TOOWOOMBA REGION KOALA HABITAT PROJECT

ADDITIONAL RESOURCES PLANTING KOALA TREES

TOOWOOMBA REGION KOALA HABITAT PROJECT

WWW.TOOWOOMBAKOALAPROJECT.ORG

Another community project from Save Mt Lofty Inc – Toowoomba Q an urban based Landcare group - www.savemtloftyinc.org ABN 56 569 592 142

ACKNOWLEDGMENT OF COUNTRY

Toowoomba Region Koala Habitat Project & Save Mt Lofty Inc acknowledge the traditional custodians of the land on which our project takes us; the Giabal, Jagera and Western Wakka Wakka people. We respect their elders past, present and emerging, for their care of koalas and their habitat over millenia as we now seek to enhance and renew koala habitat across our Region.

This document adds to our printed booklet -

SO YOU'RE THINKING OF PLANTING KOALA TREES?

This ADDITIONAL RESOURCES document builds on our discussions with local landholders, steeped in a history of successful plantings, as well as a range of local consultant ecologists and community groups.

If you have further local knowledge to contribute please do not hesitate to contact our project via our website

toowoombakoalaproject.org

Remember, there is always more than one way to beat an egg.

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ADDITIONAL LOCAL KOALA TREE SPECIES LIST 1

KOALA TREE SPECIES	DESCRIPTION	SOILS & LOCATIONS	ZONES
EUCALYPTUS ANDREWSII NEW ENGLAND BLACKBUTT	Fine fibrous bark on tall trunk, smooth white branches, curved bright green leaves. 20-40 metres in height	Grows in well-drained soils, ranging from moderately deep loamy sands of good fertility to shallow stony soils on rises.	**5, 7**
EUCALYPTUS BLAKELYI BLAKELY'S RED GUM	Stout trunk with grey smooth bark shed in large patches, long dark green to grey leaves - 15-25 metres in height	Prefers well-drained soils, typically found on alluvial flats. It can grow in loamy to heavier soils with poorer properties.	**5, 7**
EUCALYPTUS CAMPANULATA NEW ENGLAND ASH	Finely fibrous greyish bark, smooth whiteish bark on thinner branches, curved adult leaves, 25-45 metres in height	Grows well in deep, fertile, well-drained loams and clay loams. It is often found in higher rainfall areas with rich soils	**2**
EUCALYPTUS CHLOROCLADA BARADINE GUM	Small to medium white trunk with flaky grey to brown bark, smooth above, 15-20 metres in height	Sandy loams and clay loams. It is adapted to a range of soil types but prefers those with good drainage	**5, 6, 7**
EUCALYPTUS CONICA WHITE BOX	Grey box type bark, often tesselated - 15-20m in height	Typically grows in clay soils and is often found in areas with moderate to heavy textures. It is adapted to regions with good subsoil drainage	**1, 2, 3, 5, 7**
EUCALYPTUS COOLABAH COOLABAH	Partly rough bark on trunk extending to largest limbs, box-type, leaves dull, green to blue or grey-green - 10m in height	Prefers heavy clay soils and is typically found along watercourses where soils are fertile and have high moisture content	**4**
EUCALYPTUS DEALBATA TUMBLEDOWN GUM	Misshapen short irregular trunk to open crown, white waxy blooms on branchlets, 5-15 metres in height	Sandy soils and rocky outcrops. This species is adapted to arid and semi-arid environments, often growing in poor, shallow soils	**5, 6, 7**

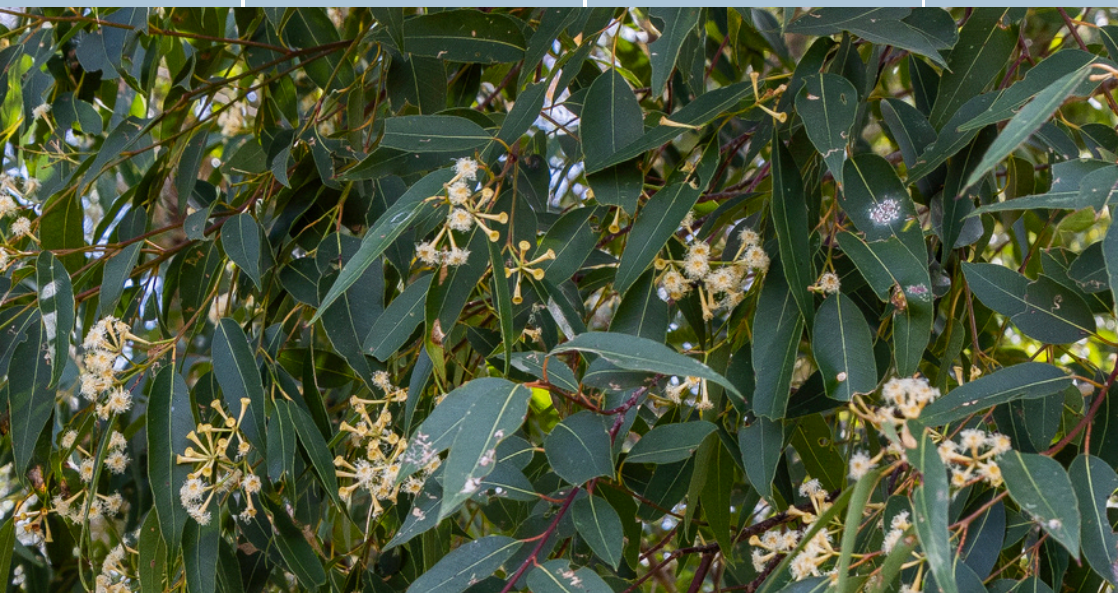
Here is our further list of 31 eucalypt species - in addition to the 7 species listed in our printed resource.

These additional species have also been recorded as being used by our koalas as feed trees. You should look to this on-line resource where you learn of koalas being sighted in particular trees around your property. You should also take local advice from neighbours, your local nursery and planting experts from your district recommended by your local landcare group.

You should tag each tree or keep a note what species you have planted and where so you can monitor how each species develops and which tree species your visiting koalas prefer.

ADDITIONAL LOCAL KOALA TREE SPECIES LIST 2

KOALA TREE SPECIES	DESCRIPTION	SOILS & LOCATIONS	ZONES
EUCALYPTUS DECORTICANS GUM-TOP IRONBARK	Dark grey to black bark on trunk, smooth white upper branches, curved adult leaves - 20-40 metres in height	Prefers well-drained soils, including sandy loams and clay loams. It thrives in areas with moderate fertility and good drainage	**3, 5, 7**
EUCALYPTUS EUGENIOIDES THIN LEAVED SPRINGBARK	White wood trunks, grey to brown bark shed in long strips, dark green glossy leaves – 30 metres in height	Prefers well-drained sandy loams and clay loams - shale derived fertile soils.	**2**
EUCALYPTUS EXSERTA SHE BLOODWOOD	Smooth bark shed in patches, retains bark to smaller branches, long stringy leaves - 10-25m in height	Well-drained soils, including sandy loams and clay loams. It is adapted to regions with moderate fertility	**5, 7**
EUCALYPTUS FIBROSA RED IRONBARK	flaky dark brown to black bark with reddish gum, dark green leaves - 20-30 metres in height	well-drained soils, sandy loams and clay loams. Moderate soil fertility and good drainage	**3, 5, 7**
EUCALYPTUS LAEVOPINEA SILVER TOP STRINGYBARK	Thick stringy bark with grey bark up to large branches, leaves glossy green to grey-green - 30-40m in height	wwell-drained loamy soils and sandy loams. It is commonly found in high-rainfall areas with fertile soils	**2, 3**
EUCALYPTUS LARGIFLORENS RIVER BLACK BOX	Short truNk with wide spreading branches, rough dark grey to black bark, often curled greyish green leaves - 25 metres height	PHeavy clay soils, typically found along riverbanks. Thrives in soils that are seasonally waterlogged and have high moisture content	**4**
EUCALYPTUS LONGIROSTRATA GREY GUM	Smooth greyish bark shed in strips , glossy green leaves 20-30 metres in height	Grows in well-drained soils, including sandy loams and clay loams. It is adapted to regions with moderate fertility and good drainage	**1, 2**



ADDITIONAL LOCAL KOALA TREE SPECIES LIST 3

KOALA TREE SPECIES	DESCRIPTION	SOILS & LOCATIONS	ZONES
EUCALYPTUS MELANOPHLOIA SILVER LEAVED IRONBARK	Black furrowed bark, grey to silvery blue leaves – 20-40 metres in height	Prefers well-drained soils, often found in sandy loams and clay loams.	**1, 2**
EUCALYPTUS MELLIODORA YELLOW BOX	Straight trunk rounded crown with drooping branchlets, grey to orange bark, upper limbs smooth & grey - 10-30 metres height	Prefers well-drained soils, often found in loamy soils with moderate to high fertility.	**1, 2, 3, 5, 6, 7**
EUCALYPTUS MICROCORYS TALLOWWOOD	Rough brown to red tessellated bark, tallow- like smell when crushed. Trunk small pores under bark – 40 metres in height	Thrives in deep, fertile loamy soils and clay loams. It is typically found in high-rainfall areas with rich soils	**2**
EUCALYPTUS MONTIVAGA NEW ENGLAND BLACKBUTT	Grey to grey-brown, rough bark trunk up to large branches - 35-45m in height	Well-drained loamy soils and sandy loams. Found in higher rainfall areas with fertile soils	**1, 2, 3**
EUCALYPTUS ORGARDOPHILA MOUNTAIN COOLIBAH	Bending trunk with box bark on trunk before first branches - 15-20m in height	Grows in well-drained soils, including sandy and clay loams. It is adapted to areas with moderate fertility	**1, 3**
EUCALYPTUS PILULARIS BLACKBUTT	Long straight trunk to spreading crown, grey bark shedding in strips leaving yellowish grey surface with scribbly insect markings - 40-65m in height	Thrives in deep, fertile loamy soils and clay loams. It is typically found in high-rainfall areas with rich soils	**2**
EUCALYPTUS PROPINQUA GREY GUM	rough, fibrous bark peeling from orange-brown trunk, and glossy green leaves - 20-30m in height	Prefers well-drained clay loams and sandy loams soils of moderate fertility.	**2**

ADDITIONAL LOCAL KOALA TREE SPECIES LIST 4

KOALA TREE SPECIES	DESCRIPTION	SOILS & LOCATIONS	ZONES
EUCALYPTUS SALIGNA SYDNEY BLUE GUM	Shaft trunk sparse crown, Grey bark peeling in long strips, rough and brown at base, shiny dark green leaves - 20-55m in height	Grows well in deep, fertile loamy soils and clay loams. This species is typically found in high-rainfall areas with rich soils	**2**
EUCALYPTUS SIDEROXYLON RED IRONBARK	Crooked and dividing trunk near base, deeply furrowed brown to black bark with red kino, long thin greyish-blue leaves - 10-30m in height	Thrives in well-drained soils, including sandy loams and clay loams. It is adapted to regions with moderate fertility	**1, 3, 5, 7**
EUCALYPTUS THOZETIANA THOZET'S BOX	Smooth light bark shed in small flakes other than base, open crown, long ascending branches, long thin dark green leaves - 10-25m height	Prefers well-drained soils, including sandy and clay loams. It is adapted to regions with moderate fertility	**3, 5, 6**
EUCALYPTUS WOOLLSINANA NARROW LEAFED GREY BOX	Grey rough bark over the trunk extending to base of branches and very narrow glossy green adult leaves - 20-25m in height	Typically prefers to grow in well-drained loamy or sandy soils with moderate fertility.	**5, 6, 7**
EUCALYPTUS YOUMANII YOUMAN'S STRINGYBARK	Grey to grey-brown stringy bark tree with a grey to green crown - 15-20m in height	Typically prefers well-drained soils, including sandy loams and clay loams, thriving in areas with low soil fertility	**6**

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FURTHER LOCAL KOALA TREE SPECIES LIST 5

KOALA TREE SPECIES	DESCRIPTION	SOILS & LOCATIONS	ZONES
EUCALYPTUS INFERA DURIKAI MALLEE	Small trunk with smooth, shiny grey to copper-coloured bark and glossy green egg shaped leaves - to 10 metres	Near watercourses along the Herries Range in the Durikai State Forest west of Warwick	**7**
EUCALYPTUS MOLUCANNA GUM-TOPPED GREY BOX	Rough fibrous bark trunk to smooth whitish bark above, young egg shaped leaves, to 30 metres in height	Thrives in red soils away from edge of our escarpment, but otherwise on coastal plains	**1, 2, 3,**
EUCALYPTUS RESINIFERA **RED MAHOGANY**	Rough fibrous bark trunk & branches- lance shaped adult leaves - to 45m in height	Prefers well-drained sandy soils, around Crows Nest and Cooby Dam aread	**1, 2**
EUCALYPTUS SIDEROPHLOIA GREY IRONBARK	Medium to tall , hard, dark, furrowed bark on trunk and larger branches - 20-45 metres in height	Chocolate soils of eastern slopes of Great Dividing Range from Cabarlah to Yarraman	**2**
EUCALYPTUS VIMINALIS MANNA, WHITE OR RIBBON GUM	Rough bark base to smooth powdery bark on trunk - large tree 50-90 metres in height	Creek banks close to range rainforest - Goomburra NP and Gowrie Creek Toowoomba	**1**
			2

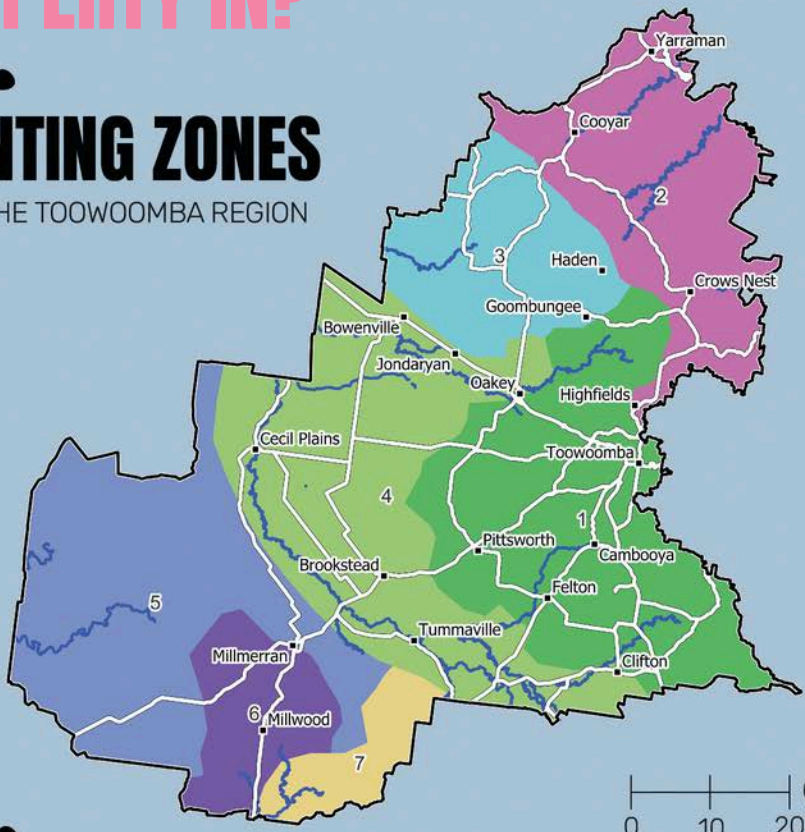
WHICH PLANTING ZONE IS MY PROPERTY IN?

You should start by checking your planting zone from our district map of the Toowoomba Region.

You will see we have divided our region into 7 zones for planting koala trees - based on climate, soils and existing vegetation.

PLANTING ZONES

WITHIN THE TOOWOOMBA REGION



LEGEND

- TOOWOOMBA REGION
- MAJOR WATERCOURSES
- MAJOR ROADS
- TOWNS

TOOWOOMBA REGION ZONES

- 1
- 2
- 3
- 4
- 5
- 6
- 7

PRUNING KOALA TREES

Pruning eucalyptus trees is essential for developing a strong structure, promoting healthy growth, and ensuring the longevity of the tree. This guide will walk you through the process, starting from seedlings and progressing to more mature stages.

Seedling Preparation

While eucalyptus seedlings generally don't require extensive preparation, mature seedlings can benefit from selective pruning to encourage robust growth.

Selective Pruning:

o Leader Shoot: Prune seedlings to ensure only one leader shoot is present. This dominant stem should be the tallest and strongest to guide the tree's upward growth.

o Side Branches: Retain only 1-2 side branches, removing all others, especially those that are low. This helps allocate more energy to the leader shoot.

o Avoid Pruning Weak Plants: Do not prune seedlings that appear weak or are not sufficiently mature, as this can stress the plant further.

Objective: Establish a single dominant stem to promote straight, vigorous growth by removing competing side stems.

General Pruning Guidelines

Pruning eucalyptus trees involves several key practices to maintain their health and structure:

1. Remove Competing Leaders: Eliminate any additional leader shoots to maintain a single dominant stem.
2. Eliminate Malformed Branches: Remove branches that are misshapen or grow from the same spot on the trunk.
3. Address Rubbing/Crossing Branches: Prune branches that rub against each other or cross over to prevent damage.

PRUNING KOALA TREES cont'd 2

4. Remove & Water Shoots: These are branches that grow entirely vertically and can divert energy from the main structure.
5. Suckers and Low Branches: Remove suckers (shoots growing from the base) and other low-lying branches.
6. Branches with Narrow Angle Attachment: Prune branches that attach at sharp angles to reduce the risk of breakage.
7. Girdling Roots: On young trees, remove any roots that encircle the trunk, which can constrict growth.
8. Broken and Diseased Branches: Remove any branches that are damaged or show signs of disease to prevent spread.
9. Branches Growing Towards the Centre: Prune branches that grow inward toward the trunk to improve airflow and light penetration.
10. Crowded Branches: Thin out dense areas to reduce competition and promote healthier growth.

Why Prune Young Trees?

Pruning young eucalyptus trees is crucial for several reasons:

Prevent Future Structural Issues: Early pruning helps avoid problems like weak branch structures that can lead to breakage or dieback.

Desired Shape and Form: Shape the tree according to aesthetic or practical needs from an early stage.

Establish Beneficial Branch Structure: Develop a branch system that supports healthy growth and structural integrity.

Important Considerations:

Initial Pruning: Newly planted trees should primarily be pruned to remove broken or damaged branches rather than to compensate for root loss.

Sustenance: Young trees rely on low temporary branches for sustenance. These should be kept short to avoid competition with permanent branches and provide trunk protection.

Gradual Removal: As the tree grows taller, gradually remove low temporary branches over several years before they reach one inch in diameter.

PRUNING KOALA TREES cont'd 3

Pruning Techniques and Best Practices

Limit Removal: Never remove more than one-fourth of a tree's branches at one time to avoid undue stress.

Small Cuts Over Large Cuts: Prefer making several small pruning cuts rather than a single large cut to minimize damage.

Avoid Cutting Large Branches: Whenever possible, refrain from cutting large branches to maintain the tree's structure and health.

Dominant Leader Management

Maintaining a single dominant leader is vital for the tree's vertical growth and stability.

Single Leader Stem: Ensure that only the tallest, strongest branch serves as the main stem.

Avoid Secondary Leaders: Prevent secondary branches from overtaking the leader by regularly pruning or bending them downward to slow their growth.

Co-Dominant Stems: If the tree has co-dominant stems (double leaders),
remove one to prevent structural weaknesses. Retain the straightest and strongest stem.

Branch Structure

Proper branch structure ensures a balanced and healthy tree.

Secondary Branches: Allow secondary branches to develop along the larger branches, promoting a well-distributed canopy.

Edge Branches: Focus on removing branches from the edges of the tree tomaintain an open center and enhance light penetration.

PRUNING KOALA TREES cont'd 4

Branch Attachment and Crotch Management

The angle at which branches attach to the trunk, known as the crotch, is critical for branch strength and longevity.

Narrow Angle Attachments: Branches that form tight crotches can weaken over time as the bark becomes enclosed, leading to branch failure or dieback.

Widening Crotch Angles:

o Removal: Prune branches with narrow crotches to prevent future issues.

o Stretching: Use spreaders (wire or wood) or weights to gently bend branches into wider angles while they are still young and flexible.

o Temporary Aids: Spreaders or weights should be removed after a season to allow natural growth patterns to take over.

Application: These techniques, traditionally used for fruit trees, are equally effective for eucalyptus trees in promoting healthy branch angles and reducing the risk of
structural weaknesses.

KOALA FODDER PLANTATION METHODS

Feed for koalas in care is in high demand from wildlife carers across the region. Harvesting feed from roadsides and other publicly accessible land is problematic as these trees can often be treated with herbicides and pesticides, which negatively affect the koalas' health. Having a secure selection of koala feed trees from which to harvest is vital for the ongoing care of injured or orphaned koalas.

Before You Start

Before beginning to develop a koala fodder plantation, you should address the following:

1. Identify an Accessible Area: Choose a section of your property that can be easily accessed by wildlife carers without the need to contact you directly.
2. Determine the Size: The area can be as small as 2 meters wide by 5 meters long, accommodating approximately six trees placed 1.5 to 2 meters apart.

are

Coppicing and Pollarding Method

To establish a sustainable koala fodder plantation, the coppicing and pollarding method is recommended. This technique encourages the growth of koala-friendly trees in a manageable and renewable way.

1. **Initial Growth Phase** (Years 1-2):
   - o Plant Selection: Choose koala-friendly tree species suitable for coppicing, such as Eucalyptus.
   - o Growth Monitoring: Allow the trees to grow until they reach a stem diameter of approximately 6-10 cm.
2. **Coppicing** (Spring/Early Summer of Year 2):
   - o Cutting Back: Once the trees have achieved the desired stem diameter, coppice them by cutting back to about 15 cm above ground level.
   - o Encouraging Reshoots: This cut stimulates the trees to re-shoot, promoting a shrubby growth habit that is ideal for koala feeding.
3. **Reshoot and Shrub Development** (Years 2-4):
   - o Growth Monitoring: Allow the reshoots to develop until the branches reach a height of 1.5 to 2 meters. This typically takes an additional 1-2 years.

4. **Pollarding** (Year 4):
o Height Reduction: Once the branches have matured, pollard the trees by cutting them back to a height of approximately 1 meter.
o Utilization: The pollarded trees are now ready to be utilized by wildlife carers as a reliable source of koala fodder.
5. **Ongoing Maintenance:**
o Regular Pollarding: Repeat the pollarding process every few years to ensure a continuous supply of fresh foliage for koalas.
o Health Monitoring: Regularly inspect the trees for signs of disease or pest infestation and manage accordingly to maintain a healthy plantation.

FIRST, TALK TO YOUR LOCAL KOALA CARER TO FIND OUT WHAT SPECIES FEED THEY NEED ...

Bushfire Considerations

Planting trees to create koala-friendly habitats is a wonderful initiative that supports biodiversity and helps preserve these iconic animals. However, you don't want to inadvertently increase your risk of bushfires on your property. Here are some things to consider to balance koala conservation with effective bushfire risk management:

Maintain Clear Access and Egress Routes

Ensure that access and egress are maintained throughout the property, especially along primary escape routes. Clear pathways are essential for the safe evacuation of people and the movement of emergency services during a bushfire. Regularly inspect these routes to remove overgrown vegetation, fallen trees, or other obstructions.

Example: Keep driveways and roads free from overhanging branches and ensure gates are wide enough for firefighting vehicles.

Implement Strategic Firebreaks

Separate larger and denser patches of vegetation with a minimum 20-meter-wide firebreak. Firebreaks act as barriers that slow down or stop the spread of fire by removing combustible material.

Example: Create a cleared strip of land between dense koala habitats and buildings to serve as both a firebreak and an access route for emergency services.

Manage Vegetation Patch Sizes

The risk of bushfires increases significantly in patches of vegetation larger than 0.5 hectares (approximately 1.24 acres) or in linear tracts wider than 100 meters. To reduce this risk, consider planting in patches no larger than 0.5 hectares and separate them with firebreaks of at least 20 meters wide. This approach limits the amount of continuous fuel available to a fire, thereby reducing its potential spread and intensity.

Example: Design your koala habitat by creating multiple smaller patches of trees, each up to 0.5 hectares in size, separated by 20-meter-wide firebreaks. This not only minimizes bushfire risk but also provides safe corridors for koalas to move between habitats.

Adjust Tree Spacing on Slopes

When planting on moderate to steep slopes, increase the spacing between trees. Fire tends to travel uphill faster due to the preheating of vegetation above the fire. Reducing planting density on slopes can decrease the potential fire spread and intensity.

Example: On a slope greater than 15 degrees, space trees at least 5 meters apart instead of the standard 3 meters on flat terrain.

Establish Protection Zones Around Infrastructure

Maintain a "protection zone" around buildings and other infrastructure. This zone should be actively managed to reduce fire risk by:

Removing Leafy and Woody Debris: Regularly clear fallen leaves, twigs, and bark that can fuel fires.

Thinning Vegetation: Reduce the density of shrubs and underbrush.

Pruning Trees: Remove lower branches to prevent ground fires from climbing into the canopy (reducing "ladder fuels").

Example: Keep a 30-meter radius around a home free of heavy vegetation and flammable materials.

Avoid Creating Ladder Fuels

Arrange plantings to prevent fires from easily moving from ground vegetation into tree canopies. This involves:

Vertical Separation: Ensure there is sufficient space between the ground vegetation and the lower branches of trees.

Horizontal Separation: Avoid dense clusters of shrubs under trees.

Example: Maintain at least a 2-meter gap between the top of any shrubs and the lower branches of trees.

Regular Maintenance and Fuel Load Management

Implement ongoing maintenance practices to reduce fuel loads:

Controlled Burns: Where appropriate and safe, conduct low-intensity controlled burns to reduce accumulated fuels. Ensure to follow relevant Vegetation laws and local fire regulations.

Mechanical Removal: Use tools and machinery to remove excess vegetation and debris.

Monitoring Fuel Loads: Regularly assess the amount of combustible material and take action when it becomes excessive.

Example: Schedule seasonal clean-ups to remove dead plant matter before the peak fire season.

Conclusion

By thoughtfully integrating these bushfire considerations into your koala-friendly tree planting initiatives, you can create a habitat that supports wildlife while enhancing the safety of your property and community. Balancing ecological goals with practical fire management ensures the long-term success and sustainability of your efforts.

The Chronicle

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TOOWOOMBA, Saturday, October 26, 2002 First with local news Office phone: 4690 9300; Classifieds direct: 13 61 81 $1.40 GST incl.

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The Big Dry
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Mayor puts city evacuation plan in place

Get ready to leave home

By THEA ZUPP

An evacuation plan has been put in place by Toowoomba's emergency services and Toowoomba City Council as bushfires continue to threaten the city.

Mayor Cr Dianne Thorley said a meeting last night had finalised plans for mass evacuations if the need arose over the weekend in the face of forecast worsening weather conditions.

Hundreds of families across the city were warned late yesterday afternoon to be ready for evacuation if it became necessary.

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INSIDE

IN THE THICK OF IT: Firefighters backburn at the end of Stuart Street yesterday afternoon to prevent a bushfire spreading to homes in the Harlaston area. Other backburning operations were carried out across the city. More reports, pictures — Pages 2, 3, 6 and 7

Picture by SCOTT FLETCHER

TARMARA SMITH

49-year-old will face Tarmara murder trial

A 49-year-old man accused of Tarmara Smith's murder is to face a committal hearing next year.

Paul Thomas Templeton appeared briefly in Toowoomba Magistrates Court yesterday.

His solicitor, Mr David Burns of Legal Aid Queensland, told the court he estimated the committal hearing, with cross-examination, would take about three days.

However, Mr Burns said he expected the initial number of 95 witnesses to be reduced considerably by that time.

Magistrate Mr Bruce Scheiboneck set the matter down for committal hearing from March 10 next year and remanded the defendant in custody.

Templeton has been held in custody since his arrest at a Russell Street boarding house on August 15.

He has not been required to enter a plea to the charge of murder.

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Koala Tree Planting Questions and Answers

Why is planting koala trees important in the Toowoomba Region?

The Toowoomba Region has experienced significant clearing since European colonization, and koala habitat continues to be threatened by urban expansion and industrialization. This has resulted in massive declines in koala numbers. To reverse this decline and ensure koalas are safeguarded from extinction, we must re-establish lost habitat and enhance the current habitat.

What are the main threats to koalas in the Toowoomba Region?

The main threats to koalas in the Toowoomba Region are habitat loss and fragmentation, disease, vehicle strikes, and dog attacks.
How does habitat fragmentation affect koala populations?
Habitat fragmentation occurs when koala habitats are split into smaller patches, which restricts koalas' ability to move freely and access necessary resources. Smaller habitat patches can limit the availability of food and shelter, making it difficult for koalas to survive, leading to reduced breeding success and an increased risk of local extinctions.
What is the Toowoomba Region Koala Count, and how can I participate?
The Toowoomba Region Koala Count is an annual event conducted every November by Save Mt Lofty Inc., in which community members act as citizen scientists to record koala observations across the region. This initiative helps gather important data about local koala populations. You can participate by joining in November and reporting your sightings using platforms such as iNaturalist or the QWildlife app.

Can I plant koala trees if my property is not near existing koala habitat?

Yes, you can plant koala trees even if your property is not near existing koala habitat. Plantings in new areas can provide food and shelter, potentially creating stepping stones that allow koalas to move between otherwise isolated patches. These new plantings can help expand the overall habitat network, supporting long-term koala population recovery.

Why are smaller patches of koala habitat not mapped by the government?

Mapping of koala habitat in the Toowoomba Region has limitations, as only patches of ~2.5-5 ha hectares are recognized. Smaller or linear patches are not officially mapped, leading to gaps in understanding of the remaining koala habitat. This mapping gap is partly because councils in other parts of Queensland conduct more regional surveys and research, whereas in the Toowoomba Region, such work largely relies on local landcare groups.

How can I report a koala sighting in the Toowoomba Region?

You can report a koala sighting in the Toowoomba Region using the National Geographic's iNaturalist platform or the Queensland Government's QWildlife app. Reporting sightings helps build a better understanding of koala populations in the region, which is crucial for conservation efforts.

What should I do if I see a sick or injured koala?

If you see a sick or injured koala, contact local wildlife rescue groups for assistance. Local rescue groups in the Toowoomba Region are dedicated to supporting injured or sick koalas, though they have limited capacity to assess overall koala population health.

Why do koalas need such a large range of habitat?

Koalas require an extensive range of habitat to support their needs for food, space, and breeding. Depending on the quality of the trees and local conditions like rainfall and soil, a koala's home range can span from 3-4 to 10-20 square kilometers. This variety is necessary to ensure that they have year-round access to suitable food and resources.

How has land clearing impacted koala populations in the Toowoomba Region?

Land clearing for agriculture and urban development over the last 150 years has significantly impacted koala populations. Grain farming and beef cattle grazing have replaced large areas of koala habitat, and urban expansion around suburbs like Kearney Springs and Highfields has led to further habitat loss and fragmentation, making it challenging for koalas to find food, shelter, and suitable mates.

What are koala food trees, and why are they important?

Koala food trees are specific eucalyptus species that koalas feed on, providing essential nutrition. Only a small number of eucalyptus species are suitable for koalas' diet, with preferences varying by region. Planting a mix of these food trees is crucial to ensure koalas have a reliable source of nutrition throughout the year, which supports their health and survival.

What are the benefits of planting koala trees for both wildlife and landholders?

Planting koala trees benefits wildlife by providing food, shelter, and connectivity between fragmented habitats, which is crucial for koala populations. For landholders, these plantings offer environmental and practical benefits, such as improved biodiversity, enhanced aesthetics, increased shade, windbreaks for livestock, and potential long-term increases in property value. Additionally, habitat trees can attract local wildlife, creating a more diverse and vibrant landscape.

How do planting koala trees help with maintaining connectivity between habitat patches?

Planting koala trees can help maintain or create connectivity between habitat patches by establishing corridors of suitable trees. These corridors enable koalas to travel safely between areas to find food, mates, and shelter, which is critical for their survival in fragmented landscapes. Connectivity reduces the risk of genetic isolation and helps increase the resilience of local populations.

What resources are available for identifying existing koala corridors near my property?

To identify existing koala corridors near your property, use tools like Google Earth or QldGlobe, which show local vegetation types. You can also consult the Queensland Herbarium's maps to see areas of remnant and pre-clearing vegetation. Local landcare groups and ecological consultants are valuable resources for gaining insight into existing koala corridors and how your plantings might contribute to connecting them.

Can I plant koala trees outside of spring, and if so, what special care is needed?

While spring is the recommended time for planting koala trees in the Toowoomba Region, planting outside of spring is possible, except during the peak of mid-summer or mid-winter. When planting at other times, additional care such as frequent watering, mulching, and protection from frost or heat is required to ensure the survival of young seedlings.

Should I avoid planting during hot, dry summers?

Yes, it is advisable to avoid planting koala trees during hot, dry summers, as the heat and dry conditions place significant stress on young plants, making them more likely to fail. If a hot, dry summer is predicted, it is better to delay planting until the following spring to give your trees the best chance of survival.

How far apart should koala trees be planted for optimal growth?

Koala trees should be planted at least 7-8 meters apart to allow for canopy spread and eventual interlocking, which koalas use for moving between trees. If planting in rows, rows should be spaced 5-10 meters apart to allow for tractor access for slashing or watering and to reduce resource competition between young trees.

Should I plant koala trees in rows or clusters, and why?

It is preferable to plant koala trees in clusters rather than rows. Clump plantings create a natural-looking habitat and limit the edge effect, reducing the impact of adverse factors like wind, heat, frost, and predators. Clusters also help form continuous canopy cover, facilitating koala movement between trees, which is vital for their habitat needs.

Should I pre-water the seedlings before planting, and why?

Yes, it is recommended to pre-water seedlings before planting, ideally by soaking them overnight. This ensures that the roots are hydrated and reduces the risk of transplant shock. Properly hydrated seedlings have a better chance of establishing successfully in the new planting site.

Why is it recommended to flood the planting hole before placing the tubestock?

Flooding the planting hole before placing the tubestock helps to settle the soil and create a moist environment that encourages root growth. It also reduces air pockets around the roots, ensuring good root-to-soil contact, which is essential for healthy growth, particularly in drier conditions.

What are the benefits of long-stem planting for koala trees?

Long-stem planting involves planting the seedling deeper, with two-thirds of the stem below the soil surface. This method is beneficial for koala trees because it allows the plant to establish a stronger root system and provides greater stability. It also helps the plant access deeper soil moisture during dry periods, increasing survival rates.

How should I prepare the planting holes to avoid root growth problems?

Planting holes should be dug to twice the depth and width of the container to ensure adequate space for root growth. Avoid using augers or post-hole diggers, as they can create smooth, glazed sides that restrict root penetration. Instead, use a trowel or spade to make a well-textured hole that encourages the roots to grow outward freely.

Why is it not recommended to use augers or post-hole diggers for planting koala trees?

Augers or post-hole diggers create holes with smooth or glazed sides, which can restrict root growth and limit root penetration into the surrounding soil. This can result in weaker root systems and poor tree establishment. For planting koala trees, it is better to use a trowel or spade to create textured planting holes that encourage robust root development.

Why is it important to plant a mix of different koala tree species?

Planting a mix of different koala tree species ensures that koalas have access to a variety of food sources throughout the year, as different species flower and produce new leaves at different times. It also increases habitat resilience—if one species fails, others may thrive. This diversity helps to support koalas and other local wildlife and promotes a more balanced ecosystem.

HOW OFTEN SHOULD I WATER MY KOALA TREES DURING THE FIRST YEAR?

During the first year, koala trees should be watered generously immediately after planting and then again within 2-3 days. Regular watering is crucial in the first month, ideally daily, especially during dry periods, to help the seedlings establish. After the first month, watering can be reduced to once a week, depending on rainfall. It's important not to overwater, as this can inhibit the roots from seeking deeper ground moisture.

WHEN SHOULD I CONSIDER A SECONDARY PLANTING TO REPLACE FAILED TREES OR EXPAND MY PLANTING?

Secondary planting should be considered 2-3 years after the initial planting. This timing allows you to identify any failed trees and replace them, as well as expand your planting to enhance existing corridors. A secondary planting can also fill in gaps and strengthen the connectivity between habitat patches, helping to support long-term koala population growth.

WHAT IS A KOALA FODDER PLANTATION, AND WHY IS IT IMPORTANT?

A koala fodder plantation is a managed grove of koala-friendly trees specifically grown to provide leaves for koalas in care. It is important because wildlife carers need a consistent and safe supply of fresh leaves to feed injured or orphaned koalas. Fodder plantations reduce the need to collect leaves from roadside or unknown locations, which might be contaminated with herbicides or pesticides harmful to koalas.

HOW OFTEN DO I NEED TO POLLARD TREES IN A KOALA FODDER PLANTATION?

Pollarding should be done every few years after the initial growth phase. Typically, after about 4 years of growth, the trees are cut back to a height of around 1 meter to encourage regrowth that provides fresh foliage for koalas. The pollarding process is repeated regularly to ensure a continuous supply of young, tender leaves.

What precautions should I take to minimize bushfire risks when planting koala-friendly trees?

To minimize bushfire risks when planting koala-friendly trees, ensure clear access and egress routes are maintained across your property. Implement firebreaks of at least 20 meters to separate larger patches of vegetation, manage vegetation to reduce fuel loads, increase tree spacing on slopes, and create a protection zone around buildings by clearing flammable debris and pruning lower branches. Regular maintenance and mechanical removal of excess vegetation are also crucial to managing fire risk.

Why is it important to prune young eucalyptus trees?

Pruning young eucalyptus trees helps establish a strong structure, promote healthy growth, and prevent future structural problems like weak branch attachments. Pruning shapes the tree, encourages upward growth, and reduces the likelihood of branches breaking off due to wind or weight. It also helps maintain a dominant leader stem, which is vital for the tree's vertical stability.

How do I identify the leader shoot on a young eucalyptus tree?

The leader shoot is the tallest and strongest central stem of a young eucalyptus tree, which guides its upward growth. It should be clearly dominant over the other branches. When pruning, remove any competing stems to ensure that there is only one strong leader shoot.

What is the best time to prune eucalyptus trees, and why?

The best time to prune eucalyptus trees is in late winter or early spring. Pruning during this time encourages healthy new growth and minimizes the risk of disease or pest infestations. Avoid pruning during periods of extreme cold or heat, as these conditions can stress the tree and hinder its recovery from pruning.

HOW SHOULD I DEAL WITH COMPETING LEADER SHOOTS IN YOUNG TREES?

Competing leader shoots in young trees should be pruned to leave only the strongest and straightest shoot as the dominant leader. This promotes a stable vertical structure, helping the tree grow strong and reducing the risk of future structural issues. Pruning early and regularly prevents the formation of weak or co-dominant stems.

WHAT ARE COMMON SIGNS OF NUTRIENT DEFICIENCIES IN EUCALYPTUS TREES?

Common signs of nutrient deficiencies in eucalyptus trees include yellowing leaves, stunted growth, and chlorosis (yellowing between leaf veins). Specific deficiencies may present unique symptoms, such as purple blotches for phosphorus deficiency or cupped leaves for potassium deficiency. Regular soil testing and visual inspections are important for identifying and correcting deficiencies.

WHAT IS THE IMPACT OF PRUNING TOO MANY BRANCHES AT ONCE?

Pruning too many branches at once can stress a eucalyptus tree, reduce its ability to photosynthesize, and compromise its growth. This can make the tree more susceptible to pests and diseases. It's important not to remove more than one-fourth of the tree's branches at any one time to allow the tree to recover and continue to grow healthily.

WHAT ARE THE MOST COMMON PESTS THAT AFFECT EUCALYPTUS TREES?

The most common pests that affect eucalyptus trees include eucalyptus beetles, psyllids, leafhoppers, and borers such as the eucalyptus longhorned borers. These pests can cause leaf damage, defoliation, or even death if infestations are severe. Management involves promoting natural predators, using biological controls, and, if necessary, applying organic insecticides.

HOW CAN I IDENTIFY IF MY EUCALYPTUS TREE IS SUFFERING FROM A DISEASE?

Signs of disease in eucalyptus trees include yellowing foliage, wilting, dieback of branches, cankers, or the presence of fungal growth. Specific diseases, such as phytophthora root rot, may also cause root decay and stunted growth. Early identification through visual symptoms and professional diagnosis helps prevent the spread of the disease and improves treatment outcomes.

HOW DOES SOIL TEXTURE IMPACT THE GROWTH OF EUCALYPTUS TREES?

Soil texture affects root growth, moisture retention, and nutrient availability for eucalyptus trees. Sandy soils have good drainage but may require frequent watering, while clay soils retain moisture but may lead to root problems. Loamy soils, with a balance of sand, silt, and clay, are ideal as they provide good drainage and nutrient retention, supporting healthy tree growth.

HOW DO I DETERMINE THE TYPE OF SOIL ON MY PROPERTY?

You can determine the type of soil on your property by conducting a simple soil texture test. Follow these steps:

1. Take about 2 tablespoons of soil in one hand and add water, drop by drop, while working the soil until it reaches a sticky consistency.

2. Squeeze the wetted soil between thumb and forefinger to form a flat ribbon.

3. Determine the texture based on the length of the ribbon that can be formed without breaking—

SEE FOLLOWING TABLE.

TEXTURE LENGTH OF RIBBON (MM) SOIL PROPERTIES AND MANAGEMENT IMPLICATIONS

SANDY <15 • Little resistance to root growth
• High infiltration rate
• Low plant available water

SANDY LOAM 15–25 • Root growth not restricted, but highly susceptible to mechanical compaction
• May be hard setting
• Moderate infiltration rate
• Moderate plant available water

LOAM 25 • Root growth not restricted
• Moderately susceptible to mechanical compaction
• Moderate plant available water
• Moderate infiltration rate

SILTY LOAM 25 • Root growth not restricted
• Moderately susceptible to mechanical compaction
• Moderate plant available water
• Low to moderate infiltration rate

CLAY LOAM 40–50 • Root growth not restricted
• Moderately susceptible to mechanical compaction
• Moderate to high plant available water

CLAY 50–75 • Root growth frequently restricted
• Moderately to highly susceptible to mechanical compaction
• Some restriction on water movement leading to periodic waterlogging
• Moderate to high plant available water

HEAVY CLAY >75 • Root growth moderately to severely restricted
• High susceptibility to mechanical compaction
• Water drains very slowly except in self-mulching soils

TOOWOOMBA REGION KOALA TREE SEEDLING TUBESTOCK SUPPLIERS

Crows Nest Community Nursery – Crows Nest
https://www.tr.qld.gov.au/facilities-recreation/parks-gardens/plant-nurseries/12314-crows-nest-community-nursery

Mole Station Native Plant Nursery – Tenterfield
http://www.molerivernursery.com

Paten Park Native Nursery, The Gap
https://ppnn.org.au

Pete's Hobby Nursery – Lowood
https://www.peteshobbynursery.com.au

Pohlmans Nursery – Adare / Gatton
https://www.pohlmans.com.au

Wallum Nurseries - Gumdale
http://www.wallumnurseries.com

Withcott Seedlings – Withcott
https://www.withcottseedlings.com.au

GUARDS / STAKES / MULCH ETC SUPPLIERS

Aussie Environmental – Yandina
https://aussieenvironmental.com.au

Bunnings – Toowoomba
https://www.bunnings.com.au

Toowoomba Landscape Supplies – North Toowoomba
https://toowoombalandscapes.com.au

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DISCLAIMER

Information contained in this document is based on information available at the time of writing. While the Toowoomba Region Koala Habitat Project has exercised reasonable care in preparing this document, it does not warrant or represent that it is accurate or complete. Save Mt Lofty Inc accepts no responsibility for any loss which may arise from reliance on information contained in this resource.

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