

**What is an environmental weed?**

Environmental weeds are non-local plants that easily reproduce in natural areas and then degrade the environmental values of that area.

**Where do environmental weeds come from?**

Environmental weeds come from outside the local area – and have left their competitors and predators behind! Many come from overseas, but plants native to another part of Australia, or even another part of Queensland, have become environmental weeds on the Sunshine Coast.

Most environmental weeds are deliberate introductions - over 70% of environmental weeds have entered Australia as garden plants and many others were introduced for agricultural purposes – especially for fodder and salinity management.

“Weedy” plants often have one or more of these characteristics:

- abundant viable seed production
- rapid population growth
- seed dormancy
- hard-seededness
- vegetative reproduction
- effective seed dispersal
- is a weed somewhere else
- more than one reproductive method

Four plant families having lots of weedy characteristics and more than their fair share of representatives in the declared plant and environmental weeds ranks are daisies (Asteraceae) wattles, acacias and their relatives (Mimosaceae), grasses (Poaceae) and legumes (Fabaceae).

**What can I do?**

- Use booklets like this one or ask your local Council or Landcare group about environmental weeds;
- Avoid plants that show weedy characteristics;
- Remove or control plants that rapidly spread once planted;
- As a general rule, don't plant exotic daisies, acacias, grasses or legumes without confirming with an environmental organisation that it is not likely to be a weed.





**PLANT TYPE**

	Tree
	Shrub
	Groundcover
	Grass
	Vine





**FLOWERING TIME**

	Summer
	Autumn
	Spring
	Winter
	Year Round



**INVASION MECHANISM**

	Vegetative
	Animals
	Wind
	Bulbs, Tubers etc.

**CONTROL METHOD**

	Cut Stump
	Manual
	Stem Inject
	Stem Scrape

**DISPOSAL METHOD**

	Bag and bin all parts of the plant
	Bag and bin viable seeds, bulbs, tubers or root. Compost other material not likely to regrow

**Manual Hand Removal**

1. Gently remove and bag any seeds or fruits.
2. Hold stem at ground level, rock back and forth to loosen, pull out.
3. Tap roots to dislodge any soil. Replace disturbed soil.

**Crowning**

1. Gently remove and bag stems with seed or fruit.
2. Grasp the leaves or stems together and expose base
3. Insert a knife or lever at an angle, close to crown.
4. Cut through all the roots around crown, remove and bag crown.

**Stem Scraping**

1. With a knife, scrape 15 to 30cm of the stem to reach the layer below the bark/outer layer.
2. Immediately apply herbicide along the length of the scrape.

**Cut and Paint –small to medium woody weeds**

1. Make a flat cut as close as possible to the ground with secateurs, loppers or a bush saw.
2. Immediately apply herbicide to the cut flat surface.

**Stem Injection, Frilling or Chipping**

1. Injection – At the base of the tree drill holes at a 45 degree angle into the sapwood at 5cm intervals. Or Frill/Chip - Make a cut into the sapwood with a chisel or axe.
2. Fill each hole/cut with herbicide immediately.
3. Repeat the process at 5cm intervals around the base.

**List of non-featured weeds:**

COMMON NAME	BOTANICAL NAME	LIFE FORM
<b>Fodder Weeds</b>		
Swamp foxtail grass	<i>Pennisetum alopecuroides</i>	TG
<b>Landscape Weeds</b>		
Balsam, Impatiens, bizzylizzy	<i>Impatiens walleriana</i>	GC
Black-eyed Susan	<i>Thunbergia alata</i>	V
Broad-leaved pepper tree**	<i>Schinus terebinthifolius**</i>	ST
Coffee	<i>Coffea arabica</i>	S
Cootamundra wattle	<i>Acacia baileyana</i>	S
Coral trees	<i>Erythrina crista-galli</i> ; <i>Erythrina x skyesii</i>	MT
Corky passion vine	<i>Passiflora suberosa</i>	V
Dutchman's pipe**	<i>Aristolochia elegans**</i>	V
Ginger lily	<i>Hedychium gardnerianum</i>	GC
Guava	<i>Psidium spp</i>	ST
Japanese Sunflower	<i>Tithonia diversifolia</i>	S
Mother of millions*	<i>Bryophyllum delagoense</i> ; syn. <i>Bryophyllum tubiflorum*</i>	GC
Mother of millions hybrid*	<i>Bryophyllum diaegremontianum</i> x <i>B. delagoense*</i> (syn. <i>Bryophyllum diaegremontianum</i> x <i>B. tubiflorum*</i> )	GC
Paulownia	<i>Paulownia fortunei</i> , <i>P. tomentosa</i>	TT
Polka-dot plant	<i>Hypoestes phyllostachya</i>	GC
<b>Water Weeds</b>		
Cabomba*	<i>Cabomba caroliniana*</i>	WP
Water poppy	<i>Hydrocleys nymphoides</i>	WP
Yellow waterlily	<i>Nymphaea mexicana</i>	WP

\* Landholders are required by state legislation to remove these weeds.

\*\* Landholders may have to remove these weeds if adjacent to environmentally sensitive areas.

**PLANT LIFE FORMS**

<b>T</b>	Tall tree (>25m)	<b>GC</b>	Ground cover
<b>MT</b>	Medium tree (15-25m)	<b>V</b>	Vine
<b>ST</b>	Small tree (5m-15m)	<b>WP</b>	Water plant
<b>S</b>	Shrub (<5m)	<b>TG</b>	Tussock grass





Image courtesy of Stephanie Haslam



## Cocos palm

*Syagrus romanzoffiana*

Traditionally grown in Queensland gardens and notorious for harbouring cockroaches and rats. The seeds remain viable for long periods and germinate from commercially available mulch.

Replace with:  
**Piccabeen palm**

*Archontophoenix cunninghamiana*

**Cabbage palm**

*Livistona australis*



Image courtesy of Cameron Trill



## Cadagi

*Corymbia torelliana* and hybrids

North Queensland native used as street trees and wind breaks. It readily invades bushland and hybridises with some local species. This species also causes serious problems for local native bees. Sooty mould on leaves transfers to other plants.

Replace with:

**Hollywood**

*Auranticarpa rhombifolia*

**Ribbonwood**

*Euroschinus falcatus*

**Red kamala**

*Mallotus philippensis*



Image courtesy of Michael Gilles



## Camphor laurel

*Cinnamomum camphora*

Aggressive invader especially along waterways, forms monocultures of large trees with little understorey. Toxic to some fish and crayfish. Class 3 declared plant.

Replace with:

**Jackwood**

*Cryptocarya glaucescens*

**Riberry**

*Syzygium luehmannii*

**Hairy walnut**

*Endiandra pubens*



Image courtesy of Cameron Trill



## Exotic pines

*Pinus taeda*

*Pinus caribaea*, *Pinus elliottii*

Windblown seeds escape from pine plantations and planted trees. These species displace native plants, alter soil chemistry and structure and may increase fire risk. Demand for moisture and dense layer of fallen needles inhibit growth of desirable plants in gardens.

Replace with:

**Black she-oak**

*Allocasuarina littoralis*

**Forest oak**

*Allocasuarina torulosa*

**Brown pine**

*Podocarpus elatus*





Image courtesy of Melissa Coyle



## Chinese Celtis

*Celtis sinensis*

Fast growing tree that invades forests, creek lines and gardens by means of bird-dispersed seeds. It forms monocultures and reduces diversity. Being deciduous, it also allows other weed species to establish under its canopy. A Class 3 declared plant in Queensland.

Replace with:  
**Creek lillypilly**  
*Acmena smithii*  
**Blue lillypilly**  
*Syzygium oleosum*



Image courtesy of Michael Gilles



## Queensland umbrella tree

*Schefflera actinophylla*

Once popular in gardens for attracting birds, this North Queensland native tree forms dense thickets in bushland in South East Queensland. It readily invades many local ecosystems and will even grow as an epiphyte on other trees.

Replace with:  
**Muttonwood**  
*Myrsine variabilis*  
**Malletwood**  
*Rhodamnia dumicola*



Image courtesy of SCRC



## Large-leaved privet

*Ligustrum lucidum*

Spread by birds that are attracted to the fruit. Forms dense stands that displace native plants and inhibit wildlife movement. Flowers exacerbate hay fever and allergies. Class 3 declared plant.

Replace with:  
**Lemon myrtle**  
*Backhousia citriodora*  
**Yellow laurel**  
*Cryptocarya bidwillii*  
**Muttonwood**  
*Myrsine variabilis*



Images courtesy of Melissa Coyle &amp; Colleen Long



## African tulip tree

*Spathodea campanulata*

This common garden tree spreads widely from windborne seeds and suckers. Displaces native vegetation and becomes dominant in gardens. Flowers can create a slip hazard on paths. Class 3 declared plant.

Replace with:  
**Peanut tree**  
*Sterculia quadrifida*  
**Malletwood**  
*Rhodamnia argentea*  
**Guioa**  
*Guioa semiglauc*



Images courtesy of Jie Wells



## Golden rain tree

*Koelreuteria elegans*

Papery seeds are wind blown and cause this widely planted tree to spread through suburban gardens and streets and into bushland. Young plants are often overlooked due to their resemblance to the native white cedar. Recognised as a significant new weed.

Replace with:  
**Ribbonwood**

*Euroschinus falcata*

**Water gum**

*Tristaniopsis laurina*



Images courtesy of Michael Gilles & Sue Aspland



## Leucaena

*Leucaena leucocephala*

A fodder plant that can rapidly colonise disturbed areas such as roadsides. Produces thousands of hard seeds. It is a vigorous species that can form dense thickets, displace native species and reduce the natural diversity of the ecosystem.

Replace with:  
**Blackthorn**

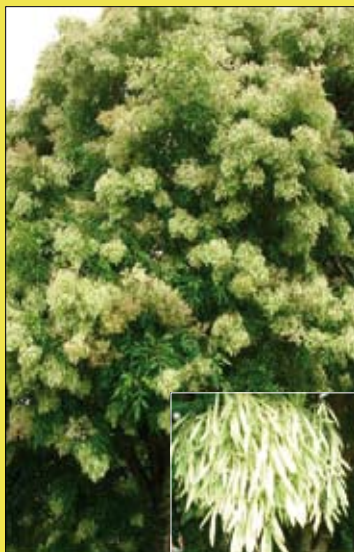
*Bursaria spinosa*

**Callicoma**

*Callicoma serratifolia*

**Wallum Phebalium**

*Phebalium woombye*



Images courtesy of Greg Brown



## Himalayan ash

*Fraxinus ornus* (featured)

## Mountain ash

*Fraxinus griffithii*

These trees have the potential to become major weeds. They are common in gardens and have masses of winged seeds that germinate abundantly under the trees.

Replace with:

**Callicoma**

*Callicoma serratifolia*

**Brown kurrajong**

*Commersonia bartramia*



Images courtesy of Michael Gilles



## Brazilian cherry

*Eugenia uniflora*

The fruit of this common garden plant is favoured by birds that aid in its dispersal through gardens and natural areas.

Replace with:

**Yellow laurel**

*Cryptocarya bidwillii*

**Blueberry ash**

*Elaeocarpus reticulatus*





Image courtesy of Cameron Trill



### Running bamboo

*Arundinaria spp.*

### Golden bamboo

*Phyllostachys aurea*

### Moso bamboo

*P. pubescens*

All the running bamboos if planted in the ground can “escape”. Once runners have spread they are nearly impossible to eradicate.

Replace with:

#### Native ginger

*Alpinia arundelliana*

#### Scaly myrtle

*Gossia hillii*

#### Broad-leaved palm lily

*Cordyline petiolaris*

#### Red-fruited palm lily



Image courtesy of Melissa Coyle



### Small-leaved privet

*Ligustrum sinense*

Popular hedge plant in colonial times. Now a major weed of forests and creek banks. Flowers trigger hay-fever and allergies. Class 3 declared plant in Queensland.

Replace with:

#### Small leaved plum-myrtle

*Ptilidostigma rhytisperma*

#### Grey myrtle, Carrol

*Backhousia myrtifolia*

#### Creek lillypilly

*Acmena smithii var minor*



Images courtesy of Stephanie Haslam



### Duranta

### Geisha girl

### Sheena's gold

*Duranta repens* (syn. *D. erecta*)

Very common garden hedge plant. Fruits are toxic to humans and animals. Plants can spread rapidly in bushland, often reverting to their thorny original form, and impede wildlife movement.

Replace with:

#### Grey myrtle or Carrol

*Backhousia myrtifolia*

#### Blackthorn

*Bursaria spinosa*



Image courtesy of Stephanie Haslam



### Murraya

*Murraya paniculata*

(syn. *Murraya exotica*)

This popular garden plant is highly invasive in natural bushland and is set to be a major weed in the future. Red fruits are spread by birds.

Replace with:

#### Native gardenia

*Atractocarpus benthamianus*

#### Green kamala

*Mallotus laoxyloides*

#### Grey myrtle or Carrol

*Backhousia myrtifolia*



Image courtesy of Michael Gilles



## Yellow bells

*Tecoma stans*

Ornamental garden escape that produces masses of windborne seed. It tolerates a wide range of conditions and soil types and will readily invade undisturbed bushland. Class 3 declared plant.

Replace with:

**Quinine bush**

*Petalostigma trilobulare*

**Plum myrtle**

*Ptilidostigma glabrum*



Image courtesy of Greg Brown



## Buddleja

*Buddleja madagascariensis*

This scrambling shrub establishes readily in bushland and can form large dense thickets that exclude other plants and impede wildlife movement. Difficult to control in the garden.

Replace with:

**Callicarpa**

*Callicarpa pedunculata*

**Red-fruited laurel**

*Cryptocarya laevigata*



Image courtesy of Stephanie Haslam



## Groundsel bush

*Baccharis halimifolia*

A very common invader of forest and pasture. In natural areas it can form dense thickets and replace the native shrub layer. Class 2 Declared Plant and must be removed.

Replace with:

**Baeckea**

*Babingtonia bidwillii*

**Bolwarra**

*Eupomatia laurina*

**Pointed-leaf Hovea**



Images courtesy of Cameron Trail &amp; Stephanie Haslam



## Lantana

*Lantana camara*

Highly invasive, it is the most widespread weed in South East Queensland. Toxic to stock, it forms dense thickets that smother native vegetation, increase fire danger and cause tree death. Despite claims that hybrids and cultivars are 'sterile', they are all fertile to some extent and the species readily hybridises. Class 3 declared plant.

Replace with:

**Callicarpa**

*Callicarpa pedunculata*

**Thready-bark myrtle**

*Gossia inophloia*

**Native Hibiscus**

*Hibiscus splendens*







Image courtesy of Stephanie Haslam



## Ochna, Mickey Mouse plant

*Ochna serrulata*

A woody shrub with an angled taproot that is easily broken when hand-pulled, plants then regenerate from the remaining root. Seeds are spread by birds and it invades undisturbed rainforest and woodland.

Replace with:  
**Hairy Psychotria**  
*Psychotria loniceroides*  
**Brush pepperbush**  
*Tasmannia insipida*



Image courtesy of Michael Gilles



## Ardisia, coral berry

*Ardisia crenata*, *A. crispa*,  
*A. humilis*

Extremely invasive, with red or pink berries carried by birds into bushland. It can grow in a range of habitats and replaces understorey and midstorey native plants.

Replace with:  
**Currant bush**  
*Carissa ovata*  
**Coffee bush**  
*Breynia oblongifolia*



Image courtesy of Sue Aspland



## Easter Cassia

*Senna pendula* var. *glabrata*

Sprawling shrub from South America that colonises bushland areas preventing native regeneration. Prominent yellow flowers followed by long cylindrical pods containing many hard seeds.

Replace with:  
**Crinkle bush**  
*Lomatia silaifolia*  
**Thready-bark myrtle**  
*Gossia inophloia*



Image courtesy of Michael Gilles



## Purple splash

*Alternanthera dentata*

This popular ornamental edging plant is closely related to the Class 1 Declared alligator weed and is potentially as invasive. It spreads by seed and vegetatively and can be very hard to control in bushland or gardens.

Replace with:  
**Pollia**  
*Pollia crispata*  
**Austral bugle**  
*Ajuga australis*  
**Native Peperomia**  
*Peperomia tetraphylla*





### Mistflower

*Ageratina riparia*

Invades fertile hilltops, rainforest and creek banks. Seeds are dispersed by wind and water. Reduces frog and in-stream habitat by filling spaces amongst rocks and out-competing native species.

Replace with:  
**Rough guinea flower**  
*Hibbertia aspera*  
**Native Coleus**  
*Plectranthus graveolens*

Image courtesy of Colleen Long



### Fishbone fern

*Nephrolepis cordifolia*

Invasive fern forming dense clumps which out-compete native groundcovers. Although sometimes regarded as a native species, the classification of this invasive plant is very confused. Spreads into bushland down hills or by water from gardens or dumping.

Replace with:  
**Prickly rasp-fern**  
*Doodia aspera*  
**Gristle fern**

*Blechnum cartilagineum*  
**Blue flax-lily**  
*Dianella caerulea*

Image courtesy of Cameron Trail



### Creeping Lantana

*Lantana montevidensis*

A commonly grown garden plant, this creeping weed is now a Class 3 declared plant. Despite claims about hybrid forms being 'sterile', all forms are fertile at least to some extent and the species readily hybridises. It is very aggressive and invades bushland, pastures and crops. Toxic to stock if eaten in any quantity.

Image courtesy of Cameron Trail



Replace with  
**Rough guinea flower**  
*Hibbertia aspera*  
**Native Coleus**  
*Plectranthus graveolens*



### Red Salvia

*Salvia coccinea*

Very invasive in rainforests, easily dominates and replaces native understorey species. Virtually impossible to get rid of once established.

Replace with:  
**Native Coleus**  
*Plectranthus graveolens*  
**Love flower**  
*Pseuderanthemum variabile*  
**Ladies tresses**  
*Spiranthes sinensis*

Image courtesy of Melissa Coyle





Image courtesy of Sue Aspland



## Singapore daisy

*Sphagneticola trilobata*

Highly invasive garden escape. Forms a dense carpet that prevents native regeneration and alters ecosystems. Reproduces mainly from stem pieces but also from seed. Class 3 declared plant.

Replace with:

**Ivy-leaved violet**

*Viola banksii*, *V. hederacea*

**Native violet**

*Viola betonicifolia*

**Rough guinea flower**

*Hibbertia aspera*



Image courtesy of Greg Brown



## Broad-leaved

## Paspalum

*Paspalum mandiocanum*,

This invasive grass is spreading on the Sunshine Coast hinterland. It displaces native grass species and severely disrupts the natural dynamics of the ecosystems it invades.

Replace with:

**Kangaroo grass**

*Themeda triandra*

**Barbed wire grass**

*Cymbopogon refractus*

**Rainforest grass**

*Ottochloa gracillima*



Image courtesy of Cameron Trill



## Wandering jew

*Tradescantia albiflora*

Smothers native plants in shady, damp understorey areas. Very difficult to eradicate once established.

Replace with:

**Native pennyroyal**

*Mentha dimenica*

**Lawn Lobelia**

*Lobelia membranacea*

**Love flower**

*Pseuderanthemum variabile*



Image courtesy of Helen Haapakoski



## Broad-leaved

## carpet grass

*Axonopus compressus*

A creeping grass that can invade the understorey in shady, damp places. This grass outcompetes native groundcovers and reduces habitats available for small animals and the microfauna that are vital in maintaining ecosystem processes.

Replace with:

**Kangaroo grass**

*Themeda triandra*

**Barb wire grass**

*Cymbopogon refractus*

**Rainforest grass**

*Ottochloa gracillima*



### Succulents and Cacti – keep ‘em corralled

Tough as old boots, easy to grow and maintain and great in small gardens, succulent plants and cacti have become very popular in the last few years.

Unfortunately the things that make them so popular can also make them a weed – even small pieces of these plants in your bushland or creek can shoot, grow and propagate, sometimes forming dense layers and spreading very quickly. Succulent plants and cacti are often very difficult to control and may need repeated applications of quite nasty chemicals to bring them to heel.

But don't despair – you don't need to get rid of most of these species\* as, with a bit of care, you can keep control of them and prevent their spread.

- Don't plant in or near bushland
- Use root barriers to stop spread at your boundary
- Never dump any part of them in bushland
- Dispose into main rubbish bin– not as green waste or into compost
- Avoid brush-cutting or mowing succulents, especially near gutters, waterways or bushland
- Always check the weediness before “taking a cutting” – avoid those that set viable seed or break very easily into small pieces

\* Some succulent plants and cacti are more invasive (some are even declared pests) and are mentioned elsewhere in this leaflet or on the Department of Primary Industry & Fisheries website.



Images courtesy of Sue Aspland



Image courtesy of Melissa Coyle



Image courtesy of Sue Aspland



Image courtesy of Melissa Coyle



Image courtesy of Stephanie Haslam



### Madeira vine

*Anredera cordifolia*

This extremely invasive garden escape smothers and destroys native bushland. Reproduces from stem fragments and aerial tubers and is very hard to eradicate. Class 3 declared plant.

Replace with:

#### Gum vine

*Aphanopetalum resinosum*

#### Morinda

*Morinda jasminoides*

#### Southern Melodinus

*Melodinus australis*

Image courtesy of Cameron Trail



### Climbing Asparagus fern

*Asparagus africanus*

Thorny invader of creek banks and vine forest. Strong canes can climb into the canopy, choking out native plants and inhibiting fauna movement. Class 3 declared plant.

Replace with:

#### Gum vine

*Aphanopetalum resinosum*

#### Wombat berry

*Eustrephus latifolius*

#### Morinda

*Morinda jasminoides*

Image courtesy of DPI&F



### White moth vine

*Araujia sericifera*

Vigorous climber with milky sap that can cause allergic reactions. Smothers native vegetation along watercourses, spreading rapidly via windborne seeds.

Replace with:

#### Headache vine

*Clematis glycinoides*

#### Scrambling lily

*Geitonoplesium cymosum*

Image courtesy of SCRC



### Blue morning glory

(featured)  
*Ipomoea indica*

### Moon flower

*Ipomoea alba*

These vigorous vines can form an impenetrable cover over the ground and standing vegetation. They can pull down trees and kill large areas of native forest. Unfortunately they are still being sold on the internet and should not be planted.

Replace with:

#### Stiff jasmine

*Jasminum volubile*

#### Bower vine

*Pandorea jasminoides*

#### Wonga vine

*Pandorea pandorana*

#### Native Wisteria

*Callerya megasperma*

Image courtesy of DPI&F







### Cat's claw vine

*Macfadyena unguis-cati*

This vine spreads rapidly via windborne papery seeds. It smothers native vegetation along waterways, killing trees and preventing regeneration. Class 3 declared plant in Queensland.

Replace with:

#### Morinda

*Morinda jasminoides*

#### Headache vine

*Clematis glycinoides*

Image courtesy of SCRC



### Blue trumpet vine

*Thunbergia grandiflora*

Vigorous, heavy vine that can smother vegetation, kill trees and transform forests. With large underground tubers it can be very difficult to control. Class 2 declared plant in Queensland.

Replace with:

#### Richmond birdwing vine

*Parastolochia praevenosa*

#### Stiff jasmine

*Jasminum volubile*

Image courtesy of Melissa Coyle



### Brazilian nightshade

*Solanum seaforthianum*

A climber still seen in gardens because of mauve flowers and red fruit that attracts birds. Fruit may be poisonous to humans.

Replace with:

#### Melodorum

*Melodorum leichhardtii*

#### Bower vine

*Pandorea pandorana*

#### Pepper vine

*Piper hederaceum*  
var. *hederaceum*

Image courtesy of DPI&F



### Japanese honeysuckle

*Lonicera japonica*

Once a popular climber in suburban gardens, this vine has become a serious pest especially on rainforest margins. It smothers native vegetation and can form a dense ground cover preventing regeneration of native species.

Replace with:

#### Bower vine

*Pandorea jasminoides*

#### Wonga vine

Image courtesy of DPI&F



## Pasture legumes

These vines were introduced to improve pasture productivity by their ability to fix nitrogen in the soil. When they are not browsed by stock they become serious weeds of bushland and gardens by smothering desirable plants and impeding wildlife movement.. Small frogs and lizards frequently die when they become trapped in the sticky hairs on Silver-leaved Desmodium.



Image courtesy of Cameron Trill

### Axillaris, archer axillaris

*Macrotyloma axillare*



Image courtesy of Cameron Trill

### Siratro

*Macroptilium atropurpureum*



Image courtesy of Cameron Trill

### Silver leaved Desmodium

*D. uncinatum*



Image courtesy of Michael Gilles

### Glycine

*Neonotonia wightii*

## All species



Fodder plants can become problems when the stock is taken off them or they seed into areas where cattle don't feed on them. They are extremely persistent and difficult to control.

Replace with:

#### Headache vine

*Clematis glycinoides*

#### Morinda

*Morinda jasminoides*

#### Zigzag vine

*Melodorum leichardtii*,

#### Scrambling lily

*Geitonoplesium cymosum*



## Water weeds and water features

Ornamental ponds and water features with water plants are a very popular and valuable part of many gardens – and why not! Beautiful, cooling and perhaps good for wildlife – there's lots to like. But there may be trouble lurking in the water - some plants used in water features are incredibly invasive water weeds.

Water weeds cost Australia billions each year in productivity loss, damaged equipment, water loss through transpiration, poor water quality, fish kills, increased flooding and lost recreational and tourism facilities. The cost to the environment is thought to be at least as much and control costs further millions. Sadly, people have lost their lives entangled in water weeds as have countless birds, fish and other animals and stock.

### But...its so pretty

Many water weeds are – the Nursery and Garden Industry Association recognises that over 75% of waterweeds entered Australia as part of the ornamental plant trade. Unfortunately being pretty doesn't reduce their invasiveness or impact.

### But.... I'm nowhere near a creek

It takes only the tiniest bit of weed to infest an entire system and everyone lives in a catchment. The water that runs over your place ends up in a creek or river at some point - and gutters and drains can be expressways between gardens and waterways! Also, many water weeds are declared pests and you must get rid of them no matter where you are.



Weed - Water hyacinth

## So – what can you do?

- Learn to recognise water weeds!
- Remove or control existing weeds and dispose of carefully
- Never collect water plants from the wild or ponds, it may be a weed or have hitchhikers.
- Report any declared water weeds for sale or displayed at nurseries, markets or elsewhere to Biosecurity Queensland or your Council.
- Only buy water plants from reputable sellers who commit to not selling weeds.

## Common water weeds used in water features:

- Water lettuce
- Salvinia
- Water hyacinth



Weed - Water lettuce

## Replace weeds with native water plants

- Nardoo (*Marsilea spp.*)
- Water snowflake (*Nymphaea indica*)
- Native Waterlily (*Nymphaea violacea*)



Native - Water Snowflake



### Salvinia

*Salvinia molesta*

A prohibited Class 2 pest plant. Under ideal conditions it can double in volume in 2 to 3 days! Very difficult to eradicate once established. Can increase water loss by 400% through transpiration and decomposition of dead material reduces oxygen availability for other aquatic life.

Replace with:

**Water snowflake**

*Nymphaoides indica*

**Native waterlily**

*Nymphaea violacea*

**Pacific azolla**

*Azolla filiculoides*

Image courtesy of DPI&F



### Water lettuce

*Pistia stratiotes*

A prohibited Class 2 plant still seen in garden ponds. Very difficult to eradicate once established. Increases water loss through transpiration and reduces water quality during decomposition, possibly causing death of aquatic life.

Replace with:

**Water snowflake**

*Nymphaoides indica*

**Potamogeton**

*Potamogeton javanicus*

Image courtesy of DPI&F



### Elephant's ears, Taro

*Colocasia spp.*

A perennial aquatic plant which invades waterways. Leaves and stems of most species are toxic

Replace with:

**Field lily**

*Crinum angustifolium*

**Stream lily**

*Helmholtzia glaberrima*

Image courtesy of DPI&F



### Water hyacinth

*Eichhornia crassipes*

Prohibited Class 2 (*E. crassipes*) and Class 1 (*E. azurea*) Plants. They can cover a 30 metre dam in one season, and seeds can germinate fresh, or remain viable for 15 years. It is easily transported downstream.

Replace with:

**Nardoo**

*Marsilea sp.*

**Ferny azolla**

*Azolla pinnata*

**Water Snowflake**

*Nymphaoides indica*

**Duckweed**

*Spirodela punctata*

Image courtesy of DPI&F





## References and further reading

### Native plants and gardening

Association of Societies for Growing Australian Plants.  
<http://asgap.org.au>

Brisbane Rainforest Action and Information Network (BRAIN)  
<http://www.brisrain.webcentral.com.au>

Eustace, R. (1996) *Indigenous Gardening – Growing local native plants*. McBenny Pty Ltd, Cannon Hill

Harden, G.J., McDonald, W.J.F. & Williams J.B. (2006) *Rainforest Trees and Shrubs. A field guide to their identification*. Gwen Harden Publishing

Harden, G.J., McDonald, W.J.F. & Williams J.B. (2007) *Rainforest Climbing Plants. A field guide to their identification*. Gwen Harden Publishing

Haslam, S. (2007) *Noosa's Native Plants*. Noosa Integrated Catchment Assoc. Inc., Tewantin  
<http://www.noosanativeplants.com.au>

Logan River Branch Society for Growing Australian Plants (2008). *Mangroves to Mountains: A field guide to the native plants of SEQ (Vols 1 & 2)*. Logan River Branch SGAP, Browns Plains, Brisbane.

Nicholson, N. & H. (1985 – 2004) *Australian Rainforest Plants I – VI*. Terania Rainforest Publishing, The Channon, NSW

Queensland Museum (2003) *Wild Plants of Greater Brisbane*. Queensland Museum, Brisbane.

Sunshine Coast Regional Council website and follow the links:  
<http://www.sunshinecoast.qld.gov.au/>

### Weeds

Cooperative Research Centre for Australian Weed Management.  
<http://www.weeds.crc.org.au/>

Department of Primary Industries and Fisheries Biosecurity Queensland  
 News and Factsheets about weeds and other pests  
<Http://www/dpi.qld.gov.au>

Ermert, S. (2005) *Gardener's Companion to Weeds*. Ken Fin Books, Victoria

Kleinschmidt, H., Holland, A. and Simpson, P. (1996) *Suburban Weeds. 3rd Edition*. Qld Department of Primary Industries and Fisheries

Weeds Australia  
<http://www.weeds.org.au>

