

Appendix C Shade Tree Suggestions

Trees give shade and shelter and provide food, habitat and beauty. They are an integral part of a landscape that cares for the earth and cares for people.

The following species list is a guide that has considered our current climate and conditions with an eye on the future to a time when our climate is likely to be drier.

The average rainfall of Aldinga is 500ml per year however we know that since AAEV began that we have experienced periods of drought and years of greatly reduced rainfall. This has been a large consideration in the species chosen.

Trees can be highly variable in how big they will ultimately grow, even within our site. The success of your tree will ultimately depend on a range of factors including how much water it receives, the soil it is growing in and how much sun and wind it is exposed to. The surrounding area is also important to a tree. If cars will be driving over the root zone this will compact the soil, removing air and reducing the microorganisms that give life to the soil. Bitumen will redirect water away from your tree whereas mulched soil, swales or a planted area will help to retain our limited rainfall. Consider the conditions your tree will be growing in, if you will be irrigating it and how, and how much care you are willing to provide. These factors will influence your choice of species, as will the function you want your tree to perform.

Trees and root damage

Tree roots will search for water and in doing so can cause damage to your house and paving, and to our roads and underground services. SA Water has developed some advice in which trees are likely to cause damage, and this advice is covered by legislation. These categories have been included in the Shade Tree Guide.

Schedule 1

These trees and shrubs are listed in Regulation 24.2 under the Sewerage Act and may be planted in any street or road in any drainage area provided they are not planted closer than two metres to any sewer main or connection.

Schedule 2

These trees and shrubs are listed in Regulation 24.3 under the Sewerage Act and may be planted in any street or road in any drainage area not closer than 3.5 metres to any sewer main or connection. In home gardens, too, they should not be planted closer than 3.5 metres to any sewer pipe.

Provisionally Classified Schedule 2

These trees are comparable to those listed in Schedule 2, but require written SA Water approval prior to planting in streets or roads.

Small trees

Deciduous

Cercis siliquastrum
Parrotia persica

Judas Tree
Persian Witch Hazel

Evergreen

Corymbia ficifolia
Arbutus unedo
Eriobotrya japonica

Grafted Eucalypts
Strawberry Tree
Loquat

Medium trees

Deciduous

Acer negundo
Acer platanoides 'Pond Emerald
Lustre'
Pistachia chinensis
Morus sp.
Gingko biloba
Ficus carica
Gleditsia triacanthos

Box Elders
Norway Maple
Chinese Pistachio
Mulberry
Maidenhair Tree
Figs – edible
Honey Locust

Evergreen

Agonis flexuosa
Acacia pendula
Brachychiton populneus
Geijera parviflora
Eucalyptus leucoxylon ssp. pruinosa
Eucalyptus odorata

Willow Myrtle
Weeping Myall
Kurrajong
Wilga, Australian Willow
Yellow Gum
Peppermint Box

Larger trees

Deciduous

Celtis laevigata

Mississippi Sugarberry

Evergreen

Allocasuarina verticillata
Calodendron capense
E. leucoxylon ssp. Megalocarpa
E. torquata
E. stricklandii
Quercus ilex
Quercus suber

Drooping Sheok
Cape Chestnut
Large fruited SA Blue Gum
Coral Gum
Strictlands Gum
Holm Oak
Cork Oak

Cercis siliquastrum Judas Tree

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
<p>Slow growing deciduous tree with rounded leaves.</p> <p>There are varying reports about this trees hardiness and ideal growth conditions.</p>	8m	3m	<p>Purplish-pink flowers in early spring along branches and trunk, followed by chocolate-brown pods and distinctive rounded leaves.</p> <p>Will flower in November with the seeds ripening from March.</p> <p>The flowers from this plant are hermaphrodite and are pollinated by bees.</p>	Some say it dislikes drought, others say it is hardy.	<p>Some say it succeeds in most soils and pH types, but dislikes growing in wet soils, especially when these are of clay.</p> <p>Others say it thrives on chalky and in dry sandy soils, probably does best on a poorish soil.</p>	<p>Some say easily stressed, resents dry or very wet sites, and to avoid hot, exposed and windy sites.</p> <p>Others say once established the tree is very resistant to drought and heat.</p>	<p>Flowers can be eaten in a salad. The flower buds can be pickled and used as a condiment. Seedpods can be eaten raw.</p>
<p>Cultivar: A specimen tree.</p>	6m	4m					<p>Sources: Aussie Gardening; Flemings Nursery; Winter hill nursery; Diggers.</p>



Parrotia persica Persian Witch Hazel

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Slow growing deciduous tree, pendulous multi stemmed branches, very hardy tolerates most soils and positions.	To 7m	3m	An unusual flowering habit of numerous red clusters of red stamens is effective before leaf growth in spring. Foliage is glossy green turning to crimson and gold in autumn. Bark during winter is a smooth grey, flaking to cream and beige.			Withstands dry conditions and exposure to wind once established.	Sources: Winterhill.



***Corymbia ficifolia* - grafted eucalypts**

Description	Height	Width	Flowers/fruit/foliage	Water	Soils	Care	Uses
<p>A range of Eucalyptus are available that have grafted the ficifolia from WA with the E. maculata rootstock, allowing these showy WA trees to be grown in a wider variety of soils. The final height is also known.</p> <p>Their names include Wildfire, Summer Red, Calypso Orange, Fairy Floss</p>	<p>Ranges from 2m dwarf that can be grown in a pot to a tree of 8m, depending on the cultivar.</p>	<p>2-8m</p>	<p>Red, pink and orange available.</p>	<p>Drought hardy.</p>	<p>Adapted to our alkaline soils.</p>		<p>Colour, nectar and shade.</p> <p>Worth asking in any nursery but definitely available from Coromandel Native Nursery, Adelaide Advanced Trees, State Flora.</p> <p>Cultivars are more costly than tubestock at \$50 - \$100 per tree depending on the size.</p>

Arbutus unedo Strawberry Tree

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
<p>A slow growing long lived evergreen tree (over 100 years).</p> <p><i>Arbutus andrachnoides</i> is a hybrid that is sterile and will not self-seed. It has peeling, cinnamon-red bark. 6m x 6m.</p>	5m	4m	<p>Flaky brown bark and white bell-shaped flowers with a soft, sweet fragrance.</p> <p>The orange-red fruit produced in winter is edible though bland.</p>	Drought tolerant but will grow better if irrigated.	Can tolerate most soils.	Slow to establish and may not grown beyond shrub size for the first 10 years.	<p>The fruit is popular with parrots.</p> <p>Source: Sophie Thomson; Shepparton Council; Diggers.</p>



Eriobotrya japonica Loquat

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Small, tropical-looking evergreen trees.	4-6 m tall, but are often smaller about 3-4 m.		The flowers appear in autumn or early winter and the fruits are ripe in late winter or early spring. The flowers have a sweet, heady aroma that can be smelled from a distance.	Needs to be irrigated to produce quality fruit but will tolerate some dry periods.	Loquats grow well on a variety of soils of moderate fertility, but need good drainage.		The fruit is eaten raw, stewed, preserved or dried and the roasted seeds can be used as a coffee substitute. Loquats can also be used to make wine. Source: Daleys Nursery; Diggers.



***Acer negundo* Box Elders**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Fast growing hardy deciduous trees that are tolerant of windy sites. Cultivars include Sensation; violaceum.	Up to 10 m	Up to 9 m	Sensation – foliage has a pink tinge in spring, green over summer and red and orange in autumn. Violaceum – unusual burgundy pink inflorescences appear in late winter before the foliage (pictured).	Hardy with minimal irrigation.	Clay	Schedule 2	Summer shade, winter sun. Sources: Shepparton Council; Sophie Thomson; Sustainable Landscapes.



***Acer platanooides* 'Pond Emerald Lustre' Norway Maple**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Moderate to fast-growing deciduous tree with a dense and uniform habit.	12m	10m	Glossy, dark green leaves, orange-yellow in autumn. New leaves have a reddish tinge.				Summer shade, winter sun. Source: Sustainable Landscapes



Pistachia chinensis Chinese Pistachio

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
An elegant, rounded tree	To 10m	To 6m	A rich green in summer and a bright crimson in autumn holding on the tree for many weeks.	Will tolerate very dry soils		Does not create allergy problems. Provisionally classified as Schedule 2.	A feature shade tree. Source: Diggers; Adelaide Advanced Trees.



***Morus sp.* Mulberry**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
<p>Mulberry Trees are easy to grow fruit tree that are also tough for our climate.</p> <p>Varieties include:</p> <ul style="list-style-type: none"> • Dwarf Red Shantoot (2m high) • Beenleigh Black • White Shantoot • others 	Up to 10m	Up to 10m	<p>Deciduous.</p> <p>Crimson black, red or white fruit in spring depending on the variety.</p>	Drought hardy	Tolerant of heavy clay	<p>The black varieties drop fruit that can stain paths or cars and when birds eat the fruit their droppings can also stain so this is a consideration when choosing their position. The white varieties don't have this problem.</p>	<p>Shade.</p> <p>Mulberries are rarely seen in shops hence the need to grow them yourself.</p> <p>Source: Daleys Fruit Nursery, Perry's Fruit & Nut</p>

Dwarf Red Shantoot at Perrys Nursery – 20 years old



South Australia's first and oldest living European tree is a mulberry which was planted at Kingscote, Kangaroo Island in 1836 and is still bearing fruit.



Ginkgo biloba Maidenhair Tree

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
<p>One of the most ancient trees still in cultivation – considered a living fossil. Very slow to become established.</p> <p>The trees can take around 20-30 years to bear nuts, however grafted trees may bear in as little as 8 years.</p> <p>Cultivars include: Autumn Gold' - an upright, symmetrical form. 'Fastigiata' - slender, upright form. 'Pendula' - long weeping branches 'Princeton Sentry' - an upright growing male tree. 'Saratoga' - pyramidal</p>	Up to 9m	To 5m	<p>Leaves are fan-shaped like maidenhair fern, changing from pale-green in spring and summer, to butter yellow in autumn.</p> <p>The Ginkgo tree is used extensively as a landscape tree due to its picturesque, unusual shaped crown and autumn coloured foliage.</p>	Young trees need deep, regular watering until established.	Prefer deep, fertile soils rich in organic matter, but will survive in poorer soils.	<p>Protect from strong winds.</p> <p>The nuts taste like a large pine nut, a cross between potatoes and sweet chestnuts when baked. The seeds are usually steamed until the hard shell cracks open, then the kernel removed and eaten like pistacho nuts.</p>	<p>Light shade.</p> <p>Sources: Sophie Thomson; Daleys Nursery; Diggers.</p>



Figs (edible) *Ficus carica*

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
<p>A smaller to large tree depending on the cultivar.</p>			<p>Some commonly grown are:</p> <p>White Adriatic – a - green to yellow skinned medium to large sized fig with red pulp and excellent flavour.</p> <p>Excel - an early fruiting medium sized fig with amber pulp and yellow skin. A good all-purpose fig with sweet, rich pulp.</p> <p>Brown Turkey - a brown skinned medium to large fig with copper-coloured skin and whitish to pink pulp. Very good quality with few seeds. A prolific bearer and popular commercial variety.</p> <p>Fig Black Genoa</p>	<p>Naturally likes living in creeklines so loves moisture. Tony Stevens (Rare Fruit Society) grows 30 – 40 varieties near Gawler. He directs winter rainfall into trenches to soak the sub-soil. In the summer the trees get no water at all.</p>	<p>Tolerant of alkaline soils and some salinity.</p>	<p>A slab of concrete or slate in the bottom of the planting hole will force the plant to spread shallow roots and encourage it to produce heavily. Alternatively if the tree establishes a deep root system it can grow large with a healthy canopy of foliage, at the expense of fruit.</p> <p><i>Ficus rubiginosa</i> 'Variegata' – Schedule 2</p>	<p>Figs can be glazed, dried or eaten fresh.</p> <p>The Rare Fruit Society is a good source of unusual figs</p> <p>Source: Food Forest, Daleys Nursery</p>

Gleditsia triacanthos Honey Locust

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Upright tree with a weeping pendulous habit. Deciduous. Cultivars Limegold Sunburst; Shademaster.	8m	8m	Small ferny foliage appearing golden in spring. The leaves hold until late autumn, and turn a rich yellow before dropping.	Can grow with limited irrigation.		Provisionally Classified Schedule 2.	Summer shade, winter sun. Sources: Sustainable Landscapes; Sophie Thomson; Metro Trees.



<i>Agonis flexuosa</i> Willow Myrtle							
Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
<p>A round-headed tree with semi-weeping branches, well-clothed in linear olive green leaves.</p> <p>A cultivar form is also available: <i>A. flexuosa</i> 'Jervis Bay After Dark' which will have different characteristics.</p>	5- 12 m	4-9m	Tiny 5-petalled, fragrant white flowers cover the branches, in late spring for up to 6 weeks. Leaves are peppermint scented. The bark of the tree is smooth when young, but becomes deeply furrowed and very dark brown with age.	<p>500 ml natural rainfall.</p> <p>Grows as a street tree in SA with no additional irrigation</p>	Grows naturally on limestone heaths. Prefers free drainage.	<p><i>A. flexuosa</i> can be pruned to retain its ideal shape, and will be able to be grown under many power lines. Also, because of its many tolerances, it is ideal for all coastal and near-coastal sites.</p> <p>Schedule 2</p>	<p>Small to medium tree providing dense shade</p> <p>Food for birds (seed)</p> <p>Source: Metro trees; State Flora; Sophie Thomson</p>



<i>Acacia pendula</i> Weeping Myall							
Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
Long lived, upright acacia with pendulous branches and silvery foliage.	6-10m	4-6	Pale cream balls autumn, winter spring. Silvery blue-green weeping foliage.	250 ml natural rainfall. Drought tolerant.	Medium to heavy soils. Tolerates lime and salt.	Schedule 2	Shade Food for birds (seeds) Fodder High windbreak Source: State Flora; Sophie Thomson



***Brachychiton populneus* Kurrajong**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
<p>A small to medium tree with a compact and dense foliage.</p> <p>Hybrids available include B. x roseus, B. 'Jerilderie Red' and B. 'Froggatt's Pink' that combine some of the flowering qualities of the Illawarra Flame Tree and the foliage from the Kurrajong parent.</p>	5- 10m		<p>The trunk is stout and grey and the leaves are 3 lobed and shiny green with young foliage tinged with pink.</p> <p>Flowers are bell-shaped and whitish in colour with the inner flower tube streaked purple-brown. Seeds are within woody, boat-shaped fruit 1-7 cm long and are surrounded by fine hairs that can cause skin and eye irritation.</p>	Tolerant of winter frosts and hot, dry summers.	Naturally occurs either on well-drained soil amongst rocky outcrops of granite or limestone, or on deeper soils.	Schedule 2	<p>Dense shade.</p> <p>Is used in farming areas for fodder during drought periods.</p> <p>Source: Aust Society for Growing Aust Plants; Gardening Australia; Metro Trees</p>



Geijera parviflora Wilga, Australian Willow

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
An elegant, highly ornamental tree that is very slow growing.	Up to 9m	Up to 8m	It has leathery foliage that is extremely dark green when grown in some shade. The flowers are white and strongly-scented—similar to citrus, to which Wilga is related and appear June - November. The blooms are followed by globular fruits that contain a glossy black seed.	Native to inland areas of SA, Vic, NSW, Qu.	It is highly tolerant of soils where irrigation is limited, and will grow well on any well-drained soil, including alkaline soils.	It grows well in full sun, although the foliage may be slightly yellow. Wilga will also thrive in some shade, probably that from tall eucalypts, and the foliage is very rich, dark green. In dense shade, Wilga will not grow well, and will not flower at all. Schedule 1	Wilgas are valuable trees as they provide shade and shelter for farm animals as well as people. Source: Coromandel Native Nursery State Flora Metro trees



Eucalyptus leucoxylon ssp. Pruinosa Yellow Gum

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
Variable sized tree	4-20m	4-12m	Cream flowers from Autumn to October. Greyish-green leaves and white trunk.	400ml natural rainfall		Schedule 2	Shade or avenue tree Highly bird attracting

<i>Eucalyptus odorata</i> Peppermint Box							
Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
	7-15	6-10	Cream flowers in summer and autumn	350 natural rainfall	Heavy, lime tolerant.	Schedule 2	Shade or shelter tree in common land. Source: Sustainable Landscapes, State Flora

Celtis laevigata Mississippi Sugarberry

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Fast growing, deciduous with a rounded crown and spreading branches.	15m	4m	Grey-brown to silvery bark with warty projections. Light green leaves, turning bright yellow in autumn. The leaf litter is allelopathic, it inhibits growth of other plants.	Minimal watering	Clay, lime.	<p>Produces berries which can be considered a nuisance.</p> <p>Shallow-rooted and may uplift paving and roads.</p> <p>Provisionally classified Schedule 2</p>	Source: Sustainable Landscapes



Allocasuarina verticillata Drooping sheoak

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
A graceful and hardy tree local to SA, and the verticillata is the form local to our area.	To 10 m		Sheoks can be male or female. The male plants have rusty golden threads and an overall golden appearance in autumn, the female plants develop cones in a rounded cluster.	Local to the Willunga Basin.	Clay	Sheoks are very effective at seeking moisture from the surrounding area. They are shallow-rooted and are better suited to flat ground rather than the side of a mound as they may uproot and fall over in the wind. Only buy stock from local growers see contact details at http://www.aev.net/management/network/native_plants/nursery/index.html	Filtered shade, and makes a stirring sound when the wind passes through. An effective wind-break when combined with other vegetation. Sheoks host many insects and provide seed which feeds smaller birds. The cones are food for the Yellow-Tailed Black Cockatoo and other parrots.



<i>Calodendron capense</i> Cape Chestnut							
Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care/Position	Uses
Slow growing evergreen tree with a dense, compact and rounded, symmetrical crown.	10-12		Summer flowering, pink in large terminal sprays, covering almost the entire crown.	Prefers moisture in summer.		Provisionally classified Schedule 2.	Diggers; Daleys Nursery

Fitzroy Gardens, Melbourne



***E. leucoxylon* ssp. *Megalocarpa* Large fruited SA Blue Gum**

Description	Height	Width	Flowers/fruit/foliage	Water	Soils	Care	Uses
<p>Small to medium, highly ornamental tree. Moderately fast growing.</p> <p>Cultivars are available (eg Rosea, Eukie Dwarf) that will have different characteristics.</p>	6-10m	3-4	Smooth yellowish bark and grey-green leaves. Cream to deep pink flowers autumn to spring.	350 ml natural rainfall	Lime tolerant	Provisionally classified: Schedule 2	<p>Shade</p> <p>Nectar for rosellas and lorikeets</p> <p>Source: Metro Trees; State Flora; Sophie Thomson; Australian Plants Society SA</p>



<i>Eucalyptus torquata</i> Coral Gum							
Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
Small to medium heavy flowering eucalypt	6-11m	6-10	Coral pink flowers during summer, grey-green foliage. Plants will flower two years after planting.	250ml natural rainfall, but responds well to more water.	Limey soils, well drained.	Schedule 2	Semi-dense shade tree for street or common land. Source: Metro Trees; State Flora; Sophie Thomson; Greater Shepparton City Council.



***Eucalyptus stricklandii* Strictlands Gum**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
Small to medium tree with short, heavy trunk. Fast growing.	6-12m	7m	Bright yellow flowers in summer. Long green narrow leaves, sooth coppery brown bark.	Drought tolerant		Schedule 2	Screening tree Good honey tree Nectar and insects for birds Source: State Flora; Copper Coast Council recommended list.



***Quercus suber* Cork Oak**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
A broad, spreading evergreen tree with an open canopy. Slow-growing and long-lived.	Up to 15m	Up to 10	Grey-green evergreen foliage and deeply-fissured grey-to-tan bark. Acorns are infrequently produced.	Drought hardy but will grow better with occasional deep watering	Adaptable to alkaline but prefers well drained rather than compacted.		A broad canopy spread for a larger common land area. Commercial cork production. Sources: Metro Trees; Diggers, Sustainable Landscapes.



A 108 year old tree in Caulfield, Victoria.

***Quercus ilex* Holm Oak**

Description	Height	Width	Flowers/fruit/foilage	Water	Soils	Care	Uses
Slow growing evergreen tree with a broad-domed canopy.	Up to 15m	Up to 10m	Small thick grey-green leaves, felted underneath, serrated on young trees, smooth edged on older trees. Black trunk. Egg shaped acorns which are sweet & edible.	It grows well with little to no summer irrigation once established.		May be better not planted near roads as the acorns are easily tripped over. Schedule 2	Shade Sources: Diggers; Sustainable Landscapes.

