# **Department of Environment** and Heritage Protection

# living with March 1 and 1 and

# Koalas

# **Planting trees for koalas**

# **Coastal South East Queensland**

# **Recognised food trees**

Koalas are strictly leaf eaters. Koalas have strong regional preferences for certain eucalypt species. In a particular district, koalas may feed almost entirely on one or two species.

The following trees are recognised as important koala food trees in South East Queensland.

# Forest Red Gum or **Queensland Blue Gum** Eucalyptus tereticornis

This is one of the most important koala food trees in Queensland. Growing 20 to 40 metres tall, this species is found throughout coastal Queensland, mainly on alluvial flats, or other fertile soils on hill slopes and mountains. The smooth bark is shed in irregular plates with white, grey and bluish patches. Flowers are usually white but can be pink.

# Tallowwood Eucalyptus microcorys

This species occurs in moist eucalypt open forest on a range of soil types. Often found on hilly areas in fertile soils, tallowwood will grow in rather poor sand if subsoil moisture is adequate. The tree has creamy white flowers in late winter-spring (sometimes summer) and grows up to 40 metres tall. Its rough red-brown bark is soft and fibrous.

# Small-fruited grey gum Eucalyptus propingua

Irregular and mottled bark patches characterise this medium to tall forest tree. It will grow 20 to 35 metres tall on a wide range of soil types but prefers moist, well-drained gravelly soils with some clay content. Flowering periods are from January to March.

# **Red stringybark** Eucalyptus resinifera

This species prefers sandy or well drained soils with adequate soil moisture. Growing 20 to 45 metres with flowers in spring and summer, its red to grey bark is rough and fibrous.

# Other food and habitat trees

Koalas are also regularly seen in other tree species that are used either as a food source or provide important habitat. They may provide good shade and shelter or have other characteristics that make them suitable for koalas. These trees also provide other benefits such as erosion protection, food sources and nesting sites for other mammals and insect-eating birds.

# Spotted gum Corymbia citriodora

## (previously known as Eucalyptus maculata)

This medium to large tree (25 to 40 metres) is found on heavy-textured, well-drained soils on slopes and ridges. Its bark has distinctive dimples and the tree flowers from March to June.

Parks and forests help to protect koala habitat, but much of this habitat in Queensland is located on privately-owned land outside of these areas.

The long-term conservation of koalas will therefore depend largely on private property owners managing their land to retain or improve koala habitat. This can include planting or maintaining trees that provide food and shelter for koalas.





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# Scribbly gum *Eucalyptus racemosa*

### (previously known as *Eucalyptus signata*)

A small to tall forest tree, the scribbly gum grows up to 20 metres and is found in coastal areas. Its feature is distinct smooth white bark with scribbly patterns made by bark-boring insects. It prefers clay to sandy, poorly drained soils. Small white flowers appear from July through to September.

# Queensland white stringybark *Eucalyptus tindaliae*

The canopy of this medium-sized tree has a silvery appearance. It has rough fibrous bark that covers the trunk and branches. This species grows 20 to 30 metres and flowers from February to April.

# Queensland grey ironbark Eucalyptus siderophloia

### (previously *Eucalyptus drepanophylla*)

Grey ironbark usually occurs in sheltered valleys with alluvial soils on edges of flood plains. It also grows on slopes on a range of soil types. This species grows to 30 metres and flowers from winter to early summer.

# Broad-leaved ironbark Eucalyptus fibrosa subsp. fibrosa

This medium-sized tree grows 20 to 30 metres tall. Found on stony, well-drained soils on ridges and slopes, the ironbark has black, deeply furrowed bark (iron bark) and dull green leaves. It flowers from April to July.

# Five-veined paperbark *Melaleuca quinquenervia*

This tree commonly grows from 8 to 12 metres but can reach 25 metres. It is found in coastal areas, along streams, estuary banks, marshes and seasonal swamps, and likes sandy, gravelly, swampy soils where ground water is close to the surface. The five-veined paperbark has white to light-brown papery layers of cork bark.

The loose outer layers become torn and ragged, eventually peeling off. The tree has white to cream flowers mainly from spring to autumn.

Other species in the areas that koalas have been known to use include:

- pink bloodwood
  Corymbia intermedia
- broad-leaved white mahogany *Eucalyptus carnea*
- narrow-leaved ironbark *Eucalyptus crebra*
- mountain grey gum *Eucalyptus major*
- gum topped box *Eucalyptus moluccana*
- narrow-leaved red gum Eucalyptus seeana
- brush box
  Lophostemon confertus
- swamp mahogany Eucalyptus robusta.

# How to grow a tree

It is easy to grow native shrubs and trees from seed:

# From seed to seedling

First, choose seeds from a species which grows naturally locally and is suited to the conditions on the property.

Sieve fine, sandy loam (a type of soil) into a shallow plastic container. Put drainage holes in the bottom of the container and dampen the soil. Sprinkle seeds evenly over the damp surface. Cover the seeds with a shallow layer of loam. This should be no thicker than twice the diameter of the seed.

Put the container in a tray of water (which will keep the soil moist by capillary action) and place in a warm, but sheltered, spot. Germination takes one to four weeks. Protect the seedling from drying winds and direct midday sun.

The seedling is ready to be transplanted into a pot when a second pair of leaves appear and the seedling is about two to three centimetres tall.

# **Transplanting seedlings**

Prepare potting mix using sandy loam and well rotted compost—60/40 mix is best—and fill medium-sized pots that are at least 10 centimetres deep. Moisten the soil and drain before planting. Using a dibble (eight millimetre dowel stick sharpened to a fine point), remove the seedling from your seed bed, gently pulling the seedling free. Make a neat hole with the dibble in the pot soil and gently lower the seedling's roots into the hole. Make sure the roots go straight down and are not doubled over. Firm the soil around the seedling. Form a shallow depression around the seedling and water immediately.

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The seedling can now continue to grow into a small plant. Keep it in a warm sheltered spot until it is ready to be 'hardened off' before planting out in the garden. Hardening off involves exposing the plant gradually to the conditions it will have to contend with when planted outside.

# Where to plant

Natural bushland has several layers grasses and herbs form the ground cover, shrubs form the understorey layer, and eucalypts form the canopy layer.

Eucalypts grow into large trees providing food and shelter for koalas and other animals including possums, gliders, parrots, honeyeaters and many very important small insectivorous birds and spiders, essential to the well-being of the Australian bush.

A mix of native trees and shrubs are best planted close together (one to two metres apart) to form a thicket in a corner of the yard, well away from overhead power lines and underground pipes. Allow leaf litter to accumulate; over the years these shrubs and trees will attract many bush creatures to the backyard.

# Caution

Heights of eucalypts vary.

Check heights of mature trees before planting.

# Selecting trees for planting

Trees for koalas should be selected for local soil type or landform.

For best results, plant species that occur naturally (refer to table below).

# **Tree planting table**

	<b>Soil type</b> Compiled for the Koala Coast area. Soil types in other coastal areas will support many of these species. Check with a local nursery.		
Tree	Red-yellow sand to sandy loam topsoil over a sandy to heavy clay subsoil. The most widely occurring soil type behind the coast, occurring on low hills and rises.	Distinctly dark red- brown coloured loam to clay loam. Generally found along the coast from Wynnum to Redland Bay, also Rochedale, Sunnybank and Eight Mile Plains.	Dark coloured clay loam to heavy clay with high organic content. Poorly drained on coastal plains, especially along creeks close to sea level.
Corymbia citriodora	1		
Corymbia intermedia		1	1
Eucalyptus carnea	1		
Eucalyptus crebra	1	1	
E. fibrosa subsp. fibrosa	✓		
Eucalyptus major	1		
Eucalyptus microcorys	✓		
Eucalyptus moluccana		<i>√</i>	
Eucalyptus propinqua	1		
Eucalyptus racemosa	1		1
Eucalyptus resinifera	✓		
Eucalyptus robusta			1
Eucalyptus seeana	✓	<i>✓</i>	
Eucalyptus siderophloia	1	1	
Eucalyptus tereticornis	<b>√</b>	<i>✓</i>	<i>✓</i>
Eucalyptus tindaliae	1		
Lophostemon confertus	1		
Melaleuca quinquenervia	1	1	1