

A guide to eucalypts in the ACT

Introduction

There are more than 900 species and subspecies (kinds) of eucalypts in Australia and many of these resemble each other closely. Botanists identify each species according to differences in floral anatomy, some details of which can only be distinguished under a microscope (for example, the shape of the pollen grains).

Only 27 of these species occur naturally in the ACT although many others have been planted in parks and gardens or on farms. Some species have a very limited distribution. This brochure describes 20 of the most common species, all of which can be identified using features that are recognisable with the naked eye. Species names are as used in Brooker and Kleinig (2006)

Differences in bark, leaves, buds and nuts (fruit) can be used to distinguish the various species. This guide lists these identifying characteristics.

Glossary

Chop marks	Horizontal marks (as though chopped with an axe) caused by grubs.
Glaucous or pruinose	Floury or wax-like in appearance.
Mallee	Multi-stemmed.
Panicle	A leafless, usually terminal on shoot cluster of umbels.
Scritbbles:	Caused by grubs burrowing in living bark:
• embossed	On some smooth-bark eucalypts, scribbles under the surface that show through the surface as faint ridges or grooves.
• surface	Appear as clearly defined lines etched into surface of e.g. <i>E. rossii</i> , <i>E. pauciflora</i> and <i>E. delegatensis</i> caused by the larva (grub) of the moth <i>Ogmograptis scribula</i> which is 1 to 2 mm long.
Tessellation	Chequered appearance.
Umbel	A bunch or cluster of buds or nuts; near flowering buds may be lost and numbers misleading.
Crenulate	Scalloped.

Eucalypt barks

Although the characteristics of the bark are probably the most widely used initial means of identifying eucalypts they are seldom sufficient by themselves. In some species the bark is distinct and uniform among all specimens but in others it is so variable that one cannot use it to identify every specimen in a group with certainty. Therefore it is necessary to use buds, nuts (fruit) and leaves (juvenile and adult) in conjunction with the type of bark.

Gums

Gums are eucalypts which have smooth bark. Although the term is commonly used to encompass all eucalypts it should be reserved for the smooth barked ones when identifying species. The bark of gums can be shed in pieces of various shapes and sizes. The Brittle Gum or Red Spotted Gum *E. mannifera* subsp. *mannifera* sheds its bark in small pieces giving it a spotted appearance while the Ribbon Gum *E. viminalis* subsp. *viminalis* sheds large strips that often hang from the tree for long periods, hence their common names.

Stringybarks

In this group the bark is rough and deepy fissured or grooved. It is fairly soft but distinctly fibrous like coconut fibres when broken. The bark of the local species is a rich cinnamon colour when broken hence the common name of red stringybark.

Ironbarks

The bark of ironbarks is deeply fissured, rough and hard. They do not occur naturally in the ACT.

Peppermints

These have a rough bark similar to the stringybark but not deeply fissured. They often have a lace-like appearance and are crumbly not stringy when broken.

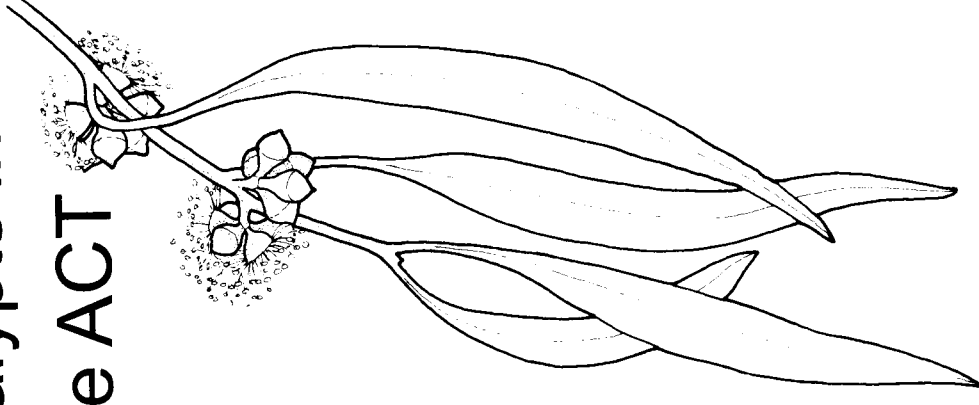
Boxes



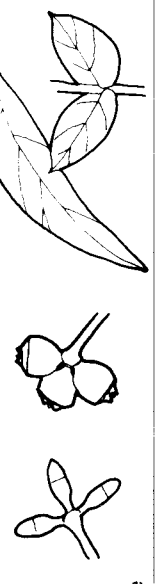
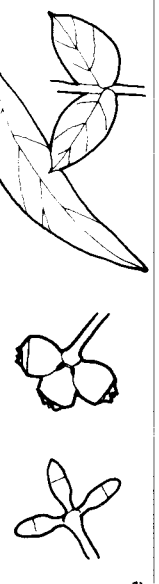
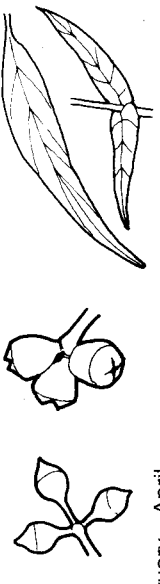
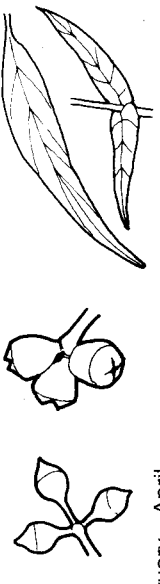


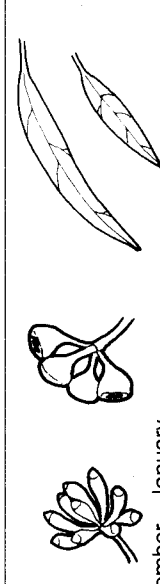
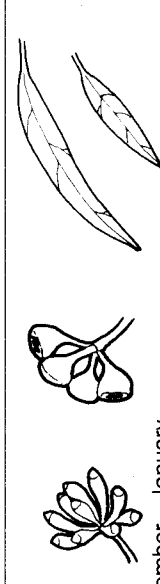
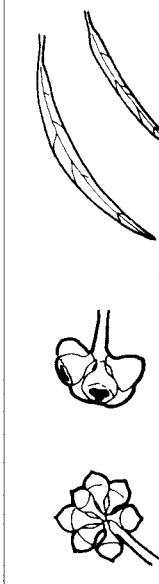
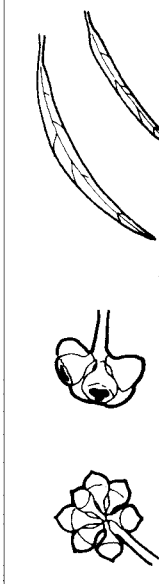


The typical box has a rough bark with fissures down and across dividing it into roughly rectangular pieces. This gives it a tessellated (chequered) appearance. Large specimens are often deeply fissured near the base. The group is fairly variable and seems to contain all the eucalypts that cannot be easily fitted into the other groups.

Further information

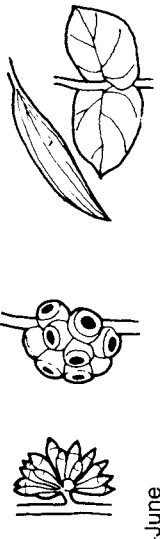
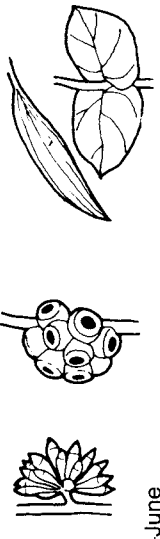
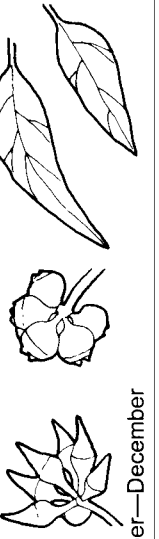
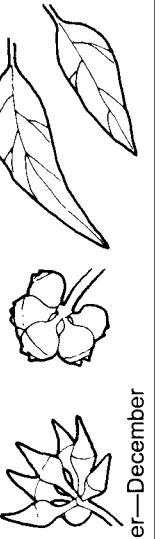


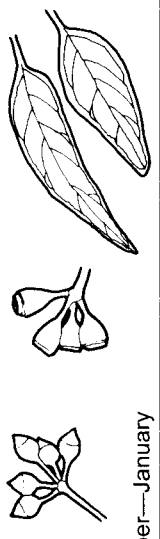
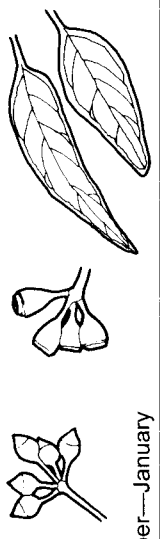




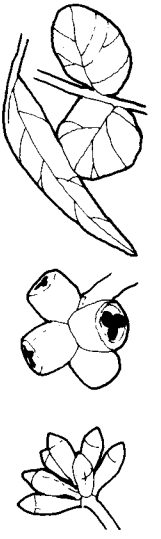
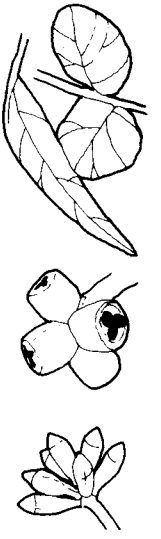


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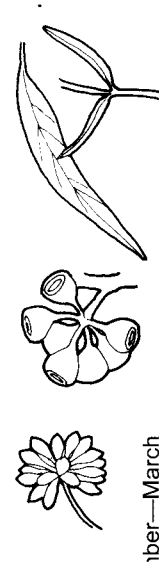
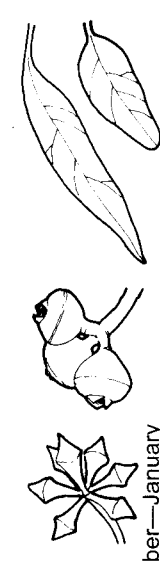

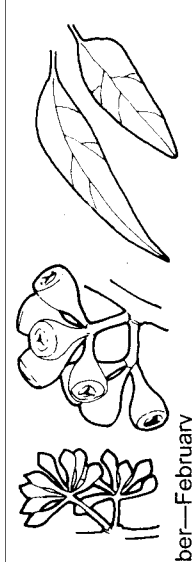
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SPECIES	HABITAT	BARK	UMBELS	CHARACTERISTICS	BUDS, NUTS & FLOWERING TIME *	ADULT & JUVENILE LEAVES
1. Candlebark <i>E. rubida</i> subsp. <i>rubida</i>	Common in colder parts of the ACT-between snow gums and lower forests and adjoining natural grasslands.	Smooth, white, generally powdery, often rough near the base like a giant dripping candle, reddish hues in autumn, often chop-marked, sometimes with embossed scribbles.	Regular 3 buds at leaf bases or on leafless portion of branchlets. Round stalks.	Juvenile leaves stalkless, opposite, round and very glaucous. Adult leaves slightly glaucous. Branchlets, umbels, buds usually slightly glaucous to glaucous.	 November—December	
2. Mountain Gum <i>E. dalrympleana</i> subsp. <i>dalrympleana</i>	Higher and wetter altitudes, often with Snow Gum.	Smooth, white-pink hues in autumn, sometimes chop marked.	Regular 3 buds at leaf bases, stalks compressed.	Trunk usually straight, juvenile leaves heart-shaped to almost round, stalkless, opposite and slightly glaucous. Adult leaves usually shiny green.	 June	
3. Ribbon Gum <i>E. viminalis</i> subsp. <i>viminalis</i>	Low to higher altitudes along water courses and cool aspects.	Smooth, white, often rough near the base. Shed bark hangs in ribbons, sometimes chop marked.	Regular 3 buds at leaf bases.	Usually tall straight tree. Note long juvenile leaves in pairs. Adult and juvenile leaves are sticky when crushed. Non-glaucous.	 February—April	
4. Tingiringi Gum <i>E. glaucescens</i>	High altitude rocky ridges. NW side of Mt Tidbinbilla is the only known location in the ACT.	Smooth, whitish, shed in long strips, rough at base of large trees.	Regular 3 buds at leaf bases.	Juvenile leaves and buds very glaucous. Bud caps knobby or warty looking and wider than capsule. Trees on Mt Tidbinbilla are mallee form.	 Uncertain	
5. Scribbly Gum <i>E. rossii</i>	Dry hilly forested areas (dry sclerophyll forest). More common on NE to NW aspects and higher slopes. Black Mountain.	Smooth, white-cream-grey, often patchy, usually surface scribbled, occasionally powdery, wrinkled at base of branches.	Irregular 5-13 buds at leaf bases or cluster of umbels at end of branchlets (terminal panicles).	Non-glaucous. Umbels irregular, buds club-shaped. Pressure ridges or wrinkles under base of large branches.	 December—January	
6. Brittle Gum or Red Spotted Gum <i>E. mannifera</i> subsp. <i>mannifera</i>	Lower slopes of dry eucalypt forests, more common on W, S and E aspects of Black Mountain.	Smooth whitish cream to grey blotchy, often dimpled, often with embossed scribbles, often powdery.	Regular 7 buds at leaf bases or on leafless portion of branchlets.	Non-glaucous. Juvenile leaves dull. Umbels a symmetrical set of 7 buds or part thereof.	 February—March	
7. Snow Gum <i>E. pauciflora</i> subsp. <i>pauciflora</i>	High altitudes, in frost hollows and cooler slopes at lower levels including at Aranda Bushland. Two other subsp. restricted to Brindabella Range.	Smooth white or mottled in grey and white, often with surface scribbles, sometimes with embossed scribbles.	7-15 buds at leaf bases.	Juvenile leaves glaucous, adult non-glaucous. Veins in adult leaves longitudinal, trunk seldom straight.	 October	

* Flowering times variable with the season

SPECIES	HABITAT	BARK	UMBELS	CHARACTERISTICS	BUDS, NUTS & FLOWERING TIME*	ADULT & JUVENILE LEAVES
8. Black Sallee <i>E. stellulata</i>	Mainly mountain valleys and on poorly drained flats subject to cold air drainage. Usually near streams at times extending onto lower valley slopes.	Smooth, grey with green, yellow and pink hues in winter. Usually black and rough at the base.	7(11)-15 buds, starlike umbels at leaf bases or on leafless portion of branchlets.	Non-glaucous. Bark usually grey. Buds form a starlike umbel. Veins in adult leaves longitudinal.	 March—June	
9. Blakely's Red Gum <i>E. blakelyi</i>	Lower slopes and woodland in better soils. Often with Yellow Box.	Smooth large blotches of blue-grey to reddish brown. New cream coloured bark in autumn.	7-13 buds at leaf bases, round stalks.	Juvenile leaves slightly glaucous. Buds have conspicuously long caps.	 November—December	
10. Red Box <i>E. polyanthemos</i> subsp. <i>polyanthemos</i>	Gentle slopes to stony ridges, patchy occurrence in dry eucalypt forest. West slope and top of Black Mountain.	Variable—usually rough base but sometimes smooth to ground, streaky blotches of white-cream-grey.	3-7 buds per umbel in panicles at leaf bases or at ends of branchlets.	Adult and juvenile leaves, branchlets, buds and nuts slightly glaucous to glaucous. Tree has slightly bluish, broad-leaved appearance.	 September—October	
11. Yellow Box <i>E. melliflora</i>	Lower slopes and woodland in better soils. Often with Blakely's Red Gum.	Very variable—rarely smooth to ground, generally rough, tessellated, grey to very coarse and rusty-black. Upper branches smooth with white creamy-grey streaks.	7 budded when very young but some soon lost. Central bud usually longer. Umbels or panicles at leaf bases or at ends of branchlets.	Non-glaucous to slightly glaucous. Nuts with thin staminal ring. Nuts soon shed.	 December—January	
12. Apple Box <i>E. bridgesiana</i>	Lower slopes, alluvial flats and creeks. Edges of woodland and forests. Farrer Ridge, Mt Majura.	Rough, grey, tessellated on trunk and large branches. Upper branches smooth.	Regular 7 buds at leaf bases. Buds 'egg in egg-cup' shape.	Adult leaves non-glaucous, juvenile leaves glaucous, with crenulate edge and separated on axis. Buds and nuts have distinctive round and short stalks.	 January—March	
13. Mealy Bundy <i>E. nortoni</i>	Steeper slopes and stony ridges, Tidbinbilla to Thanwa. Also in Farrer Ridge and Molonglo Gorge.	Rough, grey, tessellated on trunk and large branches. Upper branches smooth.	Regular 7 buds at leaf bases. Stalks thick and flattened.	Adult leaves slightly glaucous. Branchlets, buds, nuts and juvenile leaves glaucous to highly glaucous. Stalks on buds and fruits are short, broad and angular.	 February—March	
14. Bundy <i>E. gontocalyx</i>	Lower slopes in sparse dry forest or woodland. Mt Majura, Long Gully and near NE boundary of the ACT.	Rough, grey, tessellated on trunk and larger branches. Large trees deeply fissured near base.	7 buds at leaf bases. Stalks thick and flattened.	Branchlets, umbels, buds and nuts slightly or non-glaucous.	 March—August	
15. Mountain Swamp	Swampy alpine areas. Recorded from Blundells	Rough on lower trunk, smooth with ribbons on upper part.	5-9 buds. Stalks round or slightly flattened.	Non-glaucous but slightly greyish foliage. Broad		

<p>Gum <i>E. campophora</i> subsp. <i>humana</i></p>	<p>Recorded from mountain with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough (not stringy) shallow fissures often deep near base. Often lace-like appearance. Upper branches smooth.</p>	<p>Marginal areas of dry eucalypt forests and drier mountain slopes.</p>	<p>March—April</p> 
<p>16. Broad-leaved Peppermint <i>E. dives</i></p>	<p>with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough (but not stringy) shallow fissures, often deep near base. Often lace-like appearance. Upper branches smooth.</p>	<p>7-19 buds at leaf bases. Stalks slightly flattened.</p>	<p>October—November</p> 
<p>17. Narrow-leaved Peppermint <i>E. radiata</i> subsp. <i>robertsonii</i></p>	<p>with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough (but not stringy) shallow fissures, often deep near base. Often lace-like appearance. Upper branches smooth.</p>	<p>11-21 buds at leaf bases or leafless portion of branchlets. Stalks thin and rounded.</p>	<p>September—March</p> 
<p>18. Red Stringybark <i>E. macrorrhyncha</i></p>	<p>with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough, deeply fissured and stringy. Grey to cinnamon red outside. Rich cinnamon when broken.</p>	<p>7-13 buds at leaf bases. Stalks slightly flattened.</p>	<p>November—January</p> 
<p>19. Alpine Ash <i>E. delegatensis</i> subsp. <i>delegatensis</i></p>	<p>with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough (stringy) near base to halfway up trunk then smooth and creamy, surface scribbled.</p>	<p>7-13 buds mostly on leafless portion of branches. Stalks round.</p>	<p>December—March</p> 
<p>20. Brown Barrel <i>E. fastigata</i></p>	<p>with rounded or slightly flattened buds on upper part. Pale creamy-grey all over.</p>	<p>Flat near Mt. Coree and Shannons Flat off Brindabella Road.</p>	<p>Rough, deeply fissured, stringy on trunk and larger branches. Sheds in ribbons from smaller branches.</p>	<p>7-13 buds. One or two umbels at each leaf base. Stalks round and slender.</p>	<p>December—February</p> 

NOTE: Silvertop Ash *E. sieberi*, River Red Gum *E. camaldulensis* var. *camaldulensis*, Blue Gum Hill Argyle Apple *E. cinerea* subsp. *triplex*, Spinning Gum *E. perriana*, Black Gum *E. aggregata*, and the two Alpine Snow Gums *E. pauciflora* subsp. *niphophylla* and subsp. *debeuzevillei* have also been found in the ACT. However they are rare and/or growing in remote inaccessible parts of the ACT. See National Parks Association of the ACT, *Field Guide to the Native Trees of the ACT*, for all the eucalypts occurring naturally in the ACT.

* Flowering times variable with the season

References and further reading
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There are interpretive signs and brochures about eucalypts in Canberra Nature Park including the *Frost Hollow to Forest Walk* in Aranda Bushland and the *Farrer Hill Trail*. Namadji National Park also has brochures and signage covering eucalypt zones in the mountainous regions of the ACT. Brochures are available on the TAMS website: www.tams.act.gov.au