



## Trees for koalas Coastal south-east Queensland

**Many secure koala habitats exist on national parks, state forests and local council parks and reserves but much of the present koala habitat occurs on privately-owned land.**

**Conservation of koalas in the future will depend largely on private property owners managing their properties to retain or improve koala habitat.**

### Recognised food trees

The koala is strictly a leaf feeder, using a large number of eucalypts as well as other species. Koalas have strong regional preferences for certain eucalypt species. In a particular district, koalas may feed almost entirely on one or two species. Sometimes, particular trees are singled out for more attention.

The following trees are recognised as important food trees in south-east Queensland.

#### Forest red gum or Queensland blue gum (*Eucalyptus tereticornis*)

This is one of the most important food trees in Queensland. Growing 20 to 40m tall, this species is found throughout the coastal area, 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 on rather poor sand if subsoil moisture is adequate. Creamy white flowers in late winter-spring (sometimes summer) and grows up to 40m. The rough red-brown bark is soft and fibrous.

#### Small-fruited grey gum

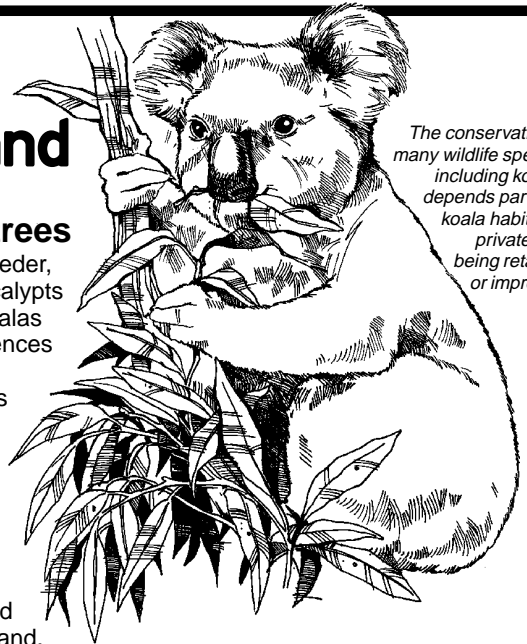
(*Eucalyptus propinqua*)

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

#### Red stringybark

(*Eucalyptus resinifera*)

This species prefers sandy or well-drained soils with adequate soil moisture. Grows 20 to 45m and flowers in spring and summer. The red to grey bark is rough and fibrous.



The conservation of many wildlife species, including koalas, depends partly on koala habitat on private land being retained or improved.

### 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. These tree species provide good shade and shelter or have other suitable 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*)

Medium to large tree (25 to 40m). Found on heavy-textured, well-drained soils on slopes and ridges. The bark has distinctive dimples. Flowers March to June.

#### Scribbly gum

(*Eucalyptus racemosa*) (previously known as *E. signata*)

Small to tall forest tree, grows up to 20m. Occurs in coastal areas. Distinct smooth white bark with scribbly patterns made by bark-boring insects. Prefers clay to sandy, poorly-drained soils. Small white flowers from July through to September.

#### Queensland white stringybark

(*Eucalyptus tindaliae*)

Canopy of this moderate sized tree has a silvery appearance. It has rough fibrous bark that persists to the top of the trunk and branches. Grows 20 to 30m. Flowers 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. Also grows on slopes on a range of soil types. This species grows to 30m and flowers winter-early summer.

### Broad-leaved ironbark

(*Eucalyptus fibrosa* subsp. *fibrosa*)

Moderate sized tree grows 20 to 30m. Found on stony, well-drained soils on ridges and slopes. Black, deeply furrowed bark (iron bark) and dull green leaves. Flowers April to July.

### Five-veined paperbark

(*Melaleuca quinquenervia*)

Commonly grows from 8 to 12m but can reach 25m. Found in coastal areas, along streams, estuary banks, marshes and seasonal swamps. Likes sandy, gravelly, swampy soils where ground water is close to the surface. White to light-brown papery layers of cork bark. The loose outer layers become torn and ragged, eventually peeling off. White to cream flowers mainly from spring to autumn.

Other species in the area 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*,
- Grey box  
*Eucalyptus moluccana*,
- Narrow-leaved red gum  
*Eucalyptus seeana*,
- Brush box  
*Lophostemon confertus*, and
- Swamp mahogany  
*Eucalyptus robusta*.

## How to grow a tree

You can grow your own native shrubs and trees from seed. It's easy — here's how.

### From seed to seedling

First, choose seeds from a species which grows naturally in your area and is suited to your block.

Sieve fine, sandy loam into a shallow plastic container. Put drainage holes in the bottom of the container and dampen the soil. Tap the surface level and 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, sometimes longer depending on conditions. 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 appears and the seedling is about 2 to 3cm.

### 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 10cm deep. Moisten the soil and drain before planting. Using a dibble (8mm 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, again using the dibble. Form a shallow

depression around the seedling and water immediately.

Your 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 your garden. Hardening off involves exposing the plant gradually to the conditions it will have to contend with when planted out.

## Where to plant

Natural bushland has several layers — grasses and herbs form the ground cover, shrubs, the understorey layer and eucalypts, 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 (1 to 2m apart) to form a thicket in a corner of your 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 your 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

Soil type Compiled for the Koala Coast area. Soil types in other coastal areas will support many of these species. Check with your local nursery.	<i>Corymbia citriodora</i>	<i>Corymbia intermedia</i>	<i>Eucalyptus carnea</i>	<i>Eucalyptus crebra</i>	<i>E. fibrosa</i> subsp. <i>fibrosa</i>	<i>Eucalyptus major</i>	<i>Eucalyptus microcorys</i>	<i>Eucalyptus moluccana</i>	<i>Eucalyptus propinqua</i>	<i>Eucalyptus racemosa</i>	<i>Eucalyptus resinifera</i>	<i>Eucalyptus robusta</i>	<i>Eucalyptus seeana</i>	<i>Eucalyptus siderophloia</i>	<i>Eucalyptus tereticornis</i>	<i>Eucalyptus tindalliae</i>	<i>Lophostemon confertus</i>	<i>Melaleuca quinquenervia</i>
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.		✓								✓		✓			✓			✓