

Eucalypts

of the City of Whittlesea



PROTECTING BIODIVERSITY ON PRIVATE LAND SERIES



City of
Whittlesea

Eucalypts of the City of Whittlesea

Eighteen species of eucalypts are indigenous to the City of Whittlesea, occurring across the municipality where they are the dominant trees of the woodland and forest communities.

Eucalypts are also commonly found along rural roadsides, river corridors and as isolated paddock trees in largely cleared agricultural areas.

Candlebark on roadside, Whittlesea



MW

EUCALYPTS – DISTINCTLY AUSTRALIAN

- There are approximately 700 species in Australia, 100 of which are indigenous to Victoria.
- Mature River Red Gums in an open grassy environment are recognised as one of the most important visual features of Whittlesea’s local landscape. They are afforded special protection, being both culturally and environmentally significant.
- The world’s tallest flowering plant Mountain Ash *Eucalyptus regnans*, is recorded in the damp forests in the far north-east of the municipality.
- The flowers are pollinated by a range of animals including microbats, mammals, insects as well as being wind pollinated.
- Hollows form in the trunks and branches of large eucalypts, providing valuable habitat for local wildlife. Trees typically need to be 80-100 years old before they are large enough to be able to form hollows.

RIVER RED GUMS – AN ICONIC SPECIES IN WHITTLESEA

The majestic River Red Gum *Eucalyptus camaldulensis* with their massive trunk, gnarled appearance, heavy twisting branches and broad open canopy are an important natural feature of the Whittlesea landscape. Many large old trees are estimated to be 200-800 years old and have significant local heritage and environmental values.

Mature trees are particularly important in providing habitat for local wildlife through the formation of hollows in the trunk and branches. When a branch falls off, it creates a wound that allows air and water in, which over time begins to rot and may eventually form a hollow. Due to the sheer size of River Red Gums, the hollows formed can be



River Red Gums in Woodstock

very large and provide natural habitat for many species including possums, gliders, small marsupials, and microbats as well as parrots, lorikeets and cockatoos to name a few.

The City of Whittlesea's River Red Gum Protection Policy recognises the intrinsic value of these trees in providing character and identity in the urban and rural areas of Whittlesea. They are afforded special protection in the Whittlesea Planning Scheme.

- Hollows can be used by bees with many types of honey being collected from eucalypts, both by Aboriginal communities and apiarists.
- Eucalypts provided many uses for Aboriginal communities, with bark used for making canoes and shields and the wood for weapons.
- Southern Blue Gum *Eucalyptus globulus*, which is not indigenous to the Whittlesea area, is the primary source of eucalyptus oil production around the world.

Nankeen Kestrel chick using hollow in mature River Red Gum tree





Typical smooth barked “gum” tree;
Mountain Ash

GUM TREES AND EUCALYPTS

Eucalyptus is the scientific genus for this iconic group of Australian trees, which are commonly referred to as “eucalypts”

The term “*gum tree*” is widely used to refer to eucalypts however, for identification purposes, the term “gum” generally refers to the group of eucalypts that have smooth bark, which peels in large flakes or ribbons.

All “gums” are eucalypts but not all eucalypts are “gums”.

ABORIGINAL USES OF EUCALYPTS

Eucalypts are one of the most versatile and widely used of all plants by Aboriginal Australians. The wood was often used to make weapons, shields and spear throwers as well as musical instruments such as knocking sticks and didgeridoos. The fibrous bark of stringybark trees was used to make coarse string for bags and fishing nets. The oils in some leaves were used to treat colds and chest complaints and the sap was used to

EUCALYPT REGENERATION – RESPONSE TO FIRES AND FLOODS

Fire and flood are important features of the Australian landscape and have been for thousands of years. For many Australian plants, including eucalypts, these events present a unique opportunity for the plants to reproduce.

Many species of eucalypt, particularly the thinner barked “gums” can be killed by fire of even a moderate intensity. However, the passing fire will create the perfect environment for the germination of seed in the soil by creating a nutrient rich ash bed with reduced competition and plenty of light.

Thicker barked eucalypts can often survive all but the most intense fires and although they may be burnt, often

seal burns and mixed with water to treat diarrhoea.

Some individual trees are particularly significant to Aboriginal Australians:

Scarred Trees: Trees that bear a scar where the bark has been cut, peeled off and shaped over fires and made into canoes or used for shelter.

Maternity / Birthing Tree: Very large trees that have been hollowed out at the base could have been used by local Aboriginal Communities for giving birth and also for shelter.

Mature River Red Gum scar tree



MW



JB

Epicormic growth on Eucalypt following Black Saturday.

re-sprout from buds under the bark along branches and the trunk, called epicormic buds.

Some eucalypts resprout from an underground root mass called a lignotuber in areas where plants have adapted to a frequent fire regime. These are called the mallee eucalypts and are usually short multi-stemmed trees. As their name suggests they are generally found in the Mallee region and not in the City of Whittlesea.

Flood events can also provide important cues for some species, particularly River Red Gums, as periods of inundation or sustained heavy rains create the necessary soil moisture levels to promote natural regeneration. Along flood plains, mass germination can often be observed following the recession of winter/spring flood waters.

IDENTIFYING FEATURES OF THE EUCALYPTS

Identifying eucalypts can be difficult. There is often considerable variation within individual species, so a combination of features (leaves, fruits and bark) may be required to identify your plant.

Bark

The bark of eucalypts is highly variable and an important identifying feature. The bark can range from typical thin, smooth gum-type bark which is shed annually in large flakes or ribbons, to the persistent, rough, deeply fissured bark of the ironbarks.

Leaves

The leaves of eucalypts go through a marked transformation from the juvenile to mature plant. The juvenile

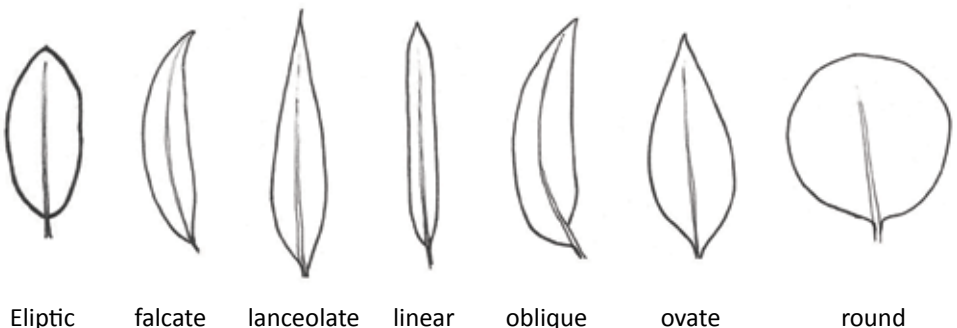
leaves can sometimes be used as a key identifying feature when the plant is small and is too young to have any buds or fruit and the bark has not fully developed. Juvenile leaves also appear on epicormic shoots of mature trees from the trunk and branches following fire or if the tree is otherwise damaged. Juvenile leaves tend to be opposite and sessile (stalkless), whereas adult leaves tend to be stalked and alternate in arrangement.

Buds and Fruit

The number of buds in a cluster can vary even within a species so use the number as a guide only and combine with other characteristics to identify your species.

As the bud matures, the top drops off to reveal the flower. Following fertilisation, the bud expands to become a woody capsule called

Figure 1: Eucalypt leaf shapes



the fruit, which encloses a number of seeds. Drying out of the fruit (especially after fire) causes the valves to open and release the seed.

The features of the fruit, particularly its shape, are extremely useful in identifying the species.

Figure 2: Eucalypt buds – components and shape-types

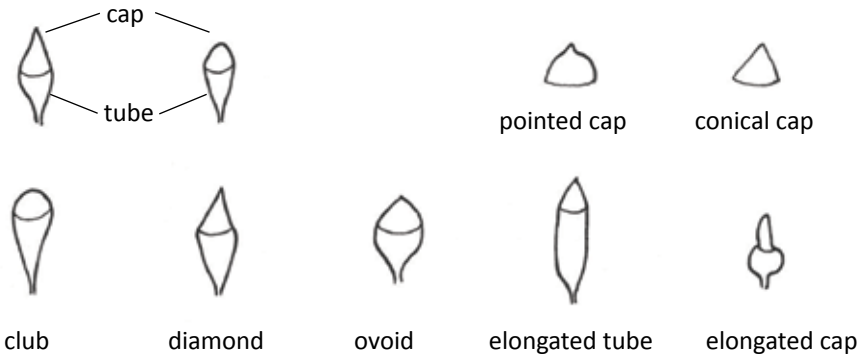
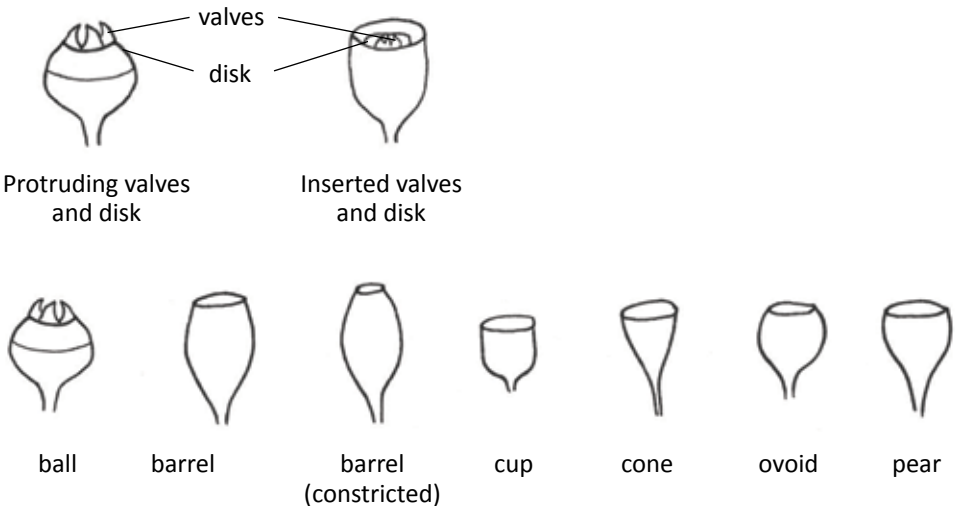


Figure 3: Eucalypt fruits – components and shape types



Glossary

Refer to Figures 1 – 3 for diagrams illustrating the components and shapes for buds, fruits and leaves.

Alternate: Leaves borne singly at different levels along a stem (c.f. opposite)

Axil: The angle between the leaf and the stem

Cap: The top of a bud that falls off when the flowers open (see Figure 2)

Elliptic: Oval shaped, often with pointed ends (see Figure 1)

Falcate: Curved like the blade of a sickle (see Figure 1)

Fissured: Cracks or splits in the outer bark of a tree, usually in a vertical orientation

Lanceolate: Lance-shaped, broader toward the base and tapering to a point (see Figure 1)

Linear: Very narrow in relation to its length, usually with parallel sides (see Figure 1)

Oblique: When the two sides of the leaf base meet at different points on the midrib or petiole (see Figure 1)

Opposite: Leaves borne at the same level but on opposite sides of the stem (c.f. alternate)

Ovate: Egg-shaped with the broadest part towards the stalk/stem (see Figure 1)

Round: Circular (see Figure 1)

Sessile: Lacking a stalk

Tube: The base of the bud which turns into the fruit after fertilisation (see Figure 2)

IDENTIFYING THE EUCALYPTS OF WHITTLESEA

To assist with identification, this booklet groups species together based on similar bark characteristics of mature trees in the first instance. Once you have determined which bark group most closely matches your tree in question, read the descriptions and observe the photos for each characteristic to try and identify the species.

For some species the bark can be quite variable and it might fit into more than one of the groups - in this case you may have to work through the different groups to try and work out your species.

Note: Some eucalypts are also known to readily hybridise, making identification more difficult. Plants may have features of two species, for example the leaf type and shape of one species and the fruits and buds of another.

Note: Many eucalypts have been planted along street scapes and have been used for revegetation. Some older revegetation projects may not have used plants local to the Whittlesea area so there may be some obscure species that you come across that do not fit any of the descriptions.

Group A

go to page 10

Smooth-barked “gums”

Smooth bark dominates the trunk and branches (skirt of rough bark may be present at base of trunk).



Group B

go to page 20

Rough-barked “boxes”

Bark with small shallow cracks, breaking into small flakes (scales) when rubbed; often tightly held to trunk and quite neat in overall appearance. Leaves often greyish.



Group C

go to page 22

Rough barked “peppermints”

Bark with short fibres and small shallow cracks, breaking into dust like particles when rubbed; leaves with peppermint smell when crushed; buds club-shaped, small and numerous (>11) per cluster.



Group D

go to page 24

Rough barked gums

Bark with short fibres and shallow to moderately deep cracks, soft/spongy or breaking into dust like particles when rubbed; leaves without peppermint smell; buds usually <11 per cluster.



Group E

go to page 28

Stringybarks and Ironbarks

Bark rough, with deep cracks and either with long fibres or very hard, black and deeply fissured.



Sugar Gum

A

Eucalyptus cladocalyx (non-indigenous)

SMOOTH BARKED

Key features: Leaves with dark glossy-green lustre one side and paler on the other; buds with elongated tube and small cap; fruit barrel-shaped with constricted opening.

Habit: Medium to large tree.

Habitat: Widely planted, introduced to City of Whittlesea, commonly naturalised.



Bark

MW

Smooth with irregular white, yellow and grey patches.



Adult leaves

MW

Broad lanceolate, glossy dark-green one side and paler on the other, to 15 x 2.4 cm.



Juvenile leaves

MW

Round to ovate, dark green, paler one side, to 6 x 9 cm.



Buds

MW

Vaguely club-shaped with elongated tube and small cap, 7-12 per cluster.



Fruit

MW

Barrel-shaped with constricted opening, longitudinally ribbed.

Mountain Grey Gum

A

Eucalyptus cypellocarpa

SMOOTH BARKED

Key features: Adult leaves very long and dark green; buds distinctly elongated with fine rib along tube; stalk of bud and fruit clusters flattened.

Habit: Medium to tall forest tree.

Habitat: Tree of damp forests on slopes and valley bottoms in mountain ranges.



Adult leaves

Long, lanceolate, dark green both sides, to 20 x 2.6 cm. Intermediate leaves very large to 35 x 5 cm.



Buds

Distinctly elongated tube with conical cap, usually one or two ribs along the tube. Clusters of 7 buds on a long flattened or angular stalk.



Bark

Smooth, grey often with yellowish patches, shed in long ribbons often seen hanging in the canopy, sometimes rough at base.



Juvenile leaves

Broad-lanceolate to ovate, sessile and opposite, glossy dark green one side and paler on the other, to 17 x 8 cm.



Fruit

Barrel-shaped often with 1-2 longitudinal ribs, clusters of fruits on broad flattened or angular stalks.

Yellow Gum

A

Eucalyptus leucoxylon

SMOOTH BARKED

Key features: Juvenile leaves opposite, grey-green, heart-shaped; buds in 3s on slender stalks; fruits cup-shaped, usually fairly large on distinct stalks. Juvenile leaves, buds and fruits greyish.

Habit: Medium to large tree.

Habitat: Woodland plains and Box-ironbark Forests.



Bark

MW

Smooth with pale shades of yellow, blue and grey, rough and dark at base.



Adult leaves

MW

Lanceolate to broad lanceolate, green to bluish-green, to 20 x 2.5 cm.



Juvenile leaves

MW

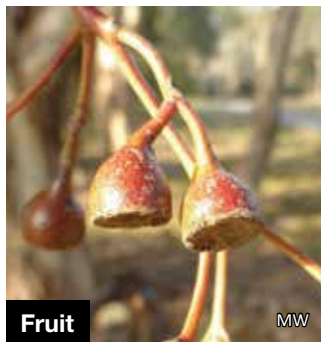
Broad or narrow heart-shaped, opposite and sessile sometimes fusing together at the leaf base, grey-green, to 9 x 6 cm.



Buds

MW

Ovoid- to diamond-shaped on long slender stalks, held in threes.



Fruit

MW

Cup- to barrel-shaped on long slender stalks, often greyish.

River Red Gum

A

Eucalyptus camaldulensis subsp. *camaldulensis*

SMOOTH BARKED

Key features: Along water courses and plains; buds on slender stalks with distinctively pointed tip; fruit on slender stalks, ball/diamond-shaped with valves protruding.

Habit: Medium to large tree.

Habitat: Along water courses and swamp margins as well as the open plains.



Bark

MW

Smooth and peeling in large irregular flakes, dull grey sometimes with cream or reddish patches.



Adult leaves

MW

Lanceolate, dull/greyish green, to 25 x 2 cm.



Juvenile leaves

CL

Broad ovate to lanceolate, greyish-green, to 26 x 8 cm.



Buds

MW

Ovoid with distinctively pointed tip, held on slender stalks in clusters of 7-11.



Fruit

MW

Ball-shaped with valves protruding, held on slender stalks.

Swamp Gum

A

Eucalyptus ovata var. *ovata*

SMOOTH BARKED

Key features: Poorly drained sites; leaves broad with wavy edges, buds diamond-shaped, fruit cone-shaped with flat top.

Habit: Small to medium tree.

Habitat: On lower slopes and alluvial terraces and fairly fertile plains, with seasonally moist or waterlogged soils.



Generally smooth cream-grey surface after bark is shed in ribbons, rough at base to varying heights.



Thick dark green, broad-ovate (sometimes lanceolate) with wavy edges, to 15 x 3 cm.



Rounded, dull green with stalk, to 19 x 8.5 cm.



Diamond-shaped with conical cap.



Cone-shaped with more or less flat top.

Candlebark

A

Eucalyptus rubida

SMOOTH BARKED

Key features: Bark smooth, white almost to ground, usually lacking ribbons in branches; juvenile leaves rounded, grey; buds/Fruits in 3s.

Habit: Medium to tall forest tree.

Habitat: Occurs on undulating hill and forest ranges on drier, shallower soils than *E. viminalis* subsp. *viminalis*.



Bark

DF

Smooth, white almost to ground, developing red patches before peeling in summer. Usually lacks ribbons.



Adult leaves

RB

Narrow-lanceolate, green or grey-green, to 15 x 2 cm.



Juvenile leaves

RB

Generally rounded, grey, opposite, sessile, to 4.5 x 5.5 cm.



Buds

RB

Ovoid- to diamond-shaped with conical cap, usually in 3s, sometimes glaucous.



Fruit

RB

Mostly in 3s, cup-shaped with protruding top (approaching ball-shaped), 6-9 mm diameter.

Manna Gum

A

Eucalyptus viminalis subsp. *viminalis*

SMOOTH BARKED

Key features: Barks smooth, rough at base, ribbons hanging from limbs; juvenile leaves narrow-lanceolate, not greyish; buds/Fruits in 3s.

Habit: Small spreading tree to tall forest tree.

Habitat: Grows as a tall forest tree along mountain streams where soils are moist and well-drained, but can extend onto ridges where it becomes a woodland tree.



Bark

MW

Smooth and white with ribbons hanging from limbs, rough at base to varying heights.



Adult leaves

MW

Narrow-lanceolate, mid-green, to 20 x 2 cm.



Juvenile leaves

RB

Narrow-lanceolate, green, opposite, sessile, to 15 x 3 cm.



Buds

MW

Ovoid- to diamond-shaped with slightly pointed cap, usually in 3s in the form of a cross (sometimes 7s).



Fruit

MW

Mostly in 3s, cup-shaped with protruding top (approaching ball-shaped).

White Sallee

A

Eucalyptus pauciflora subsp. *pauciflora*

SMOOTH BARKED

Key features: Leaves with conspicuous veins running lengthwise.

Habit: Small to medium open tree with more than one main trunk.

Habitat: Grassy woodlands on moderately fertile soils of slopes and plains.



Smooth to base of trunk, white or with grey, red, olive-green stripes and patches.



Lanceolate, glossy dark green, leathery with conspicuous veins running parallel to midrib, to 16 x 3 cm.



Ovate, grey-green, opposite then becoming alternate, to 7.5 x 3 cm.



Club-shaped with slightly pointed tip, 7-9 (up to 15) per cluster, often slightly rough/warty.



Pear- to cone-shaped with flattened top.

Southern Blue Gum

A

Eucalyptus globulus (non-indigenous)

SMOOTH BARKED

Key features: Leaves long, thick and leathery, juvenile leaves bluish-white and waxy growing on square stems.

Habit: Medium to tall forest tree.

Habitat: Planted, not naturally occurring in City of Whittlesea.



Bark

MW

Smooth, peeling in strips giving shades of grey, blue, cream and brown, rough at base.



Adult leaves

MW

Long, lanceolate, thick and leathery, glossy dark green, to 25 x 2.4 cm. Some intermediate leaves can be very long, to 50 cm.



Juvenile leaves

MW

Large, ovate, silvery with waxy coating, opposite, sessile on square stems, to 15 x 9 cm.



Buds

MW

Large, cap warty with central knob, tube sometimes warty, 2-4 angled, usually waxy greyish/white. Depending on subspecies buds may be solitary, or in clusters of 3 or 7.



Fruit

MW

Cone-shaped with slightly protruding top, 1-4 ribs, usually waxy greyish/white.

Mountain Ash

A

Eucalyptus regnans

SMOOTH BARKED

Key features: Sub-fibrous bark on lower part of trunk, but smooth and ribbony above. Leaves slightly oblique at base, juvenile leaves glossy green. Bud/fruit clusters often in pairs in leaf axil.

Habit: Tall forest tree.

Habitat: Tall forests on deep moist soils in cool mountain valleys between 200 m and 1100 m altitude.



Bark

Sub-fibrous on lower part of trunk (to 15 m),
smooth and ribbony above. DF



Adult leaves

DF

Lanceolate-falcate/oblique, green,
to 14 x 2.7 cm.



Juvenile leaves

GJ

Broad-lanceolate to ovate, green, glossy,
to 17 x 8 cm.



Buds

DF

Club-shaped,
clusters often
in pairs in leaf
axils.



Fruit

DF

Conical to
pear-shaped,
clusters often
in pairs in leaf
axils.

Red Box

B

Eucalyptus polyanthemos subsp. *vestita*

BOX BARKED

Key features: Drier shallow soils in foothill country. Leaves grey-green and ovate.

Habit: Small to medium tree.

Habitat: Drier shallow soils in foothill country.



Adult leaves

Ovate, grey-green, to 9 x 3 cm.



Buds

Club- or diamond-shaped with short cap, usually glaucous.



Bark

Grey fine-scaly box-bark on trunk and large branches.



Juvenile leaves

Rounded, notched at the end, grey-green, to 6.5 x 8 cm.



Fruit

Pear-shaped (to cone- or barrel-shaped) with thin rim.

Yellow Box

B

Eucalyptus melliodora

BOX BARKED

Key features: Variable scaly bark and large, rounded, fine-textured (often greyish) crown.

Habit: Small to medium tree.

Habitat: Widespread, common on hills, foothills and plains, on loamy soils.



Bark

MW

Variably scaly bark, yellow-brown or greyish, upper trunk and limbs smooth and gum-like.



Adult leaves

MW

Lanceolate, light-green to slate grey, to 14 x 1.8 cm.



Juvenile leaves

MW

Ovate-elliptic, pale grey-green both sides, to 11 x 5 cm.



Buds

RB

Club-shaped with short conical cap.



Fruit

MW

Ovoid or cup-shaped with prominent stalks.

Broad-leaf Peppermint

C

Eucalyptus dives

ROUGH BARKED PEPPERMINTS

Key features: Leaves broad-lanceolate usually more than 2 cm wide, strong peppermint smell when crushed; juvenile leaves sessile, opposite, broad-ovate to heart-shaped, greyish.

Habit: Medium to large tree.

Habitat: Common in lower-rainfall hill country on shallower soils than *E. radiata*.



Bark

MW

Peppermint type, rough to the small branches, grey-brown, finely fissured and sub-fibrous, never stringy.



Adult leaves

MW

Broad-lanceolate, usually more than 2 cm wide, dark greyish-green, strong peppermint smell when crushed, to 15 x 3.3 cm



Juvenile leaves

RB

Broad-ovate to heart-shaped, opposite, sessile, greyish, to 12 x 7 cm.



Buds

MW

Small, club-shaped, 11-20+ per cluster.



Fruit

MW

Pear-shaped (to cup- or cone-shaped) with flat top, slightly larger than *E. radiata*.

Narrow-leaf Peppermint

C

Eucalyptus radiata subsp. *radiata*

ROUGH BARKED PEPPERMINTS

Key features: Canopy crown has a dull green fine textured appearance; leaves have a strong peppermint smell when crushed; juvenile leaves opposite, sessile and narrower than *E. dives*; buds numerous in a cluster.

Habit: Small to large tree.

Habitat: Forest tree of ranges and foothills.



Peppermint type, rough to the small branches, grey-brown, finely fissured and sub-fibrous, never stringy.



Narrow-lanceolate, thin-textured, strong smell of peppermint when crushed, to 15 x 1.5 cm.



Narrow-lanceolate, opposite, sessile, paler one side, to 18 x 3.5 cm.



Small, club-shaped, 11-20+ per cluster.



Small, pear-shaped (to cup- or barrel-shaped) with flat top.

Southern Mahogany

D

Eucalyptus botryoides (non-indigenous)

ROUGH BARKED GUMS

Key features: Rough bark; leaves glossy dark green, duller pale beneath, many close spaced parallel veins at wide angle to midrib.

Habit: Medium to large tree.

Habitat: Planted and naturalised, not indigenous to the City of Whittlesea.



Bark

MW

Rough, thick, short fibred, brown-greyish, spongy/soft upper branches often smooth.



Adult leaves

MW

Broad -lanceolate, thick with glossy dark green surface above, duller pale beneath, many close parallel veins at wide angle to midrib, to 16 x 4 cm.



Juvenile leaves

MW

Similar to adult leaves but more ovate, thinner and often with wavy edge, to 15 x 8.5 cm.



Buds

MW

Elongated tube with 2-ribs and conical cap, clusters of 7-11 buds on flattened stalks.



Fruit

MW

Barrel-shaped, almost sessile, clusters held on flattened stalks.

Bundy

D

Eucalyptus gonicalyx

ROUGH BARKED GUMS

Key features: Bark greyish, hard, rough, coarse and scaly, persistent to small branches; juvenile leaves rounded, opposite, sessile, grey-green; buds elongated tube with conical cap, clusters of 7 sessile buds on broad flattened stalks.

Habit: Small to medium tree.

Habitat: Slopes, ridges and escarpments often in harsh rocky sites in woodland or forest.



Bark

MW

Greyish, rough, coarse and scaly, often hard and deeply fissured, persistent to small branches.



Adult leaves

MW

Lanceolate, long and tapering, usually dark green with firm texture, to 20 x 3 cm.



Juvenile leaves

MW

Broad, rounded, opposite, sessile, grey-green, to 11 x 10 cm.



Buds

MW

Elongated tube with conical cap, usually with 2 longitudinal ridges, clusters of ~ 7 sessile buds held on broad flattened stalks.



Fruit

MW

Barrel-shaped, sessile, clusters on broad flattened stalks.

Coast Manna Gum

D

Eucalyptus viminalis subsp. *pryoriana*

ROUGH BARKED GUMS

Key features: Very similar to *E. viminalis* subsp. *viminalis* but with rough bark to larger branches; juvenile leaves narrow-lanceolate, green, opposite, sessile.

Habit: Small to medium tree.

Habitat: Various habitats, mainly on moister fertile soils and/or coastal grey sands.



Bark

JB

Rough, sub fibrous, usually persistent to larger branches.



Adult leaves

MW

Narrow-lanceolate, mid-green, to 20 x 2 cm.



Juvenile leaves

CC

Narrow-lanceolate, green, opposite, sessile, to 15 x 3 cm.



Buds

MW

Ovoid- to diamond-shaped with pointed cap, usually in 3s in the form of a cross (sometimes 7s).



Fruit

MW

Mostly in 3s, cup-shaped with protruding top (approaching ball-shaped).

Yarra Gum

A locally rare species so please report sightings to the City of Whittlesea

D

Eucalyptus yarraensis

ROUGH BARKED GUMS

Key features: Adult leaves elliptic to broad-lanceolate (smaller than *E. ovata*), glossy green both sides, edges broadly wavy; fruit pear- to rounded cone-shaped, small on distinct stalks.

Habit: Small to large spreading tree.

Habitat: Grassy Woodland on undulating terrain and lower slopes; fertile well drained loamy soils.



Bark

Rough, dark, sub-fibrous or scaly on trunk and larger limbs, smooth on small branches.



Adult leaves

Elliptic to broad-lanceolate (smaller than *E. ovata*), glossy green both sides, edges broadly wavy, to 10 x 3 cm.



Juvenile leaves

Elliptic, then oblong or ovate, green, to 8 x 5 cm.



Buds

Ovoid to diamond-shape, small on distinct stalks.



Fruit

Usually 7 per cluster, pear- to rounded cone-shaped, small on distinct stalks.

Red Stringybark

E

Eucalyptus macrorhyncha

DEEPLY FISSURED BARK

Key features: Fibrous bark usually deeply fissured. Buds with a smooth tapering (beaked) conical cap. Fruit with rim at widest part, disk domed-shaped, 3-4 valves strongly projecting.

Habit: Medium to large tree.

Habitat: Common and widespread on drier well drained ridges and slopes often on shallow soils.



Long-fibred, usually deeply fissured, fresh bark red-brown, weathered surface grey, persistent to smaller branches.



Asymmetrical, lanceolate with oblique base, green, slightly-glossy and sometimes paler one side, to 15 x 2.5 cm.



Ovate with wavy margin, stalk absent/short, green, one surface paler than the other. Early leaves roughened with tiny hair tufts, to 12 x 5 cm.

Diamond-shaped with smooth tapering (beaked) conical cap.



Ball-shaped, rim at widest part, three sharp valves strongly projecting, short stalk.

Messmate Stringybark

E

Eucalyptus obliqua

DEEPLY FISSURED BARK

Key features: Common, widespread, Stringy bark with dark green, oblique leaves. Fruit barrel-glass-shaped.

Habit: Medium to large forest tree.

Habitat: Widespread, on better quality soils of higher rainfall areas.



Fibrous and stringy to the smaller branches, fissured to varying degrees, brown-greyish.



Broadly lanceolate, curved (falcate), asymmetrical and oblique at base, thick, glossy dark green.



Broadly falcate and oblique, green, glossy, without hairs.



Club-shaped, 7-11 (up to 19) per cluster.



Barrel-shaped with short stalk.

Red Ironbark

E

Eucalyptus tricarpa subsp. *tricarpa*

DEEPLY FISSURED BARK

Key features: Bark hard, dark brown to black, thick, deeply fissured to small branches. Buds and fruit hanging on long slender pedicles, fruit barrel-shaped or cup-shaped.

Habit: Small to medium tree.

Habitat: Ridges and slopes on poor often shallow stony soils.



Bark

Hard, dark brown to black, thick, deeply fissured to small branches.



Adult leaves

Lanceolate, dull green, to 14 x 1.8 cm.



Juvenile leaves

Lanceolate(-ovate), dull green, to 15 x 2 cm.



Buds

Club- to diamond-shaped, cap conical, hanging in three on long stalks.



Fruit

Barrel- to cup-shaped hanging on long stalk.

If you have reached this point and not found your eucalypt, it could be for a number of reasons:

- a) You have misapplied the key (have another go)
- b) You have found an eucalypt not previously recorded in the area *
- c) You have found a eucalypt not listed in this key (never get rid of the plant until you know what it is) *

* Email photographs to sustainability@whittlesea.vic.gov.au and we'll identify it for you

Acknowledgements

Key and associated text by Ecology Australia Pty Ltd
General booklet text City of Whittlesea

Photo credits:

James Booth (JB), Mark Williams (MW), Russell Best (RB), David Francis (DF), Chris Lindorff (CL), Lorraine Phelan (LP), Sue Guymmer (SG), Chris Clarke (CC), CoW (City of Whittlesea), GJ (Greg Jordan, University of Tasmania).

Images sourced from Natureshare (www.natureshare.org.au), private collections and City of Whittlesea collection.

Further Reading

Bull, M (2014) *Flora of Melbourne: a guide to the indigenous plants of the greater Melbourne area* (Hyland House: Melbourne)

Costermans, LF (1983) *Native Trees and Shrubs of South-Eastern Australia* (Landsdowne Publishing: Sydney)

Costermans, LF (1994) *Trees of Victoria and Adjoining Areas* (Costermans Publishing: Frankston)





**City of
Whittlesea**

City of Whittlesea

Address: Council Offices, 25 Ferres
Boulevard, South Morang, Vic 3752
(Melway 183 A10)

Postal Address: Locked Bag 1,
Bundoora MDC, Vic 3083

Telephone: (03) 9217 2170

Fax: (03) 9217 2111

Email: info@whittlesea.vic.gov.au

Website: www.whittlesea.vic.gov.au

Free telephone interpreter service



131 450