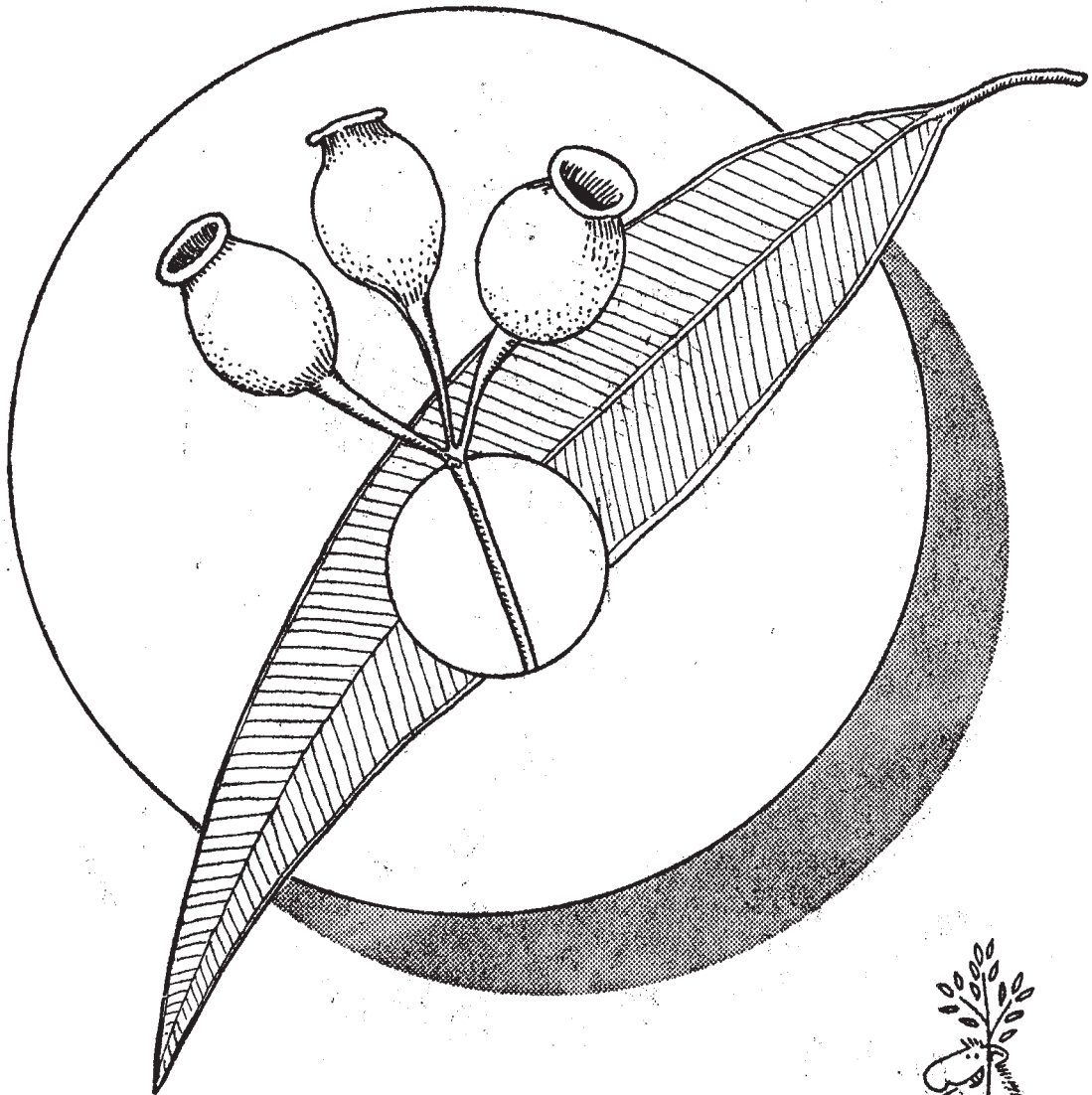
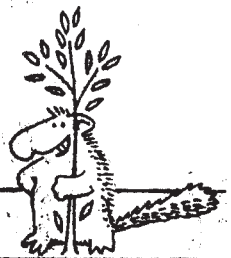


# Trees of Wolli Creek



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The Wolli Creek Preservation Society



# Key

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*Tall trees* over 8 metres.....page 4



*Small trees* 4-8 metres.....page 7

A facsimile of the original 1987 edition, with corrections.

Wolli Creek Preservation Society Inc.  
PO Box 270 Earlwood NSW 2206  
February 2004



Produced by **Les Robinson** for the Wolli Creek Preservation Society ©1987

# Trees of Wollie Creek

## Once upon a time...

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The original flora of Wollie Creek covered just about every type of general plant community in the Sydney region. Open heath and scribbly gum forest covered the ridge tops. The valley sides were clothed in a rich sclerophyll shrubland scattered with Sydney Red Gums. Nearer to the creek were dense woodlands of Blackbutt, Bangalay, Bloodwood, and Sydney Peppermint. Over the creek flats spread a dense jungle of Swamp Mahoganies, She-oaks, paperbarks and Cabbage-tree palms. Beside the salty lower reaches of the creek arose dense stands of Mangrove trees and extensive reedlands and salt-marshes. Meanwhile around the upper freshwater parts of the creek clustered a temperate rainforest of Coachwood and Lilly Pilly.

This is an 1833 description of the forests of the estate of "Bexley" -

*"It is scarcely necessary to state the numerous and valuable quantities of timber which have been preserved on the Estate, viz., stringy and ironbark, black-butt, mahogany, shingle-oak, turpentine, red, blue and white gum, honeysuckle for ship and boat builders, and white wood of a large size, so much used by coach-builders and others."*

So numerous were the Cabbage Tree palms in the area that Wollie Creek was probably known as "Cabbage Tree Creek" at the time.

The industriousness of our ancestors has ensured that little of this richness remains today.

The forests of Wollie which sheltered the Bidjigal people for many thousands of years have now all but vanished. The haunt of bushrangers until the 1840's when the first bridge over Cooks' River speeded settlement and woodcutting in the area, their destruction was sealed following sub-division of the large estates in the 1860's.

Here is an advertisement from 1843 which shows the spirit of the times-

### **"MONEY TO BE MADE**

by Woodcutters, Farming Men and Persons about Cook's River, Newtown Road and the Neighbourhood. Let every man.....clear the Arncliffe Timber into his pocket."

By the 1830's the mangroves which supplied oysters to the squires of Tempe House were already declining. They were incinerated to supply soda for the manufacture of soap. In 1828 there were *"two or three Manufactories of Soap"* at Botony Bay. As early as 1831 it was reported that *"The soap boilers still suffer considerable restriction from the insufficient supply of mangrove ashes."*

In 1850 a journalist could write of the area around Tempe -

*"..aye, and the oyster-growing mangroves temptingly inviting one to partake of their juicy dainties - where are they? Torn down by the ruthless hand of time, destroyed, and almost forgotten."*

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The native bush areas of Wollli Valley have been subject to almost every form of abuse: woodcutting, clearing, grazing, burning, rabbit infestation, quarrying, garbage dumping, chicken farms, wool-washing, market gardening.

Since the end of agriculture in the 1950's however the remaining bushland areas have regenerated remarkably. In recent years efforts by local councils, residents' groups and the National Trust have assisted this process. The proposed F5 Freeway unfortunately poses a final threat to this bushland. If the current proposed route goes ahead virtually the entire remaining native plant communities in the valley would be destroyed.

## ***What you can see today***

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### **Girrahween Park**

This is rich remnant of dense woodland with rocky heath on its upper parts. Upon entering Girrahween Park you pass several white barked *Eucalyptus pilularis* (Blackbutt) and planted *Eucalyptus robusta* (Swamp Mahogany). You then enter a dense woodland where the main trees are *Angophora costata* (Sydney Red Gum) and *Eucalyptus piperita* (Sydney Peppermint). Less common but still prominent are *Eucalyptus gummifera* (Red Bloodwood) and *Syncarpia glomulifera* (Turpentine). Beneath these tall trees is a rich flora of typical "dry sclerophyll forest" shrubs including Banksias, Geebung, Hop Bushes and small heathy plants. Scattered amongst the shrubery are several species of paperbarks - remnants from earlier dense stands on the marshy creek flats.

### **To Nannygoat Hill**

After leaving Girrahween Park the path continues east through open heathland with scattered *Angophora costata* (Sydney Red Gum) and beneath a line of ferny cliffs with Port Jackson Fig (*Ficus rubiginosa*) above. It then enters a dense damp canopy. This is a little "exotic rainforest" produced by nutrient-rich run-off and consisting entirely of introduced species, *Pittosporum undulatum*\* (Common Pittosporum) and *Ligustrum lucidum*\* (Large-leaved Privet).

The path to Nannygoat Hill then passes through a floristically rich heath shrubland until the Banks Road Reserve is reached. A detour leads up a steep rocky path to Nannygoat Hill where there are excellent views. This area has retained its species diversity because it surrounds the knoll of Nannygoat Hill and is its own watershed. This has protected it from exotic species invasion because there has been no run-off to increase nutrient levels in the soil. Nannygoat Hill is still known as "Prickly Pear Hill" by many residents, for obvious reasons.

### **Below Highcliffe Road.**

Crossing the Banks Road Reserve the path leads through a charming low heath with many species not seen in other parts of the valley. A small overgrown quarry nearby shows one of the earlier industries of the area.

To the East of Jackson Place the path goes through some private land and is occasionally difficult to follow. It starts by passing beneath a dense exotic rainforest and then into a heavily invaded dry sclerophyll forest and tall shrubland before emerging above the sewer aqueduct at Unwin Street, Undercliff.

Along the creek flats below the rocky banks are dense mangroves which are a surreal sight with their dense canopy, numerous projecting pneumatophores and masses of plastic containers half buried in the grey oozing mud.



# Trees of Wollii Creek

In alphabetical order by Family

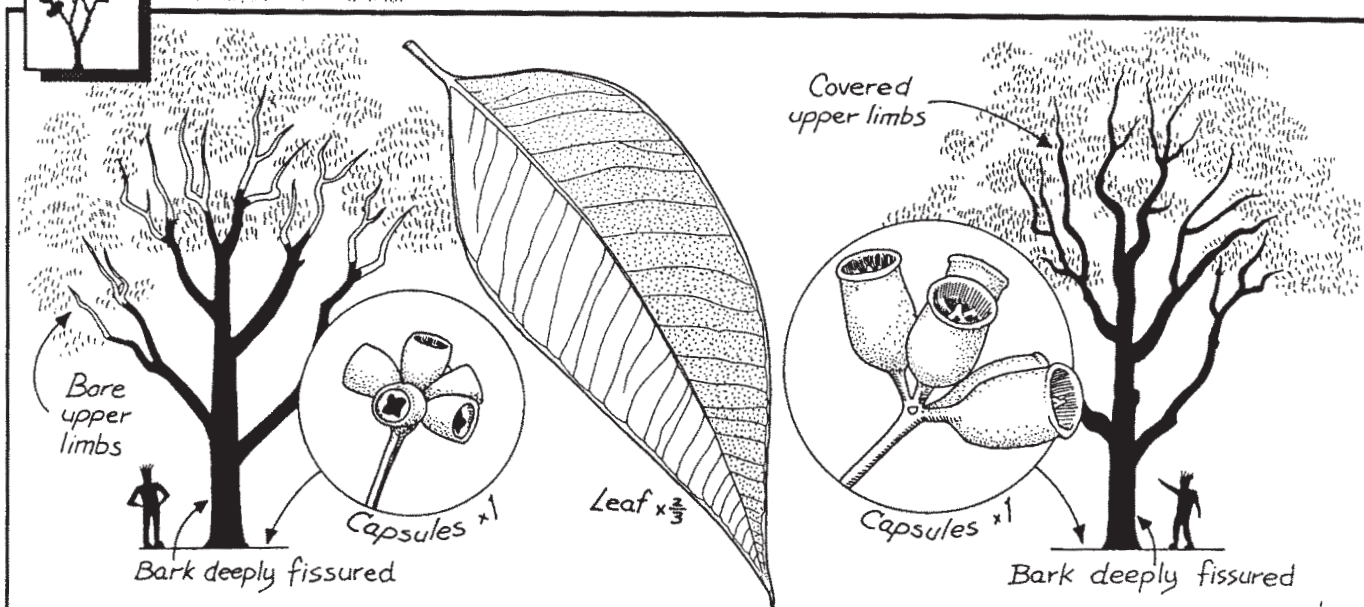
FAMILY NAME	Scientific name	Common name	page no.	Rare in Wollii Valley
<b>AVICENNIACEAE</b>				
	<i>Avicennia marina</i>	Grey Mangrove	15	
<b>CASUARINACEAE</b>				
	<i>Casuarina glauca</i>	Swamp She-Oak	7	
	<i>Casuarina littoralis</i>	Black She-Oak	8	
<b>CUNONIACEAE</b>				
	<i>Ceratopetalum apetalum</i>	Coachwood	7	Rare
<b>ELAEOCARPACEAE</b>				
	<i>Elaeocarpus reticulatus</i>	Blue-Berry Ash	12	
<b>FABACEAE</b>				
	<i>Erythrina hybrid species*</i>	Coral Tree	13	
<b>LAURACEAE</b>				
	<i>Cinnamomum camphora*</i>	Camphor Laurel	6	
<b>MIMOSACEAE</b>				
	<i>Acacia parramattensis</i>	Parramatta Green Wattle	8	
<b>MORACEAE</b>				
	<i>Ficus rubigosa</i>	Port Jackson Fig	9	
<b>MYRTACEAE</b>				
	<i>Acmena smithii</i>	Lilly Pilly	9	Rare
	<i>Angophora costata</i>	Sydney Red Gum	6	
	<i>Angophora floribunda</i>	Rough-barked Angophora	6	Rare
	<i>Eucalyptus botryoides</i>	Bangalay	4	
	<i>Eucalyptus gummifera</i>	Red Bloodwood	4	
	<i>Eucalyptus piperita</i>	Sydney Peppermint	5	
	<i>Eucalyptus pilularis ssp. pilularis</i>	Blackbutt	5	
	<i>Eucalyptus robusta</i>	Swamp Mahogany	4	Rare
	<i>Melaleuca ericifolia</i>	Swamp Paperbark	10	Rare
	<i>Melaleuca lineariifolia</i>	Snow-in-Summer	11	
	<i>Melaleuca nodosa</i>	Paperbark	10	
	<i>Melaleuca sieberi</i>	Paperbark	10	Rare
	<i>Melaleuca styphelioides</i>	Prickly-leaved Paperbark	10	
	<i>Syncarpia glomulifera</i>	Turpentine	5	
	<i>Tristaniopsis collina</i>	Water Gum	11	
	<i>Tristaniopsis laurina</i>	Water Gum	11	Rare
<b>OLEACEAE</b>				
	<i>Ligustrum lucidum*</i>	Large-leaved Privett	13	
<b>PALMAE</b>				
	<i>Livistonia australis</i>	Cabbage Tree Palm	15	Extinct in valley ( <i>Livistonia</i> rediscovered 2002)
<b>PITTOSPORACEAE</b>				
	<i>Pittosporum undulatum*</i>	Common Pittosporum	13	
<b>PROTEACEAE</b>				
	<i>Banksia integrifolia</i>	Coastal Banksia	12	
	<i>Banksia serrata</i>	Old Man Banksia	12	
<b>SALICACEAE</b>				
	<i>Populus alba*</i>	White Poplar	14	
	<i>Salix alba*</i>	White Willow	14	
	<i>Salix babylonica*</i>	Weeping Willow	14	

## Abbreviations

- \* - species not native to Wollii Creek Valley (may be native to other parts of Australia)
- Dsf - Dry sclerophyll forest
- ssp. - sub-species



## Tall trees over 8 metres



### *Eucalyptus botryoides*

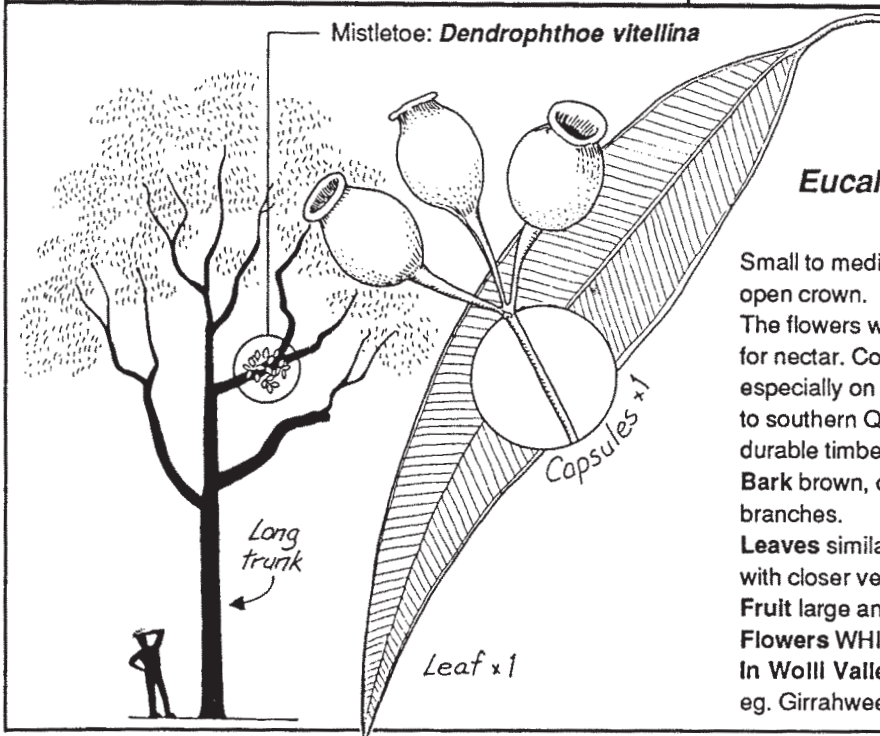
#### Bangalay, Southern Mahogany

Medium sized tree with spreading crown.  
 One of the most important trees in coastal areas from east Victoria to north of Newcastle.  
 It prefers poor sandy soils and often appears just behind the sand-dunes.  
**Bark** rough, deeply fissured, fibrous, reddish inside except the smaller upper branches which are smooth and pale.  
**Leaves** thick and broad, widest towards the base, paler on undersurfaces.  
**Fruit** small, cup-shaped, in tight clusters.  
**Flowers** WHITE. **Flowering time:** late summer.  
**In Wollli Valley:** abundant; a dominant tree in forest areas, esp. Girrahween Park. Family **Myrtaceae**.

### *Eucalyptus robusta*

#### Swamp Mahogany

Small to medium sized tree with open crown.  
 One of the few Eucalypts that likes marshy ground, it is common near estuaries in marshy coastal areas, often with *Casuarina glauca*. The timber is very durable and is milled for fencing and wharf construction.  
**Bark** similar to *E. botryoides* but it persists to the smallest branches.  
**Leaves** similar to *E. botryoides*.  
**Fruit** large, elongated tubular capsules.  
**Flowers** WHITE. **Flowering time:** autumn-winter.  
**In Wollli Valley:** rare. Once probably occurring in dense stands on the creek flats, it has suffered heavily from clearance so that few specimens remain, scattered through the valley in marshy ground or on creek banks. Several have also been planted near the entrance to Girrahween Park. Family **Myrtaceae**.

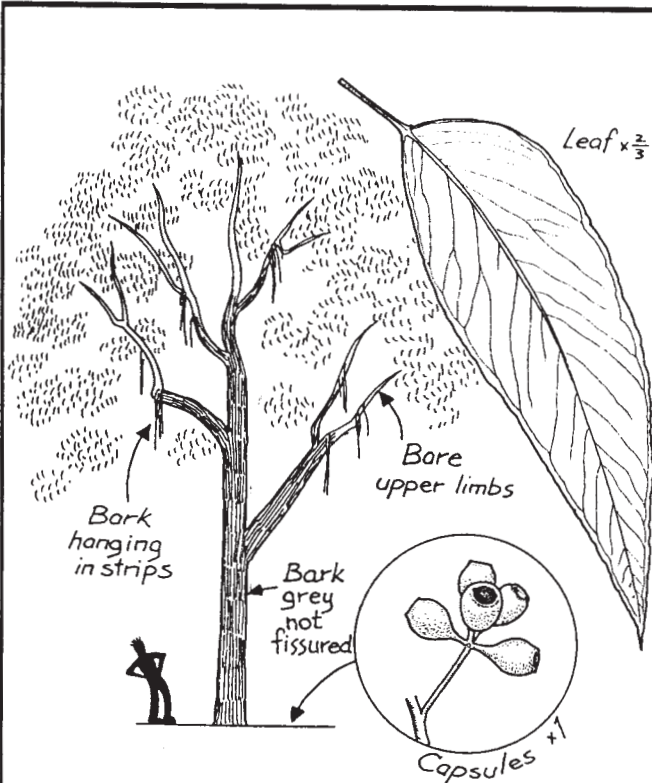


### *Eucalyptus gummifera*

#### Red bloodwood

Small to medium tree with tall straight trunk and open crown.  
 The flowers were known to be sucked by Aborigines for nectar. Common in near-coastal forests, especially on sandy soils, from the Victorian border to southern Queensland. A useful and extremely durable timber, sawn for many uses.  
**Bark** brown, deeply fissured, fibrous; covering all branches.  
**Leaves** similar to *E. botryoides*, but smaller and with closer veins.  
**Fruit** large and urn shaped.  
**Flowers** WHITE. **Flowering time:** autumn.  
**In Wollli Valley:** uncommon; found scattered in Dsf eg. Girrahween Park. Family **Myrtaceae**.

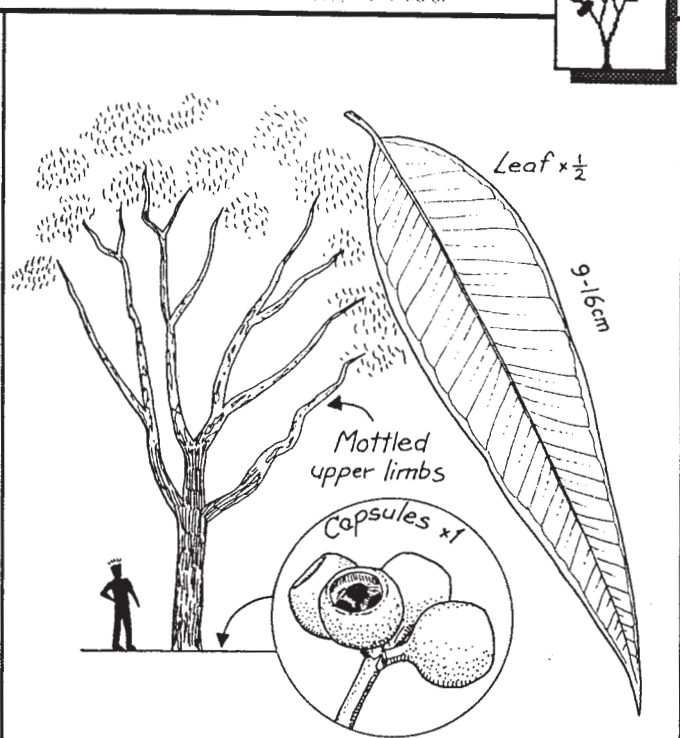




***Eucalyptus piperita***

**Sydney Peppermint**

Medium sized tree with open crown. Common on forested valley sides in the Sydney region.  
**Bark** fine grey fibrous bark, not fissured except for upper branches where it is smooth and pale and falls in ribbons.  
**Leaves** with distant veins and an intramarginal vein.  
**Fruit** small and globular in dense clusters.  
**Flowers** WHITE. Flowering time: early summer.  
**In Wollli Valley:** fairly plentiful on the lower slopes on Girrahween Park. Family Myrtaceae.

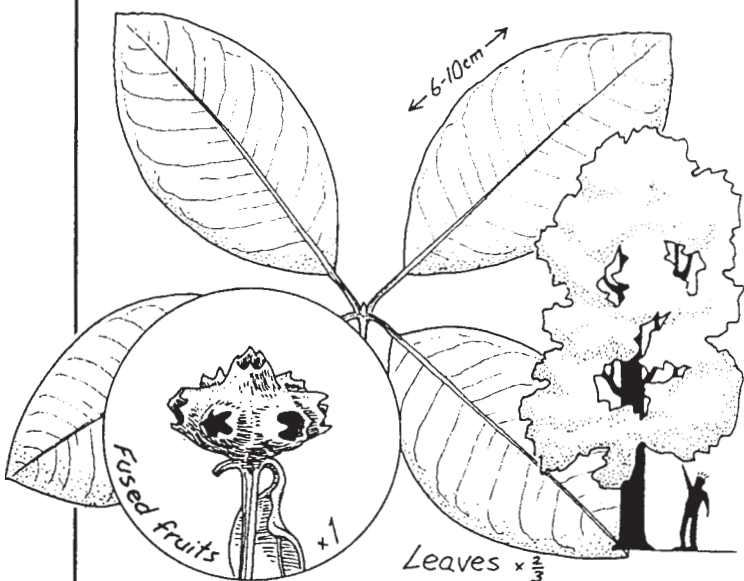


***Eucalyptus pilularis* ssp.**

***pilularis***

**Blackbutt**

Medium to tall tree with open spreading crown. A common tree in tall coastal forests of NSW and Sth Queensland. One of the most important commercial hardwoods of Australia. Common name from the blackened trunk bark following fires.  
**Bark:** trunk and lower branches - rough, grey, fibrous, flaky. Upper branches - smooth, pale, mottled.  
**Leaves** thick, drooping, narrow.  
**Flowers** WHITE. Flowering time: early summer.  
**In Wollli Valley:** rare; a few specimens along the upper margin and entrance of Girrahween Park. Family Myrtaceae.

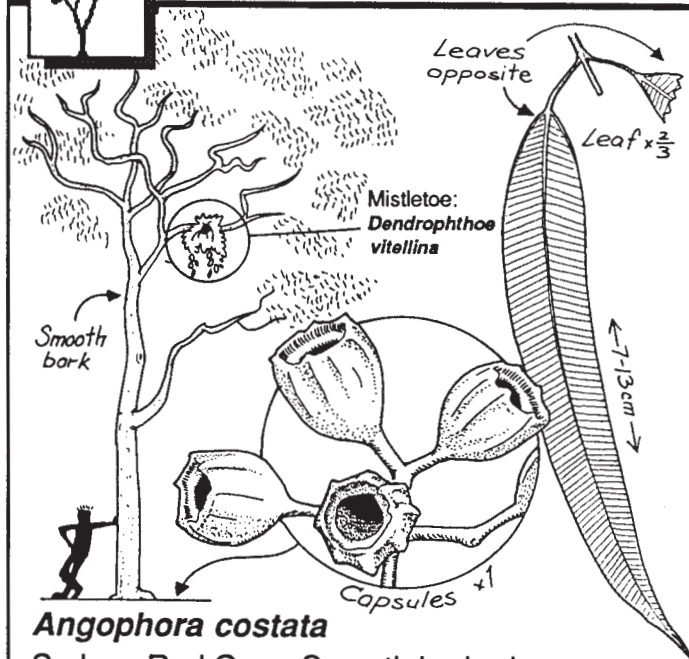


***Syncarpia glomulifera*** Turpentine

Tall tree, often to over 40m, with straight trunk and dense dull grey-green foliage. Found in places transitional between tall eucalypt forests and rainforest. It is common in the Sydney Region and ranges from Batemans Bay to the Atherton Tableland in northern Queensland. As a timber it is very resistant to fire damage and very durable in saltwater. It is a pre-eminent Australian timber for structural purposes such as piles, poles, girders, beams and wharf decking.  
**Bark** thick, dark, coarsely fibrous, deeply fissured.  
**Leaves** opposite or clustered (whorled), glossy grey-green above, thin, stiff, tough, with downturned edges and a layer of fine grey hairs beneath.  
**Flowers** have prominent WHITE filaments and are clustered together in united heads.  
**Fruits** form a distinctive fused woody cluster.  
**In Wollli Valley:** plentiful; scattered through all forest areas. Family Myrtaceae.



Tall trees 8m+



**Angophora costata**

Sydney Red Gum, Smooth barked apple

Expressively shaped medium sized tree with attractive bare trunk and sinuous limbs. One of the loveliest of gums, it is common in the Sydney region as a dominant of open forests on poor sandstone soils but it is also found along much of the NSW coast and over an extensive area of southern Queensland. The timber is rarely milled as it is not very durable.

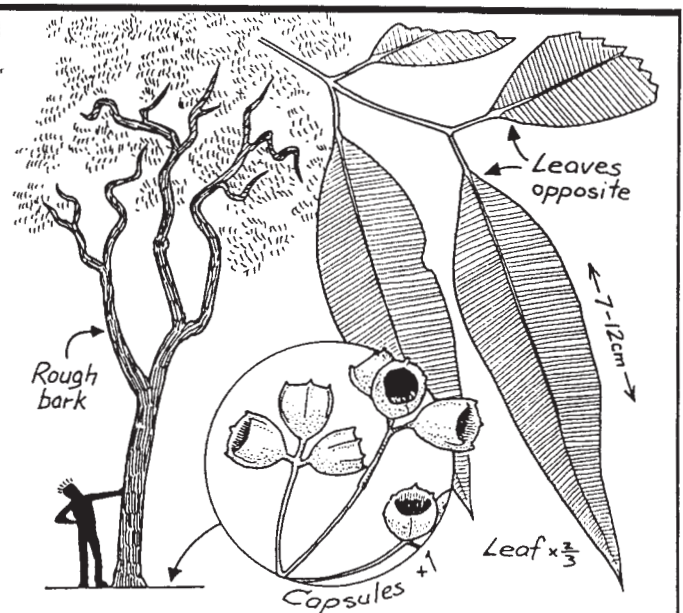
**Bark** smooth, mottled; orange after summer shedding, becoming pink in winter.

**Leaves** opposite, *Eucalyptus*-like with very close lateral veins.

**Fruit** a large ribbed capsule, hence the latin species name ("costa"=rib). **Flowers** cream.

**Flowering time:** spring and summer.

**In Wollli Valley:** abundant; in all Dsf areas, occasionally with the mistletoe *Dendrophthoe vitellina*. Family *Myrtaceae*.



**Angophora floribunda**

Rough-barked Angophora

Handsome medium sized tree with sinuously contorted upper branches. Common in coastal forests in southern NSW and further inland in northern NSW and southern Queensland, mainly along watercourses. It has its best development in deep valleys of the mountains where its magnificently expressive limbs make it a memorable sight. The timber is rarely milled.

**Bark** brown, fibrous on all limbs.

**Leaves** opposite, *Eucalyptus*-like with very close lateral veins.

**Fruit** capsules ribbed but much smaller than *A. costata*.

**Flowers** WHITE. **Flowering time:** spring and summer.

**In Wollli Valley:** rare; a few specimens found between Girrahween Park and Nannygoat Hill. Family *Myrtaceae*.



**Cinnamomum camphora\***

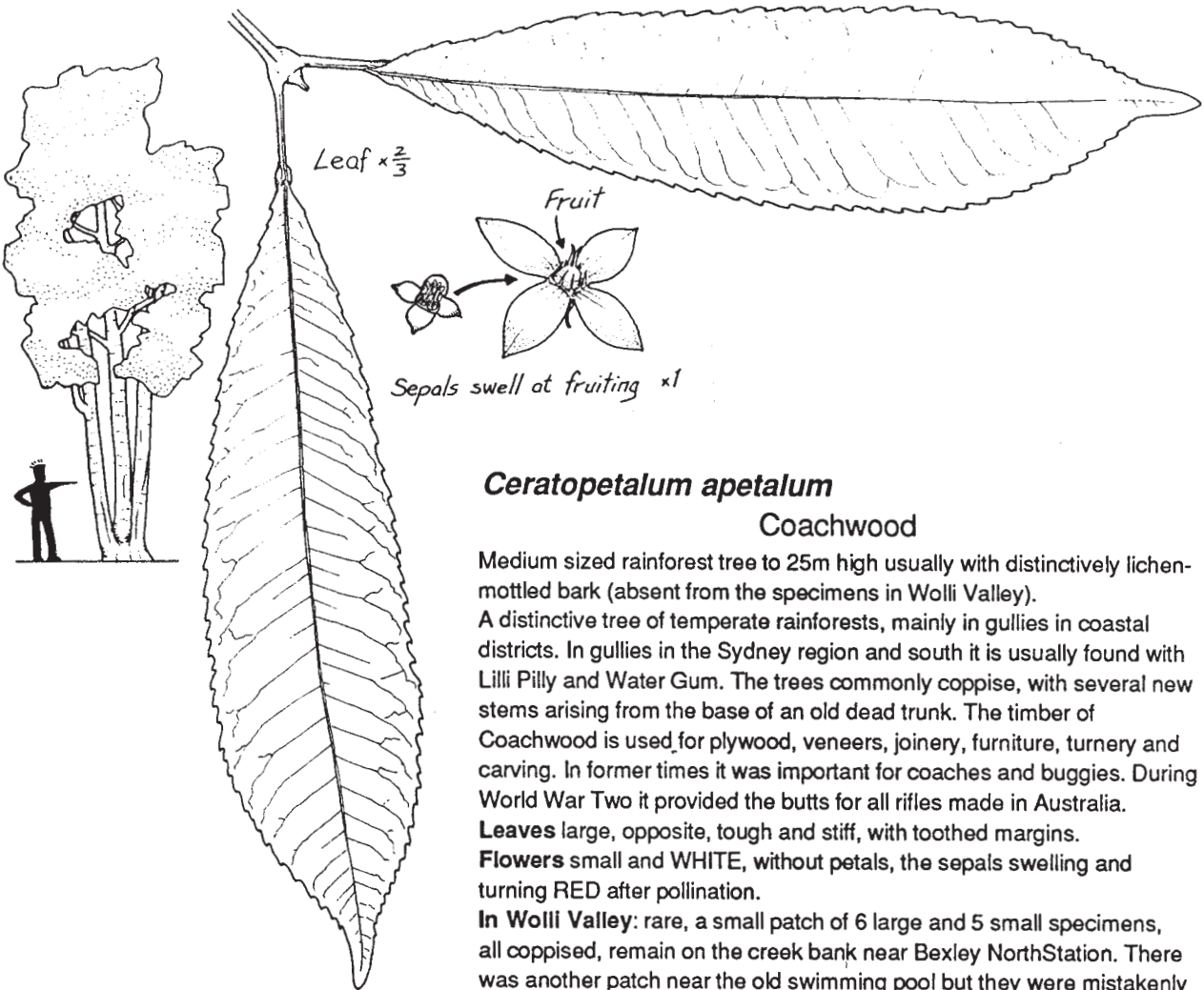
Camphor Laurel

A large fragrant tree that is common in gardens and parks, and a serious pest in bush areas. Introduced from China and Japan.

**Leaves** to about 8cm long are glossy, thin and easily recognized by having three main veins extending from near the base. Leaves release a rich camphor odour when crushed.

**In Wollli Valley:** the tree is plentiful and established in many situations throughout the valley. Family *Lauraceae*.

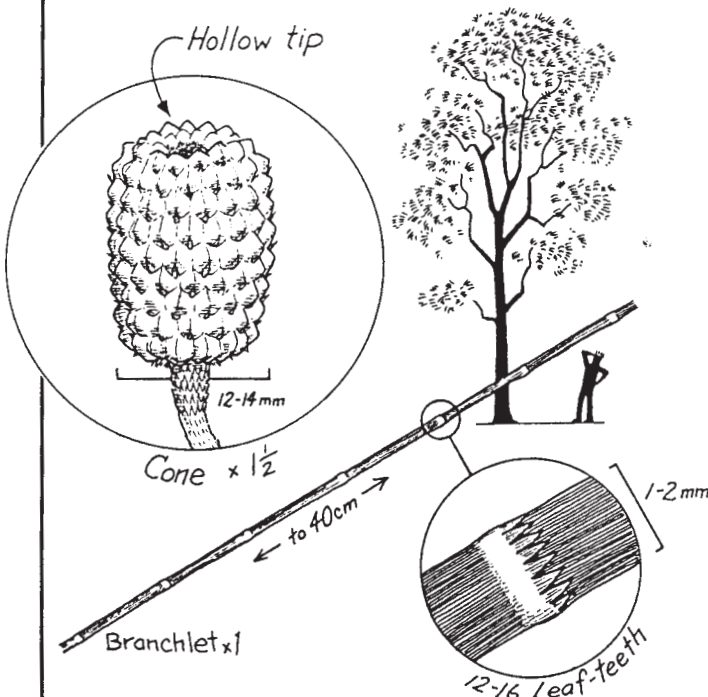




**Ceratopetalum apetalum**

**Coachwood**

Medium sized rainforest tree to 25m high usually with distinctively lichen-mottled bark (absent from the specimens in Wollli Valley). A distinctive tree of temperate rainforests, mainly in gullies in coastal districts. In gullies in the Sydney region and south it is usually found with Lilli Pilly and Water Gum. The trees commonly coppice, with several new stems arising from the base of an old dead trunk. The timber of Coachwood is used for plywood, veneers, joinery, furniture, turnery and carving. In former times it was important for coaches and buggies. During World War Two it provided the butts for all rifles made in Australia. **Leaves** large, opposite, tough and stiff, with toothed margins. **Flowers** small and WHITE, without petals, the sepals swelling and turning RED after pollination. **In Wollli Valley:** rare, a small patch of 6 large and 5 small specimens, all coppiced, remain on the creek bank near Bexley North Station. There was another patch near the old swimming pool but they were mistakenly destroyed during council track clearing in about 1978. Without their usual mottling, the stems are easily mistaken for Large-leafed Privett. Family Cunoniaceae.



**Casuarina glauca**

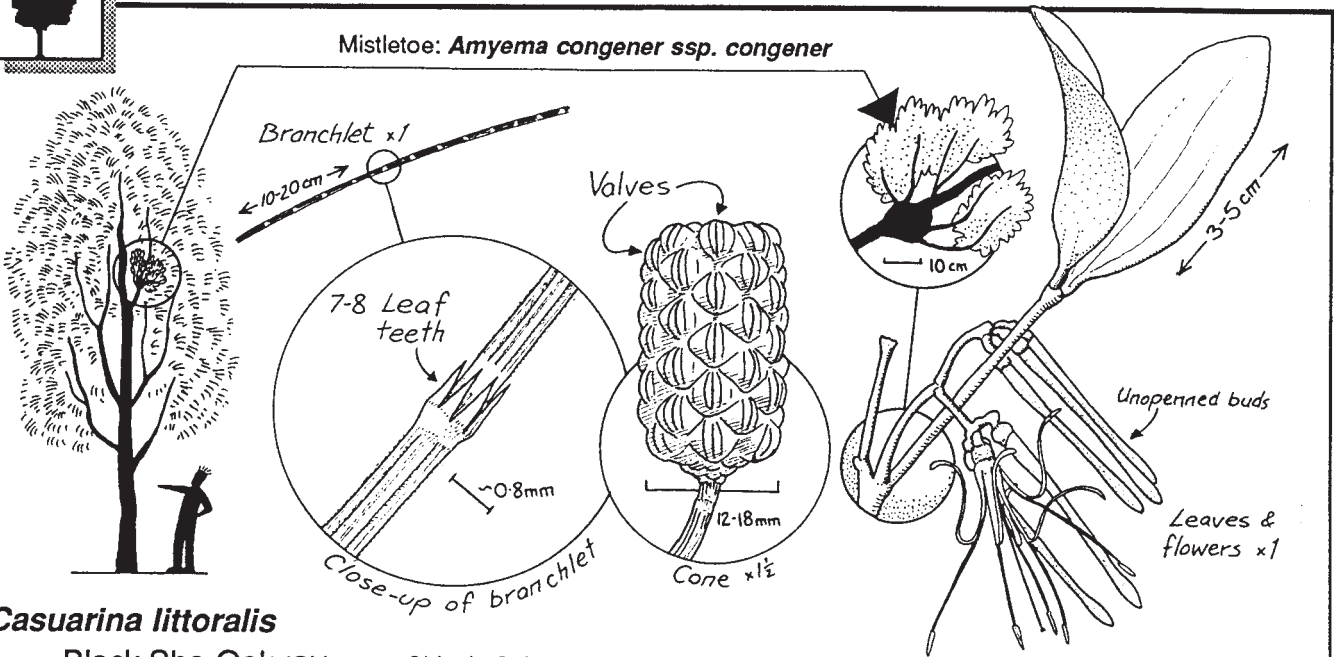
**Grey She-Oak, Swamp She-Oak**

Small to large tree to 20metres high, preferring marshy brackish sites. Usually a tall but scraggly-shaped tree. Distinguish from *C. littoralis* by shape of fruit. Flowers unisexual (*dioecious*). A common tree in brackish marshes and estuary banks north from Eden, usually growing in dense stands and often just inland from mangroves. **Branchlets** have 12-16 miniature leaf-teeth per joint. **In Wollli Valley:** grows beside the creek on its lower salty parts, just inland from the mangrove zone. Family Casuarinaceae.



## Small trees 4-8m

Mistletoe: *Amyema congener ssp. congener*



### *Casuarina littoralis*

Black She-Oak (Old name: Shingle Oak)

Pine-like tree or shrub usually 3-6m tall. Heavily cut in the past as a shingle timber. A common understory tree in dry mountain and coastal forests in eastern Australia. The plants are *dioecious* (i.e. unisexual flowers occur on different plants). The male plants turn rusty brown when flowering due to the numerous tiny flowers concealed behind the leaf-teeth. Casuarinas are amongst the few large plants with wind-borne pollen. The family is very distinctive and relations with other families are unclear. Casuarinas are mostly endemic to Australia with a few species being found on Pacific islands and SE Asia.

**Branchlets** are jointed and ridged with a circlet of 6-8 tiny leaf-teeth at each joint.

**In Wollli Valley:** plentiful and widely scattered in heathy and Dsf locations throughout the Valley. Family **Casuarinaceae**.

### *Amyema congener ssp. congener* Mistletoe

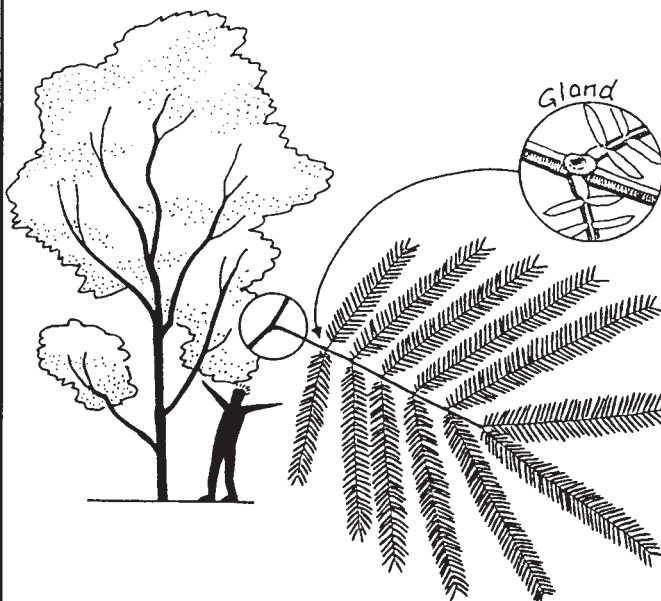
Parasitic shrub. The berries are edible when ripe, bearing a very sticky, gelatinous, sweet pulp around a single seed. The berries are popular with birds and the stickiness helps the seeds to adhere to the branches of trees when the birds are finished with them. A fairly common species, parasitic on non-Eucalyptus trees.

**Leaves** opposite, thick, fleshy, yellowish.

**Flowers** very attractive, with narrow recurved green petals and bright red anthers and style.

**Flowering time:** spring.

**In Wollli Valley:** plentiful; on *Casuarina littoralis* in Girraween Park and on Nannygoat Hill. Family **Loranthaceae**.



### *Acacia parramattensis*

Parramatta Green Wattle

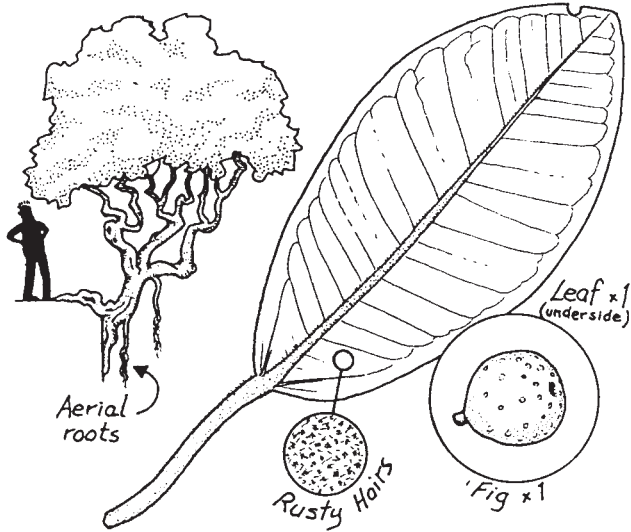
Tall shrub or small tree with soft feathery foliage. An occasional under-story tree in open-forests on dry shallow soils in coastal and mountain areas from Sydney to South of Nowra.

**Leaves** *bipinnate*, dark-green, with very fine blunt leaflets and glands at the base of each division with smaller ones sometimes in between.

**Flower-heads** globular, pale-yellow. **Flowering time:** summer.

**In Wollli Valley:** uncommon; found sparsely in Girraween Park.

Family **Mimosaceae**.



**Ficus rubigosa** Port Jackson Fig

Small fig tree. Commonly found on the sides of gullies where it attaches itself to rock faces by a massive system of coalesced roots. Distinguish from other species of figs in the Sydney region by rusty leaf undersides and absence of buttresses on trunk.

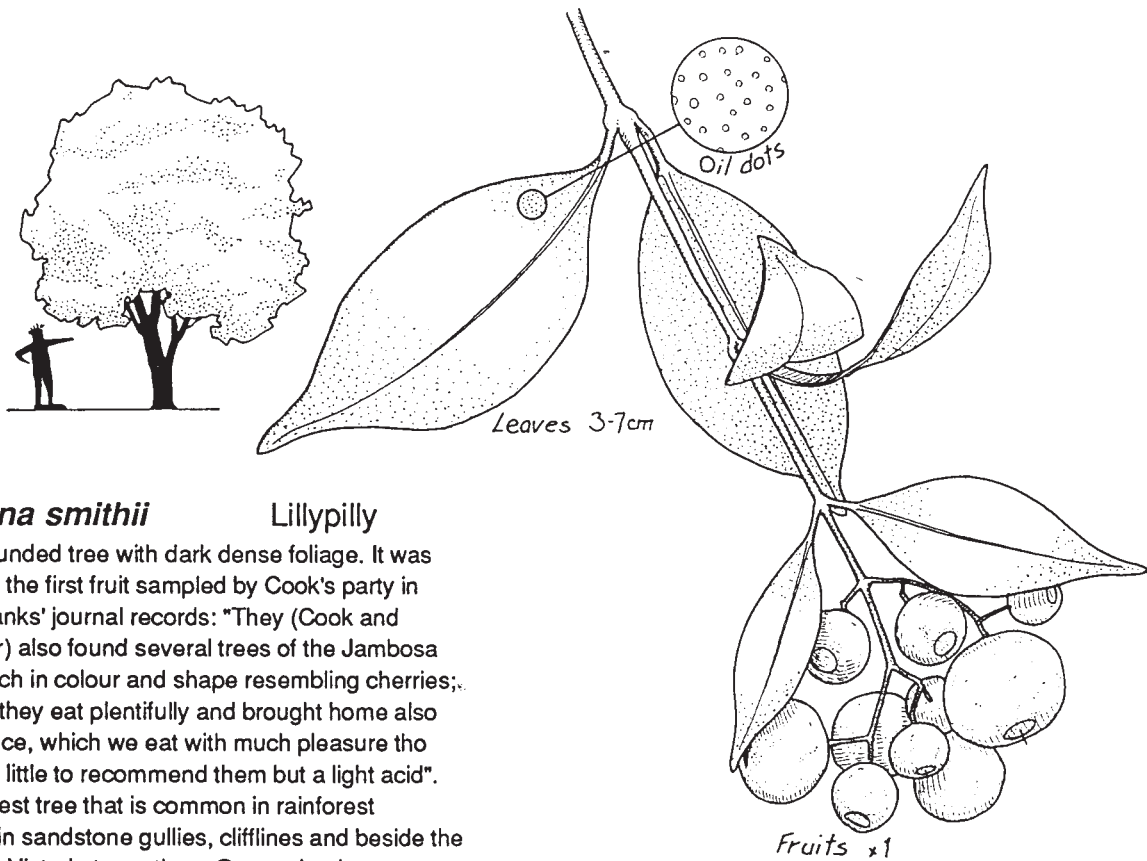
**Leaves** usually but not always with a furry layer of rusty coloured hairs on the lower surface [always found on young leaves], fairly thick and tough with a thick leaf-stem (*petiole*) 20-60mm long.

**Flowers** are 'invaginated' on the interior of the fig. The agent of fertilization is a species of tiny wasps which force their way through an entrance at the apex of the fig.

**Mature figs** are about 10mm diameter, yellow with warty markings.

**In Wollli Valley:** abundant; fairly common along sandstone cliffs and terraces.

Family **Moraceae**.



**Acmena smithii** Lillypilly

Small rounded tree with dark dense foliage. It was probably the first fruit sampled by Cook's party in 1770. Banks' journal records: "They (Cook and Solander) also found several trees of the Jambosa kind, much in colour and shape resembling cherries; of these they eat plentifully and brought home also abundance, which we eat with much pleasure tho they had little to recommend them but a light acid".

A rainforest tree that is common in rainforest pockets in sandstone gullies, cliffines and beside the sea from Victoria to northern Queensland.

**Leaves** opposite, broad, usually downcurved, dark green, glossy, with a drawn out tip (*accuminata*), thick and tough, with visible oil dots.

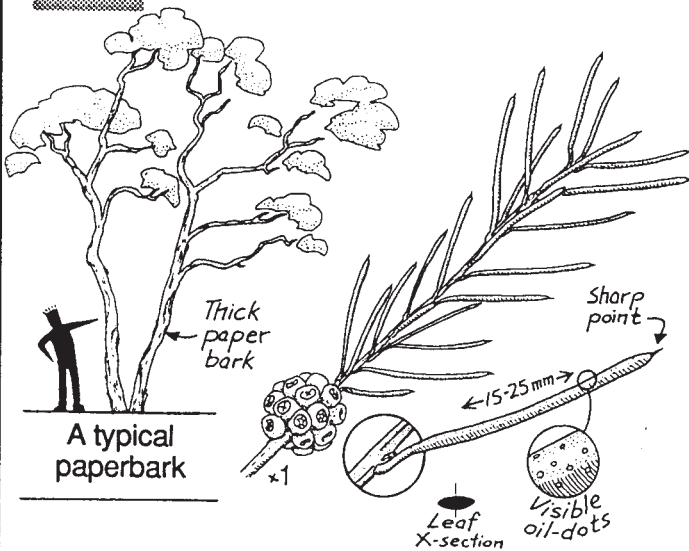
**Flowers** small, cream, in dense inflorescences.

**Flowering time:** summer.

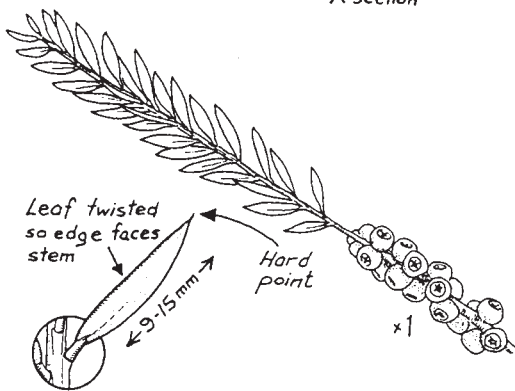
**Fruit** a large crisp succulent pink or white berry which although somewhat sour is quite edible.

**In Wollli Valley:** rare; there are a few large old specimens in Girrahween Park. Family **Myrtaceae**.

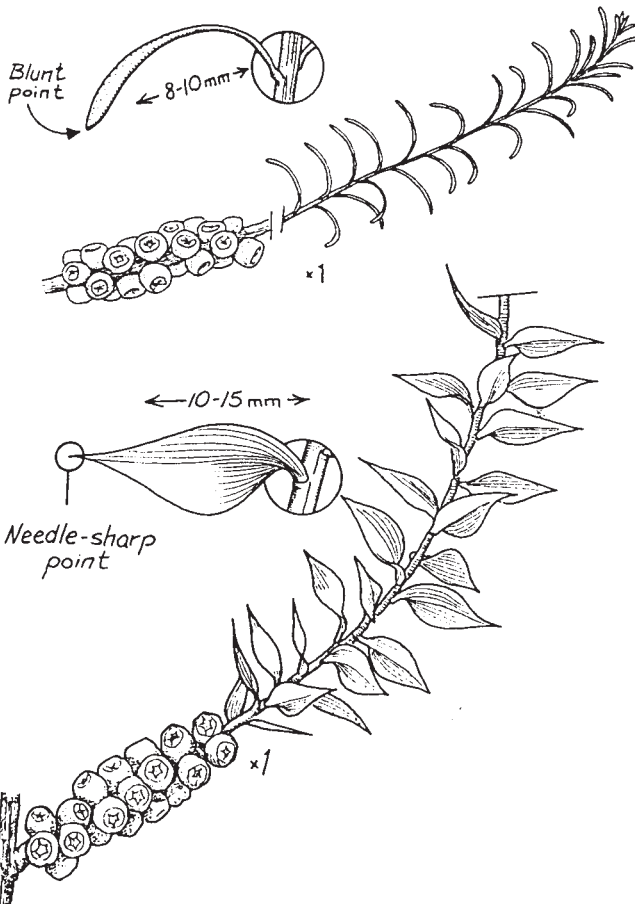




**Melaleuca nodosa** Paperbark  
 Erect shrub usually to 6m high with thick paper bark. Most common in heath and Dsf near the coast. The nectar-rich flowers of several species of *Melaleuca* were soaked in water by aborigines to produce a sweet beverage.  
**Leaves** narrow, stiff, pungent pointed, fairly crowded.  
**Flowers** in globular clusters with CREAMY YELLOW filaments. **Flowering time:** October.  
**Fruit** in dense spherical clusters.  
**In Wollli Valley:** abundant; in shrublands and Dsf areas. Several large mature specimens may be seen near the picnic area in Girrawheen Park. Family **Myrtaceae**.

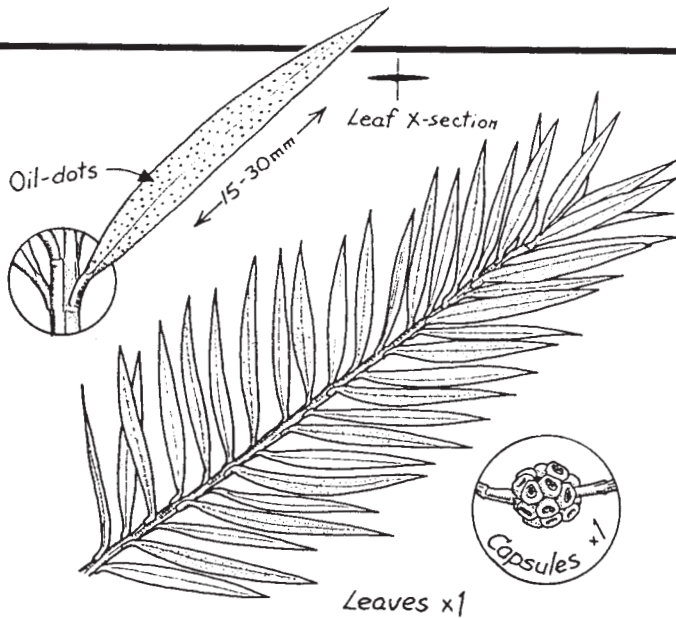


**Melaleuca sieberi** Paperbark  
 Small tree to 5m with thick paper bark. Found in coastal districts usually on swampy ground.  
**Leaves** small, crowded with hard tips, spirally arranged on the stem. Each leaf is twisted so that its edge faces the stem.  
**Flowers** CREAM, in short spikes. **Flowering time:** summer.  
**Fruit** small capsules 3-4mm wide, with a pale sheeny surface.  
**In Wollli Valley:** rare, a few specimens scattered in Girrawheen Park. Family **Myrtaceae**.



**Melaleuca ericifolia**  
 Swamp Paperbark  
 Small rounded tree with thick paper bark and dense foliage. A common tree in swampy ground near estuaries, streams and lagoons. Also common as a street and garden shrub.  
**Leaves** tiny, narrow, recurved, fairly soft.  
**Flowers** in spikes with WHITE filaments.  
**Flowering time:** spring and early summer.  
**In Wollli Valley:** rare; a few specimens grow in the brackish marsh below Jackson Place. Family **Myrtaceae**.

**Melaleuca styphelioides**  
 Prickly-leaved Paperbark  
 Small tree with thick paper bark. Found in marshy ground in mountain gullies and in swamp forests at lower altitudes.  
**Leaves** stiff, twisted, pungent pointed, crowded along the stems.  
**Flowers** in dense spikes with WHITE filaments.  
**Flowering time:** mid-summer.  
**In Wollli Valley:** uncommon; a few specimens grow in cleared land near the creek and in Girrawheen Park? but it is not clear whether these have been planted or not. Family **Myrtaceae**.



**Melaleuca linearifolia**

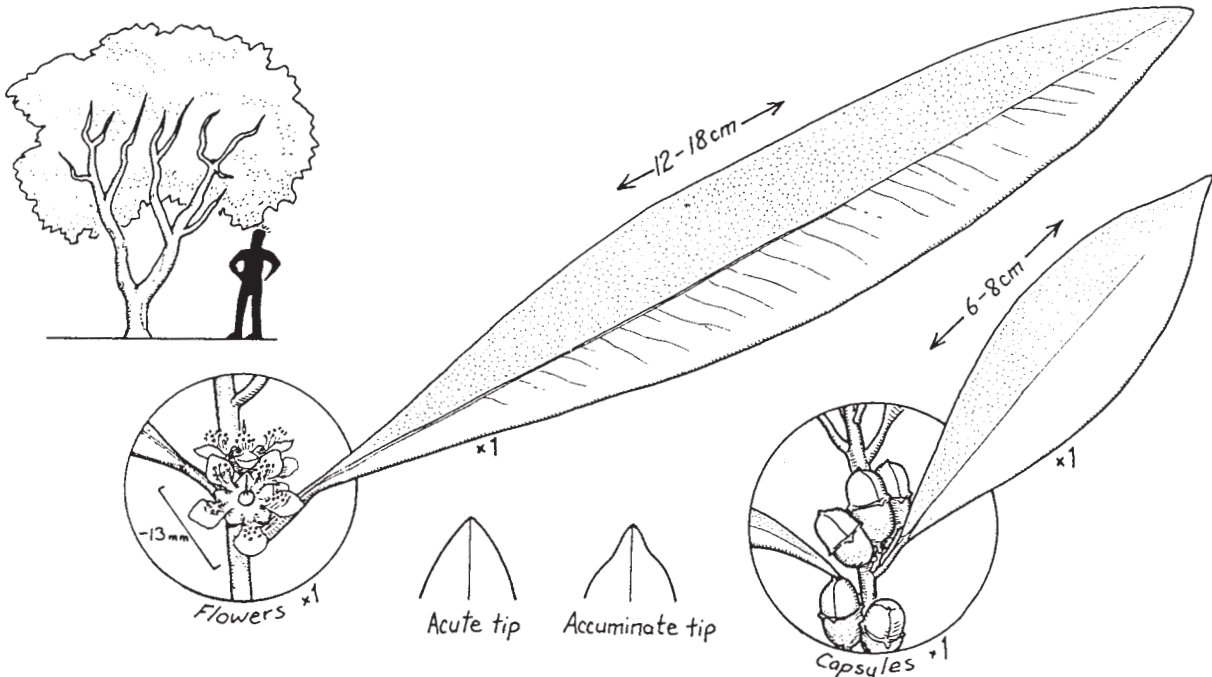
Snow-in-summer, Paperbark

Small tree to 8m high with thick paper bark. Common in marshy places in forests and gullies. **Leaves** narrow, opposite, crowded, fairly soft and thin.

**Flowers** with YELLOWISH-WHITE stamens.

**Capsules** in small globular clusters.

**In Wollli Valley:** fairly plentiful but sparsely scattered; found in Girrahween Park, near Highcliffe Road and other places. Family **Myrtaceae**.



**Tristaniopsis laurina**

Water Gum, Kanooka

Small spreading tree usually 4-6m high with handsome foliage and distinctive pale bare sheeny bark. A common tree throughout eastern Australia. It is found beside rivers in mountain valleys and in sandstone gullies in coastal plateaus, where it commonly occurs with Lilly Pilly and Coachwood. Also a popular street tree.

**Leaves** to 14cm long, hairless, satin, never with a drawn out (*accuminate*) tip, pale beneath.

**Flowers** YELLOW, numerous, in leaf-joint inflorescences, with prominent staminal bundles (*claws*). **Flowering time:** Dec-Jan. **Fruit** a 3 valved non-woody capsule.

**In Wollli Valley:** rare, 5 mature specimens are scattered with *Ceratopetalum apetalum* (Coachwood) on the creek bank near Bexley North Station. Family **Myrtaceae**.

**Tristaniopsis collina**

Water Gum, Kanooka

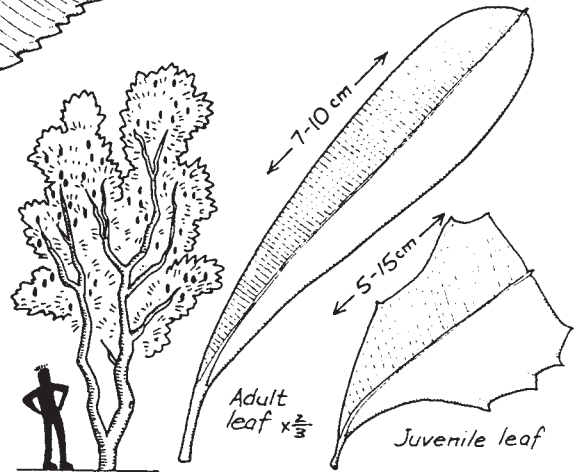
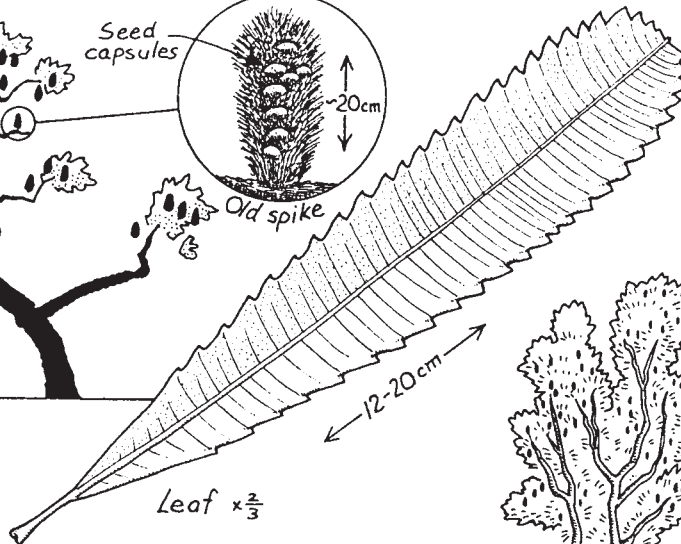
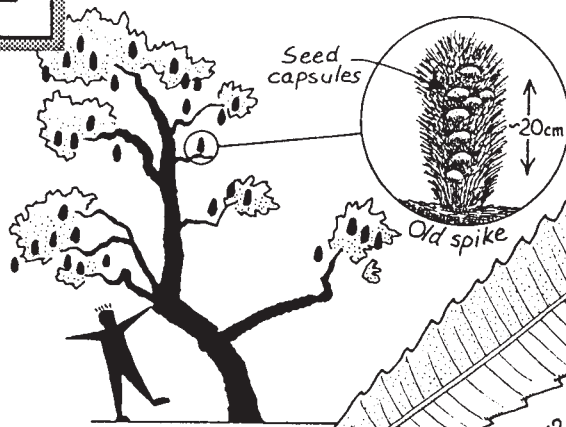
Attractive tall shrub or small tree with pale sheeny bark. Usually found on sheltered valley slopes. Both species have a few old bright red leaves which are about to fall.

**Leaves** satin, dark green above, very pale beneath, hairless, with drawn out (*accuminate*) tips and obscure venation.

**Flowers and fruit:** as for *T. laurina*

**In Wollli Valley;** uncommon; isolated individuals or small stands in Girrahween Park, east of Jackson Place and near Unwin Street. Family **Myrtaceae**.

*Small trees* 4-8m



***Banksia serrata***

Old Man Banksia (Old name: Honeysuckle)

Venerable, gnarled, thick-trunked shrub or small tree, usually 4-8m high. The withered inflorescences were immortalized as the evil "Banksia-men" by May Gibbs in her "Sugglepot and Cuddlepie" stories. The lumpy tubercles on the trunk are ligno-tubers, food storage mechanisms which also allow quick regeneration from burning. This species' resistance to severe fire accounts for its even and abundant distribution throughout its habitat. It is common in heaths and forests on poor soils along the eastern seaboard and is especially characteristic of the Sydney Region.

**Leaves** are large, stiff, leathery, evenly serrated, glossy and dark green above and dull and pale green below.

**Flowers** DOVE-GREY, in huge dense spikes 10-20cm high. **Flowering time:** summer (Dec-Mar).

**In Wollli Valley:** plentiful; evenly spread through Dsf areas. Family **Proteaceae**.

***Banksia integrifolia***

Coastal Banksia (Old name: Honeysuckle)

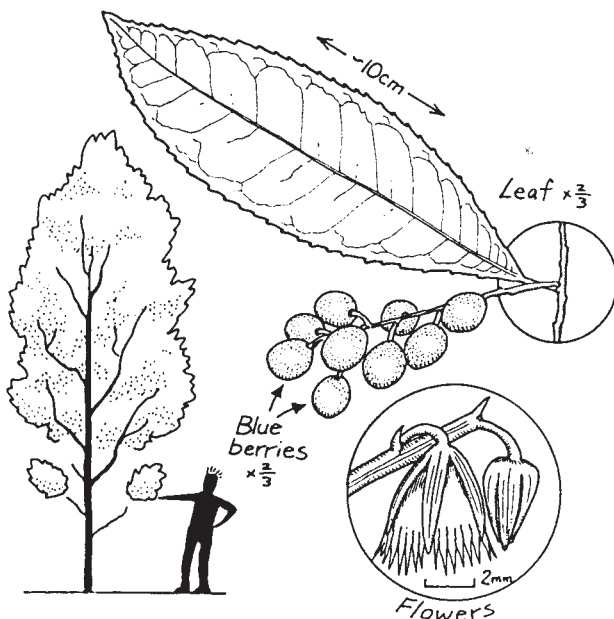
Tall shrub or small tree 6-10m high. A common coastal tree often abundant in dune successions, on headlands and beside estuaries.

**Leaves** entire, stiff, leathery, erect (toothed only in juvenile stage), dark green, hairless above, white below due to a layer of fine white felty hairs which cause the tree to shimmer silver in the wind.

**Flowers** in a PALE YELLOW spike to 12cm long.

**Flowering time:** mainly winter.

**In Wollli Valley:** uncommon; a few specimens scattered on open slopes above the creek eg. below Nannygoat Hill. Family **Proteaceae**.



***Elaeocarpus reticulatus***

Blue-Berry Ash

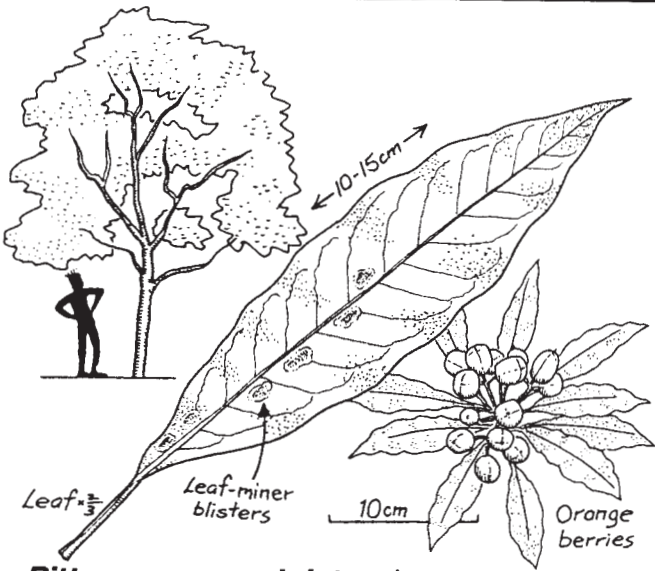
This is a small straight tree usually 4-8 metres tall. The genus name means "Olive-fruited" and the plant has drooping bunches of blue olive-like berries for much of the year. A common understory tree in dry forests on poor soils. Recognized by the presence of scattered bright red leaves (they turn red before falling with age).

**Leaves** are hard, thin, toothed and with prominent reticulation (small veins).

**Flowers** WHITE, drooping and with fringed petals, resembling little lampshades. **Flowering time:** summer.

**In Wollli Valley:** plentiful; scattered in heathy shrublands and sclerophyll forests throughout the Valley. Family **Elaeocarpaceae**.





***Pittosporum undulatum\****

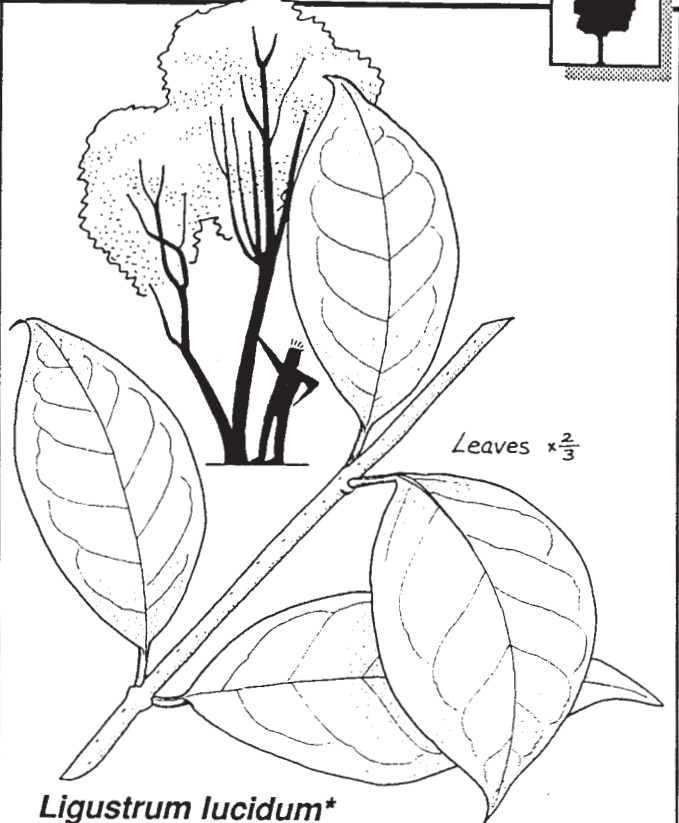
**Native Daphne, Mock Orange**

Common shrub or small tree, usually to 3-10m high. Widely distributed along the eastern seaboard. The plant is very opportunistic, colonising disturbed areas enriched by run-off. Although a native plant it is usually found where it shouldn't be and grows to the detriment of the original understory. At least it competes with Privett. Seeds were ground as food by Aborigines in the Sydney area.

**Leaves** glossy above, thin, light to mid green, usually with undulate margins, recognized by lines of brown blisters along the leaf-surface [these are excavations of tiny *Pittosporum* Leaf Miner grubs].

**Flowers** WHITE, very sweet-fragrant, in large terminal inflorescences. **Flowering time:** Sept.

**In Wollli Valley:** abundant; common and often dense in all areas. With *Ligustrum lucidum\** it forms a canopy in the wet exotic forests and with *Kunzea ambigua* it forms a closed shrubland in drier parts of the valley. Family **Pittosporaceae**.



***Ligustrum lucidum\****

**Large-leaved Privett**

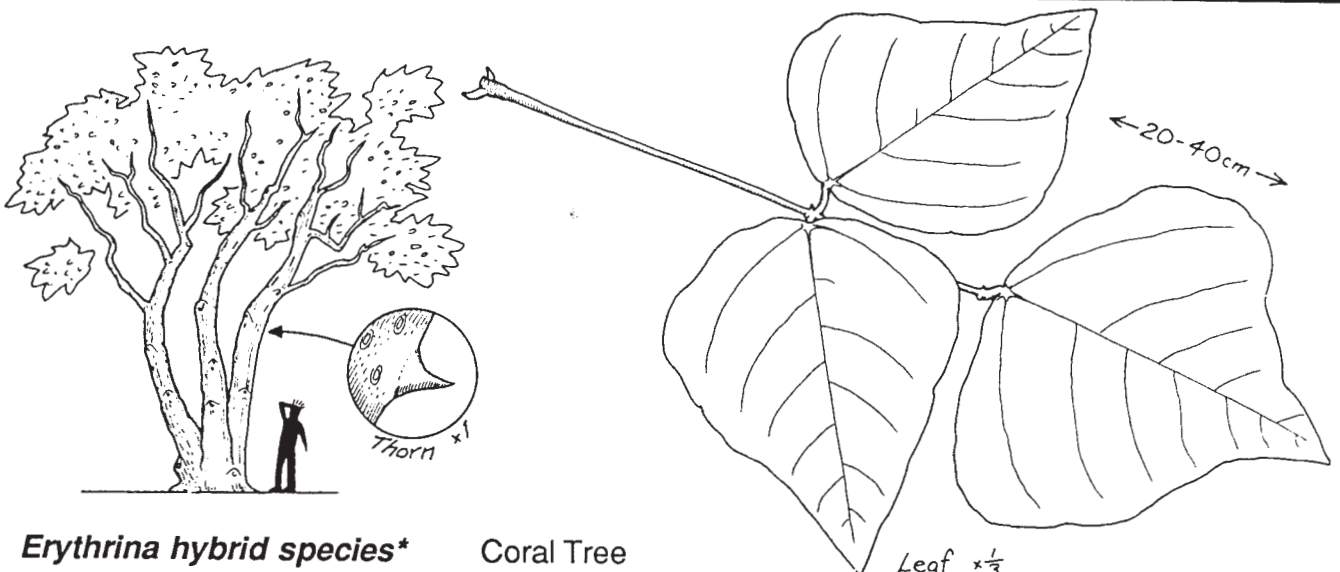
Tall shrub to 6m high with smooth grey bark. It has a tenacious root system which makes it hard to eradicate. Introduced from China and Japan as a garden shrub, now a pest in native areas near habitation.

**Leaves** opposite, hairless, to 12cm long, moderately thick and tough, glossy, downcurving.

**Flowers** WHITE and numerous.

**Fruit** black-purple in large bunches.

**In Wollli Valley:** abundant; but mostly restricted to wet exotic forest patches where it is a dominant species. Family **Oleaceae** (Olives).

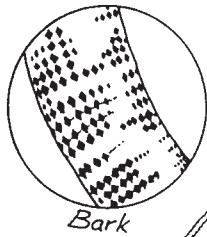


***Erythrina hybrid species\**** Coral Tree

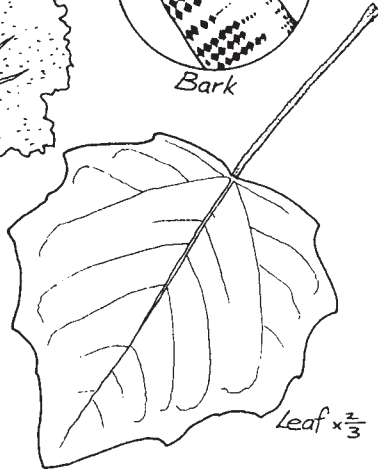
Large deciduous tree with numerous "hands" of large red pea-flowers in autumn, winter and spring. A native of northern Australia and South-East Asia, but now found throughout SE Australia, both planted and wild.

**Leaves** large, tri-lobate.

**In Wollli Valley:** several specimens grow in waste places and parks. Family **Fabaceae** (Peas).



Bark



Leaf x  $\frac{2}{3}$

**Populus alba\***

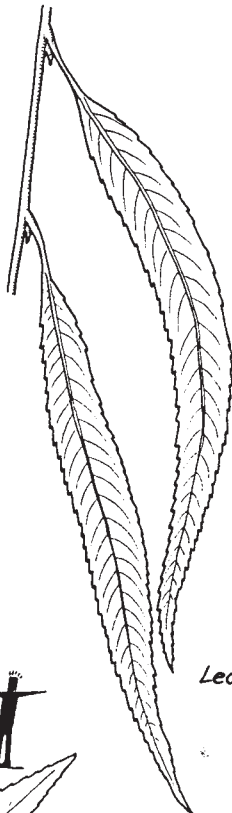
**White poplar**

Medium sized deciduous tree with silvery foliage. Introduced from North America as a park tree, now naturalised in many places. The tree loses its leaves in April.

**Leaves** shallowly lobed, dark-green above, white below due to a dense layer of white felty hairs. **Trunk** white with a distinctive pattern of diamond-shaped fissures.

**In Wollli Valley:** plentiful; growing often densely beside the creek in many places above the weir.

Family Salicaceae.



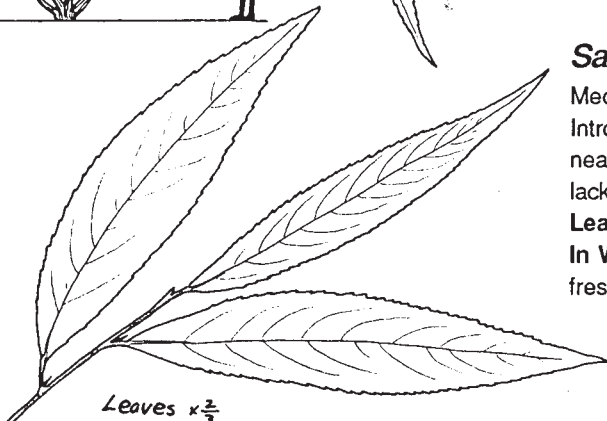
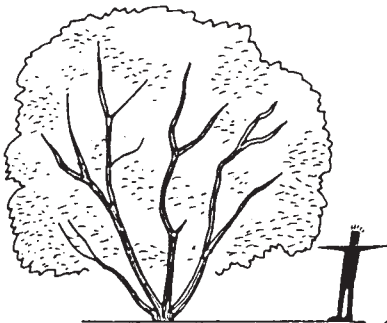
Leaf x  $\frac{2}{3}$

**Salix babylonica\*** Weeping Willow

Small deciduous tree with long drooping whip-like branches. Introduced from Asia, now a common sight throughout settled areas. Prefers marshy creek-banks.

**Leaves** narrow, finely toothed, thin and soft, drooping.

**In Wollli Valley,** abundant along the creek banks and fresh-water marshes above the weir. Family Salicaceae.



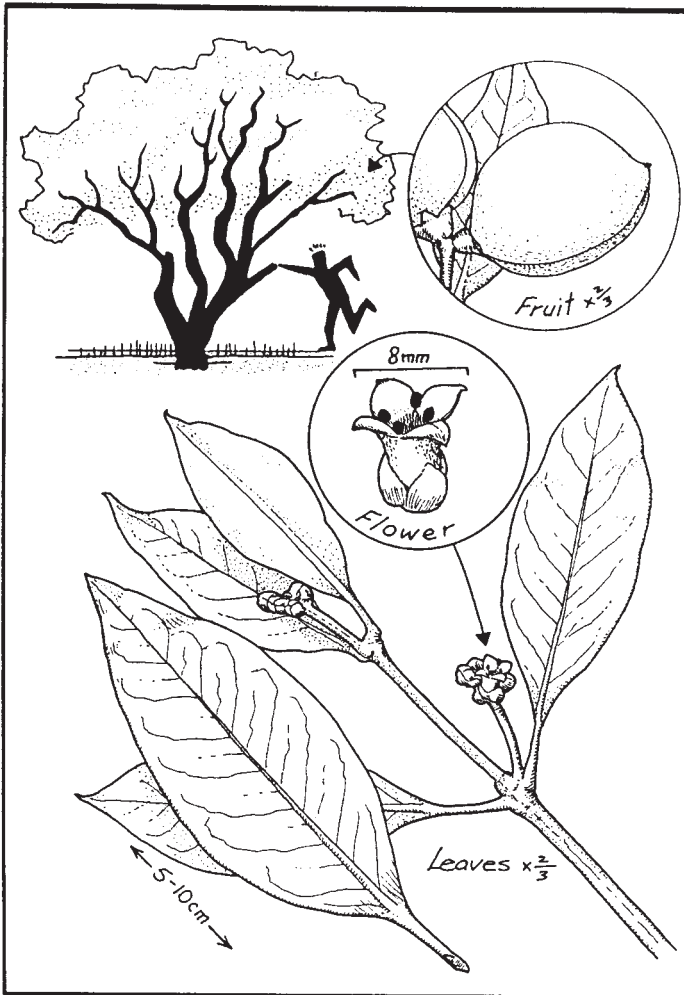
Leaves x  $\frac{2}{3}$

**Salix alba\***

**White Willow**

Medium-sized tree with spreading branches. Introduced from Europe, now wild in many places near fresh water. Very similar to *S. babylonica* but lacking the weeping habit. Leaves are lost in May. **Leaves** similar to *S. babylonica*.

**In Wollli Valley:** abundant; on creek banks and in freshwater marshes. Family Salicaceae.



**Avicennia marina** Grey Mangrove

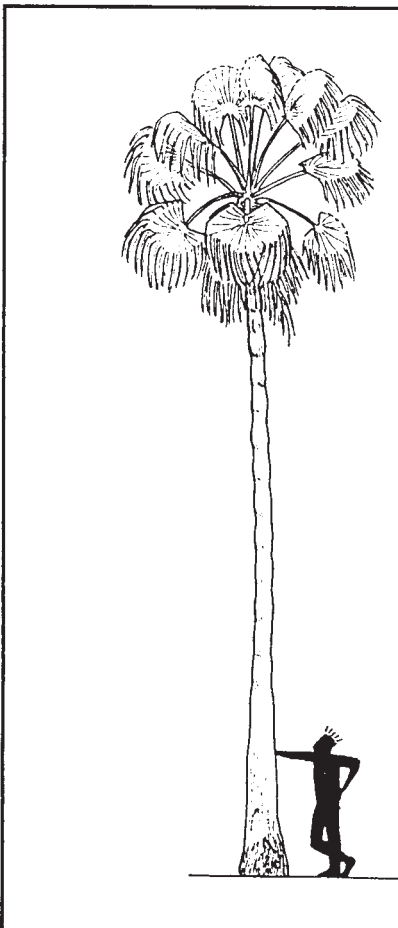
A small stout tree, usually about 4-6m high, the dominant mangrove plant in coastal NSW. The tree grows in dense single-species groves in the intertidal zone of estuaries. Its roots breathe by means of fibrous woody "pneumatophores" which arise from the mud around the tree. The seeds often sprout on the tree and fall to be carried by the tide to a new resting place (these are the large swollen green split objects often seen floating on the tide). The seeds formed an important part of the diet of Aborigines in northern Australia. The tree is a ready colonizer of mudbanks and its dense roots have a role in purifying estuarine waters. The plant has a wide range, growing from South Australia to the Northern Territory.

**Leaves** are opposite, thick, tough, hairless, shiny above.

**Flowers** are small and gold, producing a rich honey nectar.

**In Wollli Creek:** it forms dense groves on the lower parts of the Valley where it provides protection for numerous water birds and is the basis of a minature ecosystem of mud-dwelling worms, crabs, barnacles and smaller organisms. Family **Avicenniaceae**.

Special honorary mention



**Livistonia australis**

Cabbage-tree Palm

Tall palm tree, unmistakable were it not extinct in the valley. Originally very common in the thick "jungles" on the marshy lowlands of the valley the palm suffered from clearing until the last plant was removed probably in the 1920's. The palm was so common that in 1833 Wollli Creek was known as "Cabbage Tree CreeK".

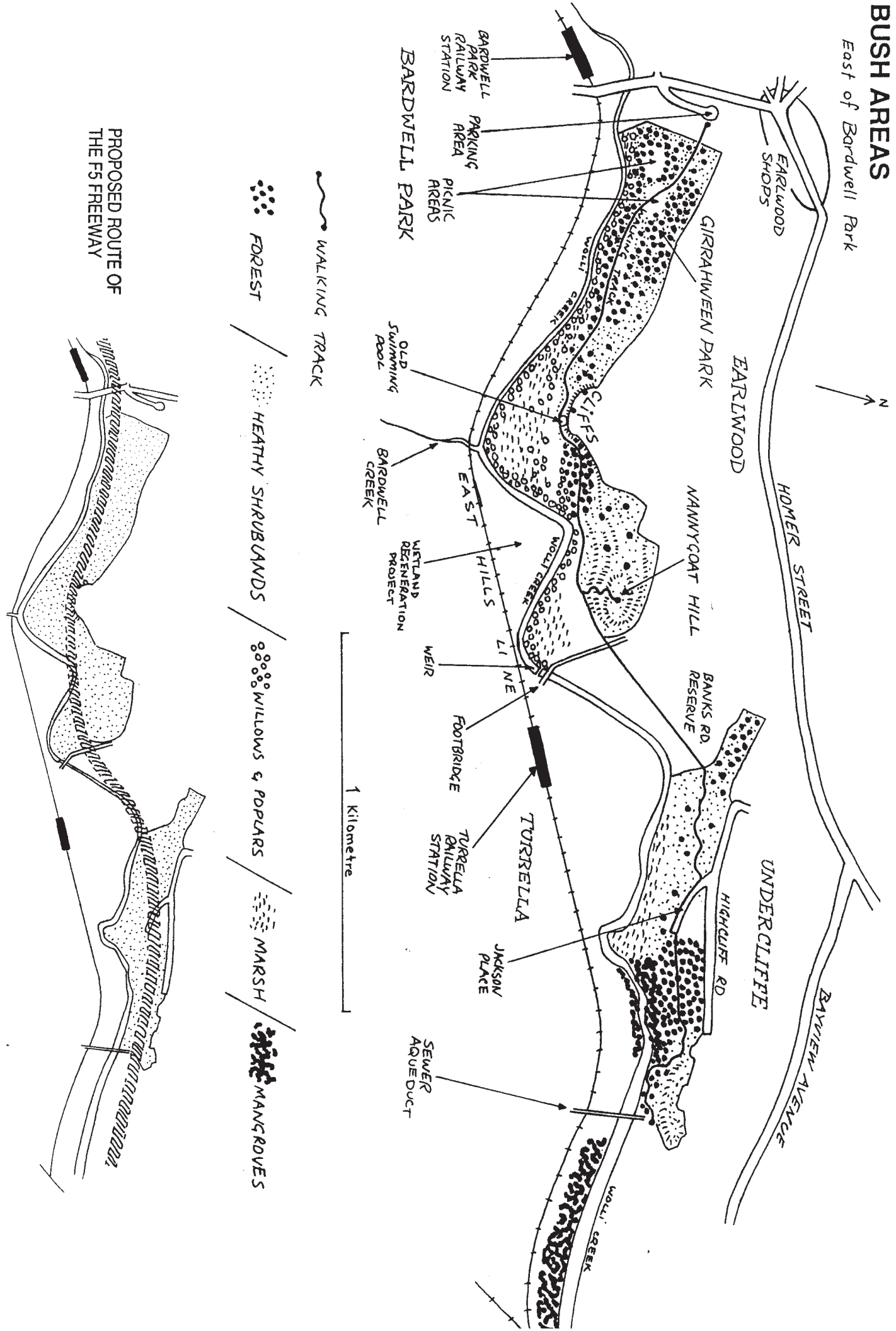
**Notes:** both Aborigines and early settlers consumed the bud at the top of the tree as a vegetable, unfortunately this practice leads to the death of the tree. The tough, shiny leaves were once used for hat-making, the result being the cabbage tree hats well known in the last century. The most southerly of palms, the Cabbage-tree Palm grows from Orbest in Victoria to Fraser Island in Queensland. Around Sydney it is found in damp gullies near the sea. It is resistant to all but very severe fires. Family **Palmae**.

(L. australis was rediscovered in Girrahween Park in 2002.)



# WOLLI CREEK BUSH AREAS

East of Bardwell Park



PROPOSED ROUTE OF THE F5 FREEWAY