



EUCALYPTUS TREE IDENTIFICATION BOOKLET

FOR THE STRATHBOGIE RANGES AND SURROUNDS

INTRODUCTION

The trees of the Strathbogie Ranges are special for a variety of reasons, including their beauty, shade and shelter, and for providing habitat to our unique wildlife. This tree identification booklet is to help you identify the majority of species in the Strathbogie Ranges.

This identification booklet is part of a broader project that we hope that you will be interested in taking part. The project needs people like you to assess the health of trees in the Strathbogie Ranges over time. As our climate appears to be getting drier, we have noticed that our trees seem to be suffering and showing reduced health. This citizen science survey project is about measuring the health of our trees now and into the future so that we can be informed about:

1. What is the health of our trees now?
2. Are some species more or less healthy than others?
3. If tree health is in decline how fast is the decline?

With your help, as citizen scientists, we can begin to answer these questions and therefore take action to manage trees so that they can survive into the future

To get involved you can contact the Goulburn Broken Catchment Management Authority on (03) 5822 7700 or go to the website www.gbcma.vic.gov.au and search for tree health survey.



Blue Gum

Eucalyptus globulus subspecies *bicostata*

Distinguishing features :

Juvenile leaves whitish—grey , occurring in opposite pairs from a square white stem - Very obvious

Large button like gumnuts

Grows very rapidly when young.

Very long glossy green leaves

A tall forest species that spreads out in an open situation.

Sheds copious amounts of bark.



Large fruit



Shady paddock tree at Caveat



Along roadsides near Highlands



Adult leaves large and long

Glossy green in color



Juvenile leaves soft and whitish grey .

Distribution :

Scattered through the foothills and mountains of the Strathbogie Ranges.
In protected gullies on the lower slopes .

Site Preference :

Prefers moist , relatedly heavy fertile soil.
Seedling susceptible to frosts .

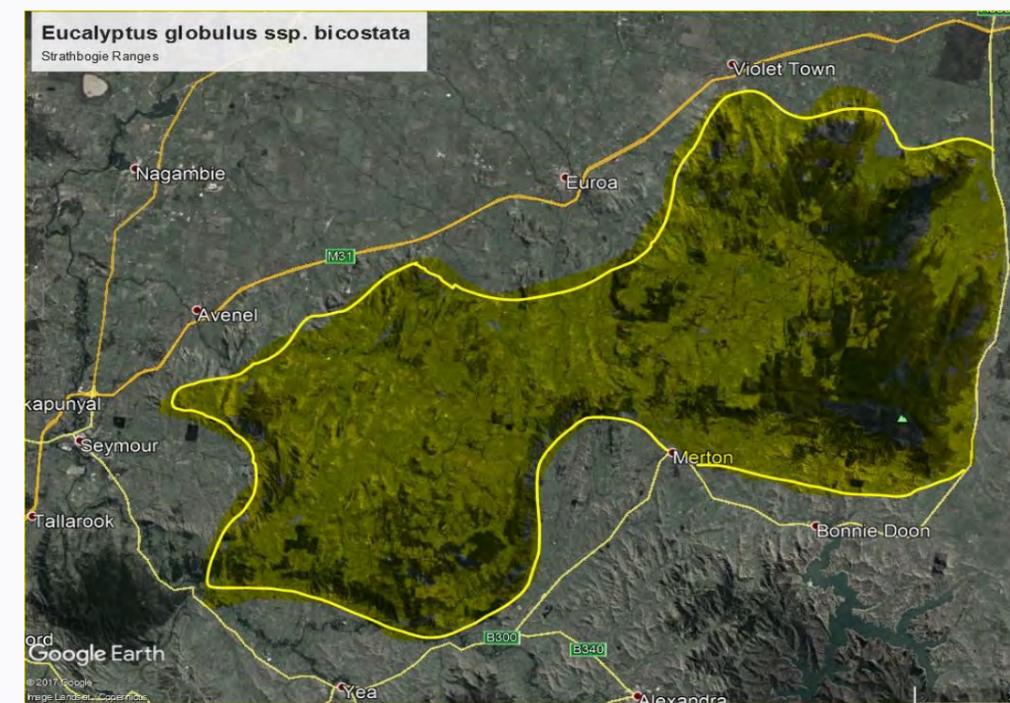


Bark smooth, shedding in ribbons, streaked grey and reddish tan over cream.



Life size mature leaf

Janet Hagen



Broad- leaved peppermint

Eucalyptus dives



Multi stemmed paddock tree in Ruffy



Grows in shallow soils on rocky ridgelines. Often suffers from dieback & mistletoe



Fruit medium sized, in clusters and abundant .
4mm—7mm wide



Flowers in Summer Oct—Jan



Differentiated from Narrow Leaf Peppermint by the shape and color of juvenile leaves



Distinguishing features :

Leaves strongly eucalyptus scented when crushed .

Widespread and common in hilly terrain at medium attitudes .

Adult leaves are broader than those of the narrow leaved peppermint. Juvenile leaves are larger , blue-green, dull and waxy

Often multi stemmed with untidy structure and dead limbs.

Distribution :

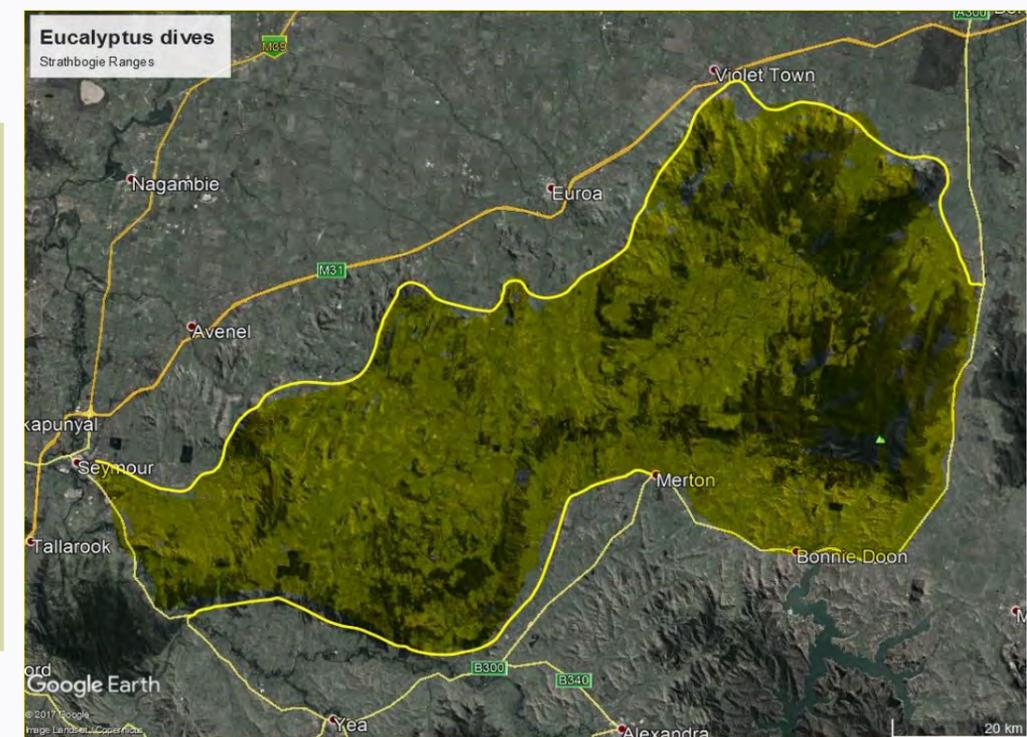
Common in the foothills and mountains of the Strathbogie Ranges.

On well drained slopes and ridges at low to medium attitudes in relatively well watered locations .

Found in woodland and low forest vegetation with a range of other eucalypt species

Site Preference :

In dry, relatedly poor soils on gentle slopes and ridgelines . Often on rocky outcrops with shallow soil..



Life size mature

Candlebark

Eucalyptus rubida



Roadside candlebarks along Red Gate Lane Ruffy



Round juvenile leaves



Smooth white trunk , powdery white to cream in color



Juvenile leaves

Distinguishing features :

Also called White Gum or Ribbon Gum

Tall straight , single trunked tree with smooth white bark

Very similar to Manna Gum but grows in drier foothills .

Bark sheds in strips which may hang loosely from the trunk.

Branchlets often waxy and reddish.

Juvenile leaves are rounded , dull and bluish grey. They occur in opposite pairs.



Smooth white bark that peels in strips



Candlebarks along Lades road Highlands

Life sized adult leaf



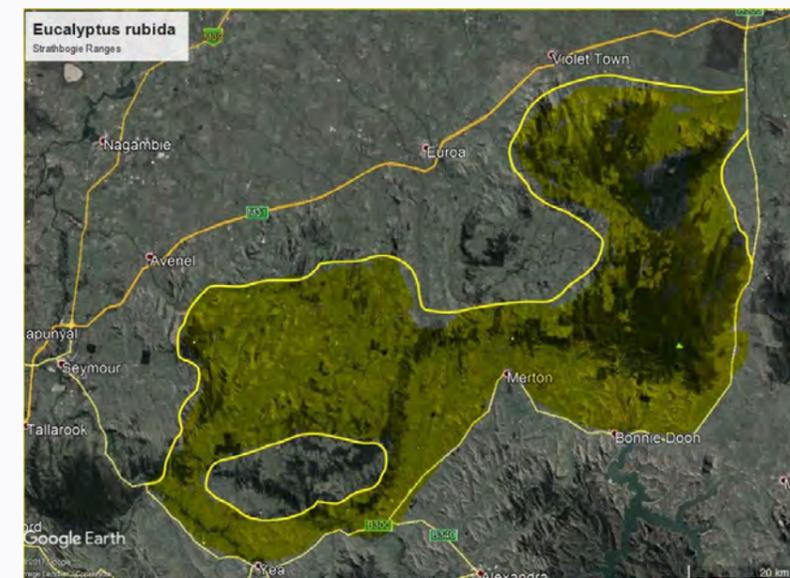
Huge Candlebark at the back of the Ruffy School

Distribution :

Mainly on the foothills of the ranges. Found on the dryish shallow soils.

Site Preference :

Prefers well drained soil. Resists cold and frost. Moderately drought resistant



Grey Box

Eucalyptus Microcarpa



Upper branches are smooth barked



Good shade tree due to its spreading crown .
Avenel paddock tree.



Seed is generally retained in the capsules



Typical Grey Box Grassy Woodland

Distinguishing features :

A woodland tree to 25m with an open crown of dull olive green leaves that grows in low rainfall areas .

Grey , fibrous -flaky 'box' bark with whitish patches, upper branches smooth barked .

Very durable , tough, strong wood.
Long lived with a moderate growth rate.

Flowers freely each year from March to May.

Good shade tree due to its spreading crown.



Grey fibrous bark . Heavy wood . Used as firewood

Distribution :

Common on the fertile plains in low rainfall areas around the edges of the Strathbogie Ranges.
Mainly on flat to slightly undulating country.

Site Preference :

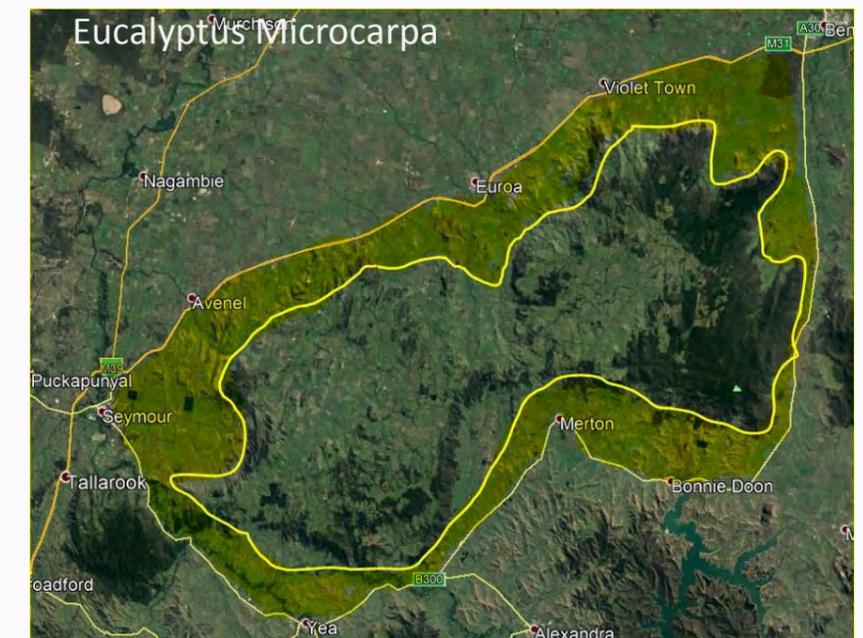
Heavy clay soils
Tolerates moderately alkaline soil, frost, wind, infrequent flooding and extended dry periods



Typical grey box country - Bushland Reserve Seymour.



Leaves dull olive green.



Hill Red Gum or Blakely's red gum



Sheans Creek example of Hill Red Gum



Tarcombe—Ruffy Road example of Hill red Gum



Mature Leaf actual size

Distinguishing features :

Found on raising country, often on rocky sites

Hardy and long lived.

Moderate growth rate

Prone to damage by lerps

Prefers well drained hillslopes and ridge lines in woodlands

Produces black seeds

Juvenile leaves ovate & dull bluish grey .

Mature leaves lanceolate 25mm wide. Dull to slightly glossy blue- green.

Good habitat

Flowers heavily , in winter to summer every 2 or 3 years depending on the season.

Naturally regenerate quickly if given a chance.



The iconic pastoral scene with majestic gum tree



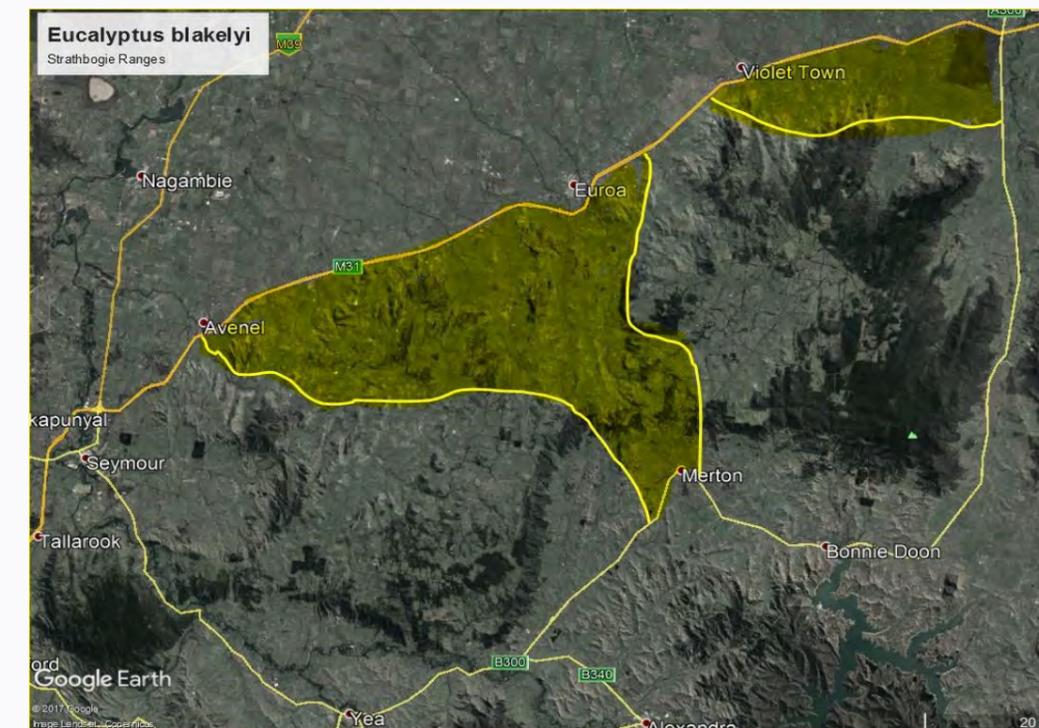
Lerp attack on eucalyptus blakelyi leaves at Creightons Creek

Distribution :

This species grows in undulating to hilly terrain
It prefers well -drained hillsides, ridges and rocky sites .

Site Preference :

Compact loams
Below 800m
Tolerates frost, winter waterlogging , and drought.



Long Leafed Box

Eucalyptus goniocalyx



Distinguishing features :

Also called White Gum or Ribbon Gum

Very similar to Candlebark but grows in moister foothills .

Juvenile leaves are lanceolate .
They occur in opposite pairs.

The bark is usually smooth throughout, pale grey over creamy white. The lower trunk is sometimes rough with moderately -fissured bark.

Sheds bark in conspicuous long ribbons .



Life sized adult leaf



Janet Hagen

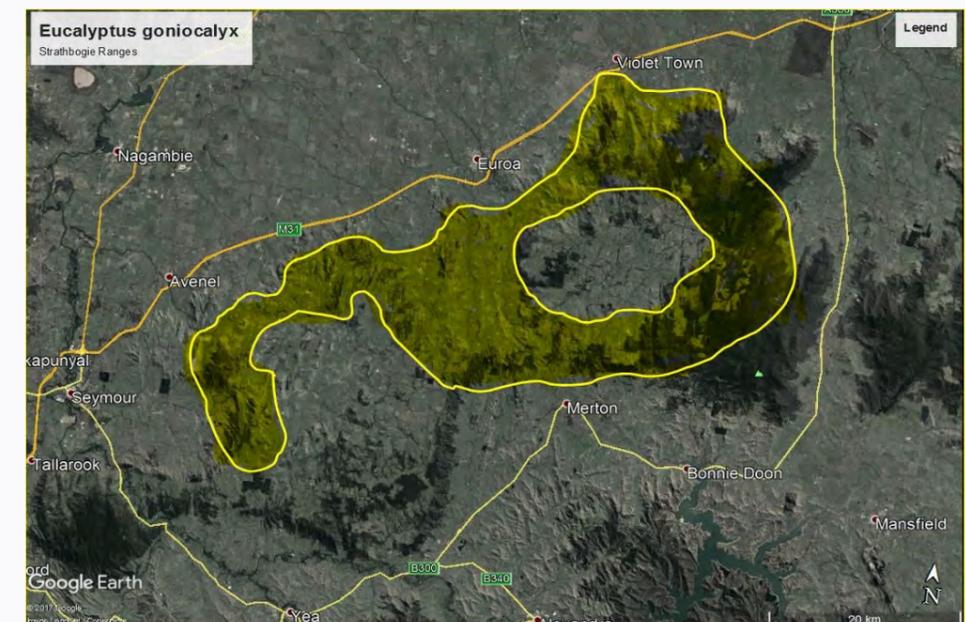


Distribution :

Grows on the lower hills and slopes of the Strathbogie Ranges in open grassy woodlands with dry shallow soils.

Site Preference :

Infertile soil on dry and rocky areas.
Tolerates drought and moderate frosts.



Manna Gum

Eucalyptus viminalis

Distinguishing features

Sometimes called White Gums or Ribbon Gums

A forest species .

A tall upright tree to 50m in height

Sheds conspicuous long ribbons of bark.

Provides major koala forage

Bark usually smooth and pale grey over creamy white.
Trunk rough and moderately fissured on the base .

Manna gums can be differentiated from Candlebarks by the juveniles leaves which occur in opposite pairs and are long and thin (lanceolate) They are glossy and green. Manna gums grow in moister areas with higher rainfall. They generally grow at higher elevations and cooler aspects than Candlebarks .



Trunk base rough and brown



Upper branches smooth and white



Paddock Manna Gums at Caveat



Solitary Manna gum at Highlands



Juvenile leaves : opposite pairs ,



Flowers in summer but not



Mature leaves glossy green .

Fruits 5mm—8mm wide .



Mature Leaf actual size

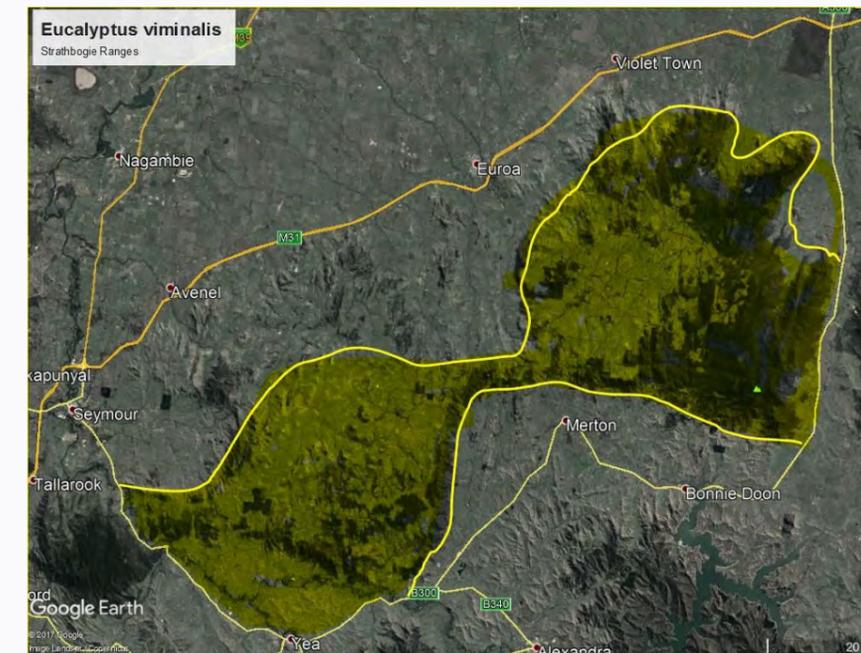
Janet Hagen

Distribution :

Foothills & Mountains
Usually in valleys or well watered sites .
Prefers high rain areas.

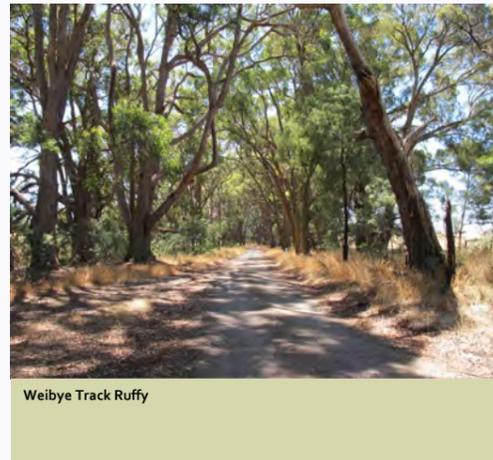
Site Preference :

Moist well drained soil .
Tolerates snow and frost .
Found in wetter more mountainous locations .



Messmate

Eucalyptus obliqua



Weibye Track Ruffy



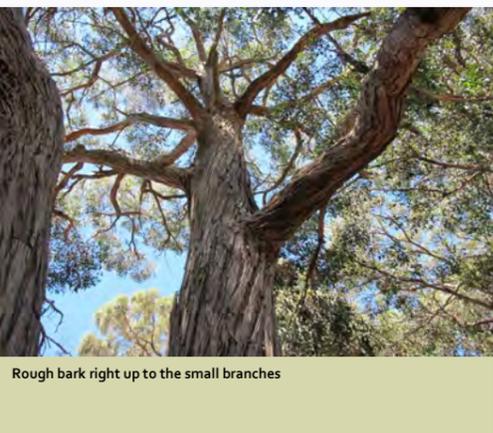
Mature Paddock tree with natural regeneration



Typical declining messmate tree



Messmate fenced to exclude stock



Rough bark right up to the small branches



Flowers a source of nectar & pollen for bees

Distinguishing features :

Tall tree with rough stringy bark to the small branches and green glossy leaves .

Found at higher altitudes in moist forests.

An abundant seeder with clusters of medium sized barrel shaped gumnuts nearly always apparent.

Flowers over summer



Stingy coarsely fissured bark



Seed usually available throughout the year



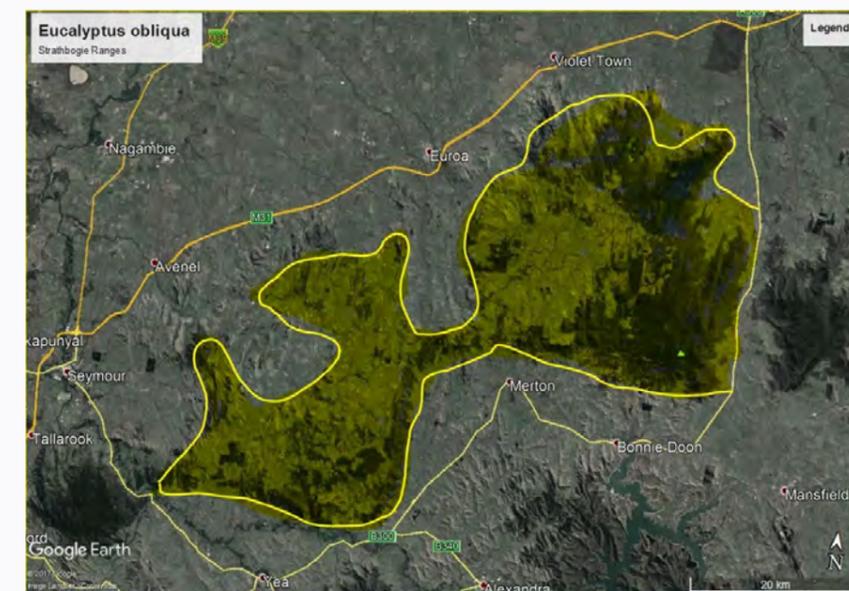
Glossy green leaves

Distribution :

Mainly a species of cool, well watered mountain forests .

Site Preference :

Moist but well drained soils .
Best growth on fertile loam .



Janet Hagen



Life size leaf

Mountain Swamp Gum

Eucalyptus camphora subspecies



This species is restricted to sites that have permanent water supplies. Boggy Ck . Ruffy



Tree to 20m. Roadside Creightons Creek



Flowers March to April



Very vigorous grower.



Mature Leaf actual size

Janet Hagen

Distinguishing features :

- Position in landscape - near waterways and swamps.
- Knobbly bumps on older tree trunks
- Oval shaped leaves with long stems.
- Rough bark on the lower trunk and smooth bark above.
- Riparian forests and woodland species.
- Seed sheds quickly after maturity
- Poor firewood



Sheds seeds quickly after maturity .



Rough grey bark .
The Hughes Creek at the Boat hole in Ruffy

Distribution :

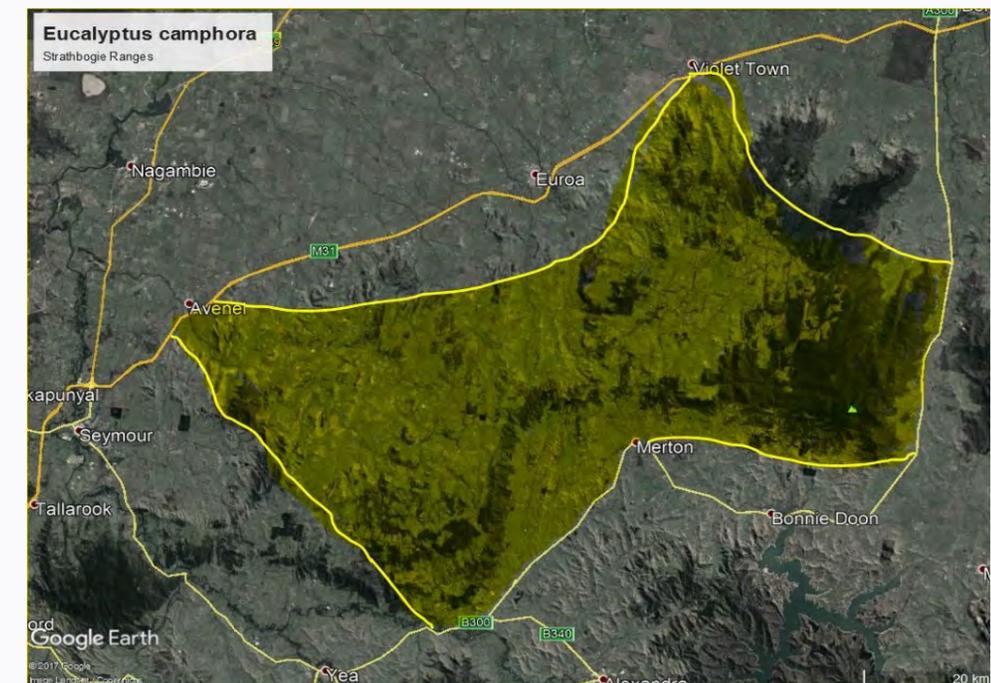
In mountainous and hilly country .
Often on damp slopes, swampy sites and creek sides .

Site Preference :

Moist wet soils
Tolerates very cold conditions
Heavy clay soils .

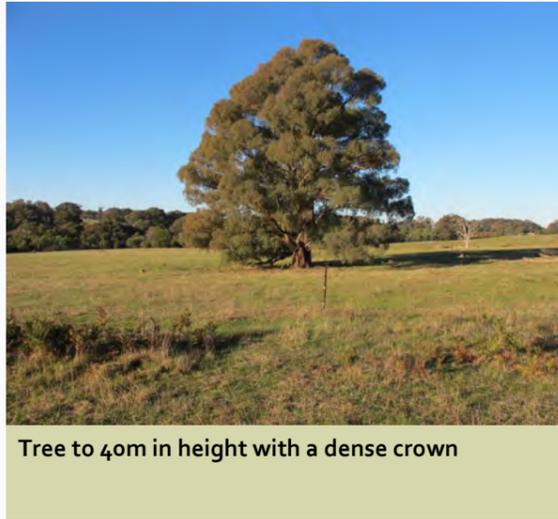


Interesting growths on the trunks of very old trees.



Narrow-leaf peppermint

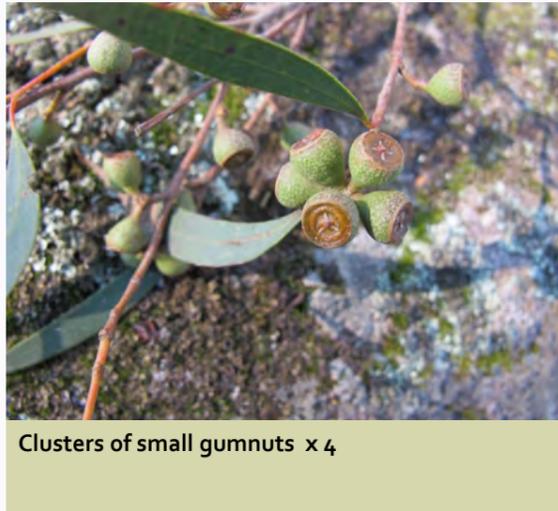
Eucalyptus radiata



Tree to 40m in height with a dense crown



Paddock tree with some dieback



Clusters of small gumnuts x 4



Juvenile leaves are reddish and shiny

Distinguishing features :

A common forest tree in the Strathbogie Ranges

The leaves are rich in oil, giving off a strong aroma when crushed and after rain.

An untidy tree with many dead limbs and fallen branches.

Spreading dense crown of fine narrow grey-green leaves.

Rough bark, tightly held and finely fissured.
Grey-Brown in colour.

Buds and flowers on pedicels occurring in groups of up to 12.
Flowers Oct-Jan

Old trees develop many hollows

Useful for firewood although it burns quickly.
It gives off good heat.



Foliage is occasional forage for koalas. Peppermint bark is rough and finely fissured. Grey to Brown.



Narrow-leaf peppermint trees are fast growing.



Mature Leaf actual size

Distribution :

Found at higher elevations
Relatively widespread and common in the cooler, better watered regions of the Tablelands.

Site Preference :

Moist deep soils
Tolerates moderate frosts and some snow.
Suits poorly drained soils.



Red Box

Eucalyptus polyanthemos



A example of a mature red box with excellent form. Trust for Nature property at Gobur



100+ years old red box trees at the Longwood Recreation Ground.



Dull blue-green slightly waxy adult leaves



Red Box that survived the 2015 Creightons Creek bushfire , lower Weibye Track Ruffy .



Attractive almost round leaves.



Young sapling regrowth after fire.

Distinguishing features :

A woodland tree to 20m with a short trunk and dense spreading crown of rounded dull grey-blue leaves.

Rough "Box" bark on the trunk and larger branches .

Flowers profusely from Oct to Jan.

Shapely , attractive shade trees.

Excellent firewood. Long lived .

Regenerates quickly after bushfires .



Flower buds with rounded operculums in dense clusters.

Distribution :

Poor stony ground, usually on ridges and dry slopes of the foothills

Lower slopes and hills of the Strathbogie Ranges.

Site Preference :

Well drained soil

Tolerates frost and wind.

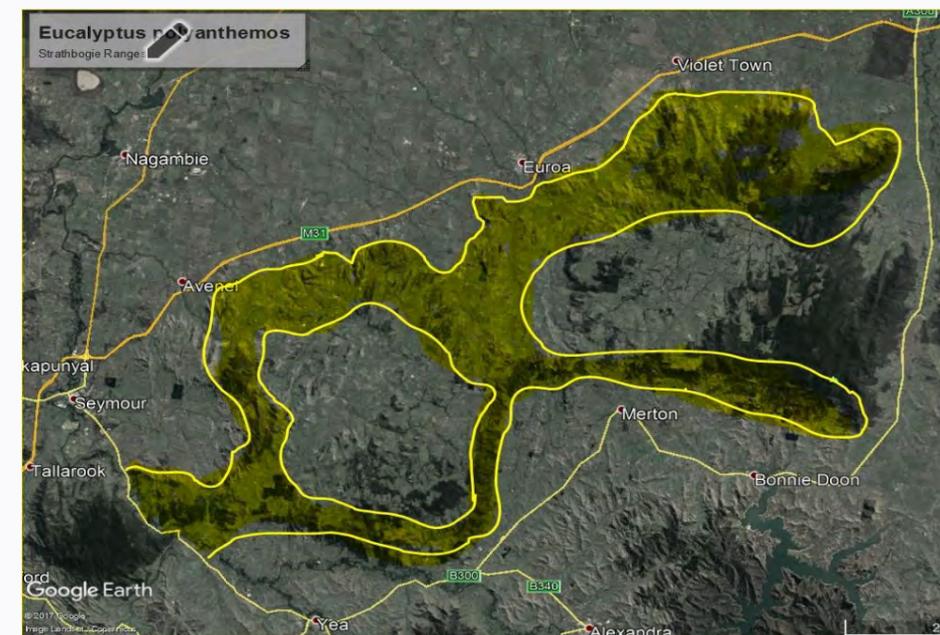
Moderately drought tolerate.



Rough , tight , grey bark.



Beautiful red heart wood .

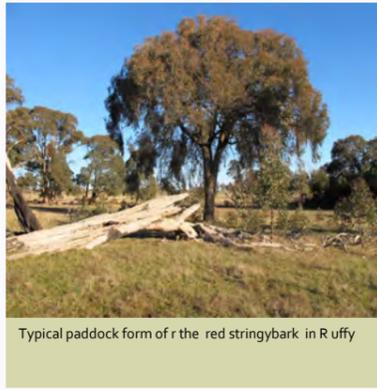


Red Stringybark

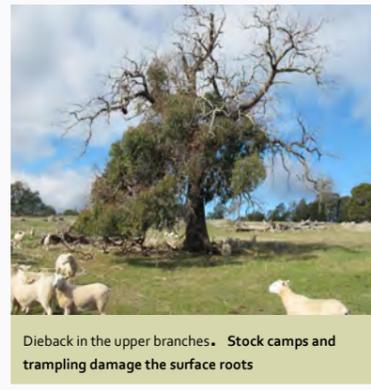
Eucalyptus macrorhyncha



An example of a healthy mature red stringybark in a lightly grazed paddock at Ruffy . Note weeping form and



Typical paddock form of r the red stringybark in R uffy



Dieback in the upper branches. Stock camps and trampling damage the surface roots



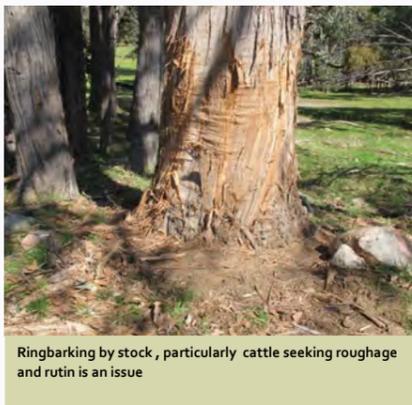
Recently dead s red stringybark . Upper Wilkinson's Lane . Euroa



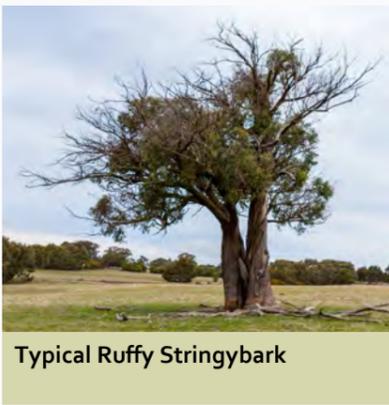
Seedling leaves are rough , reddish , with short bristles



Sapling leaves are dull green.



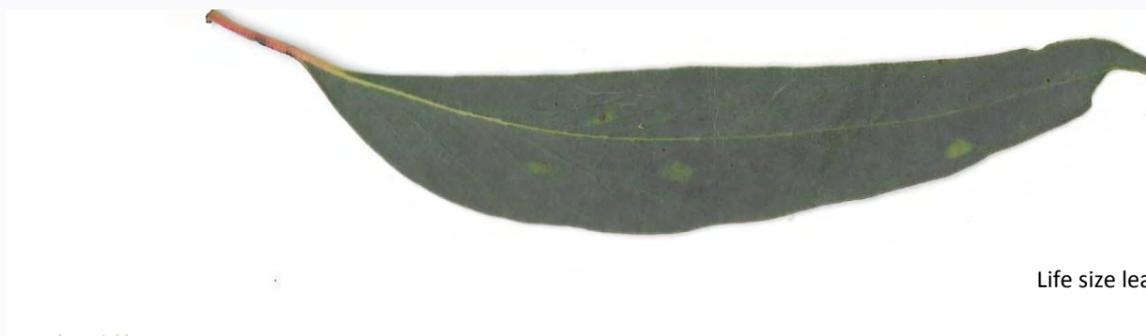
Ringbarking by stock , particularly cattle seeking roughage and rutin is an issue



Typical Ruffy Stringybark



Adult leaves are lanceolate 12mm to 25 mm wide glossy and green .



Life size leaf

Janet Hagen

Distinguishing features :

Gum Nuts

The seed capsules hang on for many years and are usually easy to find. The large woody gumnuts are top-shaped and 7mm to 12mm wide. .

Bark:

A member of the stringybark family .

Similar to eucalyptus obliqua , the messmate stringybark. These two species can occur in the same paddock in the Strathbogie Ranges.

Messmates have much smaller gum nuts and glossy green leaves.



Bark : tough, stringy , coarsely fissured, grey - brown to red-brown in color.



Round pea-sized gum nuts



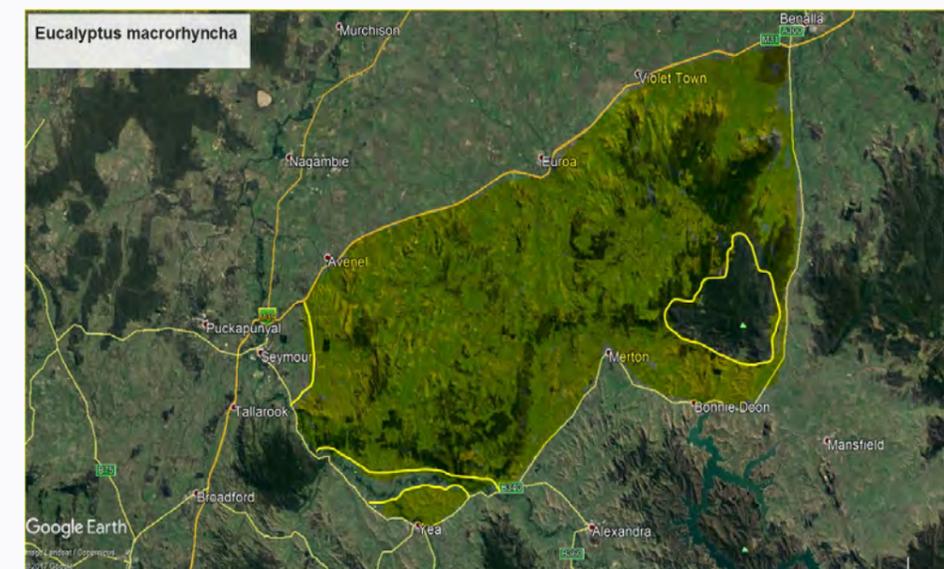
Red Stringbarks make good shade trees due to their dense compact crowns

Distribution :

Common on hills and slopes .
Found on poor, shallow soils in the low to moderate rainfall zones .

Site Preference :

Well drained , poor to moderately fertile soil.
Tolerates frost, hot dry conditions & harsh sites.



River Red Gum

Eucalyptus camaldulensis



This species commonly occurs on



Tolerant of periodic waterlogging .



Linked to wetlands



Juvenile leaves fine and wispy.



Buds with a beaked operculum



Seedlings quickly establish after summer rain



Distinguishing features :

The dominant species in grassy woodlands on deep alluvial soils.

An iconic species along all permanent waterways. The mighty River Red Gum .

The River Red Gum has a large spreading crown and heavy twisting branches

Tree to 40m tall with smooth bark . Loose rough bark near the base of the trunk. Mottled grey and white bark.

Juvenile leaves are long, thin and tinted red.
Mature leaves are lanceolate , 10mm- 20mm wide. They have a 'weeping' appearance

Flowers heavily every 2 or 3 years depending on the season.

Excellent habitat and very good fuel

Differentiated from *eucalyptus blakelyi* by position in the landscape , the width of the leaves & the yellow colour of the seed.



Mature trees can suddenly drop large branches on hot still days.



Fast growing saplings



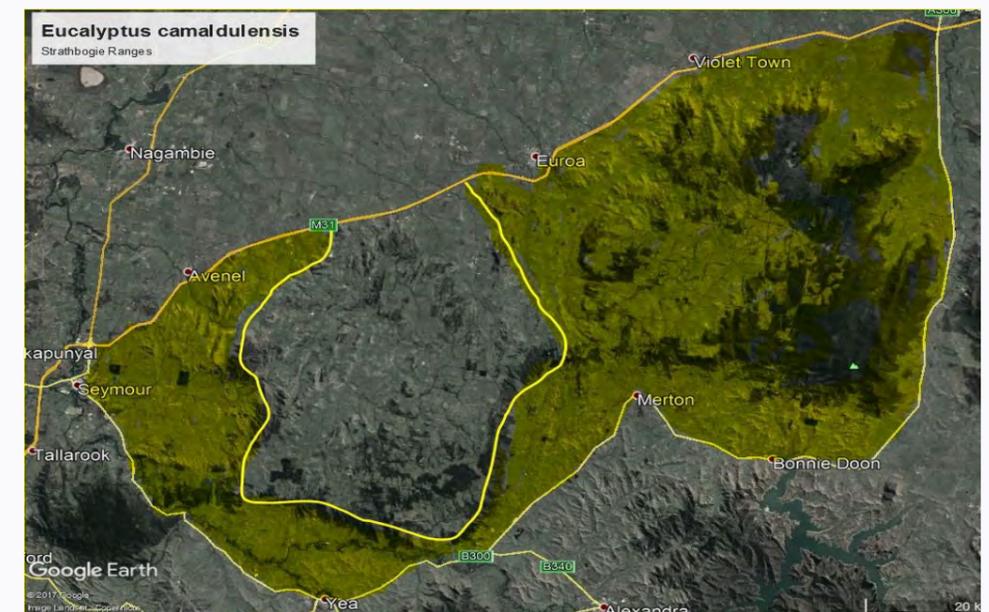
Very long lived trees .

Distribution :

Found at lower elevations on the deep rich alluvial soils adjacent to large permanent water ways . Along all rivers.

Site Preference :

Low country, inundated occasionally or where underground water is generally available. Tolerates wind, salinity , drought, flood and fire.



White Box

Eucalyptus albens



Healthy mature white on Trust for Nature site at Gobur



Buds on short peduncles in groups of seven. Waxy

Distinguishing features :

Stately tree to 25m high with rough pale grey bark over the trunk and to the base of the branches.

A large crown of dull grey-green leaves and larger juvenile leaves.

Flowers white occurring mainly in Spring .

Waxy leaves buds and fruit .

Closely related to *E. macrocarpa* (Grey Box)
Differing from it by its greyer juvenile leaves and broader and dull greyish adult leaves.

Excellent shade tree

Moderate Growth rate



Excellent shade trees



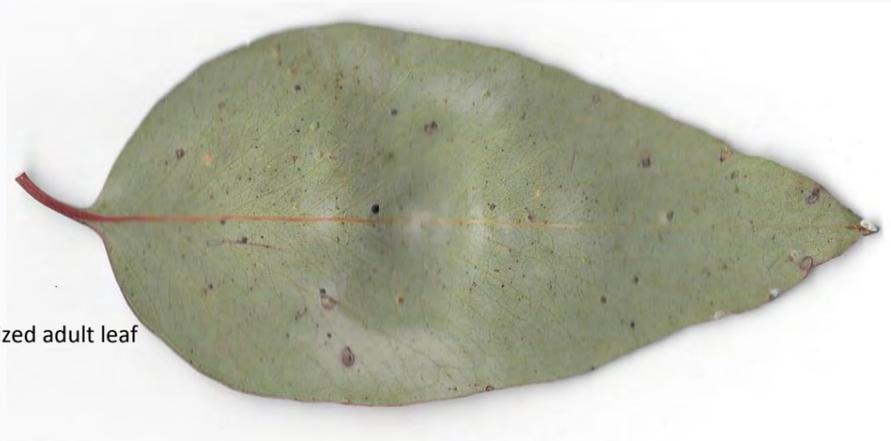
Flowers in Spring



Greyish leaves



Fruit barrel-shaped and waxy



Life sized adult leaf

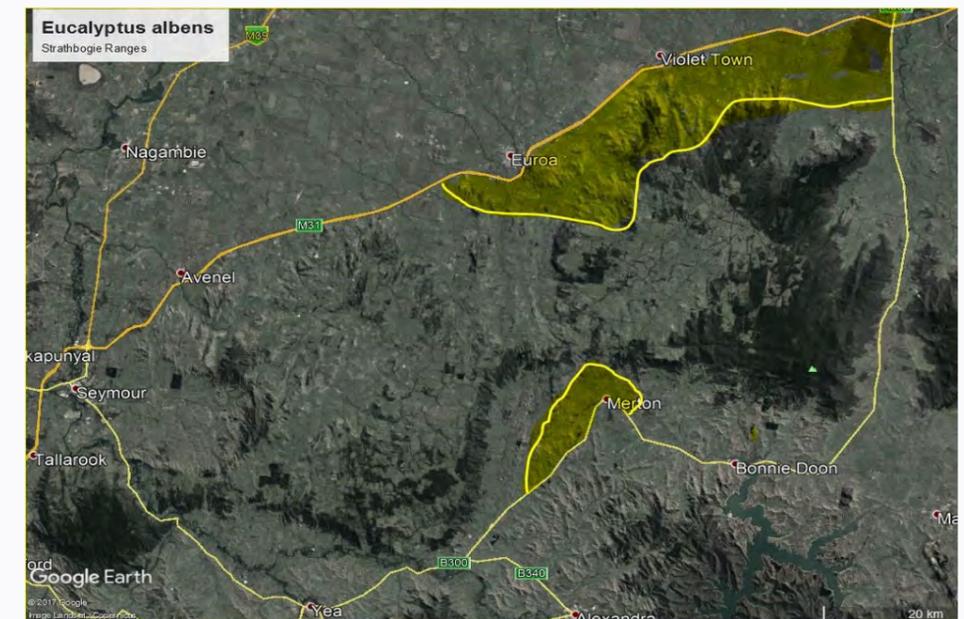
Janet Hagen

Distribution :

Foothill country at lower elevations.
Dominant species in Box Grassy Woodlands

Site Preference :

Prefers relatively fertile soils in well drained positions.
Tolerates droughts
Is moderately frost tolerant .



Yellow Box

Eucalyptus melliodora



Lower Weibye Track in Creightons Creek



Smooth creamy-white fine branches



Small fruits 4mm–7mm wide. Barrel shaped with hidden valves.



Small bluish-grey leaves. These leaves have a blotchy imperfection.



Mature Leaf actual size

Distinguishing features :

Long lived, slow growing, tidy tree, which grows to 30m in height.

Grows on slightly undulating to hilly terrain. On moderately fertile soil, clay loam soil in woodlands with a variety of other eucalypts

Some magnificent specimens have survived in the Strathbogies. Much admired by farmers for its useful shade and excellent timber.

Spreading dense crown of fine grey-green leaves.

Fibrous flaky 'box' bark varying from dark to light brown—yellow, shedding in short ribbons from above. Smooth, creamy white branches.

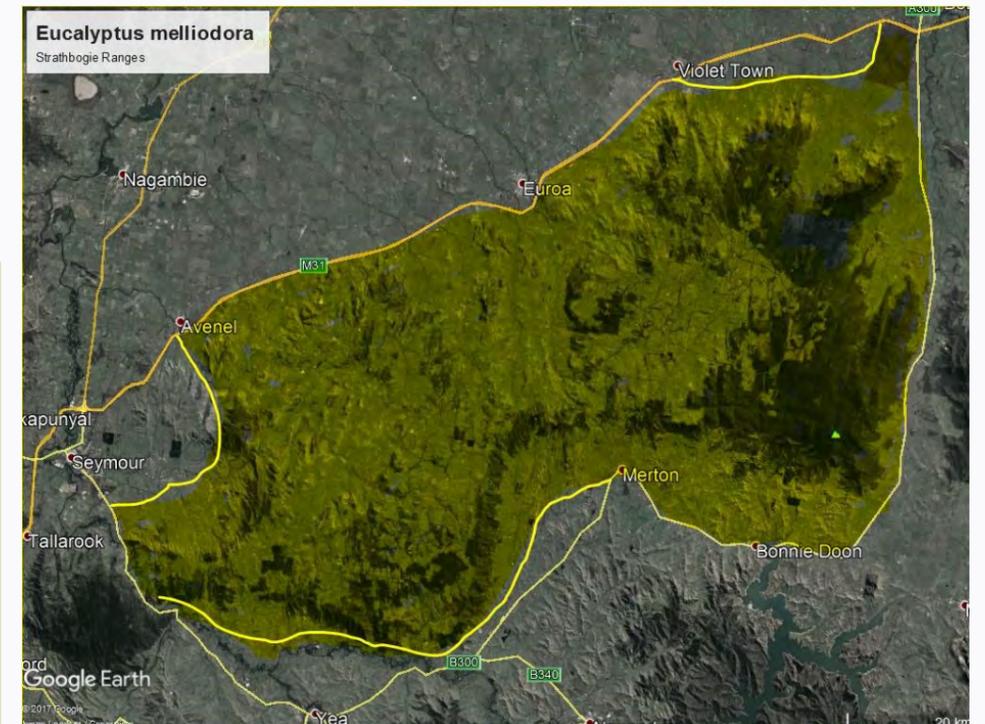
Tiny buds and white flowers. Spring–Summer flowering.



Fibrous flaky bark. Grey-Yellow in color



A well proportioned paddock tree at Ruffy. Yellow box tree don't tend to drop limbs and



Distribution :

Found throughout the Strathbogie Ranges except at the highest elevations. Usually on the better soils in areas of moderate rainfall. Its distribution coincides with much of the best cool-temperate pastoral areas.

Site Preference :

Prefers Light to heavy well-drained moist soils. Tolerates frost and wind. Grows poorly on poorly drained infertile soil.

Species	Common Name	Max height as per GB Revegetation Guide	Rainfall requirements mm.	Site Preference	Flowering Time	Seeds Mature
Eucalyptus albens	White Box	25m	400-700	Fertile soil	Jan - June	Summer-autumn
Eucalyptus blakelyi	Hill Red gum	20m	300-500	Moderately fertile	Aug - Jan	Feb - June
Eucalyptus camaldulensis	River Red Gum	40m	<1000	Alluvial soils	Variable	March - Sept
Eucalyptus camphora	Mountain Swamp Gum	20m	>600	Moist soils	March - April	March - June
Eucalyptus dalrympleana	Mountain Gum	40m	>800	Moist soils	March - May	All year
Eucalyptus dives	Broad leaved Peppermint	20m	>600	Poor well drained soils	Oct-Dec	All year
Eucalyptus globulus bicostata	Blue Gum	45m	700-1200	Fertile soils	September - Jan	Jan - June
Eucalyptus gonicalyx	Long-leaf Box	15m	>500	Dry rocky slopes	March - August	All year
Eucalyptus macrorhyncha	Red Stringybark	35m	>400	Fertile well drained soils	Jan - April	Summer
Eucalyptus melliodora	Yellow Box	30m	400-1000	Fertile well drained soils	September - Feb	Nov - April
Eucalyptus microcarpa	Grey Box	25m	400-1000	Heavy soils	Feb - July	Nov - August
Eucalyptus obliqua	Messmate	45m	>700	Well drained soils	Jan - March	Most times
Eucalyptus ovata	Swamp Gum	20m	>700	Swamps and creek flats	March - November	Early Oct to Late March
Eucalyptus polyanthemos	Red Box	20m	>400	Well drained soils	September - Jan	Dec - September
Eucalyptus radiata	Narrow-Leaved Peppermint	40m	>650	Wide range of soils	Oct-Jan	Best August to April
Eucalyptus rubida	Candlebark	35m	>700	Moderately fertile soils	Nov - Feb	Jan - Sept
Eucalyptus viminalis	Manna Gum	50m	>650	Moist well drained soils	Summer	Sept - March