THREATENED PLANTS OF LOGAN

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LOGAN
CITY COUNCIL

CONTENTS

KEY TO ICONS

Key to conservation status icons

The following icons are used throughout this guide to show the conservation status of the various species.

Australian Law:
Environment Protection and Biodiversity Conservation Act 1999

vulnerable

endangered

Queensland Law:
Nature Conservation Act 1992

near threatened

vulnerable

endangered

INTRODUCTION

Introduction

All native plants are special to Logan. However, there are a few standout significant species that need to be highlighted for our attention. This brochure will help you discover the significant plant species that are found in Logan.

The following 27 native plants are recorded in Logan as being either **near threatened**, **vulnerable** or **endangered** under Queensland Law, specifically under the *Nature Conservation Act 1992*. Thirteen of these species are also listed as **Vulnerable** or **Endangered** under the Australian Government's Law, the *Environment Protection and Biodiversity Conservation Act 1999*. These two forms of legislation provide a legal framework to protect and manage state and nationally significant plants and animals (also known as flora and fauna).

The plants in this booklet are considered significant as few remain in the wild. Each species has been subjected to various threatening processes which have led to their decline. Some of the common processes which threaten their survival include:

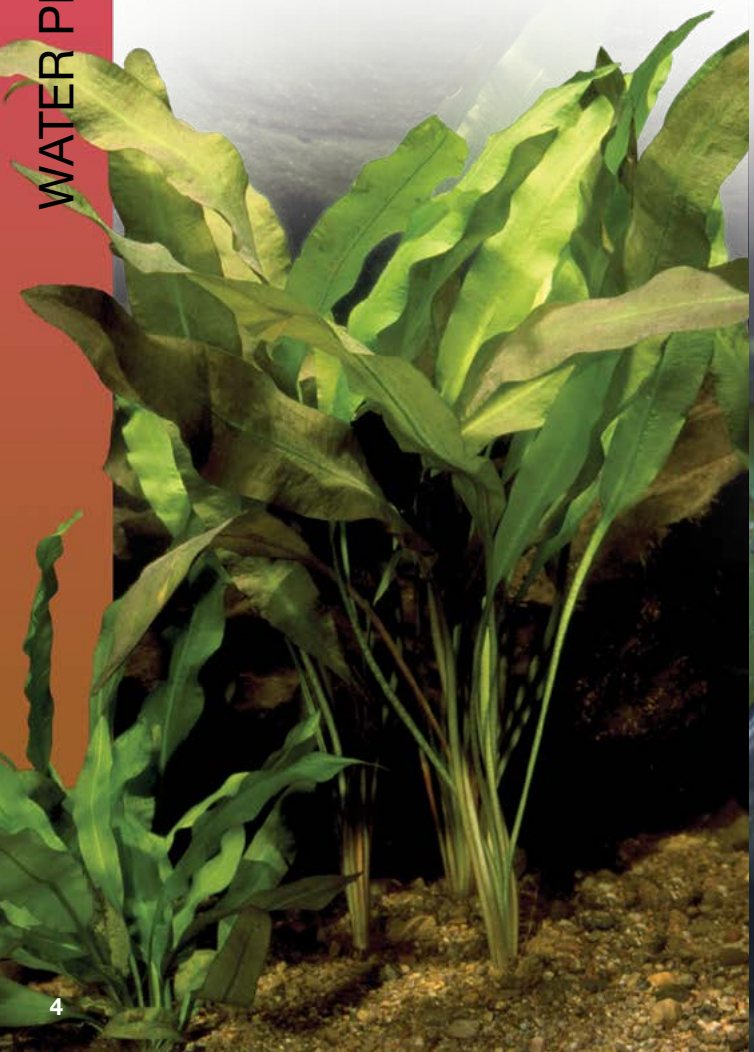
- habitat degradation through invasion of weeds and disturbance
- loss or modification of habitat through clearing for agriculture and development
- waterway and wetland modification, clearing, degradation and pollution
- competition with introduced weeds
- changes in fire regimes
- grazing and trampling by domestic stock
- cultivation or harvesting of seeds or fruit
- overuse of herbicides.

Queensland Lace Plant

(Aponogeton elongatus subsp. *elongatus)*

Description and habitat:
Aquatic plant of still and flowing permanent creeks and muddy billabongs. Leaves to 50 cm x 5 cm, mostly submerged, but occasionally floating. Tiny yellow flowers on floating spike to 15 cm. Forms swollen tuberous root.

Specific threats:
Illegal harvesting of plants for the aquarium trade. Sediment accumulation in waterways.

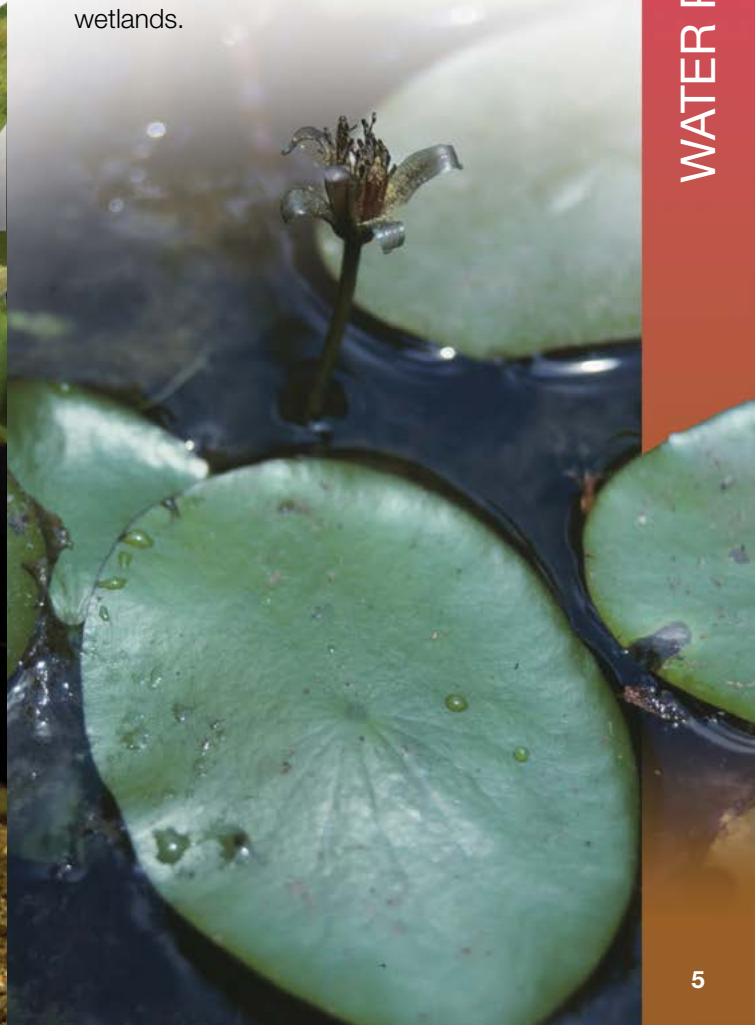


Water Shield

(Brasenia schreberi)

Description and habitat:
Aquatic herb occurring in freshwater lagoons and rivers. Leaves, up to 11 cm x 7.5 cm, are oval shaped with the stem attached to the underside of the leaf. Stems and leaf undersides are covered with jelly-like substance. Flowers spring to summer with red or purple flowers up to 20 mm.

Specific threats:
Alteration of the wet/dry cycles of ephemeral wetlands.



Maundia

(Maundia triglochinoides)

Description and habitat:
Creeping waterplant of shallow freshwater swamps, with thick white underground rhizomes. Spongy leaves to 75 cm x 20 mm, triangular in cross section. Fruit clusters to 10 mm.

Specific threats:
Modification of wetlands and changed flow regimes.

Pink Smartweed

(Persicaria elatior)

Description and habitat:
Erect herb to 1.5 m tall, found in wetland areas. Stalked, glandular hairs on most plant parts. Alternate leaves with sheath at base of each leaf, up to 18 cm x 6 cm. Small (3 mm) pink flowers arranged in long, narrow spikes up to 10 cm long, summer and autumn. Fruits form lens-shaped nuts 2–2.5 mm long.

Specific threats:
Increased nutrient and sediment in runoff. Misidentification as a weed.

Hairy Plectranthus

(Plectranthus habrophyllus)

HERBS

Description and habitat:
Hairy, woody, square-stemmed herb growing to 60 cm on rocky areas. Opposite fleshy velvety leaves, serrate, to 7 cm, sticky and aromatic when crushed. Purple 5 mm flowers in spikes throughout the year.

Specific threats:
Clearing of habitat. Misidentification.

Bahrs Scrub Devil's Needles

(Solanum mentiens)

HERBS

Description and habitat:
Prostrate plant with scrambling stems to 2 m, in drier rainforests mainly of the Beenleigh region. Sparsely prickly stems and leaves. Leaves alternate to 8 cm, whitish below but dark green on the top side. Flowers in spring with mauve or white flowers to 25 mm. Red spherical fruits to 12 mm.

Specific threats:
Clearing of habitat and inappropriate land management practices. Misidentification as a weed.

Slender Milkvine

(Marsdenia coronata)

Description and habitat:
Slender twining vine to 3 m, growing mostly in eucalypt dominated open forest. Can also be seen in dry rainforest margins. Opposite leaves, growing to 6 cm x 2 cm, rounded at the base and pointed at the tip. Flowering in summer with 4 mm, five-petalled pale yellow or greenish-yellow flowers. Fruit pods to 5 cm ripen summer to winter, splitting to reveal dark seeds with long silky hairs. Sap milky.

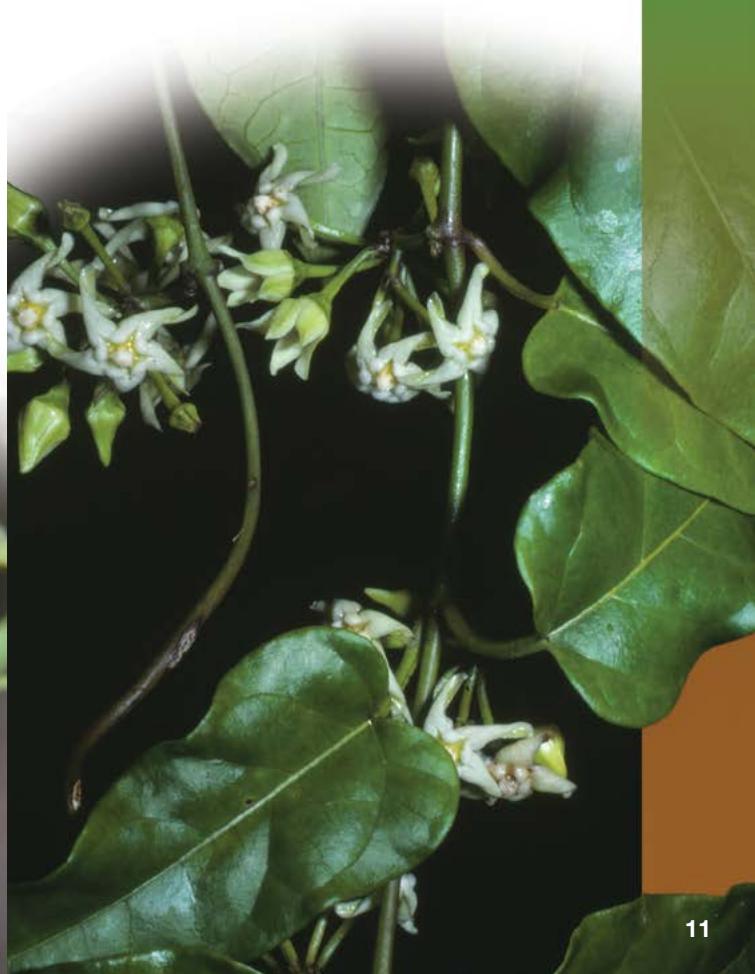
Specific threats:
Clearing of habitat.

Clear Milkvine

(Marsdenia longiloba)

Description and habitat:
Slender twining vine with hairy stems and clear sap. Leaves opposite, to 12 cm x 5.5 cm, tapering to fine tip, with 5-6 minute basal glands. Clusters of small white 5 petalled star-shaped flowers to 12 mm produced in summer, followed by long, narrow seed-capsules that split to release many seeds with tufts of long silky hair.

Specific threats:
Clearing of habitat.



Birdwing Butterfly Vine

(Pararistolochia praevenosa)

Description and habitat:
Woody climbing vine, stems twining. Young shoots densely hairy, older stems corky. Leaves alternate to 25 cm, hairy below (at least on veins). Tubular, creamy or pinkish, hairy flowers to 20 mm, with hairy yellow throat. Yellow ribbed oblong fruit to 4 cm.

Specific threats:
Prolonged drought. Habitat clearing especially along waterways.

Critical habitat for the vulnerable Richmond Birdwing Butterfly

Native Jute

(Corchorus cunninghamii)

Description and habitat:
Small herbaceous shrub growing to 1.5 m in moist eucalypt forests. Alternate toothed 8 cm x 5 cm leaves. Bright yellow 15 mm flowers usually from November to May, but may be seen all year. Black pointed oblong seed capsules to 30 mm long.

Specific threats:
Invasion of habitat by Lantana. Modified fire regimes. Clearing of habitat. Grazing by cattle.

Bahrs Scrub Croton

(Croton mamillatus)

Description and habitat:
Narrow spindly shrub often with multiple trunks to 4 m tall, found in drier rainforests predominantly at Bahrs Scrub. Alternate glossy leaves, 9 cm x 3.5cm, drawn out to a fine point with white colouration below. Two tiny glands at leaf base. Flowers in spring to summer with 5 mm creamy-white flowers and hairy three-lobed green to brownish fruit to 10 mm.

Specific threats:
Clearing of habitat and inappropriate land management practices.

Curly Beardheath

(Leucopogon recurvisepalus)

Description and habitat:
Erect to spreading shrub with woolly branchlets growing to 1 m tall occurring on sandstone hills in closed heathland to woodland communities. Leaves alternate, linear-oblong to very narrowly triangular, stiff, rough, up to 8 mm x 2 mm, apex pointed. White flowers to 4 mm with long hairs in throat, in short spikes summer to autumn. Fruit ellipsoid, 2.8-3.2 mm long, ribbed, hairless, brown.

Specific threats:
Modified fire regimes.

Rainforest Cassia

(Senna acclinis)

Description and habitat:
Shrub to 3 m usually near edges of rainforest. Compound alternate leaves to 15 cm, each with up to 6 pairs of oval leaflets to 30 mm x 12 mm with 1 or 2 tiny stalked glands between lowest pairs. Yellow flowers in groups of two to five in spring to summer. Flat pod to 12 cm x 4 mm, not constricted between seeds.

Specific threats:
Clearing of habitat. Misidentification as a weed. Grazing by cattle.

Scrub Sophora

(Sophora fraseri)

Description and habitat:
Sparsely branched shrub to 2 m, found on rainforest margins. Leaves alternate, pinnate, with 21 to 39 leaflets, each to 25 mm x 10 mm, often greyish-green. 10 mm yellow pea flowers in racemes to 10 cm long in spring to autumn. Pods cylindrical to 10 cm x 8 mm.

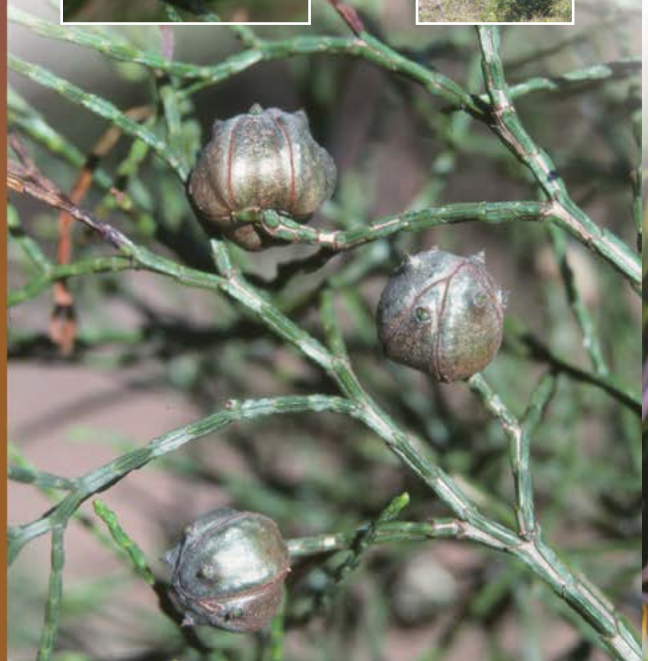
Specific threats:
Clearing of habitat. Modified fire regimes. Grazing by cattle. Misidentification as a weed.

Bailey's Cypress

(Callitris baileyi)

Description and habitat:
Slender tree with rough grey bark, growing up to 15 m in dry sclerophyll habitats and vine forests predominantly in the Veresdale district. Triangular branchlets with tiny (5 mm) needle-like leaves which grow in whorls of three. Woody seed capsules, with differently shaped male and female flowers throughout the year.

Specific threats:
Clearing of habitat. Misidentification. Weed invasion. Grazing by cattle. Cutting down of young specimens as Christmas trees.



Giant Ironwood

(Choricarpia subargentea)

Description and habitat:
Grows up to 25 m tall with buttressed roots often in drier rainforests. Smooth mottled bark, with blotches of pink-mauve, orange-green and copper-colour. Opposite shiny dark green leaves, 4-8 cm tapering to a point at the tips and paler below. Crushed leaves have strong eucalyptus aroma.
Flowers winter to spring with creamy-yellow flowers to 10 mm, followed by small (5 mm) dry fuzzy brownish seed capsules.

Specific threats:
Land clearing. Grazing by cattle. Weed invasion, particularly Lantana. Fire.

Long-leaved Tuckeroo

(Cupaniopsis newmanii)

Description and habitat:
Small narrow tree growing to 6 m. New growth reddish and young shoots rusty-hairy. Leaves alternate, compound, with 16 to 24 serrated leaflets, each to 17 cm. Five-petalled pink flowers (8 mm) from winter to spring. Three-lobed, orange to rosy-pink hairy seed capsules to 25 mm, splitting to reveal three black seeds.

Specific threats:
Land clearing.
Grazing by cattle.
Fire. Weed invasion, particularly Lantana.

Boonah Tuckeroo

(Cupaniopsis tomentella)

Description and habitat:
Small tree growing to 10 m in dry rainforest areas. New growth with dense brown hairs. Leaves alternate, compound, with 6 to 10 often toothed leaflets, each to 9 cm. Leaves paler and densely hairy below. Greenish-white flowers (6 mm) in panicles during spring. Three-lobed, orange-yellow densely hairy seed capsules to 25 mm, splitting to reveal three black seeds. Recorded in the Undullah area.

Specific threats:
Land clearing. Fire. Weed invasion, particularly climbing vines, Lantana and Coral Berry.

Small-leaved Tamarind

(Diploglottis campbellii)

Description and habitat:
Rainforest tree growing to 20 m with good canopy. Alternate, glossy upper, pinnate leaves with four to eight leaflets, each up to 15 cm. Flowers spring to autumn with small (2-4 mm) creamy coloured four-petalled flowers, in panicles. Fruit to 6 cm usually three-lobed with edible red casing surrounding seeds.

Specific threats:
Land clearing. Fire. Weed invasion, particularly Lantana. Grazing by cattle.

Floyd's Walnut

(Endiandra floydii)

Description and habitat:
Tree usually found along watercourses and edges of rainforests growing up to 15 m. Leaves alternate, discolorous, to 12 cm, with prominent raised yellow midrib. Greenish or red 8 mm flowers in winter. 6 cm black fruit with one large seed.

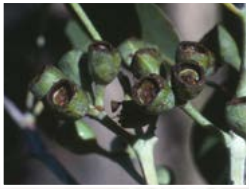
Specific threats:
Cattle grazing.
Land clearing. Fire.
Weed invasion.

Plunkett Mallee

(Eucalyptus curtisii)

Description and habitat:
Smooth grey-barked multi-stemmed tree growing to 10 m. Bark sheds in long thin ribbons. Narrow blue-green alternate or occasionally opposite 6-13 cm leaves. It is generally found growing on sandy or stony clay soils, often in sandstone areas. Flowering occurs in spring as clusters of fluffy white honey-scented flowers. Fruits are bell-shaped, 7-8 mm in diameter and appear in large clusters. When ripe, the brownish coloured seeds are released from their capsules.

Specific threats:
Attack by leaf-eating pests and scale.
Altered fire regimes.



Veiny Fontainea

(Fontainea venosa)

Description and habitat:
Small tree growing to 18 m occurring in drier rainforests with Hoop Pines, in the Bahrs Scrub area. Alternate tough leathery leaves up to 12 cm, dark above, paler below. Five-petalled, 10 mm perfumed white flowers, with 20 mm orange fruit in winter to spring.

Specific threats:
Clearing of habitat. Fire. Weed invasion, particularly Lantana. Grazing by cattle.

Angle-stemmed Myrtle

(Gossia gonoclada)

Description and habitat:
Medium sized tree with pale brown flaky-scaly bark growing to 18 m with a dark green canopy in riverine scrub. Opposite glossy leaves to 5 cm. Flowering in November-December with small, white, four to five petalled, slightly fragrant flowers. The fruit is a glossy, globular berry that turns black when ripe. A distinctive characteristic of this species is the four raised corners on the angled branchlets.

Specific threats:
Clearing of habitat.
Misidentification.
Road construction and widening.
Weed invasion.
Grazing by cattle.
Fire.

Macadamia Nut

(Macadamia integrifolia)

Description and habitat:
Medium sized tree growing to 20 m, often preferring partially open areas such as rainforest edges. Smooth edged (when mature), stiff dark green leaves, either growing in whorls of three or opposite pairs, to 18 cm. Flowering winter to spring with white spikes to 15 cm, followed by fruit of a hard brown nut encased in a green leathery outer shell of 2-3 cm. Smooth brown nut contains an edible kernel.

Specific threats:
Land clearing. Fire. Weed invasion. Erosion. Overgrazing.

Swamp Tea Tree

(Melaleuca irbyana)

Description and habitat:
Small tree growing to 8 m with thick, spongy, papery bark growing in swamp-wetland or moist areas. Tiny, stalkless, pointed leaves, 5 mm or less long, arranged spirally and pressed close to the branchlets. Flowering in spring to summer with 20 mm fluffy creamy-white flower spikes. Small woody seed capsules to 3 mm.

Specific threats:
Risk of local extinction because populations are small and may also lack genetic diversity. Land clearing. Grazing by cattle.

Shiny-leaved Coondoo

(Planchonella eerwah)

Description and habitat:
Medium, dry rainforest tree to 15 m. Dark, glossy, paler below, alternate leaves to 14 cm. Flowers and fruits occur throughout the year with peak flowering from August to January. Small (7 mm) greenish flowers. Fruit edible, red to black, 3-6 cm, containing three to five brown seeds. Milky sap.

Specific threats:
Fire. Weed invasion, particularly Lantana. Grazing by cattle. Land clearing. Misidentification.

Hairy Hazelwood

(Symplocos harroldii)

Description and habitat:
Small tree to 8 m generally found in dry rainforest. Alternate, clustered, finely toothed leaves, to 7 cm. Small white flowers (10 mm) on short spikes, during summer. Red to black egg-shaped fruit, to 9 mm long.

Specific threats:
Land clearing. Grazing by cattle. Fire. Weed invasion. Misidentification.

What can you do?

- Get out and go bush walking in one of the many great bushland parks or reserves of Logan, or keep an eye out in your backyard for any of these special species. We are lucky enough to live in one of the few remaining areas of South East Queensland that provides habitat for such a range of native plants, so we should do all we can to ensure their survival.
- Make sure you report any threatened species sightings to Council so we can help protect them. Phone the Environment and Sustainability Branch on 3412 3412 or report via our website at www.logan.qld.gov.au.
- Restrict the clearing, draining, and filling of important habitat areas on your property, including trees, wetlands and watercourses. Remember Council and other government agencies have rules on vegetation clearing and associated management which need to be abided by, so if necessary, please seek further advice.
- Don't unnecessarily use or over-use chemicals in your garden and be mindful of what you release into gutters and drains; it may end up polluting our waterways.
- Remove positively identified weeds or non-natives from your property and replace with local native species. This will also encourage native wildlife.
- Do not take any seeds, cuttings or fruits from plants growing within local or state government owned land. In some circumstances, permits may be issued so if necessary please liaise with Council or the state government.
- Practice environmentally responsible horse and cattle management techniques. Hard-hooved animals compact soil and trample native regrowth creating prime habitat for weed invasion.
- Become an active member of a local conservation group (see page 38).
- Get involved with Logan City Council environmental programs (see page 32).

What Council is doing to help these very special members of our community

Logan City's bushlands, wetlands and waterways are an important part of our natural environment. Logan City Council supports the conservation and protection of these areas through the Logan City Council Planning Scheme, Local Laws, and by promoting sustainable development, land acquisitions for conservation purposes, community education and rehabilitation of these areas.

Specific Council-run programs you can be involved with include:

EnviroGrants
A Council program offering financial grants for environmentally-based projects which aim to achieve positive local environmental outcomes.

Free trees
All Logan City ratepayers can receive three free trees each financial year. Schools and community groups based on Council-owned land can receive 50 plants per financial year.

Bushcare
Join your local Bushcare group and help rehabilitate wildlife habitat and observe and record native plants and animals.

Native Fish Program
Logan City Council provides native fish to residents wanting to control mosquitos in their backyard.

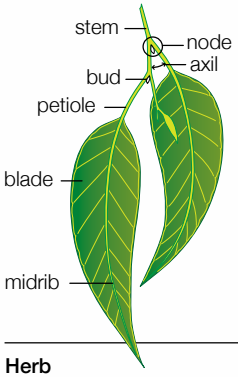
Land for Wildlife
Landholders with properties larger than 1 ha who are interested in effectively managing their property for flora and fauna conservation may be eligible to join this program and receive various incentives such as free trees, advice and workshops.

Voluntary Conservation Agreements and **Voluntary Conservation Covenants**
A similar program to Land for Wildlife however these are legally binding agreements with greater incentives.

COUNCIL PROGRAMS

Glossary

Leaf terminology



axil
The angle formed by a part in relation to its parent structure, e.g. as that formed by a leaf in relation to the stem.

discolorous
When both surfaces of a leaf are unlike in colour.

Notes on stems

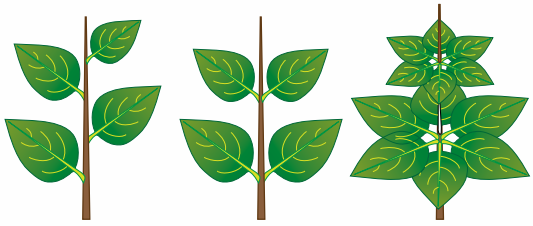
Herb
Generally a smallish plant lacking a woody stem.

Prostrate
A growth habit where the stems lie flat on the ground.

Shrub
Woody plant with multiple stems emanating from or near ground level.

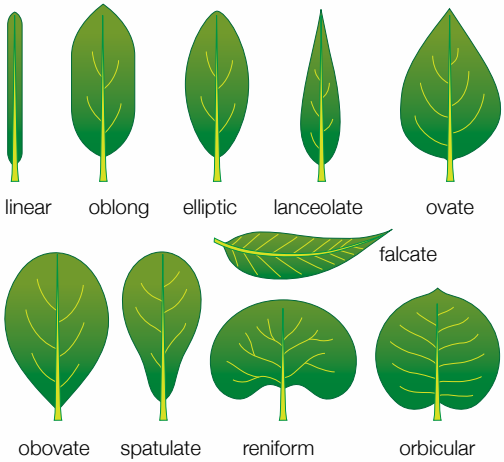
Tuber
Swollen portion of an underground stem.

Leaf arrangement - simple leaves

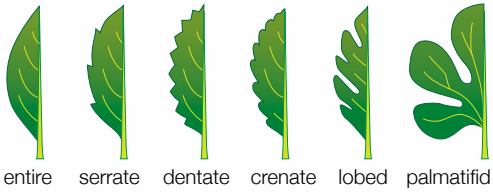


Leaf arrangement - compound leaves

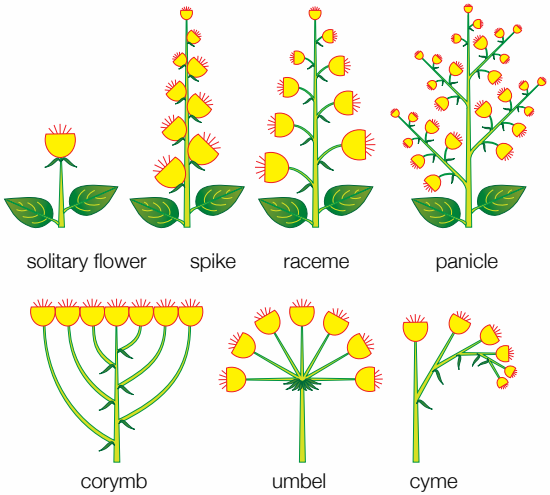
Leaf shapes



Leaf margins



Inflorescence types (flower-bearing systems)



GLOSSARY

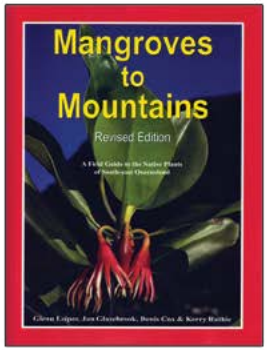
Positive identification

This threatened plants identification booklet has been developed to aid in threatened plant recognition and should be used as a guide only. Accurate identification is difficult as many plants can look very similar and can be easily mistaken.

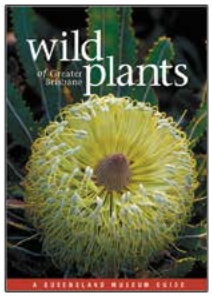
If you think you have found a threatened plant or there is a species that you can not identify on your property, you should take a cutting and perhaps also a photograph to obtain positive identification. Detailed identification guides can then be utilised to key out and identify species (see page 37 for useful guides). Alternatively, the Queensland Herbarium provides a plant identification service. Plant specimens/cuttings can be sent by mail or taken to the Queensland Herbarium for identification. Plant specimens are usually presented pressed and dried in folds of newspaper. For more information on how to collect a specimen and have it identified by the Queensland Herbarium, go to: http://www.derm.qld.gov.au/wildlife-ecosystems/plants/queensland_herbarium/botanical_information.html

Identification guides

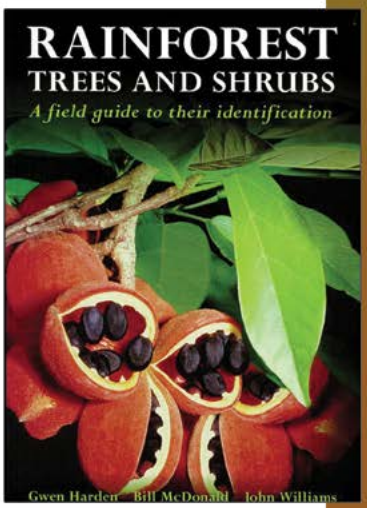
A wide variety of field guides are available to help with the identification of native plants. The majority of the books listed below can be found in Logan City Council Libraries.



- **Mangroves to Mountains: a Field Guide to Native Plants of South-east Queensland** Revised edition (2009) by Glenn Leiper, Jan Glazebrook, Denis Cox and Kerry Rathie



- **Wild Plants of Greater Brisbane** (2003) published by Queensland Museum



- **Rainforest Trees and Shrubs: a field guide to their identification** (2009) by Gwen Harden, Bill McDonald and John Williams

Further information

Logan City Council
(www.logan.qld.gov.au) or phone 3412 3412 or 1300 1 LOGAN* (1300 156 426)

Queensland Herbarium
(www.derm.qld.gov.au/wildlife-ecosystems/plants/queensland_herbarium/)

Department of Environment and Resource Management (DERM)
(www.derm.qld.gov.au)

Department of Sustainability, Environment, Water, Population and Communities
(www.environment.gov.au)

* Council's 1300 number is only for use by customers within Logan City from a landline. When contacting Council from a mobile phone or from outside Logan City please phone 07 3412 3412.

Local conservation groups

Society for Growing Australian Plants, Logan River Branch
(www.sgapqld.org.au/logan.html)

Logan & Albert Conservation Association
(www.laca.org.au)

Wildlife Preservation Society
(www.wildlife.org.au)

Logan-Albert Rivers Catchment Association (www.larcweb.org.au)

Oxley Creek Catchment Association
(www.streamorder.info)

Acknowledgements

The majority of information contained in this booklet is courtesy of *Mangroves to Mountains: a Field Guide to Native Plants of South-east Queensland* Revised edition (2009) by Glenn Leiper, Jan Glazebrook, Denis Cox & Kerry Rathie. With special thanks to Glenn Leiper for also providing his extensive knowledge and editing skills.

Photographic credits

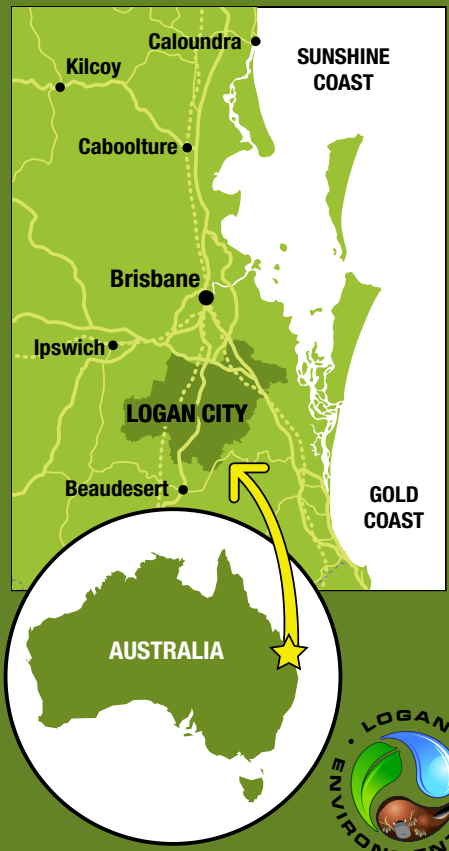
FRONT COVER: MELALEUCA IRBYANA FLOWERS
Glenn Leiper

P4: QUEENSLAND LACE PLANT:
Gunther Schmida ©

P6: MAUNDIA TRIGLOCHINOIDES (main image):
Graham Prichard

P12: RICHMOND BIRDWING BUTTERFLY:
Ray Seddon

P1-3, 5-30: ALL REMAINING PHOTOGRAPHS:
Glenn Leiper



LOGAN ENVIRONMENT LEVY

LOGAN CITY COUNCIL

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web: www.logan.qld.gov.au

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