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## WE COVE TREES

Canberra's living
infrastructure – our
trees, plants, soil and
water systems – give
our city its unique
'Bush Capital' identity.



Message from the Minister for Housing and Suburban Development

## It's a practical guide for your Canberra home garden...

It's often hard to know how to plan your garden with our capital city's unique seasons. This guide can help you choose trees suited to Canberra's climate so the trees you plant in your garden can flourish and provide greenery, shade and habitat for decades to come. With your help, we will make an important step towards delivering a more sustainable and climate resilient city. Let's work together to enhance Canberra's plants and tree canopy coverage.

Yvette Berry MLA



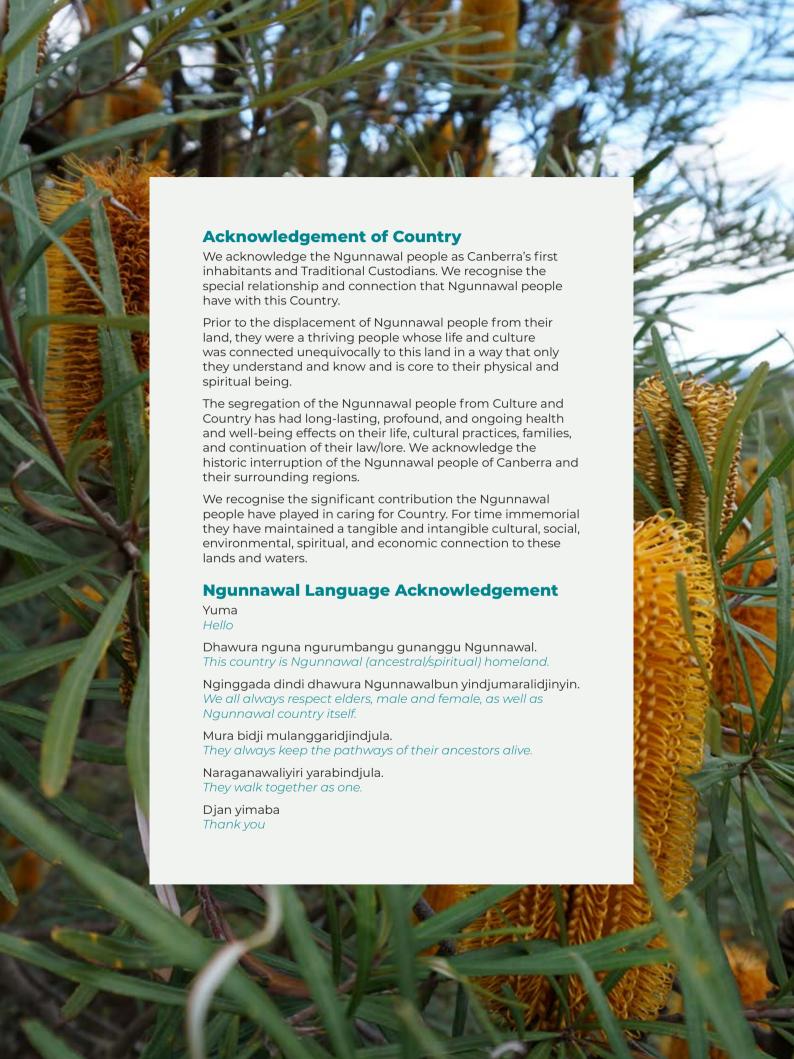
Canberra's design as a city in the landscape differentiates us from other higher density, more urban cities in Australia. Canberrans are lucky enough to have nature on our doorsteps, an abundance of birds, bees and wildlife in our gardens, and beautiful street trees and gardens greening our suburbs.

Trees and plants give us clean air and water, provide shade in summer and beautiful colours in autumn and spring. They create nice places for us to play, exercise and enjoy ourselves – bringing us all a little closer to nature. Planting trees in your backyard can bring these activities into your home.

The ACT Government recognises how important trees and greenery are to our community, our city's identity and to keep us cool in the face of a changing climate. This is why we've set a target of increasing tree canopy coverage across Canberra's urban area to 30% by 2045. We need to work together to plant more trees in and around our city to achieve this.

The Suburban Land Agency (SLA) is committed to creating great places where communities thrive. Visit the SLA's website to learn about how the SLA improves the environmental sustainability of our new suburbs and urban developments through the SLA's Sustainability Strategy 2021-25. Learning about gardening, planting trees and connecting to nature can help with our wellbeing, and contribute to a more resilient future.

Ngunnawal people have cared for the country around Canberra for thousands of years, supporting growth of native flora and habitat for fauna. By planting a tree in your backyard, you can contribute to Canberra's growing treescape, and provide habitat for our local wildlife.



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# It is important to choose the right tree for your garden, and to think carefully about where you plant it based on your house design and local conditions.

Trees will likely be the largest – and hopefully longest-lived – plants in your garden, so it's important that we plan for trees that co-exist with your house foundations, driveway, pipes, solar panels, and access to sunlight. When selected carefully and placed in the right spot, trees can create shade and privacy in your garden, provide habitat for birds and bees, block winds and grow fruit that you can harvest for years to come.

The trees recommended in this guide are suggestions based on Canberra's specific climate and soil conditions – including their frost tolerance! The list is only a small sample of the types of trees that are suitable for Canberra's growing conditions. We encourage you to visit your local nursery for more information about the right tree for you and your garden.



Select a tree species whose mature height and width are suitable for the space you have in your garden. Don't be fooled by the size of the sapling at the nursery – some trees can grow to 15 metres tall in good growing conditions in Canberra, and not all gardens have space for very big trees. Choose a tree that will work well in your space, and remember to keep clear of infrastructure like powerlines and underground services when you plant trees.



### Fire risk

If you live in a bushfire prone area – on the edge of Canberra's urban area, or near a nature reserve – be sure to select tree species with low flammability. Bushfires are predicted to become more frequent across Australia in coming years as the impacts of climate change increase.¹ Selecting fire-retardant plant species for your garden can help slow the progress of a fire.

The Victorian Country Fire Association's Landscaping for Bushfire: Garden Design and Plant Selection guide has further information on designing gardens with bushfire risk in mind.



Tree species each have different watering requirements and drought-hardiness. Canberra's climate is predicted to be hotter and drier in the future, so planting drought-resistant species – like Australian natives – will help ensure the longevity of your tree.



Pollinators – like bees – are the foundation of biodiversity. Pollination produces fruits, vegetables and seeds for us to enjoy.

Your garden can become a haven for native bees, by providing a long-lasting and varied source of the nectar, pollen and plant materials that bees need.

Make you garden bee-friendly by selecting plants that flower at different times of the year. Avoid the use of insecticides in your garden, and plant shrubs and small plants around your trees to provide a rich food source for pollinators.



### Wildlife friendly trees

It's not just bees that love to visit Canberra gardens. Birds of all sizes, butterflies, flying foxes and lizards are regular visitors to our backyards. Planting the right combination of trees with shrubs and groundcover can create valuable urban habitat that helps connect backyards to Canberra's parks and bushland.



There are so many species of trees that could work for your backyard. You want to choose one that fits your space, but also your lifestyle. When choosing a tree, think about the time you have to care for it – a low-maintenance tree may be right for you. Do you need shade quickly – pick a species that grows fast! If you have allergies to pollen, consider planting a low allergen species.

Also note that all the species recommended here are pet friendly.

- National Environmental Science Programme (2018) 'Bushfires and climate change in Australia' www.nespclimate.com.au.
- 2 ACT Government (2014) 'Australian Capital Territory Climate change snapshot' www.environment.cact.gov.au

### **CANBERRA'S CLIMATE**



### FROST TOLERANCE

Canberra's annual frosts largely govern what can be grown in local gardens.

Many trees that can be grown in warmer parts of Australia will not survive Canberra's winters, so be sure to select frost-hardy species for your garden. In fact, frosts are actually essential for many trees that thrive in Canberra's conditions, contributing to spring blossoms and beautiful autumn colours.

The key to a successful Canberra garden is choosing plants that are right for our unique climatic and soil conditions.

Canberra typically has low, uneven rainfall, and experiences frosts from late April to early October. Summers can be hot and dry, especially during periods of drought, with some years of heavier rainfall.

### WATERING NEEDS

New trees will need to be watered regularly for the first two to three years while they are establishing their root system. Deep watering (e.g. once a week so that the water penetrates deep into the soil) will encourage a strong, healthy root system that increases tree stability and is less likely to damage paving. Once established, watering can be reduced. You can also reduce watering in autumn by half, and stop watering altogether if it rains throughout winter.

Installing a drip irrigation system can ensure that plants receive the required level of water throughout the year. Non-potable water can also be used to water your plants – such as collecting water from your shower in a bucket while you wait for it to heat up.

Mulching and planting groundcovers beneath the tree also helps to prevent evaporation and preserve soil moisture.

Native plants may be better suited to hot, dry weather conditions than many introduced species, and may require less watering – it's important to check what your individual trees need when you plant them.

# WHERE TO POSITION YOUR TREE



Before you head to a plant nursery, get to know your site. Think about sun movements, wind direction, soil composition, slope, as well as what sort of garden you want to create.

Do you want your trees to create shade in summer and allow sunlight through in winter? Attract birds and bees? Grow fruit with spring blossoms, or beautiful autumn leaves? How much space do you have for a tree in your front and back garden? Are there powerlines or underground services that you need to steer clear of? What other plants do you have in your garden, or are you planning to plant?

#### Sun

All plants need access to sunshine to grow and thrive. A large tree can dominate a garden, and can restrict the growth of colourful shrubs that require full sun. If you have a small garden, or a healthy understory of plants, choose a small tree to place on the north or the west side of the house. This will provide the shade you need without taking up a large amount of space.

### **Solar panels**

With more and more Canberrans choosing to install solar panels on their roof, make sure any large trees you plant don't overshadow your or your neighbours' roof.

Plant larger trees to the south or east of your house, with smaller trees to the north and west so that your roof can get maximum solar access. Trees planted on the western side of the house can help keep your home cool in summer and reduce the need for air-conditioning. Plan your site layout carefully to balance keeping your home cool in summer while allowing solar panels to get access to sunshine.

#### Wind

If you have a windy backyard, you can use trees to help buffer the winds and make the space a calmer place to enjoy.

Cold winds generally come from the south and southwest in winter. If you have the space, it's a good idea to grow plants generally taller than two metres to buffer these winds.

Hot winds can dry out your garden very quickly. Hot winds usually come from the northwest and west. You'll want to grow evergreen plants that keep their leaves all year round to reduce the impact of wind from these directions.

#### **Services**

Large trees have large root systems. In Canberra's shallow clay soils, the majority of roots will be close to the surface where they are more likely to interact with drainage pipes, paths, paving foundations, etc.

For these reasons, plant trees several metres away from the house, drains, paths or any other fixed surfaces if possible.





## TERRITORY PLAN REQUIREMENTS

As part of the ACT Government's commitment to achieve 30% tree canopy cover across Canberra's urban area by 2045, residents are required to plant canopy trees on their block as part of a new build or significant renovation.

Details of these planning requirements can be found in the **Territory Plan**. If you need more help to understand the requirements, speak to your builder, architect or expert for more advice.

Requirements under the Territory Plan group canopy trees into three size categories: small, medium and large trees. Information about the tree size categories used in the Territory Plan is shown in the table below.

Tree size	Mature height	Minimum canopy diameter	Minimum soil surface area dimension	Minimum pot size (litres)*	Minimum soil volume
Small tree	5-8m	4m	3m	45**	18m³
Medium tree	8-12m	6m	5m	75**	42m³
Large tree	>12m	8m	7m	75**	85m³

- \* Minimum pot size refers to the container size of new trees prior to planting.
- \*\* The maximum pot size for small, medium and large eucalyptus sp. trees if selected is 45 litres, with maximum height at planting of 2.5m and maximum trunk calliper of 3cm.

## Tips for successful tree planting

### HOW TO PLANT A TREE

### When you're ready to plant your trees, here's some tips to get you started:

- Dig a wide hole, and incorporate a small amount of cow manure, planting compost, or stones, coarse sand, granite and gypsum if your soil is very hard clay, with existing soil in the bottom of the hole. If you have clay soil, 'roughen' the sides of the hole for better root penetration.
- Fill the hole with water (before the plant goes in) and allow to drain.
- Trim any roots protruding from the bottom of the plant container. Gently remove the plant from the pot, holding the root ball, not the trunk of the plant.
- Place the plant in the hole and backfill with the remaining soil you dug out for the hole.
- Water in gently, up to half a bucket per plant depending on soil dampness.
- Check that roots are not exposed when watering.

  Add more soil if necessary.
- Mulch lightly around the plant. Remove weeds that may compete with the plant for water. Avoid heaping mulch against the plant as this can bring on stem rot and insect attack.
- Consider using a tree guard to give your sapling the best chance of surviving early life protecting it from animals that may eat the young plant. Use biodegradable guards if possible.



### SOILS, MULCH AND COMPOST



A healthy garden starts with great soil. Much of Canberra's soil is clayey or rocky and can be improved by adding organic materials like compost. This will provide plants with nutrients and help retain moisture in the soil. Search online for 'clay soils in Canberra' for information about clay soils.

Cover bare soil with groundcover plants or a 75mm layer of mulch to reduce evaporation (water loss) from your garden.

Compost kitchen scraps in a compost bin or a worm farm, which you can use to improve your soil and feed your plants throughout the year. Search for **'Everyday Climate Choices composting'** for more tips to set up your compost.

### WATER CAPTURE

Collect water in your garden in rainwater tanks and by diverting water into trenches, where it slowly enters the soil. Search for 'collecting rainwater Canberra' for more information about how to capture water at your place

Use permeable surfaces that allow water to slowly soak through into the soil rather than being diverted to stormwater drains. Permeable surfaces include mulch, garden beds, gravel, paving laid on gravel and sand, and specially made permeable pavers. Search online for 'sustainable permeable surfaces' for more information.

Install drip irrigation to plants to help plants thrive in hot weather. The easiest type of drip irrigation to install are long rolls of brown irrigation pipe with regular openings spaced along the pipe (30cm apart). These apply a constant amount of water to each hole and efficiently irrigate your garden.



## RECOMMENDED TREE SPECIES



Narrow-leaved sallee, Little sallee Sm	Tree Species	Height	Native	Flammability	Drought Tolerance	Pollinators
**King's Park Special" Bottlebrush	SMALL TREES					
to high Moderate  Bechtel's crab apple Bechtel's crab apple Black cherry plum  6m	Narrow-leaved sallee, Little sallee	5m	$\bigcirc$	High	Moderate	
Black cherry plum 6m 2 Very low High Wall Mireless zelkova 7m 2 Low High Wall Mireless zelkova 7m 2 Low High Wall Mireless zelkova 7m 3 Very low High Wall Mireless zelkova 7m 3 Very low High Wall Mireless zelkova High Wall Mireless zelkova 6-8m Very low High Wall Mireless zerpe myrtle 6-8m Dow High Wall Mireless Zelkova 6-8m Dow High Wall Mireless Wall Wall Wall Wall Wall Wall Wall Wa	'King's Park Special' Bottlebrush	4-6m			Moderate	
Wireless zelkova  7m	Bechtel's crab apple	6m	×	Very low	High	<b>3</b>
Chinese flowering crab apple  7m  Very low  High  Authorize crepe myrtle  6-8m  Low  High  Moderate  Moderate  Moderate  White cedar  6-8m  Low  High  Moderate  Moder	Black cherry plum	6m	×	Very low	High	<b>3</b>
Natchez crepe myrtle  6-8m  1 Low  High  1 Hig	Wireless zelkova	7m	×	Low	High	<b>7</b>
Weeping myall 6-8m	Chinese flowering crab apple	7m	×	Very low	High	<b>3</b>
Flax leaf paperbark, Snow in summer 6-8m	Natchez crepe myrtle	6-8m	×	Very low	High	
Mite cedar  MEDIUM TREES  Chinese pistachio (male form)  8-10m  Low  High  Low  Low  High  Low  Low  High  Low  High  Low  Low  High  Low  Low  High  Low  Low  Low  Low  Low  Low  Low  Lo	Weeping myall	6-8m	<b>②</b>	Low	High	<b>E</b>
MEDIUM TREES   Chinese pistachio (male form) 8-10m ★ Very low High ♣   Trident maple 10m ★ Low High ♣   Black sallee 10m ♦ High Moderate ♣   Todd Chinese elm 10m ♦ Low High ♣   Mount Buffalo sallee 10m ♦ High ♣ ♠   Black tea tree 8-12m ♦ Low High ♣   Aristocrat callery pear 11m ★ Low High ♣   Weeping snow gum 8-12m ♠ Moderate Low Moderate   Cimmaron green ash 10-12m ★ Low Moderate ♣   Kurrajong tree 10-12m ★ Low High ♣   LARGE TREES   Autumn blaze maple 12m ★ Very low Moderate ♣   Wallangarra white gum 12m ★ High Moderate ♣   Blackwood 8-15m ★ Low Low ♣   Argyle apple 10-15m Moderate High ♣ ♠   Hillgrove gum 15m Moderate High ♣ ♠   Free Fall pin oak 18m Low High ♣ ♠   Common Linden, Lime Tree 18m Low High ♣ ♠   American sweet gum 15-20m Low Moderate ♣ ♣   Indian Bean Tree 15m Very Low Moderate ♣	Flax leaf paperbark, Snow in summer	6-8m	<b>②</b>	Moderate	Moderate	<b>3</b>
Chinese pistachio (male form)  8-10m  Chinese pistachio (male form)  10m  Low  High  Moderate  10m  Low  High  Moderate  10m  Low  High  Moderate  10m  Mount Buffalo sallee  10m  High  Mount Buffalo sallee  10m  High  High  High  Mount Buffalo sallee  10m  High  Mount Buffalo sallee  10m  High  Mount Buffalo sallee  10m  High  Moderate  Low  High  Moderate  Low  Moderate  Low  High  Moderate  Low  High  Moderate  Low  High  Moderate  Low  High  Moderate  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  Moderate  Moderate	White cedar	6-8m	<b>②</b>	Low	High	<b>5</b>
Trident maple  10m	MEDIUM TREES					
Black sallee  10m  10m  Low  High  Moderate  10m  Mount Buffalo sallee  10m  High  High  Moderate  Black tea tree  8-12m  Low  High  Weeping snow gum  8-12m  Moderate  Low  High  Wallangarra white gum  12m  Wallangarra white gum  12m  High  Moderate  Wallangarra white gum  12m  High  Moderate  Low  High  Moderate  High  High  Moderate  Moderate  High  Moderate  Moderate  High  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate	Chinese pistachio (male form)	8-10m	×	Very low	High	<b>3</b>
Todd Chinese elm  10m  Low High  High  High  Aristocrat callery pear  11m  Low High  Weeping snow gum  8-12m  Moderate  Low High  Weeping snow gum  8-12m  Low  Moderate  Low  High  Low  High  Weeping snow gum  Cimmaron green ash  10-12m  Low  Moderate  Low  High  Well and aristocrat callery pear  Low  Moderate  Low  Moderate  Low  High  Well and aristocrat callery pear  Low  High  Moderate  Low  Low  Low  Moderate  High  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate	Trident maple	10m	×	Low	High	<b>7</b>
Mount Buffalo sallee  10m  High  High  Migh  Mi	Black sallee	10m	<b>②</b>	High	Moderate	<b>3</b>
Black tea tree  8-12m  Low  High  Aristocrat callery pear  11m  Low  High  Weeping snow gum  8-12m  Moderate  Low  Moderate  Low  Moderate  Low  Low  High  Low  Moderate  Low  Moderate  Low  Low  Moderate  Low  Moderate  Low  Moderate  Low  Low  Moderate  Low  Moderate  Low  Low  Low  Low  Low  Moderate  Low  Moderate  Low  Low  Low  Moderate  Moderate  Moderate  Low  High  Moderate  Low  Moderate  Low  High  Moderate  Low  Moderate  Low  High  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Low  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Moderate  Low  Moderate  Mo	Todd Chinese elm	10m	×	Low	High	<b>7</b>
Aristocrat callery pear  11m	Mount Buffalo sallee	10m		High	High	
Weeping snow gum  8-12m  Moderate  Low  Moderate  Kurrajong tree  10-12m  Low  High  LARGE TREES  Autumn blaze maple  12m  Very low  Moderate  Wallangarra white gum  12m  High  Moderate  Blackwood  8-15m  Low  Moderate  to high  High  Moderate  High  Moderate  to high  High  Moderate  High  Moderate  Low  Moderate  Low  Moderate  High  Moderate  Low  Moderate  High  Moderate  Low  High  Moderate  High  Moderate  Low  Moderate  Low  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Low  Moderate	Black tea tree	8-12m		Low	High	
Cimmaron green ash  10-12m  Low  High  LARGE TREES  Autumn blaze maple  12m  Very low  Moderate  Wallangarra white gum  12m  High  Moderate  Blackwood  8-15m  Low  Moderate  to high  High  Moderate  High  Moderate  High  Moderate  High  Moderate  Low  High  Moderate  Low  Moderate  High  Moderate  High  Moderate  Low  High  Moderate  Low  High  Moderate  High  Moderate  Low  High  Moderate  High  Moderate  Low  Moderate  Low  High  Moderate  Low  Moderate  Moderate  Low  Moderate  Moderate  Moderate  Moderate  Low  Moderate  Moderate  Moderate	Aristocrat callery pear	11m	×	Low	High	<del>2</del>
Kurrajong tree 10-12m   Low High  LARGE TREES  Autumn blaze maple 12m   Very low Moderate  Wallangarra white gum 12m   High Moderate  Blackwood 8-15m   Low Low   Low   Image: Moderate to high   High   Moderate  High Moderate   High   Image: Moderate   Moderate   Image: Moderate   Moderate   Image: Moderate   Moderate   Image: Moderate   Moderate   Moderate   Image: Moderate   Moderate   Image: Moderate   Image: Moderate   Moderate   Image: Moderate   Ima	Weeping snow gum	8-12m		Moderate	Low	
Autumn blaze maple  12m  Very low  Moderate  Wallangarra white gum  12m  High  Moderate  Low  Low  Low  Argyle apple  10-15m  Moderate to high  High  Free Fall pin oak  18m  Low  High  Common Linden, Lime Tree  18m  Low  Moderate Low  High  Moderate Tow  High  Moderate High  Moderate Tow  High  Moderate Low  High  Moderate Tow  Moderate Tow  High  Moderate Tow  Moderate Tow  High  Moderate Tow  Moderate Tow  Moderate	Cimmaron green ash	10-12m	×	Low	Moderate	<b>₹</b>
Autumn blaze maple  12m  Very low  Moderate  Wallangarra white gum  12m  High  Moderate  Low  Low  Argyle apple  10-15m  Moderate  to high  High  High  Free Fall pin oak  18m  Low  High  Common Linden, Lime Tree  18m  Low  Moderate  Low  High  Moderate  High  Moderate  High  Moderate  High  Moderate  High  Moderate  High  Moderate  Low  High  Moderate  Low  High  Moderate  Low  High  Moderate  Low  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate  Moderate	Kurrajong tree	10-12m	<b>②</b>	Low	High	<b>3</b>
Wallangarra white gum 12m ✓ High Moderate   Blackwood 8-15m ✓ Low Low   Argyle apple 10-15m ✓ Moderate to high High ✓   Hillgrove gum 15m ✓ Moderate High ✓   Free Fall pin oak 18m ✓ Low High ✓   Common Linden, Lime Tree 18m ✓ Low High ✓   American sweet gum 15-20m ✓ Low Moderate ✓   Indian Bean Tree 15m ✓ Very Low Moderate ✓	LARGE TREES					
Blackwood  8-15m  Low  Low  Moderate to high  High  High  High  Free Fall pin oak  Common Linden, Lime Tree  18m  Low  High  Low  High  American sweet gum  15m  Very Low  Moderate  Very Low  Moderate  Low  Moderate  High  Wall	Autumn blaze maple	12m	×	Very low	Moderate	<b>*</b>
Argyle apple  10-15m  Moderate to high  High  Moderate to high  High  Moderate  High  Low  High  Common Linden, Lime Tree  18m  Low  High  Moderate  High  Moderate  High  Moderate  Low  High  Moderate  Low  High  Moderate  Moderate  Moderate  Moderate  Very Low  Moderate	Wallangarra white gum	12m		High	Moderate	
Hillgrove gum  15m  Moderate  High  Free Fall pin oak  Common Linden, Lime Tree  18m  Low  High  American sweet gum  15-20m  Very Low  Moderate  Hohigh  High  Low  High  Wash  Wash	Blackwood	8-15m		Low	Low	
Free Fall pin oak  18m  Low  High  Common Linden, Lime Tree  18m  Low  High  American sweet gum  15-20m  Low  Moderate  Very Low  Moderate	Argyle apple	10-15m			High	
Common Linden, Lime Tree  18m  Low  High  American sweet gum  15-20m  Low  Moderate  Very Low  Moderate	Hillgrove gum	15m		Moderate	High	
American sweet gum  15-20m  Low  Moderate  Very Low  Moderate	Free Fall pin oak	18m	×	Low	High	<b>₹</b>
Indian Bean Tree 15m Very Low Moderate 📆	Common Linden, Lime Tree	18m	×	Low	High	<b>₹</b>
	American sweet gum	15-20m	×	Low	Moderate	<b>₹</b>
Red box gum 20m V Moderate High 👸 💋	Indian Bean Tree	15m	×	Very Low	Moderate	<b>36</b>
	Red box gum	20m	<b>②</b>	Moderate	High	



## SMALL TREES

## Recommended species:

- · Narrow-leaved sallee, Little sallee
- Callistemon 'King's Park Special'
- Bechtel's crab apple
- Black cherry plum
- Japanese elm
- · Chinese flowering crab apple
- Natchez crepe myrtle
- Weeping myall
- Flax leaf paperbark,
   Snow in summer
- White cedar

#### Other small trees to consider:

- · Tulip magnolia
- · Persian witch hazel
- · Purple leafed plum
- · Japanese flowering cherry
- · Red flowering white ironbark
- · Yellow-top mallee ash
- · Blue Mountains mallee ash
- · Baeuerlen's gum

### **QUICK REFERENCE KEY**



HIGH DROUGHT TOLERANCE



**NATIVE SPECIES** 



LOW FLAMMABILITY



WILDLIFE FRIENDLY

## NARROW-LEAVED SALLEE, LITTLE SALLEE



Î

Eucalyptus moorei



#### **SPECIES DESCRIPTION**

- · Evergreen
- · A multi-stemmed mallee or small tree
- · Smooth white or blotched bark
- · Sickle shaped, glossy leaves
- · White flowers from March to April
- · Small woody, cup-shaped fruit

#### **HEIGHT AND WIDTH**

5 metres tall by 6 metres wide

#### **SPECIES ORIGIN**

Gibraltar Range in north New South Wales, the Blue Mountains (from 1000 to 1200 metres altitude) and the Budawang Ranges (from 600 to 800 metres altitude)

- From a sub-alpine climate, well suited to Canberra's climate
- High frost tolerance and moderate drought tolerance
- Suits shallow soils. Grows on cold wet sites which suggests tolerance of poor drainage
- · Medium to long lived
- · Moderate growth rate
- · High flammability
- No major problems evident with pests and diseases, but susceptible to scale insects
- Can be pruned to form a single stemmed tree
- Produces seeds, pollen and nectar which attract bees and birds
- Provides habitat for wildlife and contributes to wildlife corridors



## 'KINGS PARK SPECIAL' BOTTLEBRUSH

Callistemon 'Kings Park Special'





### **SPECIES DESCRIPTION**

- Evergreen
- · Small rounded native tree/shrub
- · Deeply-fissured, blackish-grey bark
- Dense crimson-red bottlebrush flowers in spring and autumn
- · Fruit are woody seed capsules

### **HEIGHT AND WIDTH**

4 to 6 metres tall by 4 to 5 metres wide

### **SPECIES ORIGIN**

Selected at Kings Park and Botanic Garden in Perth, Western Australia





- · Moderate frost and drought tolerance
- Suitable for a range of soils, however performs better on deeper soils on flat to slightly sloping ground with better moisture retention
- Once established, will tolerate seasonally dry or wets sites
- · Medium longevity
- · Fast initial growth rate
- · Moderate to high flammability
- · Occasionally affected by scale insects
- · Can be rejuvenated after heavy pruning
- Produces pollen and seeds which attract bees, birds, butterflies and beetles
- Flowers are highly attractive to birds as a source of nectar
- · Provides wildlife habitat
- · Can be used under powerlines

## BECHTEL'S CRAB APPLE

Malus ioensis 'Plena'



### SPECIES DESCRIPTION

- · Deciduous
- Small to medium tree with a rounded crown
- · Greyish brown bark
- Green leaves, turning dark red and orange in autumn
- Profusion of delicate double pink flowers after leaves in mid to late October
- · A few green crab apples

### **HEIGHT AND WIDTH**

6 metres tall by 5 metres wide

### **SPECIES ORIGIN**

Central USA

- High frost tolerance to minus 10 degrees
   Celsius and high drought tolerance
- Requires good drainage; will not tolerate waterlogged soils
- · Grows well in full sun to part shade
- · Medium longevity
- · Slow growing
- · Very low flammability
- Shaping a tree when it is young can be required to create a single trunked form
- Produces significant nectar, attracting bees and birds
- · Should not be planted near nature reserves, creeks or watercourses
- Fruit drop may be a minor nuisance in paved areas

### **BLACK CHERRY PLUM**

Prunus cerasifera 'Nigra'

#### **SPECIES DESCRIPTION**

- · Deciduous
- · Small tree with rounded to vase shaped form
- · Dark brown to purple-brown bark
- · Distinctive dark purple foliage
- Attractive pink flowers before foliage, darkening to red as spring progresses
- · Small dark red-purple fruit in January

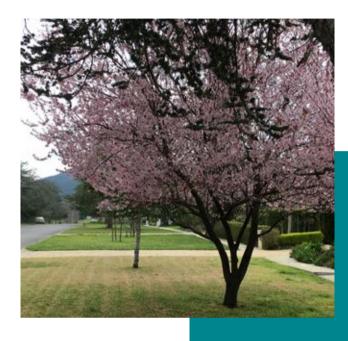
### **HEIGHT AND WIDTH**

6 metres tall by 5 metres wide

### **SPECIES ORIGIN**

Balkans, Caucasus to western Asia





- · Performs very well in Canberra
- · High frost and drought tolerance
- · Suits most soil types in Canberra
- · Flowers best in full sun
- · Medium longevity
- · Moderately fast growing
- · Very low flammability
- Can have problems with pear and cherry slug
- Requires some pruning in early years to encourage a single trunk
- Produces good nectar which attracts bees; fruit attracts birds and possums
- Should not be planted near nature reserves, creeks or watercourses
- Fruit drop may be a minor nuisance in paved areas

### **JAPANESE ELM**

Zelkova serrata 'Schmidtlow' Wireless



### **SPECIES DESCRIPTION**

- Deciduous
- Medium sized tree with broad spreading habit and low height
- Smooth grey bark with horizontal lenticels, some patches of exposed orange inner bark
- Green foliage with serrated edges, turning yellow and copper bronze in autumn
- · Inconspicuous fruit and flowers in spring

#### **HEIGHT AND WIDTH**

7 metres tall by 9 metres wide

### **SPECIES ORIGIN**

Japan, cultivar was developed by J. Schmidt Nursery in the USA

- High frost tolerance and high drought tolerance once established
- Grows in most soil types with good drainage; does not tolerate wet sites
- · Prefers full sun but will tolerate part shade
- · Medium longevity
- · Moderate to fast growth rate
- · Low flammability
- · Ideal for use under powerlines
- · Superb shade tree



## CHINESE FLOWERING CRAB APPLE

Malus spectabilis







### **SPECIES DESCRIPTION**

- · Deciduous
- · Small upright spreading tree
- · Shiny to scaly greyish-brown bark
- · Bright green glossy leaves
- Dark pink buds fading to pale pink as they come into flower in single or semi-double arrangements in spring
- · Small 2 centimetres wide sour yellow crab apples

#### **HEIGHT AND WIDTH**

7 metres tall by 5 metres wide

### **SPECIES ORIGIN**

China

- · Performs well in Canberra's climate
- High frost tolerate to minus 10 degrees Celsius and high drought tolerance
- · Suits most soils, preferring good drainage
- · Grows well in full sun to part shade
- · Medium longevity
- · Moderate growth rate
- · Very low flammability
- · Can be susceptible to woolly aphids
- Tree can be pruned when young to create a single trunk
- Produces significant nectar which attracts bees and fruit is attractive to birds
- Should not be planted near nature reserves, creeks or watercourses



### NATCHEZ CREPE MYRTLE

Lagerstroemia indica x L. fauriei 'Natchez' – and other cultivars







#### **SPECIES DESCRIPTION**

- Deciduous
- · Small open vase shaped tree
- Attractive exfoliating cinnamon coloured bark in various shades
- Green leaves turning to red or bronze in autumn
- White flowers, flowering late summer or autumn for 60 to 90 days on the new season's wood
- · Insignificant fruit

### **HEIGHT AND WIDTH**

6 to 8 metres tall by 6 metres wide

### **SPECIES ORIGIN**

Created in the US National Arboretum by crossing *L. indica* and *L. fauriei*, originally from China and Taiwan

- High frost and drought tolerance once established
- · Suits most soils from loams to clays
- · Grows best in full sun
- · Medium longevity
- · Moderate growth rate
- · Very low flammability
- Mildew resistant
- Light pruning can be undertaken when young to create a high canopy

### **WEEPING MYALL**

Acacia pendula



### **SPECIES DESCRIPTION**

- · Evergreen
- Small elliptical tree with weeping branches
- · Bark is grey, hard and fissured
- Straight to curved silvery drooping stems called phyllodes (similar to leaves)
- · Irregular flowering in winter and spring
- Pods straight or strongly curved and narrowly winged

#### **HEIGHT AND WIDTH**

6 to 8 metres tall by 5 metres wide

### **SPECIES ORIGIN**

Western New South Wales

- · High frost and drought tolerance
- Tolerates inundation for short durations, but prefers well drained soils
- Suitable for most soils including heavy clays
- Prefers full sun but will tolerate part shade
- · Medium to long lived
- · Slow to moderate growth rate
- · Low flammability
- · Develops a good form without pruning
- Produces pollen and seeds which attract bees, birds, butterflies and beetles
- · Provides habitat for birds

## FLAX LEAF PAPERBARK, SNOW IN SUMMER

Melaleuca linariifolia

### **SPECIES DESCRIPTION**

- · Evergreen
- Tall shrub or small tree with a dense broadly domed canopy
- · Beige-cream papery bark, peels in thick sheets
- · Small linear shaped leaves
- Dense clusters of honey-scented cream flowers in summer
- · Small cylindrical wooden fruit

#### **HEIGHT AND WIDTH**

6 to 8 metres tall by 7 metres wide

### **SPECIES ORIGIN**

Along water courses and swamps in New South Wales and South-East Queensland





- · Moderate frost and drought tolerant
- Adaptable to a range of soil types, growing naturally in low-lying areas
- Prefers ample moisture and will tolerate periodic flooding. Does not thrive in dry conditions so additional watering likely required in Canberra
- · Medium longevity
- · Slow to moderate growth rate
- · Moderate flammability
- Pruning may be required to enhance line of sight on street plantings
- Produces pollen, seeds and significant nectar, attracts bees and birds
- · Can be used as a screening plant or windbreak

### **WHITE CEDAR**

Melia azedarach 'Elite'









### **SPECIES DESCRIPTION**

- Deciduous
- Rounded topped tree with a broad canopy
- Dark grey-brown bark, becoming fissured with age
- Deep green glossy foliage turning yellow in autumn
- Reputed to have very low numbers of flowers or fruit, unlike the common seedling grown Melia

### **HEIGHT AND WIDTH**

6 to 8 metres tall by 9 metres wide

### SPECIES ORIGIN

Asia to central New South Wales; low/non fruiting variety of Melia discovered in a local Melbourne streetscape





- High frost tolerance and drought tolerance once established
- Tolerates a wide variety of soils, from clay to sandy loams
- · Medium to long lived
- · Moderate to fast growth rate
- · Low flammability
- Tree can be pruned when young to shape tree
- Produces nectar and pollen; attracts bees
- Should not be planted near nature reserves, creeks or watercourses
- · This variety has a low weed potential
- Berries are toxic, but the 'Elite' cultivar is a non-fruiting variety



#### Other medium trees to consider:

#### **OUICK REFERENCE KEY**



HIGH DROUGHT TOLERANCE



NATIVE SPECIES



LOW FLAMMABILITY



WILDLIFE FRIENDLY

## Recommended species:

- · Chinese pistachio (male form only)
- Trident maple
- Black sallee
- Todd Chinese elm
- Mount Buffalo sallee
- Black tea tree
- Aristocrat callery pear
- Weeping snow gum
- Cimmaron green ash
- Kurrajong tree

### **CHINESE PISTACHIO**

Pistacia chinensis (male form only)



## Use considerations

- · Excellent performance in Canberra
- High frost tolerance to minus 10 degrees Celsius and high drought tolerance
- · Grows well in most soils
- · Will grow in full sun or part shade
- · Medium longevity
- · Slow to moderate growth rate
- · Very low flammability
- · Very tolerant of pruning
- Should not be planted near creeks or watercourses nor in streets adjacent to nature reserves due to its ability to spread
- Non-fruiting (male clone) variety will not spread and is therefore not considered a weed in the ACT

### **SPECIES DESCRIPTION**

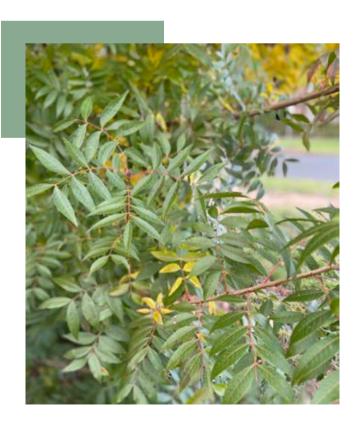
- · Deciduous
- · Medium sized, rounded tree
- Greyish-brown bark flaking to reveal pinkish-orange younger bark
- Leaves arranged in a feather-like shape, green in summer and brilliantly red, orange and yellow coloured in autumn
- Insignificant yellowish-green flowers in spring
- Peppercorn-type reddish berries on female plants in autumn; male plants are non-fruiting

### **HEIGHT AND WIDTH**

8 to 10 metres tall by 6 metres wide

### **SPECIES ORIGIN**

Central China, introduced into Western gardens in 1897



## **TRIDENT MAPLE**

Acer buergerianum

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### **SPECIES DESCRIPTION**

- Deciduous
- · Rounded to elliptical crown
- · Mottled grey-brown bark, exfoliating in plates
- Leaves in opposite pairs, three lobed and glossy green, turning yellow to red in autumn
- · Flowers in long drooping clusters in spring
- · Double-winged samara (fruit inside shell)

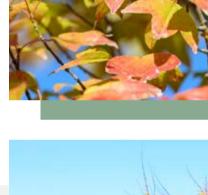
#### **HEIGHT AND WIDTH**

10 metres tall by 8 metres wide

### **SPECIES ORIGIN**

Eastern China and Taiwan

- · High frost and drought tolerance
- Tolerates clay soils but prefers well drained soils
- · Grows in full sun and part shade
- Medium longevity
- · Vigorous early growth rate, then slow growing
- · Low flammability
- · Not troubled by pests or diseases
- Tree can be pruned when young to encourage a single trunk
- Produces nectar and pollen which attract bees and other pollinators





### **BLACK SALLEE**

Eucalyptus stellulata









### **SPECIES DESCRIPTION**

- · Evergreen
- Usually a short single trunk with a rounded crown
- Dark grey bark for about half the trunk and then attractive smooth olive green for the remainder
- Broadly oval-shaped leaves with a point at each end, glossy green foliage
- Star-like clusters of 7 to 10 flowers from late autumn to spring
- · Small woody, cup-shaped fruit



10 metres tall by 10 metres wide

### **SPECIES ORIGIN**

Native species that is widespread in high tablelands and subalpine locations of New South Wales, the ACT and Victoria







- Suited to cool climates; grows well in southern Canberra
- High frost tolerance and moderate drought tolerance
- Suitable for wetter soils or low lying damp areas
- · Long lived
- · Slow to moderate growth rate
- Sheds large quantities of bark which may need clearing
- · High flammability
- Can be affected by scale insects, but fairly pest free in the Canberra area
- Produces nectar, pollen and seeds which attract bees and birds
- Local species that provides protective habitat for birds

### **TODD CHINESE ELM**

Ulmus parvifolia 'Todd' - and other cultivars







### **SPECIES DESCRIPTION**

- · Deciduous
- Broad ovate to rounded tree with wide spreading branches
- · Greyish-brown bark, exfoliating in patches to reveal brownish-orange bark
- Dark green leaves turning bronze or yellow in autumn
- · Inconspicuous flowers in spring
- · Fruit is a samara (fruit inside shell)

### **HEIGHT AND WIDTH**

10 metres tall by 11 metres wide

### **SPECIES ORIGIN**

China and Japan; cultivar developed by Fleming's Nurseries in 2001

- · High frost and drought tolerance
- Tolerates clays, loams, sandy, alkaline and acidic soils; particularly tolerant to clay soils
- · Medium longevity
- Vigorous growth when young if provided with irrigation
- · Low flammability
- Resistant to elm leaf beetle and Dutch Elm Disease
- Early pruning is required to establish a single trunk and good branch structure
- Vigorous root system with surface roots that may cause future maintenance issues, roots will sucker if damaged
- Should not be planted near nature reserves, creeks or watercourses



## MOUNT BUFFALO SALLEE

Eucalyptus mitchelliana



### **SPECIES DESCRIPTION**

- Evergreen
- · Usually has a spreading mallee habit
- · Bark is smooth and white to grey in colour
- Narrow oval-shaped leaves with a point at each end
- · Small woody, cup-shaped fruit
- · White flowers in summer

### **HEIGHT AND WIDTH**

10 metres tall by 10 metres wide

### SPECIES ORIGIN

Mount Buffalo Plateau, Victoria

- · Should perform well in Canberra
- · High frost and drought tolerance
- Grows naturally among granite outcrops in sub-alpine areas; suitable for use in cold areas
- · Grows best in well-drained soil
- Medium longevity
- · Moderate growth rate
- · High flammability
- Produces seeds and significant nectar, attracts bees and birds



### BLACK TEA TREE

Melaleuca bracteate

#### **SPECIES DESCRIPTION**

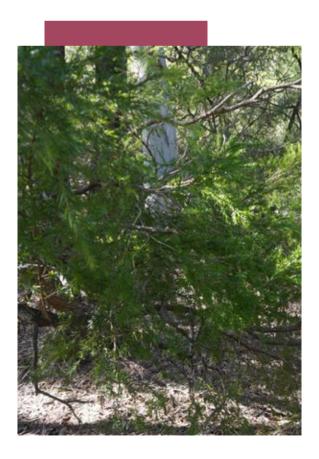
- · Evergreen
- · Medium sized tree with rounded top
- · Hard fissured bark
- · Ovate leaves up to 2 centimetres long
- · White flowers in profusion in spring
- · Fruit are small nuts

#### **HEIGHT AND WIDTH**

8 to 12 metres tall by 6 to 8 metres wide

### **SPECIES ORIGIN**

Eastern Australia





- High frost tolerance once established and high drought tolerance
- Prefers soil with good drainage, although will grow in heavy clays and tolerate waterlogged sites
- · Medium longevity
- · Moderate growth rate
- · Low flammability
- Early pruning may be required to enhance line of sight on road verge plantings
- Produces seeds and significant nectar and pollen, attracts bees and birds

### ARISTOCRAT CALLERY PEAR

Pyrus calleryana 'Aristocrat' – and other cultivars



### **SPECIES DESCRIPTION**

- · Deciduous
- Medium sized tree with firmly attached horizontal branching, forming pyramidal to oval shape
- · Greyish-brown bark
- Green leaves in summer with spectacular red and orange autumn leaf colour
- · White flowers in spring
- · Small pea-sized red-brown fruits

### **HEIGHT AND WIDTH**

11 metres tall by 7 metres wide

### **SPECIES ORIGIN**

China and Japan







- Suitable for Canberra's climate, prefers full sun
- · High frost and drought tolerance
- Suits most soils found in Canberra, including acidic and alkaline soils, and tolerates waterlogged sites
- Medium longevity
- · Fast growth rate
- · Low flammability
- Preferred cultivar due to its wider branching angles that are less likely to split in strong winds
- Suitable for growth in restricted soil spaces
- · Produces a small amount of nectar

### WEEPING SNOW GUM

Eucalyptus lacrimans

### **SPECIES DESCRIPTION**

- Evergreen
- Medium sized tree with distinctive weeping branches
- · Smooth white or grey powdery bark
- · Glossy grey-green foliage
- · White flowers from spring to early summer
- · Spherical fruit

### **HEIGHT AND WIDTH**

8 to 12 metres tall by 6 to 8 metres wide

### SPECIES ORIGIN

Adaminaby region of New South Wales

- · Grows naturally in cold wet areas
- Very high frost tolerance and low drought tolerance. May require supplementary irrigation in Canberra.
- · Grows in treeless plains with poor soils
- · Medium to long lived
- · Slow growing
- · Moderate flammability
- Susceptible to scale insects and other common eucalypt pests
- Can have a low survival rate during establishment
- Produces pollen, seeds and significant nectar which attracts bees and birds





### CIMMARON GREEN ASH

Fraxinus pennsylvanica 'Cimmzam'
Cimmaron – and other cultivars



### **SPECIES DESCRIPTION**

- Deciduous
- Pyramidal shaped tree, opening up as the tree ages
- Greyish-brown bark becoming fissured with age
- Dark green leaves changing to burgundy in autumn
- · Insignificant flowers in spring
- · Seedless variety

### **HEIGHT AND WIDTH**

10 to 12 metres tall by 8 to 10 metres wide

### **SPECIES ORIGIN**

Eastern North America





- · Suited to all areas of Canberra
- High frost tolerance and moderate drought tolerance
- · Suitable for most soils
- Medium longevity
- · Moderate growth rate
- Low flammability
- Should not be planted near nature reserves, creeks or watercourses

### **KURRAJONG TREE**

Brachychiton populneus







#### **SPECIES DESCRIPTION**

- · Evergreen although some trees may be semi-deciduous in early summer
- · Medium sized tree with spreading crown
- · Hard grey bark with shallow fissures
- · Glossy green foliage, with juvenile foliage often being tri-lobed
- · Bell-shaped flowers from autumn to summer
- · Large hard shelled seed pods

#### **HEIGHT AND WIDTH**

10 to 12 metres tall by 8 to 10 metres wide

#### **SPECIES ORIGIN**

Indigenous to most areas of the eastern states of Australia, including the ACT

- · Suited to all areas of the Canberra but performs particularly well on higher ground in light soils
- · High frost tolerance once established and high drought tolerance
- · Grows well in most soils, including gravel, shale and sand, however performs better on higher ground in light soils
- · Long lived
- · Slow growth rate
- · Low flammability
- · Produces nectar and pollen which attract bees and birds
- · Excellent farm fodder, especially in drought prone areas









# Recommended species:

- · Autumn blaze maple
- Wallangarra white gum
- Blackwood
- Argyle apple
- Hillgrove gum
- Free Fall pin oak
- Common Linden, lime tree
- American sweet gum
- · Indian bean tree
- Red box gum

#### Other large trees to consider:

- · River she-oak · Tulip tree
- · Claret ash
- · Snow gum
- · Maidenhair Tree · Scribbly gum
- Golden ash
- · Red ironbark
- · Burr oak

#### **QUICK REFERENCE KEY**



# HIGH FROST TOLERANCE



HIGH DROUGHT TOLERANCE



NATIVE SPECIES



LOW FLAMMABILITY



**WILDLIFE FRIENDLY** 

## AUTUMN BLAZE MAPLE

Acer x freemanii 'Jeffersred'

#### **SPECIES DESCRIPTION**

- · Deciduous
- Medium sized elliptical to rounded tree with straight central leader
- Dark greyish-brown bark becoming furrowed with age
- Deeply lobed, rich green leaves, intense red in early autumn
- · Insignificant red flowers in spring
- · Often does not bear fruit

#### **HEIGHT AND WIDTH**

12 metres tall by 10 metres wide

#### **SPECIES ORIGIN**

Jeffers Nursery, Ohio, 1982: the tree is a cross between Acer rubrum and Acer saccarinum





- High frost tolerance to minus 15 degrees Celsius, and moderate drought tolerance
- · Performs well in most soils, from clays to light loams
- · Grows best in full sun
- · Medium to long lived
- · Relatively fast growing depending on soil conditions
- · Very low flammability
- Can possibly be affected by a rust fungus on its leaves, but this does not appear to be a problem in Canberra
- Produces significant nectar and pollen which attract bees and other pollinators
- · Less susceptible to storm damage
- · Low potential for root damage

## WALLANGARRA WHITE GUM

Eucalyptus scoparia



#### **SPECIES DESCRIPTION**

- Evergreen
- Usually single trunked with a rounded crown
- Attractive, smooth white bark which sheds in strips
- Narrow, peppermint scented glossy green leaves
- White-cream flowers from spring to summer
- · Small ovoid woody fruit

#### **HEIGHT AND WIDTH**

12 to 15 metres tall by 12 metres wide

#### **SPECIES ORIGIN**

Restricted to a small area on the Queensland-New South Wales border

- · Very suitable for the Canberra climate
- High frost tolerance and moderate drought tolerance
- High tolerance of waterlogged soils and moderate tolerance of compacted soils
- · Medium longevity
- · Moderate to fast growth rate
- · High flammability due to its ribbon bark
- Susceptible to foliage damage by insects when young, and to borers, scale insects and fungal decay
- Requires early pruning to develop a strong central leader and sound structure
- Can shed major limbs after drought or in high wind
- Produces nectar, pollen and seeds which attract bees and birds
- · Provides food and habitat for native fauna
- Not suitable for use in bushfire prone areas due to shedding bark; not suitable for use as screening or in shelter belts



### **BLACKWOOD**

Acacia melanoxylon





#### **SPECIES DESCRIPTION**

- · Evergreen
- Medium sized, rounded elliptical tree with dense rounded crown
- $\cdot\,$  Single, stout trunk with fissured hard bark
- · Dark green phyllodes (leaf-like stems)
- $\cdot\,$  Pale cream flowers from August to October
- · Seed pods are reddish and slightly twisted

#### **HEIGHT AND WIDTH**

8 to 15 metres tall by 5 to 8 metres wide

#### **SPECIES ORIGIN**

Australia: Queensland to Tasmania including the ACT

- High frost tolerance but requires irrigation in drought
- Grows best in deeper fertile soils with higher moisture levels and good drainage
- · Grows well in full sun or light shade
- Medium longevity, but long-lived compared to other Acacia species
- · Moderate to fast growing
- · Low flammability
- Can be susceptible to stem borers, particularly if under drought stress
- · Requires a low level of early pruning to shape tree
- Produces seeds and significant pollen which attract bees, butterflies, beetles and birds.
   Provides protective habitat for urban wildlife

## **ARGYLE APPLE**

Eucalyptus cinerea

#### **SPECIES DESCRIPTION**

- · Evergreen
- Spreading crown sometimes with low branches
- · Fibrous, red, stringy bark
- · Attractive, often round, silver-blue foliage
- · White flowers in October and November
- · Small woody fruit

#### **HEIGHT AND WIDTH**

10 to 15 metres tall by 15 metres wide

#### **SPECIES ORIGIN**

Central and southern tablelands of New South Wales and a small area of north east Victoria



- Performs well in Canberra and has been planted for many years
- High frost tolerance to minus 10 degrees Celsius, high drought tolerance
- Prefers good soils with good drainage, but will grow in shallow rocky soils and tolerate poorly drained soils and wet areas
- · Medium longevity
- Moderate growth rate
- · Moderate to high flammability
- · Subject to sawfly larvae infestation
- Pruning is important in early years to avoid branching to the ground
- Produces pollen, seeds and nectar which attract bees, birds and butterflies
- Flowers are attractive to bees for honey









## **HILLGROVE GUM**

Eucalyptus michaeliana





#### **SPECIES DESCRIPTION**

- · Evergreen
- · Straight trunk and open rounded crown
- Attractive grey and white blotched bark that can resemble jigsaw puzzle pieces
- · Dark green leaves 15 to 20 centimetres long
- · White flowers which are held in unusually large clusters from August to November
- · Small conical or hemispherical woody fruit

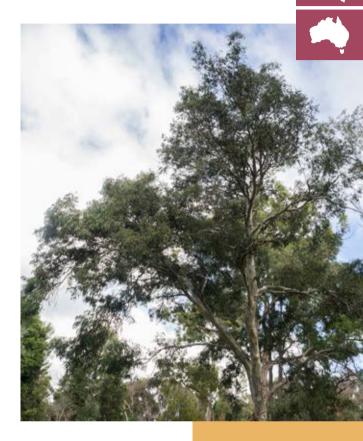
#### **HEIGHT AND WIDTH**

15 metres tall by 10 metres wide

#### **SPECIES ORIGIN**

Rare species that grows from Wyong, New South Wales to south east Queensland





- Moderate frost tolerance and high drought tolerance
- Can grow in a range of soils from clayey to sandy
- · Medium to long lived
- · Moderate growth rate
- · A flammable species
- Produces seeds and significant nectar and pollen, attracts bees and birds
- · Provides habitat for birds

### FREE FALL PIN OAK

Quercus palustris 'Free Fall'



#### SPECIES DESCRIPTION

- Deciduous
- Large tree with conical shape until mature
- Grey-brown bark, developing thin ridges and furrows with age
- Deep green summer foliage and striking red-brown autumn foliage
- Leaves drops quickly in autumn, unlike the widely used *Quercus palustris*
- Male flowers borne on drooping yellow-green catkins and female flowers borne on short spikes in spring
- · Small acorns with thin saucer-like caps

#### **HEIGHT AND WIDTH**

18 metres tall by 15 metres wide

#### **SPECIES ORIGIN**

North-eastern to mid-west USA

- · Very suitable for Canberra's climate
- · High frost and drought tolerance
- Grows well in a wide range of soil types and tolerates all drainage conditions
- · Long lived
- · Establishes well and is fast growing
- · Low flammability
- Requires pruning when young and lower branch removal as tree matures
- · Acorn drop may be a nuisance
- · Produces pollen which may cause allergies
- · Provides dense shade in summer





## COMMON LINDEN, LIME TREE

Tilia x europaea







#### **SPECIES DESCRIPTION**

- Deciduous
- · Large tree with rounded to elliptical crown
- · Finely textured grey-green bark
- · Bright green heart-shaped shaped leaves turning orange to brown in autumn
- · Yellow flowers in summer
- · Dry, nut-like fruit

#### **HEIGHT AND WIDTH**

18 metres tall by 12 metres wide

#### **SPECIES ORIGIN**

Europe

- High frost tolerance (to minus 15 degrees Celsius) and moderate drought tolerance
- Prefers soils with good drainage; will not tolerate poorly drained sites
- · Grows well in full sun and semi shade
- · Long lived
- · Medium growth rate
- · Excellent shade tree
- · Low flammability
- Produces pollen and fragrant flowers which are an excellent source of nectar for bees and birds

## AMERICAN SWEET GUM

Liquidambar styraciflua



#### **SPECIES DESCRIPTION**

- Deciduous
- · Pyramidal shaped tree
- · Corky grey-brown bark
- Star-shaped leaves with variable autumn foliage colours including burgundy-red, yellow and orange
- Flowers in spring followed by spiky 'gumball' fruit capsules, which may be a problem in high use areas

#### **HEIGHT AND WIDTH**

15 to 20 metres tall by 12 metres wide

#### **SPECIES ORIGIN**

Eastern North America through to temperate areas of Mexico, Guatemala and Honduras





- Suitable for Canberra's climate, and can withstand wind and pollution
- High frost tolerance to minus 10 degrees Celsius and moderate drought tolerance once established
- Hardy in a range of Canberra soils, however performs better on deep moist soils and is not suitable for alkaline soils
- · Long lived
- · Moderate growth rate
- · Low flammability
- Relatively pest free but can be affected by armoured scale insects
- Pruning may be required to create a single leader and canopy lifting may be needed near paths and roads
- Produces nectar and pollen which attract bees
- Will coppice (grow from a cut trunk) under some circumstances, and has a shallow, vigorous root system

## INDIAN BEAN TREE

Catalpa bignonioides



- · Deciduous
- Wide spreading tree with broad dome-shaped canopy
- · Brown to grey bark
- · Large heart-shaped leaves
- Large clusters of purple-spotted cream foxglove-like flowers in spring
- · Long, thin bean-like fruit pods

#### **HEIGHT AND WIDTH**

15 metres tall by 12 to 15 metres wide

#### **SPECIES ORIGIN**

Eastern United States of America





- · Grows well in Canberra
- High frost tolerance to minus 10 degrees
   Celsius and moderate drought tolerance
- Grows well in most soils, however prefers well-drained sites
- · Can perform better on sheltered sites
- · Long lived
- · Moderate to fast growth rate
- · Very low flammability
- Produces nectar and pollen which attract bees and butterflies



## **RED BOX GUM**

Eucalyptus polyanthemos







#### **SPECIES DESCRIPTION**

- · Evergreen
- · Round-headed canopy and a short trunk
- · Red-brown furrowed bark which may shed
- · Blue-grey coin shaped foliage
- · Flowers from October to February
- · Small hemispherical woody fruit

#### **HEIGHT AND WIDTH**

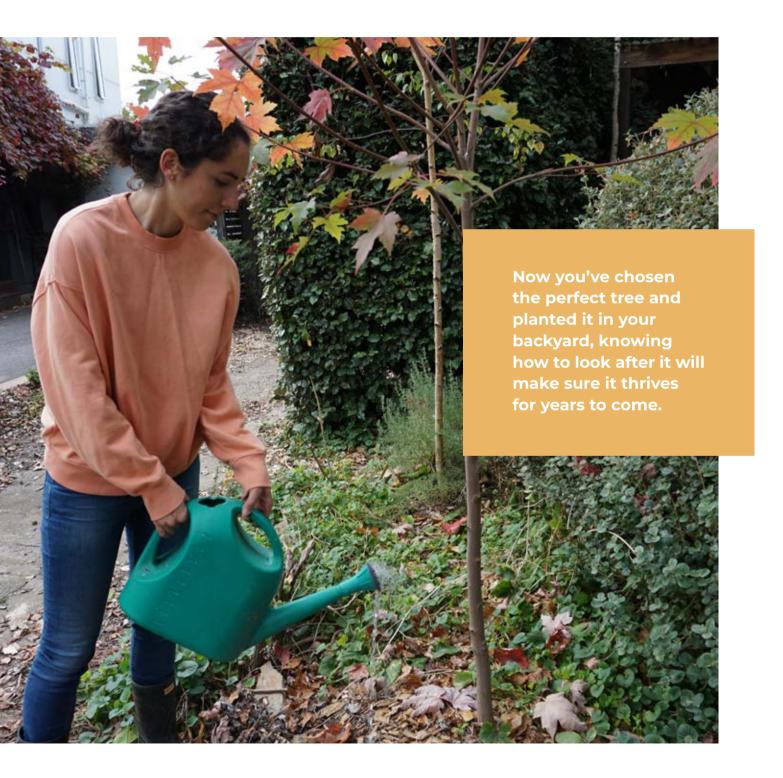
20 metres tall by 15 metres wide

#### **SPECIES ORIGIN**

Native to the ACT, Victoria and NSW

- Naturally suited to the Canberra climate, and withstands wind well
- · High frost and drought tolerance
- Performs well on gravelly free-draining sites; can tolerate exposed sites
- · Long lived
- · Slow to moderate growth rate
- Moderate flammability
- Usually free from pests and diseases, although may be affected by some scale, lerp and leaf blister sawfly insects
- May require establishment care, including staking to provide a straight tapered trunk
- Produces seeds, and a small amount of pollen, attracts birds and bees which produce honey
- Important local species that provides wildlife habitat
- · Not suited to small areas and narrow sites

## HOW TO CARE FOR YOUR TREE





## STAKING TREES

It is best not to stake plants. Staking can alter growth shape and encourage smaller root systems. If you have to stake a tree, use three stakes and soft material like an old stocking, forming a triangle around the stakes, not tied to the tree. Remove the stake as soon as the plant will stand upright on its own.

### **PRUNING**

Pruning includes cutting off old flowers, and trimming off the tips of the stems with sharp, clean tools. This is a very important practice, and should be carried out yearly, even when your plants are very young and small.

Prune in spring and summer for a bushy, healthy plant. This encourages vigour, fresh new growth for the next year, and can often increase the lifespan of your plants.

### WATERING

In clay soil, water trees deeply once every week to 10 days for the first summer, then less frequently after that unless drought conditions apply. Water early in the morning or late in the evening to reduce evaporation. The clay in soil holds moisture underneath the plant and can rot new roots, so mulch well to retain soil moisture close to the surface and water less frequently.

In winter, soil stays moist for longer due to cooler temperatures and heavy dews. Always check the soil before watering to avoid over watering and drowning your new plants. Less frequent deep soaking is better than more frequent light watering. A good soak encourages plants to develop strong, deep roots, which eventually reach the water table. Shallow, light watering keeps roots growing towards the surface, leaving them vulnerable to wind and dry periods.

### **MULCH**

Mulch is any material you use to cover soil around plants, and can include woodchips, tanbark, straw or decomposed leaves. Mulch is best bought in bulk from a local landscape supplier.

Mulch your soil surface with a 75mm deep layer of mulch – this will improve your soil and keep it cool. As mulch breaks down, it adds organics to the soil, helping to improve it. Depending on the type of mulch you use and how quickly it decomposes, you will need to top up your mulch regularly.

### **GREEN BIN**

At the request of residents, the ACT Government can provide a new a 240-litre green waste bin for collecting garden organics. The fortnightly service is available to all Canberrans, including apartments and townhouses, upon request.

Garden organics such as weeds, grass, clippings, prunings, flowers, leaves, twigs and small branches (no longer than 45cm long and a diameter of 10cm) can go in the green bin.

Search for 'Canberra green waste' for information about green bins.





## MANAGING LEAVES

Leaves are a valuable resource. They contain 50 to 80 per cent of the nutrients a plant extracts from soil and air during its growing season. To keep Canberra's waterways healthy we need to stop leaves and other organic matter from washing down our stormwater drains. Leaves should be collected for mulch, compost, placed in your green bin or can be dug into clay soil to directly improve aeration and drainage.

## NETTING AND FENCING

If you're considering using the netting for your trees, make sure to use wildlife safe netting (using a mesh that is less than 5mm). This will help prevent animal entanglements.



## USEFUL RESOURCES

## DESIGNING YOUR GARDEN



A well designed garden, considering Canberra's unique climate will complement your chosen trees.

'Planting a climate wise garden in Canberra can ensure your plants look beautiful all year round – through our four defining seasons. A climate wise garden can be designed with hotter, dryer conditions in mind by planting drought tolerant plants and thinking about how to use water efficiently. For inspiration, read the Suburban Land Agency's Climate Wise Garden Designs booklet: https://suburbanland.act.gov.au/en/sustainability

Angus Stewart and A.B. Bishop (2017) 'The Australian Native Garden' book

Victorian Country Fire Association's (2021) 'Landscaping for Bushfire: Garden Design and Plant Selection'



### **CHOOSING PLANTS**

Check out the information below, or visit your local nursery for more help choosing the right plants for your Canberra garden.

Canberra Plant Selector https://climatechoices.act.gov.au/plant-selector

Horticultural Society of Canberra (2010) 'The Canberra Gardener' book

Australian Native Plants Society Canberra Region Inc. (2021) 'Australian Plants for Canberra Region Gardens and other cool climate areas' book

The **Heritage Nursery Yarralumla's** facts sheets includes information on choosing plant species, plants for bushfire prone areas, how to attract native birds to the garden, improving clay soils.

Identify plants across Canberra using the Canberra Nature Map app or website: https://canberra.naturemapr.org/

## NGUNNAWAL PLANT USE GUIDE

The Ngunnawal Plant Use guide provides information on the native plants of the ACT region and their many Ngunnawal uses.

The ACT's Traditional Owners, the Ngunnawal people, used and continue to use the plant resources of this region for food, medicine, tools and weapons, fire, ceremonial purposes, water, fibre, dye and paint.

This 96-page spiral-bound field guide includes:

- an introduction to Ngunnawal history and natural resource use
- · a guide to using the book
- descriptions and photos of 69 plant species, including their Ngunnawal use, distribution, and method of propagation

 further reading and references





## ATTRACTING WILDLIFE

Certain plants will help attract local birds, bees, butterflies and lizards into your backyard!

AB Bishop (2018) 'Habitat: A practical guide to creating a wildlife-friendly Australian garden' book

#### Bird attracting species for Canberra.

Search online for 'Canberra birds recommended plants'

The ACT Government's Urban Planting Calendar helps Canberrans plan their gardens to ensure that there is food for bees, birds and insects all year round. Search online for 'Canberra Urban Planting Calendar'.

Doug Purdie (2016) 'The Bee Friendly Garden' book

## USEFUL RESOURCES



## CHOOSING TREES

If you're looking for extra advice about the best trees for Canberra, including suitable species, tree protection and the ACT Tree Register, visit the Transport Canberra, City Services (TCCS) website: https://www.cityservices.act.gov.au/trees-and-nature/trees

Trees and Plants: https://www.climatechoices.act.gov.au/water-and-plants/trees-and-plants

Declared weeds – trees you should avoid planting in the ACT – can be found in the Pest Plants and Animals (Pest Plants) Declaration 2015: https://www.legislation.act.gov.au/di/2015-59

## PEST MANAGEMENT

Dealing with harmful insects and pests can be challenging, but there is lots of advice available online.

Integrated Pest Management, Canberra Organic Growers Society: https://cogs.asn.au/integrated-pest-management/

Mary Horsfall (2014) 'Australian Garden Rescue: Restoring a damaged garden' book





### **COMPOST**

Composting is a great way to reduce waste generated at home and improve your soil quality.

Composting: https://www.climatechoices.act.gov.au/recycling-and-waste/food-and-garden-waste/composting/

### **IRRIGATION**

Setting up efficient irrigation means you can have a beautiful and sustainable garden in all seasons.

Water and your garden: https://www.climatechoices.act.gov.au/water-and-plants/water-and-your-garden/

Garden Tool: https://climatechoices.act.gov.au/garden-tool





## NATURE STRIPS

This guide shows you what you can grow and where to make the best use of your nature strip.

Search online for: 'Your nature strip – guidelines for use of residential nature strips'

## **MY GARDEN**

Plant name	Page Ref





Brought to you by the Sustainability team at the Suburban Land Agency

