.



Are you creating a weed problem in your area?

Are your garden plants 'jumping the fence'? Garden escapes are said to be one of the main sources of environmental weeds. Home owners have a responsibility to protect natural resources.

Here are some simple ways to enjoy gardening without creating problems outside the garden fence, either for yourself or for others.

- Recognise and remove plants known to be 'weedy' and destroy them responsibly according to local council or shire regulations.
- Replace problem plants with non invasive alternatives, as suggested by the GMI booklet or by your local garden centre. Your local garden centre will help identify any suspect invasive plants.
- When purchasing new plants for the garden read labels to establish good characteristics such as drought tolerance and non-weedy habit.
- Good gardening practices include removal of spent flowers that can set seed within your garden or spread to bushland
- Do not dump green garden waste in neighbouring or public space as many plants can regenerate to become a nuisance.
- Do not dump spent cut flowers into the garden or on to adjoining property. Florists often use seed heads, vines and other plant parts that may be adventitious of the conditions in your garden.
- Never tip the water or plants from your aquarium into ponds, rivers or waterways. There are numerous, serious aquatic plants threatening rivers and waterways because of the thoughtless actions of some people.
- There are many good sources of information in regard to weeds and their control. See the back page for a list.
- Think global – act local. Consider plants local to your area. Your local council will be able to provide a list of indigenous plants for your garden.
- Encourage friends and neighbours to become involved in Bushcare, Landcare as custodians of their environment by following the same guidelines.

Native plants or imported species?

One of the most commonly asked questions at nurseries and garden centres is whether one should use native or exotic plants in the garden. There has long been discussion about this in gardening circles, and more recently the topic of using only locally indigenous or local area natives has become topical. The primary concern of most horticulturists is that gardeners should know the difference so that they may make informed choices.

Natives are, as the name suggests, those plants that occur naturally within Australia. Quite properly, they should be referred to as Australian native plants. Grevilleas, Eucalypts and Acacias are all examples. Of course, Australia is a big continent, so what is native to one area or Region, may be very different to those found in another. Think for example, of native plants from the dry soils of Western Australia and compare them to the tropical rainforest plants native to Queensland – all Australian natives – but very different plants, with different growing requirements.

In recent years plant breeders have hybridised many or been able to choose better or 'select' forms that have been sourced from plants growing naturally in the wild. Both hybrids and select forms will have improved characteristics to the parent species. It may be they flower more often or earlier in the season, they may produce better fruit, be disease resistant or they may have a longer life span.

Imported or so called 'exotic' plants are those originating elsewhere, not necessarily the 'exotic tropics' as some people may think.

Indigenous plants are plants that grow naturally in your local area. They are naturally occurring plants of the Region and can be seen in local parklands, as remnant plants on roadsides or riverbanks and in local bushland.

Some Australian native plants become 'naturalised' or take over in an area where they would not normally occur such as Cootamundra Wattle (*Acacia baileyana*), Bluebell Creeper (*Sollya heterophylla*) and Sweet Pittosporum (*Pittosporum undulatum*.)

Of concern to some conservationists and indigenous plant enthusiasts is the possibility that some introductions may interbreed with local or indigenous plants, thus impacting on the local gene pool.

Most invasive plants are imported or introduced plants. These are those you need to be informed about and are the basis of the GMI program. However, it is fact that there are a far greater number of well behaved, imported garden plants that are not invasive.



Working on the known statistics that 27,000 plants have been imported into Australia and some 2,700 of these are listed as environmental weeds it is estimated that approximately 10% of the imported plants in our gardens are invasive.

In modern horticulture, plants are bred, developed or selected for desirable traits such as hardiness, drought tolerance, long flowering season, larger flowers or fruits' their disease resistance and general appeal.

Of primary importance in selecting plant material for your garden is sourcing accurate information about the plant. We suggest that you ask for advice at your local garden centre.

Consult your local council or council weeds officer if still in doubt!

Australian native plants have greater appeal today than in the past; they generally grow better because of the improvements made in their selection.

Indigenous species should be grown from seed sourced locally to be of best benefit in your locality.

Australian gardens today have become an eclectic mix of both native and imported plants and can be complimentary to one another. Choosing one or the other is not the question; a garden should be one where the owner enjoys growing plants the owner prefers!

Any plant should be acceptable to the Australian gardener so long as it is non invasive; does not require lots of water to thrive; and grows well without lavish use of fertilisers and other chemicals.



Using Herbicides

Many of the weed control techniques suggested on this and the following pages involve the use of herbicides. Herbicides are poisons, and should be handled with the greatest respect. They can be absorbed very easily through the skin, by breathing the vapours, and by ingestion (eating or drinking).

By law, herbicides must be used strictly in accordance with the manufacturer's label. They should be kept well out of the reach of children, preferably secured in a locked cabinet. They should always be stored in the original labelled container.

USE OF HERBICIDE: SAFETY PRECAUTIONS

- Read the label before opening the container and follow the instructions.
- Wear protective clothing: long sleeves, long pants, sturdy shoes, gloves, eye protection.
- Always wear waterproof gloves. A respirator is advised when mixing or pouring the liquid.
- Do not eat, drink or smoke while using herbicide. Keep children and pets away.
- Wash skin and equipment afterwards. Wash contaminated clothing separately.
- Clean up any spills with large amounts of water; shovel up contaminated soil, dispose of it at the tip.



Bushcare Officers take no risks

Types of Herbicide

There are two widely used herbicides licensed for use at home: Glyphosate, sold under various trade names, including Roundup® and Zero® (which have different concentrations), and Triclopyr, sold as Tree, Blackberry and Woody Weed Killer (etc).

How Herbicides Work

Glyphosate is a systemic, non-selective herbicide. It inhibits the action of an enzyme, preventing the production of an amino acid essential to plant life and growth. It must be applied to green leaves, or directly to the plant's sapwood, which lies under the bark.

Triclopyr is a selective systemic herbicide for woody and broadleaf plants. It is a growth inhibitor which moves to the plant's roots, stops growth, and eventually leads to the death of the plant. Triclopyr can be applied to green leaves and to bark.

Herbicides, Waterways, and Steep Land

Some of the chemicals which are added to herbicides are not safe to use near waterways. They have the potential to seriously affect the quality of aquatic ecosystems. If you need to remove weeds, particularly trees, within 20m of any kind of watercourse, even a drain that runs only when it is raining, you must seek advice and assistance from your local council's environmental management department.

Control of Woody Weeds

CUT AND PAINT

Suitable for small to medium sized woody shrubs up to 10cm in diameter (or larger if using a chain saw). See below for trees.

- Clear around the base of the plant.
- Cut the stem horizontally as close to the ground as possible, using secateurs, loppers, or a saw. Make sure there is no soil on the cut.
- Apply undiluted herbicide to the cut stem immediately. Squeeze, not squirt, if using an applicator.
- Ensure there is no runoff of poison.
- Use as little herbicide as possible.

Clear ground and cut low: loppers & secateurs give the cleanest cut.



Apply the herbicide within seconds of cutting.



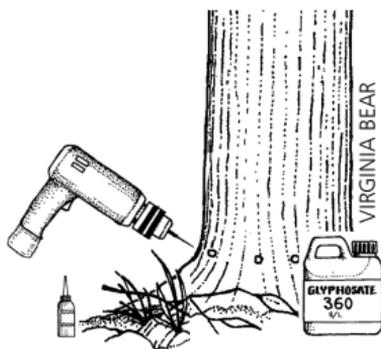
TIPS

- Make cuts horizontal to prevent herbicide from running off the stump. Sharp angled cuts are hazardous.
- Apply herbicide immediately after cutting - within a few seconds, before plant cells close and translocation of herbicide ceases.
- If plants resprout, cut and paint the shoots after sufficient regrowth has occurred.
- Stem scraping can be very effective on certain woody weeds, eg Japanese Honeysuckle, Blackberry, vines and rhizomatous plants.

STEM INJECTION

A method for weedy trees and large shrubs

- Use a cordless drill (9mm bit), hammer and chisel, or brace and bit.
- Below any branches, drill or chisel holes round the base of the tree, into the sapwood, angled down at 45°, and at 5cm intervals.
- Make the holes about 40mm deep.
- Within a few seconds of drilling each hole, fill it with undiluted herbicide.
- Use this method only when falling branches, as the tree dies, will not be a safety hazard.





HAND REMOVAL OF WEEDS

Suitable for seedlings, herbaceous weeds, many grasses:

- Before starting work, remove and bag seeds and fruit, and place in bin.
- If the weed has a tap root, push a narrow trowel or long knife deep into the ground beside the root. Loosen the soil. Work round the root, then work the plant out gently.
- Many plants which will not regrow from their roots (eg many grasses) can be crowned: see diagram right. Hold leaves and stems together, and use a knife to cut through all the roots below the 'crown'.
- Plants with bulbs, corms or tubers (eg Montbretia, Madeira Vine) may need deep digging to ensure complete removal. Bag bulbs, corms and tubers and send to the tip; do not compost.
- See Guard against erosion on next page.



STEM & LEAF WIPING

This method is suitable for plants with bulbs, tubers, corms or rhizomes, eg Montbretia.

- Remove and bag any seed or fruit.
- Using a weed wiper, start at the base and wipe all the stems and/or leaves with a dilute mix of herbicide.
- If leaves have soil on them, wipers must be regularly washed out.



leaf wiping

Take great care when wiping: do not allow the herbicide to touch your skin or to run off into the soil, or to get on a non-target plant.

There are many control methods which are specific to certain weeds - eg, large infestations where spraying, or covering to exclude light may be options.

Contact BMCC Bushcare (02) 4780 5528 for up to date techniques.

WHEN TO TREAT WITH HERBICIDE

- Apply herbicide when the plant is actively growing.
- Do not apply herbicide when the plant is under stress: extreme heat or cold, drought, waterlogging, or disease.
- Choose early morning or late afternoon in summer.
- Do not apply when wet or windy weather is anticipated.
- For many plants, especially bulbous plants and those which sucker, the best time is from summer to autumn.
- Treat deciduous plants in late spring or summer, when in full leaf.

Control of Groundcovers, Vines & Scramblers

SCRAPE AND PAINT

This method is suitable for vines and scramblers with woody stems.

- Using a knife, and starting from the base, scrape 20 to 100cm of leafy stem to expose the sapwood below the bark.
- Within seconds, apply herbicide to the scraped area (but also see By Law, below).



scrape and paint

TIPS

- Do not ringbark the stem: scrape about one third of the diameter.
- Stems larger than 1cm in diameter can be scraped on both sides.
- Vine curtains can be cut at chest level, then again at about 30cm. Scrape or cut and paint these stumps.
- Blackberry can be cut back to 1m if there are plenty of leaves; then scrape and paint the cut stems.
- Pulling vines (especially twiners) out of trees and shrubs may do a lot of damage. They can be left hanging to die.

By Law

Herbicides must be used according to the label, or according to National Registration Authority Permits.

If the plant on which you wish to use the herbicide is not named on the label, contact your council for permit information.

THE DIG OPTION

On these pages you will find advice on using herbicides to control weedy plants: often this causes minimal disturbance and less germination of seedlings.

Seedlings and small plants may be pulled by hand when the soil is moist.

And if you have the energy and the space in your garden, you can often take the dig option, making absolutely sure that you remove all the parts of the plant from which it can regrow.

Guard against erosion

Try to stage weed removal. Large areas of exposed soil are an open invitation to weed invasion. They may also cause soils to erode, carrying weed seed into the bush. Mulch bare soil, and stabilise it by planting bush-friendly plants into it as soon as possible.



Cootamundra Wattle

Acacia baileyana



Photo: Lorna Rose

This very popular garden wattle with fine, silvery-grey feathery foliage and masses of soft balls of golden flowers is an Australian native plant now invasive outside its natural region.

Seeds spread by ants and humans rapidly germinate. There is a high danger it will cross pollinate with the already endangered Downy Wattle (*Acacia pubescens*), putting it at further risk of extinction.

Cootamundra wattle is native in central western NSW and it is important to preserve this tree within its natural range.



Queensland Silver Wattle

Acacia podalyriifolia



Photo: Lorna Rose

This Australian native plant is natural to the Northern NSW and QLD. A small 5m tree, it has become invasive outside its region. The silvery grey foliage and masses of golden yellow blooms are the main attraction as a garden plant.

HOW IT SPREADS

- Both of the listed acacia species produce masses of seed pods that ripen on the tree and disperse with the help of birds, ants and small native mammals.
- These seeds have a high rate of germination especially after a bush fire.

Avoid growing these weedy varieties. Visit your local Garden Centre or a specialist native plant nursery for advice about other wattle alternatives.

The weeds and their alternatives



Coastal Myall

Acacia binerva



Photo: Lorna Rose

This Australian native plant may grow to 10m high by 4m wide and is a popularly cultivated medium sized shade tree with a blue-green appearance, suitable for well drained soils.

Its features are the silver-grey foliage and masses of golden spring blossom.



White Sallee Wattle

Acacia floribunda



Photo: Lorna Rose

A small evergreen tree, fast growing but living up to 30 years, rather than the usual 10-20 years. It has drooping branches and pale yellow flowers in late winter. It is native throughout the South Coast and often found along rivers. Use of local wattle species is always desirable.



Blue Bush

Acacia coventyi



Photo: Lorna Rose

A rare plant from Southern New South Wales. This tall shrub has foliage with a silver-blue tinge and rich golden spring flowers. The combination of foliage and flowers creates a stunning combination in the garden. It is one of the most eye-catching native shrubs.

Please note: Although rare in nature this species is becoming available from nurseries - ask at your local garden centre. It has proved to be fast growing, frost tolerant, drought resistant and free flowering



Box Elder

Acer negundo



Photo: Lorna Rose

This green leaf form was a popular shade and street tree in the past. It is also used as an understock for other ornamental grafted maples.

Silver and gold variegated forms will also revert back to this green form. All grow to 9m and form deciduous shade trees however the mass of seeds they produce has made them major bushland invaders.

HOW IT SPREADS

- Produces masses of 'winged' seed which are readily carried on winds.
- Seeds germinate rapidly in gardens, guttering, gaps in paving and driveways etc.
- Wind transfers them from garden to bush land, parks and reserves.

Removal of these invasive plants is both difficult and very costly if allowed to grow to even a moderate height. Remove the rogue seedlings if they appear in your garden.



Sensation Maple

Acer negundo 'Sensation'



Photo: Fleming's Nurseries

The best of the box elder maples. Grows to 9 m tall. With lovely bronze- burgundy growing tips that turn mid green in summer it is beautiful shade tree. Tolerates heat and drought and given good cultivation may grow beyond 10m in height. This variety is sterile, so the self seeding issue with the species is not concern.



Claret Ash

Fraxinus oxycarpa 'Raywood'

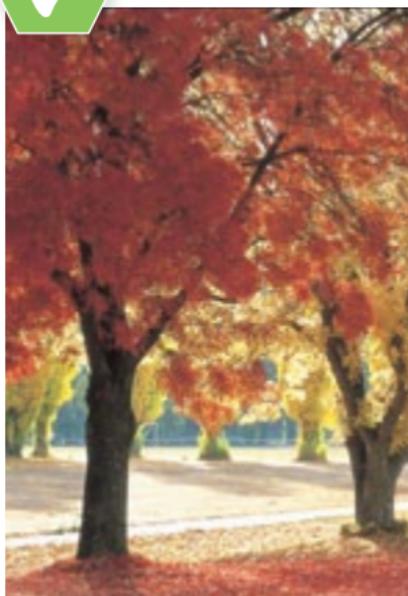


Photo: Lorna Rose

An Australian hybrid, this tree will grow 10-15m tall and is deciduous.

The feather-shaped leaves turn claret red in autumn.

A neat, medium sized tree, perfect for garden or street planting.



Tupelo

Nyssa sylvatica



Photo: Lorna Rose

Decorative, deciduous tree with flat, mid-green leaves that turn brilliant colours in autumn.

Almost pyramidal in shape, it rarely exceeds 10-15m as a lovely garden specimen tree.



Agapanthus (non hybridized)

Agapanthus praecox sub species orientalis



Photo: Macbird Floraprint

Very popular as border plants, used to hold low banks and planted by farmers around properties as a fire retardant.

They are known to invade roadsides, bushland and waterways. Agapanthus are grown because of their hardiness and the striking blue, blue-purple and white flowers in November/December.

HOW IT SPREADS

- Often spread by dumping garden waste.
- Each flower head can have hundreds of seeds which are spread by wind, water and soil.

TIP: Removing spent flower heads can avoid much of the problem of seed spread to roadsides and bushland

NOTE: There are many hybridized agapanthus available that are infertile or set very little seed. Visit your local garden centre for advice about these superior non invasive hybrids.



Dwarf white Agapanthus

Agapanthus 'Snow Storm'



Photo: Macbird Floraprint

This dwarf agapanthus grows to 40cm tall. With an almost complete absence of seed is considered non invasive. With multiple heads of compact white tubular flowers. In early summer it makes a very showy low border plant, wonderful for cottage gardens or as a hardy container plant. An excellent cut flower.



Swamp Lily

Crinum pedunculatum



Photo: Lorna Rose

This Australian native plant has rosettes of broad leaves and clusters of white, highly fragrant, flowers on 1m stems. Suits any soil, full sun or dappled shade and is mildly frost tolerant, it also grows well near ponds. Protect from wind in coastal gardens.



Blue Flax Lily (Paroo lily)

Dianella species



Photo: Macbird Floraprint

Australian native plant, Natural to eastern coastline this plant forms clumps of long dark-green leaves up to 60cm high. Tall stems of blue, starry flowers followed by blue berries attract birds. Likes sun and is frost resistant.



Butterfly bush

Buddleia davidii



Photo: Lorna Rose

Who would think that this plant with its delightful name would become an environmental weed?

Arching stems carry sprays of tiny gold throated, mauve flowers in spring and summer and is attractive to butterflies.

It was also very popular as a quick growing privacy plant, however there are now many better, non invasive alternatives.

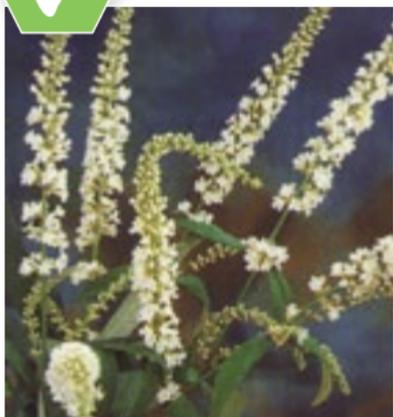
HOW IT SPREADS

- Seeds are spread by wind and water.
- Dumping of garden prunings that may easily take root.
- This plant grows readily in damp areas to create shady thickets crowding out natural species and destroying habitat.

Remove these plants from gardens and choose superior species from others that will prove more environmentally friendly while at the same time still attracting butterflies



Buddleia 'Spring Promise'



Buddleias are usually summer flowering shrubs and a bit too vigorous for the average garden, however, here is a smaller one which flowers from the middle of winter through to spring. With masses of long slender stems of white flowers with a delicious fragrance. It can be grown in full sun or part shade, grows quickly and will tolerate quite dry conditions when established. A non invasive hybrid.



Buddleia 'Wattle Bird'



This deciduous Buddleia is a shrub growing to 2m wide by 3m high. It is a relatively recent introduction and is an Australian-raised variety.

It bears elongated spikes of yellow flowers, in late summer-autumn and is also Butterfly attracting.



Lasiandra

Tibouchina urvilleana 'Alstonville'



A sturdy evergreen shrub to 6m high by 4m wide, with large showy, Purple-violet flowers in autumn. An ideal feature plant or use as a colourful hedge.

There are numerous selected varieties available which offer variable flower colour and heights. Ask at your local garden centre for the best local varieties.

Photo: Lorna Rose



Mirror Plant

Coprosma repens



Photo: Lorna Rose

This evergreen shrub with round, glossy leaves is very commonly planted in coastal environments because of its salt tolerance.

HOW IT SPREADS

- Its succulent orange fruits are spread by birds into many coastal vegetation types, including swamp forest, dunes, and sea-cliff scrub.
- Canopy will smother all other vegetation
- Can grow prostrate, rooting where branches touch the ground.



Evening Glow

Coprosma species



A very hardy non invasive plant. The colourful golden foliage changes to rich orange and pink-red shades in autumn and winter. It will tolerate coastal conditions and is ideal for small gardens, tubs, rockeries and general landscaping. Low water requirement once established.

Photo: Green Hills Propagation



Karo Red

Coprosma species



Photo: Green Hills Propagation

It has striking black-red foliage, very compact growth and is hardy. The colour is most intense during winter. This outstanding non invasive coprosma is a great addition to any garden adding a display of colour all year round



Coastal Golden Wattle

Acacia longifolia ssp. 'Sophorae'



Photo: Jackie Miles

Australian native spreading shrub to 5m high. Spikes of golden yellow flowers in September provide a stunning display. Tolerates sea spray and coastal winds and is used to hold sand dunes. There is a prostrate form available (to 2m high.)



Gazania

Gazania species



A favourite of gardeners living in coastal areas because of their bright, sunny, daisy style flowers and their ability to withstand coastal conditions. The seed grown plants are considered very invasive, particularly in residential areas near the beach where they will spread along roadsides from seeds blown from nearby gardens

HOW IT SPREADS

- Produce abundant seeds that are spread by wind and water
- Spread by dumping garden waste
- Also spread by stolons
- Stops native ground layer plants from growing.

Please note: Avoid any seed grown plants specifically *Gazania linearis* and *Gazania rigens*.

Photo: Ramm Botanicals



Gazanias - sterile varieties

Gazanias are low-growing, evergreen, clump-forming or carpet plants. They thrive in coastal gardens. Deadhead frequently to encourage flower production. They are suitable to be grown as an annual in more frosty areas.



Look for these wonderful, hardy, sterile varieties of Gazania at your local garden centre.



Montezuma

has distinctively striped, large flowers in earthy tones of orange and brown. Also has high pest and disease tolerance.



Sunset Jane

has large, honey coloured, fully double blooms over grey-green foliage, it can withstand dry conditions and is suitable for coastal plantings.



Sahara

has large, fully double yellow flowers and silver grey foliage.



Sun about

has double, bright yellow flowers.



Avalon

this single flowered variety with bright yellow flowers spreads well.



European and African Olives

Olea europaea ssp europaea and cuspidata



Hardy long-lived evergreen, small to medium trees. European olives produce green or black oval-shaped fruits for table and oil production. The fruits are considered a delicacy after they have been processed.

African olives produced smaller spherical black fruits and has been used as a hedging species in the past.

It must be stressed it is the fruit left on trees and not harvested that are spread by birds. The seedlings are extremely invasive and have become problematic in areas the state.

HOW IT SPREADS

- Trees left to grow wild, or that are not harvested.
- Fruit is attractive to and spread by birds and small mammals.

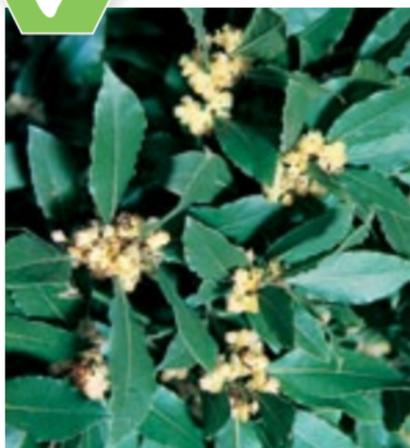
How you can help.

Don't plant olive trees unless you are going to harvest the fruit, if you have trees you no can longer manage, ask permission from your local council to have the trees removed.



Bay Tree

Laurus nobilis



Evergreen tree 15-30m. Aromatic dark green leaves used as flavouring in cooking. Small yellowish flowers. Ideal tub plant and can 'be clipped to shape'. Drought tolerant, grow in full sun or part shade.

Photo: Macbird Floraprint



Water Gum

Tristaniopsis laurina



Photo: Macbird Floraprint

This Australian native tree has various new improved forms, one highly recommended form is 'Luscious', it grows 7 to 12m tall, the foliage is lush, dark green and shiny, with distinctive copper coloured new growth.

Water Gums are highly desirable evergreen landscape trees with sweetly scented yellow flowers in short clusters through January. 'Luscious' is a highly ornamental tree well suited for use in street tree plantings, parks, reserves, as a garden feature for that special spot, or as an elegant shade tree.



Bush Tuckeroo

Cupaniopsis anarcardioides



Photo: Jackie Miles

Small evergreen densely growing tree to 10 m high. Creamy-green, inconspicuous flowers May to September followed by clusters of small orange fruit. An attractive, dense tree, it will provide excellent shade and is suited for street trees. This tree is the host plant for eight native butterfly species.



Radiata Pine

Pinus radiata



Photo: Jackie Miles

This large evergreen tree has been very widely planted in Australia as a windbreak and timber tree. The winged seeds are contained in woody cones, from which they are released when ripe to spread on the wind.

HOW IT SPREADS

- Plants are found in bush many kilometres from the nearest plantations. It is possible that cockatoos, which eat the seeds, may sometimes carry the cones longer distances than seeds could travel on the wind.
- Self-sown young trees are a very common sight near mature trees. Other pine species may also be as invasive.

Please note: It is desirable to replace the pines with native conifers as exotic conifers do not harbour our native birds and small mammals.



Black She oak

Allocasuarina littoralis



Photo: Jackie Miles

An Australian native tree the black sheoak will grow very well both inland and in coastal zones. Grows to about 8m high by 4m wide. The flowers are showy and dark red in spring. This is an excellent street tree. Drought tolerant, once established they will succeed where other exotic trees may fail.



Black Cypress Pine

Callitris endlicherii



is a native Australian conifer. It develops into an erect tree to 15m high with spreading branches, it is drought and frost tolerant and useful for windbreaks and timber.



Photo: Jackie Miles



Leyland cypress

Cupressocyparis leylandii



Evergreen, moderately fast growing trees mainly used for hedging and windbreaks. Ask at your garden centre for information about the selected forms, 'Naylor's Blue', 'Leighton's Green' and 'Castlewellyn Gold'

Photo: Macbird Floraprint



Yellow bamboo

Phyllostachys aurea

Black bamboo

Phyllostachys Nigra



Photo: Bamboo Downunder

These bamboos have a spreading habit sending their invasive rhizomes (roots) underground

Any type of running bamboo is to be avoided

Choose a clumping type of bamboo instead such as *Bambusa multiplex* 'Alphonse Karr' or other small cultivars.



Gold Stripe Bamboo

Bambusa multiplex



Photo: Bamboo Downunder

Clumping variety to 3 metres. Erect growth, leaves to 3.5cm across, bright yellow, striped green, lower third of stems are leafless. Very attractive, an ideal garden specimen.



Slender Weavers Bamboo

Bambusa textilis gracillis



Photo: Bamboo Downunder

This bamboo originates from Southern China and will grow 6 m high by 25 mm in diameter straight and graceful. This upright, clumping bamboo has small leaves and is a splendid ornamental with upright growth. Excellent pot or container plant. Can be grown next to ponds or places where other bamboo species would become waterlogged.



Chungi Bamboo

Bambusa chungii



Photo: Bamboo Downunder

Chungi is a highly ornamental bamboo. The new shoots and young culms are heavily covered in white powder, giving them a bluish appearance and an attractive upright form. A vigorous growing and hardy bamboo, it can withstand frost, cold wind and dry winters.



Polygala virgata **Polygala myrtifolia**



Polygala myrtifolia and Polygala virgata are the two widely naturalised species of this group.

The flowers are mauve-purple, pea shape and fringed. Both are very invasive especially in coastal bush areas.



Dazzler *Polygala x dalmaisiana Dazzler*



This sterile form of Polygala is an ideal alternative to the invasive species. A delightful compact small shrub grows 1.5m high by 1m wide with attractive purple pea flowers most of the year.



Mint bush

Prostanthera species



Photo: Macbird Floraprint

These hardy Australian native upright bushy shrubs to 2m tall with aromatic foliage and have masses of purple flowers in spring. There are numerous varieties of mint bush. They are frost tolerant. Seek advice at your local garden centre for the best varieties for your garden.



Lasiandra

Tibouchina urvilleana 'Alstonville'



Photo: Lorna Rose

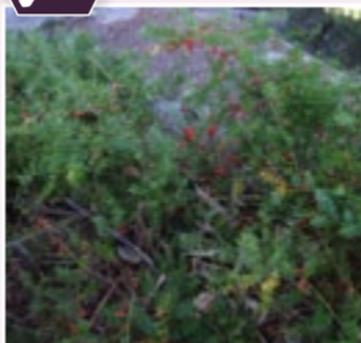
This evergreen 6m shrub with showy, purple flowers makes this an ideal specimen or privacy plant. Numerous other varieties offer variable flower colour and heights.



Asparagus Fern

Asparagus aethiopicus 'Sprengeri'

Asparagus plumosus and plumosus 'Nana'



Multi-branched prostrate herbs forming a dense mat of rhizomatous roots. The fern-like branches grow to 60cm with a covering of small sharp spines. Native to Southern Africa these species have small white-pink clusters of flowers in late summer which ripen to bright red berries.

HOW IT SPREADS

- dispersed by birds, small animals and dumping of garden waste.

Asparagus species are highly invasive environmental weeds however some species are still in production. These 'ferns' will overtake natural species by developing dense thickets that deprive other plants of light and nutrient as well as destroying habitat.

Please note: All other Asparagus species except the cultivated *A. officinalis* have the potential to become invasive weeds.



Grevilleas

Grevillea species



Among the highly recommended varieties are 'Royal Mantle', 'Bronze Rambler', 'Bedspread' and 'Gin Gin Gem'

All fast growing ground cover plants ideal for covering large areas. The red toothbrush flowers occur in spring and autumn. They grow to about 30cm high x 2m across and are frost tolerant. Ideal as a ground cover or living mulch. Will grow over banks or hang down walls and attract nectar-feeding birds.

Photo: Macbird Floraprint



Creeping Boobialla

Myoporum parvifolium



Photo: Macbird Floraprint

An Australian native, dense, weed suppressing ground cover. Individual plants will easily cover one square metre. The flowers are white or pink and occur from winter to summer. Sweet fleshy fruits provide feed for native birds.



Prickly rasp Fern

Doodia aspera



Photo: Lorna Rose

This is a pretty fern as its new growth is a bright pinky-orange. It makes a good groundcover for a shady site and is one of the most drought-tolerant local native ferns.



Common ground Fern

Calochlaena dubia



Photo: Hill, R. - ANBG

This frost resistant fern grows to 1m high and will tolerate full sun. It is slow growing, spreading to approx 1 m wide with age.



Cocos palm

Syagrus romanzoffianum



Photo: Macbird Floraprint

Popular as an inexpensive, fast growing palm often used in new gardens. Their over-use has created a blot on the landscape and the environment.

Growing up to 12m tall, their stems can give the appearance of a garden planted with telegraph poles

HOW IT SPREADS

- They produce a multitude of seed attractive to larger birds, possums and bats, through which the spread is accomplished.
- Seeds are quick to germinate and plants are well established by the time they become visible in the bush. Removal is difficult and expensive.
- Seeds also move through storm water channels and drains to germinate many miles from the original plant.

What you can do

If you own this palm try to remove as many seeds and seedling plants as possible. Better still, choose from the alternative palms listed here to replace existing Cocos palms.



Cabbage Palm

Livistona australis

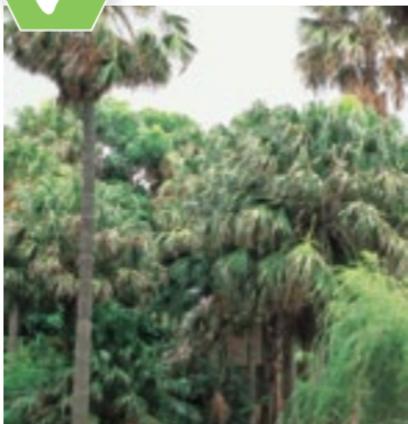


Photo: Lorna Rose

This native palm has fan-shaped leaves and generally a smooth trunk. It is native throughout coastal areas and into East Gippsland. Remnant trees, sometimes as much as 30 metres high, can often be seen in gullies in cleared paddocks on the coast.



Alexander Palm

Archontophoenix alexandrae



Photo: Lorna Rose

Smooth, pale-green shafts at the base of feathery, drooping fronds, slightly grey on the under sides. The stem shows rings of leaf scars. From north Qld and best suited to warm zones. Grows between 10-15m high.



Bangalow Palm

Archontophoenix cunninghamiana



Photo: Lorna Rose

This 10m palm has distinct silvery undersides to the large feather-shaped fronds. As a rain forest palm it is best suited to warm, frost-free zones.

Smooth stem with close, horizontal leaf scars. Seeds attract lorikeets to the garden.



Golden Bells

Tecoma stans



Photo: Lorna Rose

This South American plant has large clusters of showy yellow trumpet shaped flowers in spring and summer.

Following the flowers are long green bean-like pods packed with winged seed.

HOW IT SPREADS

- The seeds are scattered by birds and carried by the movement of soil, water and garden refuse dumping.
- Seeds readily germinate to infiltrate bush land reserves and parks.

This plant is already a substantial weed of coastal areas and the Blue Mountains region of NSW.

It has been a commonly grown garden plant. Its use must be stopped.



Fringed Wattle

Acacia fimbriata



Photo: Lorna Rose

Bushy 7m tree with fine, dark-green leaves, bronze tips in spring and perfumed, pale lemon to golden flower balls. Suits a variety of soils with good drainage.



Native Frangipani

Hymenosporum flavum



Photo: Lorna Rose

Clusters of scented, creamy yellow flowers cover the tree in spring amid shiny, dark-green leaves. Growing 10-15m high in the garden. Reasonable frost tolerance.



Honey Gem or Sandra Gordon

Grevillea species and hybrids



Photo: Macbird Floraprint

Both are excellent shrubs with yellow flowers almost all year round. There are many other hybrid Grevilleas which reach small tree size. With an open branching habit, ferny leaves and spectacular clusters of yellow, orange or pink flowers that provide nectar for birds. Seek advice at your local garden centre for the best grevilleas to plant in your garden.



Aquatic plants

In recent years aquatic plants have become a major invader. The cost of removal and control to Local, State and Federal governments runs into many millions of dollars.



Parrot Feather

Myriophyllum aquaticum

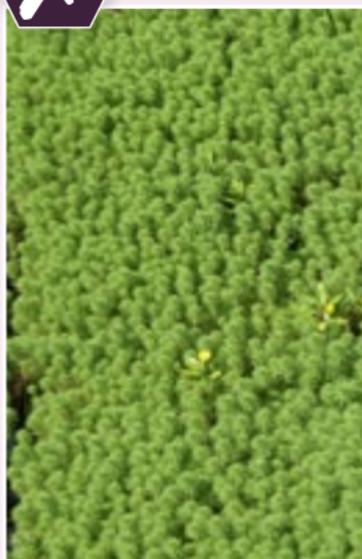


Photo: Terry Inkson

A feathery leaved, perennial, aquatic plant with stems that grow up to 2m in length. The tips of the stems frequently protrude from the water up to 30cm. Seeds are infertile in Australia due to only female plants being recorded here.

Parrot feather reproduces by fragments breaking from the parent plant and moved by water currents. Also commonly found in home aquaria as the plant was once sold as an attractive fish tank plant. This aquatic plant is capable of totally choking water ways, dangerously excluding all other flora and fauna.

Please note: It is not recommended that native aquatic plants should not be planted or dumped into waterways outside their natural distribution as they may become invasive.



Water Milfoil

Myriophyllum papillosum



Photo: Glenfield Nursery

(formerly known as Myriophyllum propinquum)

A vigorous native milfoil with foxtail like stems held above the water. Provides shelter and spawning areas for fish. Full sun to light shade. Submerge up to 60cm.



Upright water Milfoil

Myriophyllum crispatum



Photo: Glenfield Nursery

This native aquatic plant has delicately divided plumes which grow out and float over the water. Submerged up to 60cm deep, it provides spawning areas and shelter for fish. Plant in full sun to semi shade.



Streaked Arrow Grass

Triglochin striata



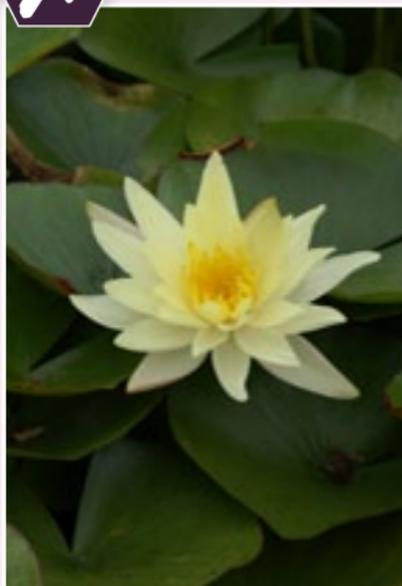
Photo: Glenfield Nursery

An Australian native plant found in shallow water or along the pond edge. It boasts slender bottle- green leaves 20cm in length. Moist soil to a level of 20cm deep.



Yellow or Mexican Waterlily

Nymphaea mexicana

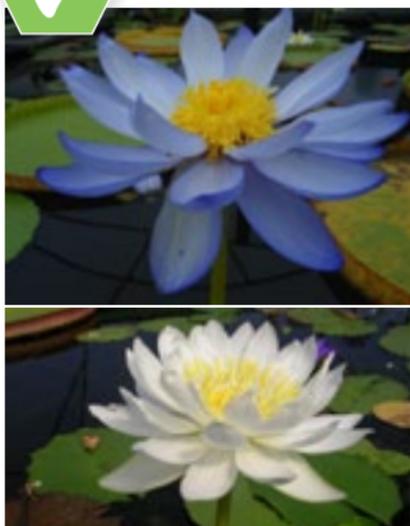


This species is often traded due to its bright, attractive yellow flowers. It is an extremely invasive perennial herb that has the ability to entirely choke slow moving or still water bodies. It produces daughter plants at the ends of stolons that can become detached and float away to establish elsewhere. It is a major weed in SE QLD and in parts of NSW and its planting in any garden or water body should be strongly avoided due to its invasiveness and adaptability. This plant has undergone a weed risk assessment and has been recommended for a national ban.



Native Waterlily

Nymphaea violacea



A floating perennial herb growing from a rhizome in the mud of the pond base. Leaves are broadly egg-shaped to circular with a split at the base to the point of the stalk attachment. The flowers are borne on long stalks up to 30 cm above the water surface. They are 7-16 cm in diameter and violet, blue or white in colour.

Photo: Blue Lotus Farm



Wavy Marshwort

Nymphoides crenata



Photo: Glenfield wholesale nursery

Slight bronzed-green waterlily-like leaves with heavily crenated edges and purplish-brown speckles. A robust native water plant with fringed yellow flowers



Swamp lily

Ottelia ovalifolia



Photo: Fagg, M - ANBG

Occurs in all mainland states and grows in slowly flowing fresh water or the still water of ponds, dams and lagoons. The Swamp Lily may form extensive colonies in nutrient-rich water. The open flowers are the most visible and are white with reddish or purple centres and emerge in the warmer months. Blooms appear regularly and last for less than a day.



Berried Plants

Gardeners often choose trees and shrubs with showy persistent berries for winter colour in their gardens when flowers are scarce. Unfortunately the berries often attract birds and small mammals that unwittingly aid the spread of these unwanted plants into bushland and open spaces.

For further information go to www.weeds.crc.org.au



Firethorn

Pyracantha species



Photo: Delwyn Thomas

Evergreen shrubs to 4 m high. Flowers appear in white clusters in spring and summer, followed by spectacular and abundant fruit maturing to red, orange or yellow.

HOW IT SPREADS

- These plants are spread by seed that is mostly bird or water dispersed.

Pyracantha and *Cotoneaster* species are often confused with each other. *Cotoneaster* species are similar but lack thorns.



Photinia

Photinia 'Red Robin'



Photo: Macbird Floraprint

This very hardy evergreen shrub has brilliant tips of red new foliage in spring. It prefers full sun to part shade, Will happily tolerate frost and dry conditions once established. New quick growing cultivars are 'Super Red', 'Super Hedge' and the fastest growing photinia on the market is 'Super Bronze'.



Bottlebrush

Callistemon 'Western Glory'



Photo: Macbird Floraprint

Western Glory in an excellent choice of bottle brush, it originated in a Western Australian nursery It is a bushy shrub 2 - 3 m tall by a similar spread. Bright red brushes occur in mid to late spring. A hardy shrub it will withstand at least moderate frost and flowers best in a sunny position. Bottle brush will perform well in gardens with poor drainage and regular availability of water.



NSW Christmas bush

Ceratopetalum gummiferum



Photo: Fagg, M - ANBG

A large shrub or small tree to 5m high in cultivation. The foliage is very attractive and the new growth is often pink or bronze coloured. The true flowers are white in colour .The main attraction is the massed display of red sepals n which are commonly mistaken to be flowers. These are at their peak in early to mid summer and usually at Christmas. The sepals and foliage are widely used for cut flowers.



Cotoneaster

Cotoneaster species



Photo: Delwyn Thomas

This group of hardy, fast growing, perennial, woody shrubs will grow 2 to 5m tall. Some varieties are deciduous. They vary from medium to large shrubs.

The flowers are small and white and appear in spring and summer. The flowers are followed by clusters of conspicuous orange to red berries that resemble minute apples.

Cotoneasters were previously used as hedges and were commonly planted because the large crops of decorative berries hang on to the branches for months through winter and provided colour when flowers are scarce.

HOW IT SPREADS

- The seeds of this fruit are spread into bushland by fruit eating birds and will grow virtually anywhere a bird drops the seeds.

Pyracantha and Cotoneaster species are often confused with each other. Cotoneaster species are similar but lack thorns.



Flowering Crabapple

Malus species

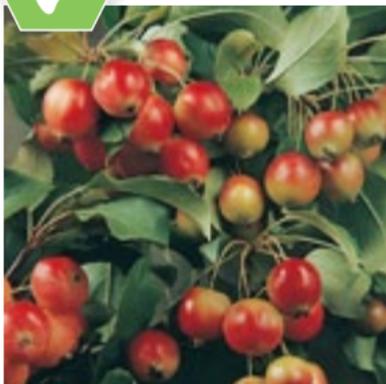


Photo: Fleming's Nurseries

Very pretty, highly ornamental and deciduous trees grown for beautiful Spring blossom and their showy crimson-red crab apples, the ripe fruit lasts well, adorning the tree from Autumn into early Winter.

Visit www.flemings.com.au for excellent cultural information on the many old and new selected forms.



Photinia

Photinia glabra rubens



Photo: Macbird Floraprint

With similar growth habits to the Photinia robusta, Photinia glabra rubens offers a finer leaf ideal for medium hedges. The new foliage shoots are bright crimson, fading to green. It is a very hardy and an excellent screening plant where it can grow to 4m tall. Best kept as a trimmed hedge at your desired height.



Crepe Myrtle

Lagerstroemia indica



Photo: Macbird Floraprint

A small tree, perfect for suburban gardens or as a stunning street tree. In summer it produces vibrant red, pink, white or lilac flowers which have a texture like crepe fabric. The flowering period lasts for up to three months. The autumn leaves colour brilliantly and the tree also has beautiful bark.



Common Holly

Ilex aquafolium



Photo: Fleming's Nurseries

Slow growing when young this tree can reach a massive 20m high in maturity. Glossy, dark-green leaves are spiny and sharply toothed. Bright-red winter berries occur only after pollination takes place.

HOW IT SPREADS

- There are always enough male and female plants to assure berries. Birds and small mammals ingest berries and are dispersed by them. Seedlings and maturing plants are costly and difficult to remove, especially in areas of thick native forest.

While berried plants add texture to the garden it is best to avoid species that so readily naturalise in bushland.

Look for native alternatives such as the Lilly Pilly varieties listed here.



Fragrant Olive

Osmanthus heterophyllus



Photo: Lorna Rose

This large shrub is similar in looks to holly, with mid-green, finely toothed leaves and highly scented flowers, at their best in the evening. Osmanthus will grow to 4m high, suitable as an informal hedge or espaliered. Grows well in shady areas.



Sasanqua Camellias

Camellia sasanqua



Photo: Lorna Rose

This hardy evergreen shrub or small tree has a wide range of heights, colours and flower forms. Suitable for use as a hardy screen, specimen or container plant. The autumn flowers are in shades of pink, red, white and many bicolours in single, semi double and double forms. Sun hardy or shade tolerant varieties available. Will tolerate drought once established. Ask at your garden centre for the best varieties for your garden.



Lilly Pilly

Acmena smithii 'Minor'



Photo: Macbird Floraprint

A dense-foliaged, medium tree that grows 8 - 10 m by 6 m wide. The leaves are glossy green. Flowers are creamy-white in spring/summer followed by fleshy fruits, white to purple in colour. This is a very hardy plant. It will grow in full sun or fairly heavy shade.



Bulbous plants.

There are a number of bulbous plants that have become invasive, especially along roadsides in coastal areas of NSW. Dumped garden waste is often the cause. Some of these plants are behaving aggressively whilst other are adventitiously taking advantage of the growing conditions to naturalise.

The most aggressive of these are the *Watsonia* species, the *Formosa* lily, *Gloriosa* lily and *Montbretia*. Other bulbs that will adventitiously naturalise are *Freesias*, *Tritonias* and *Gladioli*.



Montbretia

Crocosmia x crocosmifolia



Photo: Lorna Rose

Bulbous South African plant with long arching spikes of spring/summer orange flowers. After the flowers die down the seed set along the stems forming a decorative spray and are used in floral decorations by florists.

HOW IT SPREADS

- Each bulb reproduces at least a dozen bulblets—each one makes a new plant to spread rapidly in gardens
- The movement of storm water and soil distributes bulbs into bushland and along the banks of rivers and streams
- Infestations replace plant life natural to the area.

Stop the spread of this plant by discouraging its planting in gardens.



Blue Flax Lily (Paroo lily)

Dianella species



Photo: Macbird Floraprint

Australian native plant, Natural to eastern coastline this plant forms clumps of long dark-green leaves to 60cm high. Tall stems of blue, starry flowers followed by blue berries attract birds.

Likes sun and is frost resistant.



Morning Iris

Orthrosanthus multiflorus



Photo: Macbird Floraprint

With beautiful blue/mauve flowers that continue over several months it is a very easy plant to grow. The bright green leaves make a lovely mound and a great landscape feature when mass planted. Snails need to be controlled as they enjoy living in the leaves.



Fringe Lily

Thysanotus species



Photo: Ramm Botanicals

This is a small tufted, Australian native, grassy plant with mauve flowers in spring and summer. It is highly recommended for planting in full sun in the garden or in containers. Look for 'Frisly Knickers' , an improved form at your local garden centre.



Taiwan lily

Lilium formosanum



Photo: Lorna Rose

This bulb from Taiwan has infiltrated bush, reserves, parks & verges of roads.

Formosa lily is an invasive bulb with reedy stems about 1 m tall with mid-green leaves. The white flowers are streaked purple on the outside rib of the petals. These appear late spring/early summer followed by seed pods that release thousands of winged seeds.

This is not the florists lily. The trumpet shaped flowers are similar to but not the same as the cultivated garden bulb called the Christmas or November Lily (*Lilium longiflorum*).

HOW IT SPREADS

- The plant seeds readily, scattered by the long willowy stem as it moves easily on the breeze.
- Seeds germinate readily and bublets also spread through soil and movement of water.

You can stop the spread of this plant by not transplanting bulbs or plants from the bush and by discouraging friends and neighbours from growing it in gardens.



November or Christmas lily

Lilium longiflorum



Photo: Lorna Rose

This bulb plant will grow to 70cm tall. The trumpet shaped, white, sweetly scented flowers are excellent cut flowers.

This plant prefers moist soils and grows in part shade to full sun.

Can be successfully grown or purchased in flower, in pots.



Day Lilies

Hemerocallis species and hybrids



Photo: Lorna Rose

Day lilies are either evergreen or deciduous with generous clumps of strappy leaves and tall flower stems with double or single flowers. The flowers are showy and short lived in a wide colour range of cream, yellow, pink, orange and burgundy flowers. Early, mid or late flowering seasons.



Swamp lily

Crinum pedunculatum



Photo: Lorna Rose

This Australian native lily has a rosette of broad leaves and clusters of white, highly fragrant, flowers on 1m stem. The swamp lily suits any soil, it will grow in full sun or dappled shade and they are mildly frost tolerant.

Grows well near ponds or in damp places. Protect from wind in coastal gardens.



Arum lily

Zantedeschia aethiopica



Photo: Lorna Rose

This white lily with large spathes is widely used as a cut flower. The plants of the Arum lily will engulf gutters, streams, waterways and wetland bogs. It is now a widespread environmental weed! The green form called 'Green Goddess' is also invasive and can also be found clogging up natural waterways.

HOW IT SPREADS

- These plants produce prolific amounts of seed that wash down gutters and streams and readily germinate. It also produces large amounts of small rhizomes that are easily spread in contaminated soil. Birds and small mammals also disperse the seeds through their droppings.
- Any moist soil will be quickly infiltrated.

Though these are popular cut flowers, the use of this plant must be discouraged for the home garden. Its spread must be stopped.



Day Lilies

Hemerocallis species and hybrids,



Photo: Lorna Rose

Day lilies are either evergreen or deciduous with generous clumps of strappy leaves and tall flower stems with double or single flowers. Choose from tall, medium or compact varieties with double or single flowers. Flowers are showy and short lived and in a wide colour range of yellows, burgundy and gold.



Swamp Lily

Crinum pedunculatum



Photo: Lorna Rose

This Australian native lily has rosette of broad leaves and clusters of white, highly fragrant, flowers on 1 m stems. The swamp lily suits any soil, it will grow in full sun or dappled shade and are mildly frost tolerant.

Grows well near ponds or in damp places. Protect from wind in coastal gardens.



Cunjevoi

Alocasia brisbanensis



Photo: Paul Donatiu

The cunjevoi is a beautiful rainforest plant perfect for shady, damp areas. Perfect for landscaping around pools and ponds. It has green lily like flowers followed by dramatic, attractive red fruits.



Climbing and Ground Cover Plants

This very useful group of plants are often used to cover unsightly objects and provide green barriers. Unfortunately we now know that the attributes that make them useful, also allow these plants to grow outside their given area and invade bushland. There are many better, less invasive plants. Please choose from the list opposite or ask at your garden centre for other alternatives.



English Ivy

Hedera helix



Photo: Lorna Rose

This rampant climber clings to walls, fences and trees with small suckers on the stems. It also forms a solid mat over the ground. The trailing ivy is the juvenile form. The 'shrub' ivy is the adult form which, if allowed to mature will produce huge quantities of black berries.

HOW IT SPREADS

- These are spread by birds and small animals.

English ivy can kill native trees and smother native groundcover.



Chinese Star Jasmine

Trachelospermum jasminoides



This evergreen vine from China has dark, glossy foliage and small, starry, white, spicy, nutmeg-scented flowers in summer. It is slow-growing initially but later becomes vigorous. Variegated leaf forms are also available.



Native sarsaparilla

Hardenbergia violacea 'Happy Wanderer'



Photo: Macbird Floraprint

This is a popular and generally hardy garden plant. The pea shape flowers appear in winter and spring and are usually violet in colour but pink and white forms are available. It is adaptable to most soils and aspects though sunnier positions produce better flowering. Ask at your local Garden Centre for the best varieties for your garden.



Japanese Star Jasmine

Trachelospermum asiaticum



Photo: Macbird Floraprint

An evergreen groundcover or twining climber with small glossy dark green leaves. During summer this hardy plant bears a profusion of highly scented cream flowers. Once established it is tolerant of dry conditions and is frost hardy. It makes a very effective groundcover and will grow around and under the shade of large trees.



Japanese Honeysuckle

Lonicera japonica

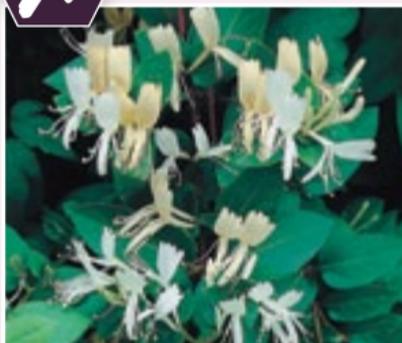


Photo: Macbird Floraprint

This semi-deciduous scrambling or climbing shrub will grow to 8 m high. It has tube-like fragrant and nectar filled flowers ageing from white to yellow and profuse through summer. Small shiny black berries follow the flowers in autumn.

HOW IT SPREADS

- The seeds are dispersed by water and birds, the stems root down where they touch the ground and the roots make new shoots.
- This plant is also often dumped on bushland and roadside edges.
- It was once frequently cultivated in gardens however the common honeysuckle is now a serious weed of moist conservation areas.



Wonga Wonga vine

Pandorea pandorana



Photo: Lorna Rose

This is a vigorous Australian native twining plant. The flowers are tubular and creamy-white with purple or brown markings in the throat. A number of selected colour forms of this species have been brought into cultivation, the most common is and 'Snowbells' with pure white flowers and 'Golden Showers' with yellow-bronze flowers. Flowering occurs mainly in spring but may persist into summer



Native sarsaparilla

Hardenbergia violacea 'Happy Wanderer'



Photo: Macbird Floraprint

This is a popular and generally hardy garden plant. The pea shape flowers appear in winter and spring and are usually violet in colour but pink and white forms are available. It is adaptable to most soils and aspects though sunnier positions produce better flowering. Given the wide range of species available we recommend that you ask at your garden centre for the best varieties for your garden.



Banksia Rose

Rosa banksia



Photo: Macbird Floraprint

This climbing rose produces long slender twining canes that produce masses of tiny, double, white or yellow flowers in spring. It is one of the most popular climbing roses because of the beautiful spring blooms and almost complete absence of thorns.



Black eyed Susan

Thunbergia alata



Photo: Lorna Rose

This persistent climber flowers prolifically when young, less as it ages.

By then it has replaced itself by seeding after the bright orange, black-throated summer flowers finish.

HOW IT SPREADS

- Produces an abundant amount of seed which rapidly germinates and is spread by bird droppings.
- Also spread by dumped garden waste

This creeper is bright and cheerful during its flowering period but it is important to remember that the seeds dispersed by birds make it yet another bushland invader.



Guinea Flower or Snake Vine

Hibbertia scandens



Photo: Lorna Rose

This is a vigorous climber or scrambler grows to 2 to 5m wide or high. The large golden yellow flowers are most commonly seen in late spring and summer however it continually flowers through the year. It tolerates a wide range of climates, including exposure to salt-laden winds.



Native Clematis

Clematis aristata and *C. microphylla*



Photo: Lorna Rose

These are the best known of the Australian native clematis.

Profuse spring/summer creamy-white flowers followed by small decorative fruits. Best in dappled shade for summer protection. Displays well on fences, lattice or rough walls.



Wonga Wonga vine

Pandorea pandorana



Photo: Lorna Rose

This is a vigorous Australian native twining plant. The flowers are tubular and creamy-white with purple or brown markings in the throat. A number of selected colour forms of this species have been brought into cultivation, the most common are 'Snowbells' with pure white flowers and 'Golden Showers' with yellow-bronze flowers. Flowering occurs mainly in spring but may persist into summer



Periwinkle

Vinca major



Photo: Macbird Floraprint

A groundcover plant that was formerly grown because of its dense green foliage and small blue flowers. This plant has jumped the garden fence and is now well established in wet areas such as natural watercourses and river banks.

It does not produce seed in Australia, but spreads by runners and by fragments carried in water or in relocated soil. It forms dense mats suppressing all other plants. A variegated form may also be invasive.

HOW IT SPREADS

- The spread of this plant has been aided by gardeners who have spread cuttings into the bush.



Native Sarsaparilla

Hardenbergia violacea 'Happy Wanderer'



Photo: Macbird Floraprint

This is a popular, widely grown, hardy garden plant. The pea shape flowers appear in winter and spring, are usually violet in colour but pink and white forms are available. It is adaptable to most soils and aspects, although sunnier positions produce better flowering. Given the wide range of species available we recommend that you ask at your garden centre for the best varieties for your garden.



Moroccan Glory Vine

Convolvulus sabaticus



Photo: Macbird Floraprint

A hardy groundcover with grey green leaves, it will grow in full sun or part shade. Tolerates dry conditions once established. Prolific mauve cup shape flowers when grown in full sun.



Scaevola

Scaevola species



Photo: Ramm Botanicals

An Australian native groundcover with prolific flowering of mauve, purple or white flowers. The petals are arranged in a one sided, hand like shape. *Scaevola angula* is the most popular in cultivation, with relatively large flowers. *Scaevola albida* has smaller flowers and is resistant to salt spray, making it a perfect coastal plant.



Grasses

Mainly chosen because of their various architecturally interesting forms and drought hardiness.

It is essential to choose non invasive grasses. There are many look alikes. Seek professional advice at your garden centre, make sure you read labels carefully and avoid purchasing from any other source.



Pennisetum setaceum



Photo: Macbird Floraprint

Tall perennial grass forming tufts to 1m high. Arching leaves 20-30cm long, with thin leathery texture and prominent veins running lengthways. Flowers small, occur in pink or purple, bristly, upright spikes at the ends of bamboo-like canes. Fruit small and dry with long, showy bristles. Adapted to colonising after fires, displacing native plants and increasing fuel loads.

HOW IT SPREADS

- Mainly spread by humans, wind, animals and water.

Don't be confused: for further information go to www.ozbreed.com.au



Common Tussock Grass

Poa labillardieri



Photo: Macbird Floraprint

Forms a densely-tufted tussock about 1m tall with seed heads up to 1.2m high. Leaves vary from green, grey-green to blue-green. Flowers Oct-Feb and grows in moist to slightly dry soils. Grows quickly. Widely available in nurseries.

Note: There are other species of *Poa* available from indigenous nurseries.



Purple Fountain Grass

Pennisetum advena 'Rubrum'



The exceptionally showy and popular, ornamental perennial grass grows in dense clumps of burgundy coloured foliage with arching purple-pink flower plumes in summer. As a striking colour accent in perennial beds, it performs good erosion control on embankments. Blooms prolifically during warm weather, with foxtail-like arching flower plumes displayed above the foliage. This sterile hybrid grows rapidly to form dense clumps up to 1.5m tall, spreading 1.2m across.

Please note: This is not the plant banned from sale in NSW.

Photo: Colourwise nursery



Kingsdale Poa

Poa poiformis 'Kingsdale'



A clump forming perennial Kingsdale features attractive, fine, deep green, strap like leaves with arching blue foliage. Plants need little or no maintenance. Ideal for mass planting in garden beds and borders. They will, grow well in full sun to shaded positions, tolerate exposed and windy positions and are drought and frost tolerant. It will perform well in heavy clay or free draining soils. and very little care needed. Water occasionally and fertilize with slow release fertilizer to keep leaves deep blue colour.

Trim annually in Autumn or late Winter for peak performance.

Photo: Ozbreed



Succulent Plants

Now very popular because they are generally drought tolerant plants, most succulents are non invasive however there are a number of succulents that are hugely invasive because they adventitiously grow from plant parts or leaves. Be sure to read the plant label carefully and ask for advice about the non weedy succulents at your garden centre.



Mother of Millions

Bryophyllum species



Photo: Delwyn Thomas

The initial infestation of this succulent is often by dumping of garden refuse. Each leaf produces several small plantlets at the tip of the leaf which drop off and take root. It can spread rapidly and is difficult to kill.

It forms dense smothering mats. Whilst the drooping bell shaped red flowers on 40 to 50cm long stems appear decorative this plant is an environmental horror!



Echeveria glauca



Photo: Glenfield Nursery

A clump forming frost tolerant succulent plant with pretty bi-coloured yellow orange flowers. A hardy, fast growing plant suitable for full sun to part shade, mass plant for an excellent effect in a dry weather garden.



Echeveria setosa



Photo: Glenfield Nursery

Another lovely clump forming evergreen ground cover succulent with spoon shaped leaves covered in soft grey hairs to 10cm tall. It produces yellow-orange flowers through the summer months. Plant in pots or along borders in full sun. Requires minimal watering.



Sedum nussbaumerianum

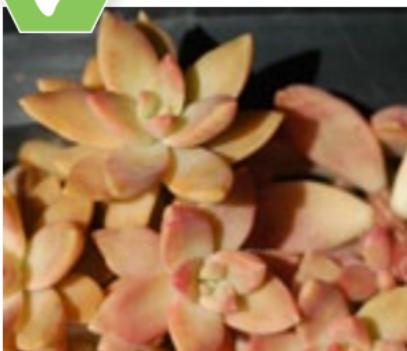


Photo: Glenfield Nursery

A stunning succulent plant with copper-tone foliage colour when grown in full sun makes this distinctive used in combination plantings. Most suitable for container growing, it will tolerate hot dry conditions which will improve the foliage colour. It grows best in full sun, suitable for low borders and in mixed plantings in containers.



Further information and additional resources

There are many areas of information regarding invasive plants, it can become overwhelming! Here are some useful sources of information to help you learn more about invasive plants.

- 1. Your local Nursery or Garden Centre** - most employ trained nursery professionals or qualified horticulturists who are knowledgeable in regard to all aspects of plant selection.
- 2. Your local council or shire** - will also have information about plants considered invasive in your local area and some good indigenous alternatives.
- 3. State Government** - Contact Department of Primary Industries www.dpi.nsw.gov.au has useful information about invasive plants. However, much of this may be confusing so local government authorities will have refined the information pertinent to your area.
- 4. Weeds Australia via the Australian Weeds Committee** - A national website resource created by the Australian Weeds Committee to promote access to key weed policies, regulations, current issues, national initiatives, research, extension, training and personnel. www.weeds.org.au
- 5. Nursery & Garden Industry Australia (NGIA)** - NGIA is the national peak body for the nursery and garden industries in Australia. Their websites have a gardener focus which has good information on invasive plants. A very useful resource is www.ngia.com.au Also look at the Life Is A Garden website www.lifeisagarden.com.au
- 6. The Nursery & Garden Industry NSW & ACT** - NGINA has information on the website about gardens, gardening, invasive plants and your local nurseries. www.ngina.com.au or phone 02 9679 1472
- 7. Australian Government** - Weeds in Australia Website. An excellent website with a good range of information, references, lists, databases and pictures and other resources. Website: www.weeds.gov.au.

