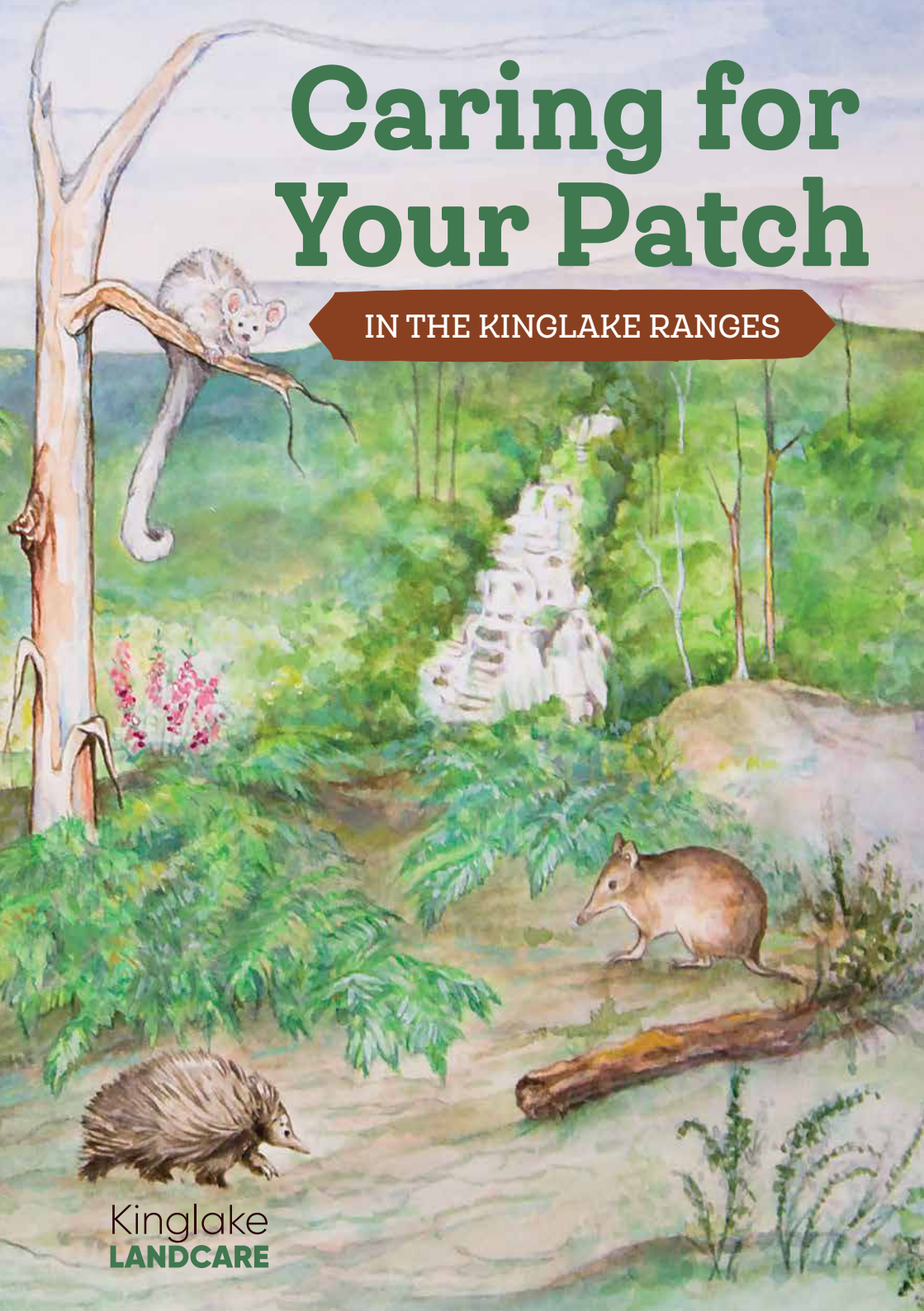
Caring for Your Patch

IN THE KINGLAKE RANGES



Kinglake
LANDCARE

Kinglake LANDCARE

FRRR
Foundation for Rural Regional Renewal

This publication is an adaptation and modification of an earlier booklet '*Sustainable Gardening in the Kinglake Ranges*', created and published by Sustainable Gardening Australia (SGA) and Kinglake Landcare Group (KLG) in 2012. The authors gratefully acknowledge the earlier work undertaken by SGA staff members Mary Trigger, Elaine Shallue and designer, Naina Knoess in preparation of the earlier booklet and for their support in the creation of this booklet.

The 2023 update, '*Caring for Your Patch in the Kinglake Ranges*', has been created by members of the Kinglake Landcare Group as a way of assisting residents to connect with the local natural environment and learn how to protect and enhance their 'patch'.

King Parrot

We would like to thank the organisations that have supported the works and projects of the Kinglake Landcare Group including:

- The Foundation for Rural & Regional Renewal (FRRR) for generously providing grant funding for this and other KLG projects.
- Upper Goulburn Landcare Network for their ongoing assistance with the delivery of KLG projects.
- The Kinglake Ranges Neighbourhood House who have supported us as an auspice body for many years.

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Acknowledgement of traditional owners

We respectfully acknowledge the traditional custodians of the land of the Kinglake Ranges – the Wurundjeri-willam people to the south of the range, and the Taungurung people to the north, both part of the Kulin Nation.

We take inspiration from their sustainable caring for this land for many thousands of years and we pay our respects to their elders both past and present.

INTRODUCTION

Kinglake Landcare Group

Kinglake Landcare Group (KLG) was formed to help protect and enhance the natural environment of the Kinglake Ranges, and to promote sustainable land management. In the past, groups such as the Kinglake Environment Society, Friends of the National Park and Friends of the Lyrebird showed care and concern for our local environment. Kinglake Landcare Group was launched in the year 2000, when a growing concern for the creeks of Kinglake and their surrounding areas, brought local residents together.

Residents were also concerned about the fire risk from a pine plantation adjacent to Number 2 Creek and the unmaintained vegetation in the Mountain Ash reserve. This concern prompted continuing action by the newly formed Landcare group. The subsequent removal of the pine plantation and regular vegetation maintenance of the creek reserve contributed to the survival of Kinglake Primary School and Kinglake Ranges Neighbourhood House during the horrific Black Saturday fires of 2009.

The removal of a serious weedy Broom infestation at Kinglake West Hall Reserve just weeks before Black Saturday also helped to save Kinglake West Primary School, the Mechanics Institute Hall, and its surrounding buildings.

The effects of climate change have increased the need for an urgent response from the KLG as it works towards the restoration and preservation of Kinglake's natural environment. The group works to inform the local community about sustainable land practices and management through workshops, regular work activities on public and private land, regular meetings, and providing advice to government bodies, and statutory authorities. We also willingly assist other community groups with land management issues.

Share in caring for our patch by becoming a KLG member, or by signing up to our free 'friends' mailing list.

This booklet is dedicated to all those (past, present and future) who actively and passionately work for the preservation, protection and sustainable management of our local environment.

Roger Cook

President
Kinglake Landcare Group

Greater Glider

OUR REGION

History & environment

History

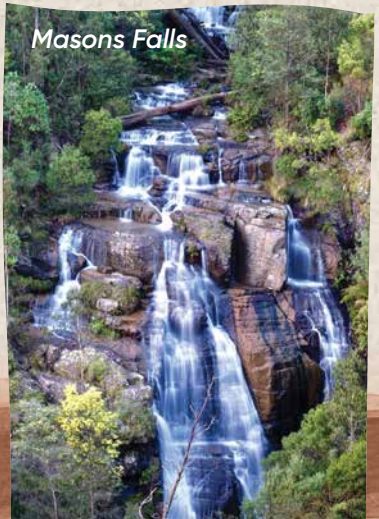
The Kulin Nation habitation of this area before European settlement is still being understood and appreciated by the wider community. The Kinglake district, as the area is known today, would have been a desirable place particularly at certain times of the year for trading or ceremonies, and for much of the flora and fauna used for food, clothing, medicine, weapons, and the essential use of fire as a practical tool in hunting, cooking, warmth, and managing the landscape. For example, the stems of Djiel-warg (Austral Mulberry Hedycarya angustifolia) were highly regarded for making firesticks, called Djelwuck. Highly prized and widely traded, Djelwuck were twirled on flat pieces of wood such as the dry flower stalk of Baggup (Grasstree Xanthorrhoea australis), to make fire.

From the second half of the 1800s, European settlement was boosted by the early gold discoveries in the Kinglake Ranges, with mining particularly along creeks. Gradually, more of the Kinglake district was cleared and settled for agricultural and horticultural purposes - potatoes, fruit, berries, logging and timber milling.

As a result of these practices the vegetation has changed, although remnants of the original vegetation have been conserved in the National Park (first proclaimed in 1928), the State Forest, local parks, along roadsides, and on private properties.

Geology

From Kinglake West through to Kinglake and towards Toolangi, the road follows the Kinglake Plateau, noted for its rich red soil. Overall nutrient availability is low-medium, with low levels of nitrogen. The application of high-quality compost is crucial to successful soil building for gardening. Soils of the southern escarpment are shallow and stony, with poor water and nutrient-holding capacity.



Masons Falls

Purple-sheath Tussock Grass

Weather

The Kinglake Plateau experiences a range of weather conditions. Severe frost & light snow may be experienced through mid-late winter; and high winds throughout the year. The annual recorded rainfall in the Kinglake Ranges historically tends to vary between 900 to 1,500mm with a recorded mean around 1200mm mainly falling in winter and spring. Average winter temperatures in Kinglake are between 5-10°C. Average summer temperatures from 12-22°C dry out the Kinglake Ranges with longer days and north winds with very low moisture content, especially on exposed soils and vegetation, increasing the grass fire and forest fire rating index.

Natural Vegetation Communities

A range of vegetation exists within the Kinglake region from the soaring Mountain Ash forests, to the more open Foothill Forests.

Our Fragile Environment

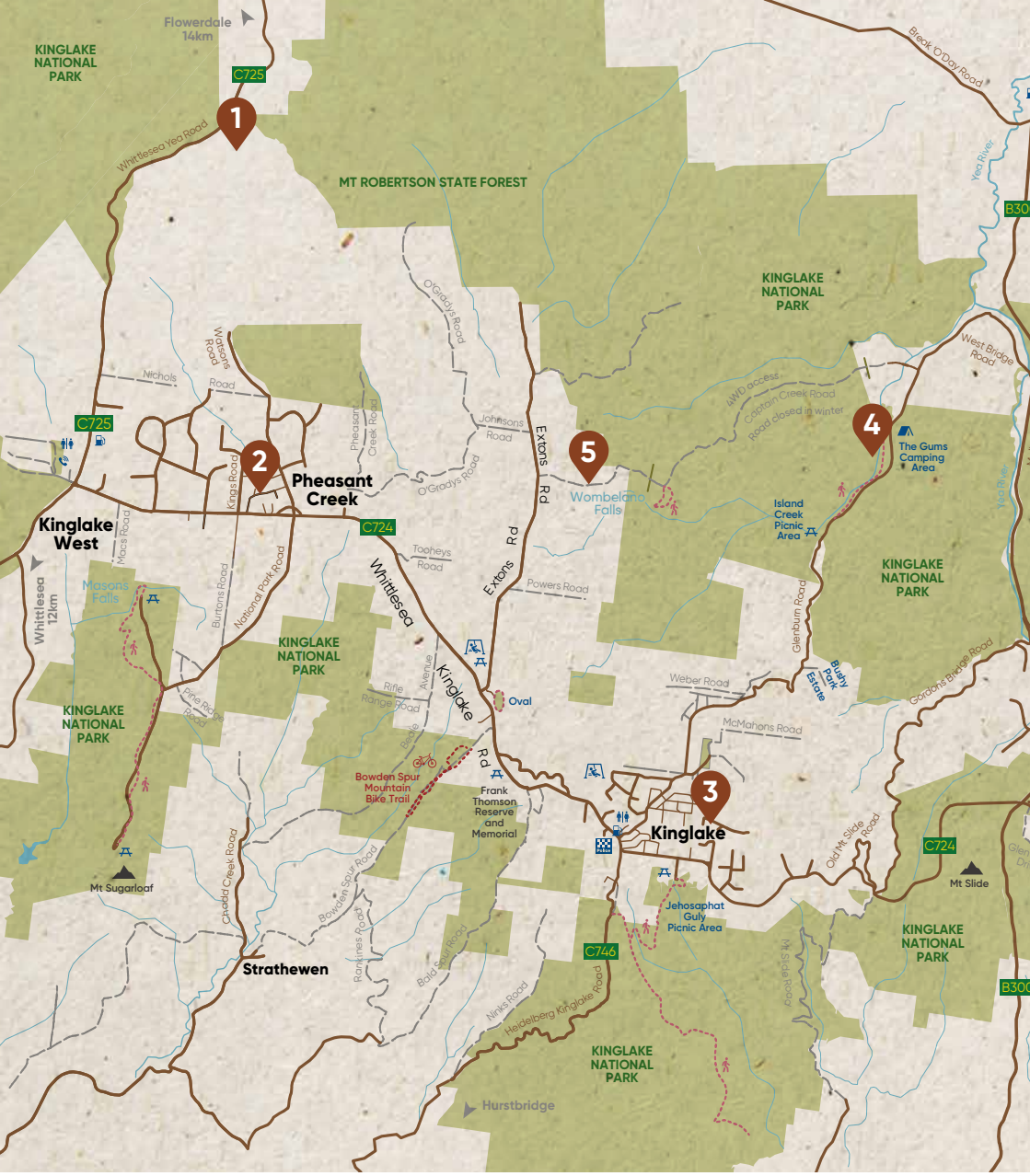
The Kinglake environment contains a unique mix of indigenous flora and fauna enhanced by the forested Kinglake National Park threading through the district.

Intense bushfires, such as in 2009, wreak destruction to our natural environments and are an ever-increasing threat. Climate change is already having an impact with fire, storms, winds and rainfall fluctuating with greater intensity and increasing frequency.

As so many residents are drawn to the area for the beauty of the forests, we need to create gardens that will allow native wildlife to coexist with the human population to ensure that the flora and fauna of our natural and diverse landscape will continue to thrive for future generations.

While it is important to safely manage our properties for fire risk, to minimise fine fuels, remove flammable materials and debris from the immediate surrounds of our homes, there are ways to ensure that our home landscapes do not negatively impact on the flora and fauna of the Kinglake Ranges, as outlined in this booklet.

Rusty Pomaderris



Key

- Reserves and National Parks
- Fuel
- Public Toilet
- Telephone
- Playground
- Police Station
- Picnic Area
- Camping Area

Roads/Tracks

- Main Road
- Sealed Road
- Gravel Road or 4WD
- Walking Track
- Mountain Bike Track

N

0 500 1000
Metres

Original map supplied by Rooftop Maps

Region Map

Our region has many places where you can connect with nature. Listed here are some of the lesser known spots.

1. Wallaby Springs

At the headwaters of the King Parrot Creek, this reserve features natural water springs and 30ha of native bushland.

2. Stony Creek Reserve

A small but important reserve, its dense and ferny understory, fallen hollow logs and large old trees provide ideal habitat for many native animals. The main entrance to the Stony Creek Reserve is on Jouvelet St, Kinglake West.

3. Number Two Creek Reserve

This reserve and the adjoining Kinglake Wilderness trail have been an ongoing Landcare project since early 2000. The main entrance is near the corner of Glenburn and McMahons Road.

4. The Gums Campground

The short and accessible Cicada Track here is a great way to explore streamside and aquatic plants.

5. Wombelano Falls

This area features a variety of native flora and fauna, such as microbats and Greater Gliders, as well as impressive waterfalls.

YOUR BACKYARD

Long-nosed Bandicoot

Garden Design

Observe, grow slow

If you can, take a year to watch where the sun and shade fall, where the runoff travels in storms, find the boggy areas, the first areas to dry out in summer, and also to identify existing plant species: both indigenous and planted. You may have orchids or other beautiful plants but only see them for a couple of months a year.

Existing features to retain, remove or relocate

- Trees, plants, and patches
- Walls, fences
- Levels
- Access routes for cars and people: do they work well, or should they change? Are all needed or is there a better use for the space?

Views

- Key views and viewing points
- Unwanted views to screen or avoid highlighting

Shade and Shelter

- Winter sun
- Summer shade
- Prevailing winds and sheltered areas

Habitat

- Birds and insects - are there areas they like to perch, nest or feed? Are there areas that some avoid?
- Animal movement - are there regular routes taken by wallabies or wombats to consider?
- Are there pests - rabbits or deer causing damage?

Site Analysis

Garden Design

The Design – what do you want your garden to look like?

Why? Determine the purpose of your garden

- Food – vegetable gardens or nut/fruit orchards
- Habitat - for all sorts or do you have a particular interest in birds, butterflies or frogs, for example?
- Resources – firewood or water supply
- Beauty and enjoyment - shade, colour, foliage, seasonal variety – and seating and viewpoints to enjoy them from
- Or a combination of two or more of the above

Where? Plan out zones or areas rather than each specific item

Work zones

- Storage areas
- Compost
- Greenhouse
- Washing line (face north or catch the wind)

Access

- Vehicle access – to sheds and perhaps throughout for transporting mulch or other supplies
- Manual access – gates, wheelbarrows and walking paths

Food production:

- Vegetables
- Orchards (including berry bushes and brambles)
- Herbs
- Poultry

Don't forget to provide for:

- Habitat corridors
- Shade and shelter from winds and frost
- Views

Locate elements where the site analysis shows they already exist or would do well. Group features that work well together such as chooks and compost. If a site such as a vegetable garden needs regular tending, locate it close to the house or at least in sight so it isn't neglected.

Site design

What, When and How are covered elsewhere in this booklet. But remember it's okay to grow slow. Create your garden in stages so you can establish each bed or feature properly and learn from any mistakes.

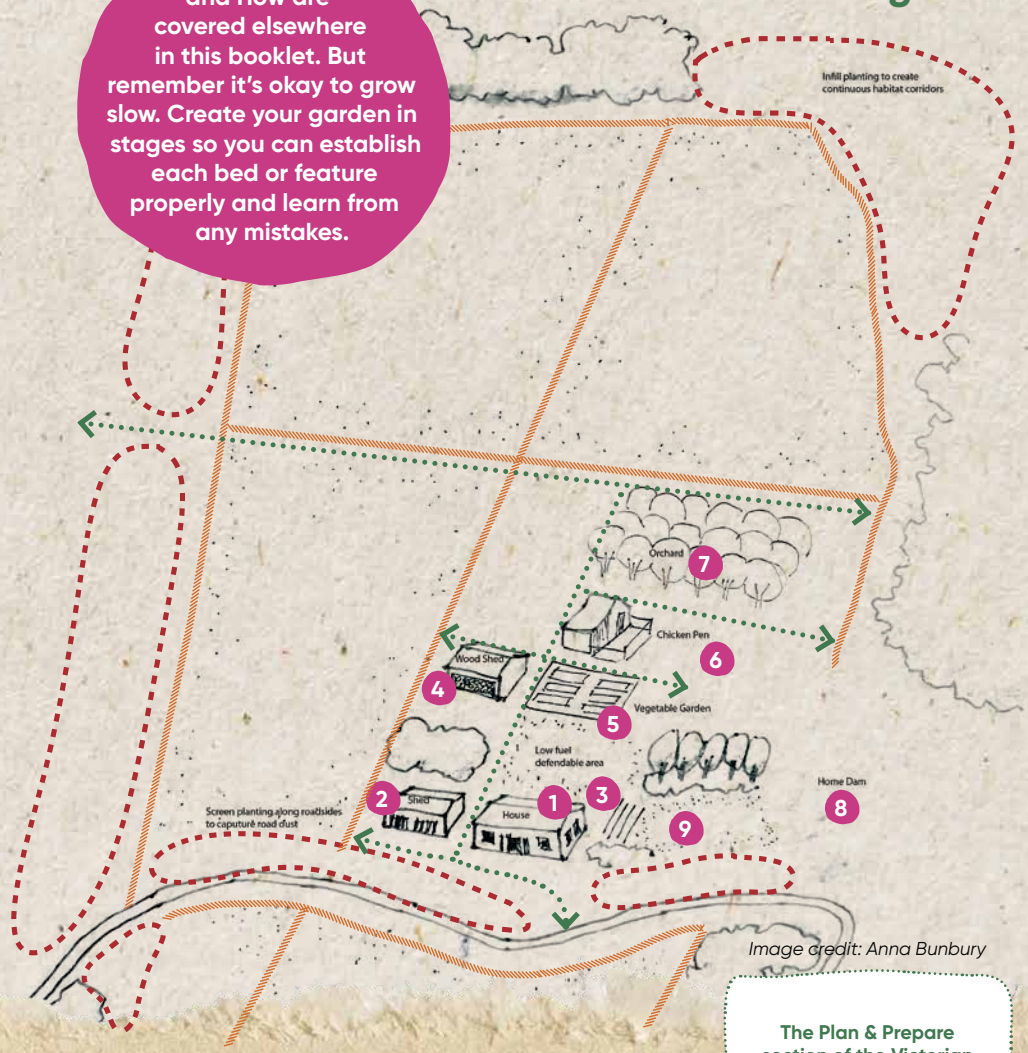


Image credit: Anna Bunbury

The Plan & Prepare section of the Victorian CFA website includes garden design and plant selection in high-risk bushfire areas.

Key

1. House
2. Storage
3. Low fuel area
4. Wood (store uphill!)
5. Vegetables
6. Chickens and compost
7. Orchard
8. Dam
9. Views to dam

Access routes

Habitat and screen planting

Fencing

Kid Friendly Gardens

Image courtesy of City of Whittlesea

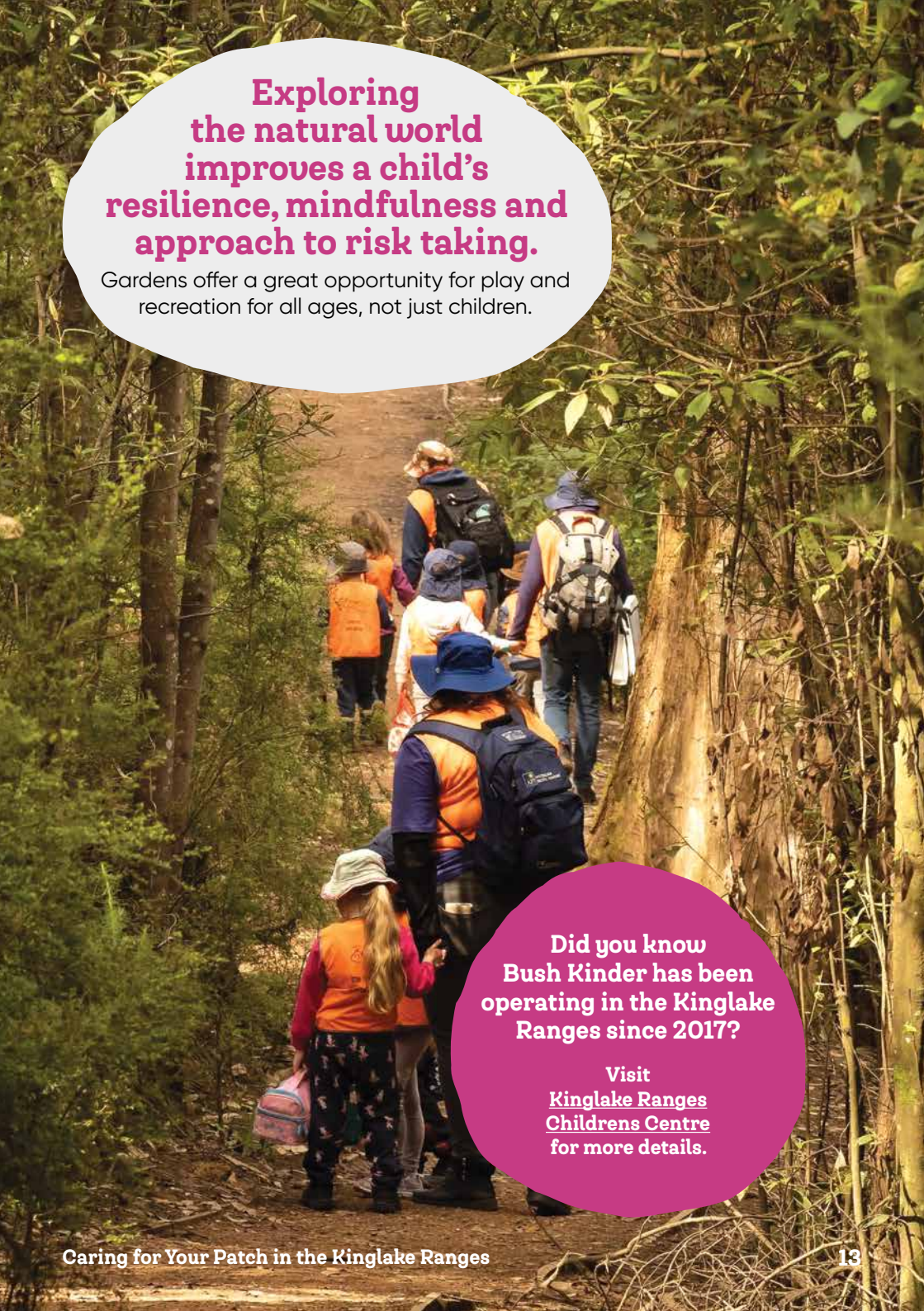
Nature play is now well understood to be a powerful – and incredibly enjoyable – way for children to develop not only physical skills and strength, but also social and cognitive skills which support learning. Skills include gross motor skills, balance, orientation, creativity, imagination, problem solving, resilience and self-confidence. Spending time in nature is calming and has been shown to improve behaviour and focus in the classroom.

Features which help to create a space for nature play include:

- Climbing trees – species with low, spreading branches.
- Plants with pickable gumnuts or seeds, leaves, flowers and stems.
- Plants that are edible, have interesting scents and textures or change with the seasons.
- Logs, rocks and stepping stones
- Sand, water and loose soil.
- Loose parts play – gumnuts, pinecones, pebbles and stones, leaves, sticks and branches, bark, large and small log rounds, bamboo poles, cardboard boxes, rope, straw bales, leaves, tarps.
- Tools, buckets and bowls to help dig, lift, carry, pour and sort.
- A space which can be messy – to be used for cubby building, creation and construction, experiments and imaginative play.
- Child-sized 'secret' spaces, up in trees or under bushes.
- Remember that most of the fun of a cubby is in the building – a completed, off the shelf cubby won't offer as much play value as materials which can be used to build and rebuild again and again.

Exploring the natural world improves a child's resilience, mindfulness and approach to risk taking.

Gardens offer a great opportunity for play and recreation for all ages, not just children.



Did you know Bush Kinder has been operating in the Kinglake Ranges since 2017?

Visit Kinglake Ranges Childrens Centre for more details.

Garden Preparation

Soil

Healthy soil = healthy plants.

Soils need a mix of organic matter (leaf litter, compost, aged animal manure, grass clippings etc.) and mineral components (phosphorus, potassium, calcium, magnesium, etc.) to maximise plant growth.

Long-nosed Bandicoot

Composting & Mulching

Composting and mulching are two of the best things you can do in your garden.

Compost is the result of organic material that has been broken down in a controlled environment e.g. a Compost Bin. It will provide you with an excellent source of soil improver and encourage valuable worms in your garden.

Compost can be dug into the soil or laid on top providing it is kept moist. An excellent way to retain moisture is to cover the compost with mulch.

In nature, mulch is simply fallen leaves and plant debris. In the garden, mulch can also include autumn leaves, straw, cardboard, or wood chips. Mulch protects the roots of plants from temperature extremes, reduces moisture loss and suppresses weed growth.

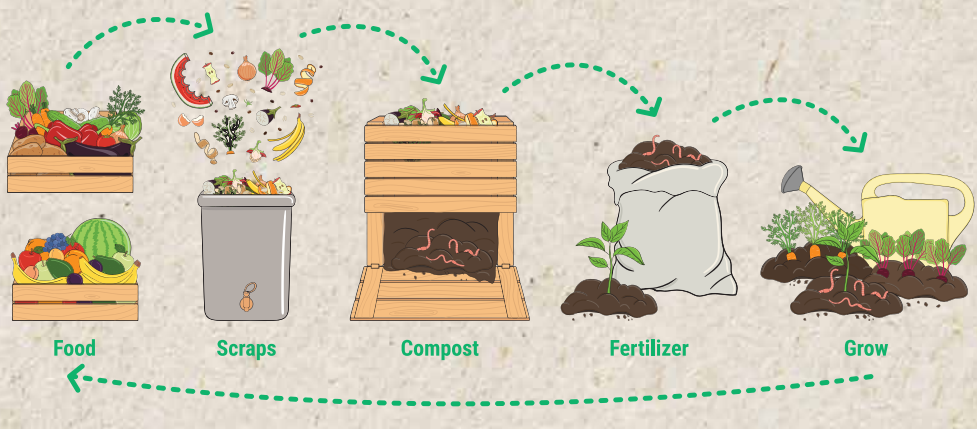
Be aware that mulch can also kill shrubs or fruit trees if it is packed in excess quantities against the trunk.

Tips to improve your soil

- Spread compost over soil and then apply a 50-100mm layer of mulch.
- Pea straw and Lucerne are good nutrient generating mulch options, breaking down quickly. Bark mulch has very few nutrients so don't rely on it to improve your soil.
- Vegetable gardens need highly nutritious soils with added compost, but most local and native plants like a relatively infertile soil. Use bark mulch to protect the soil in these areas.
- Add mineral components to your soil, such as potassium, phosphorus, and manganese.
- Crushed eggshells and coffee grounds can also add nutrients to your soil.
- When buying soil, select one that is mixed with recycled organics or compost.

Compost

Almost any organic material can be added to your composting system. A mix of carbon (dry, brown materials) and nitrogen (green, wet materials) works best. Avoid foods that attract pests (meat) and produce unpleasant odours (dairy products). Manure from herbivores is excellent but do not add dog or cat droppings.



Add to your compost

- Fruit and vegie scraps
- Coffee grounds and tea bags
- Autumn leaves
- Egg cartons and crushed eggshells
- Pizza containers
- Aged animal manures
- Grass clippings (thin layers 3-4cm)
- Chopped prunings
- Weeds (minus seed heads or bulbs)
- Shredded newspapers

Keep out of your compost

- Meat and dairy
- Cat and dog droppings
- Large amounts of citrus peel
- Onion
- Bleached or glossy office paper
- Diseased plants

Murrindindi Shire Council has some great information about composting and worm farming on their website, as well as the latest green waste disposal policy for the region.

Water

Australia is one of the driest continents on earth. While rainfall in the Kinglake Ranges is relatively abundant most of the year, maintaining a healthy garden through summer months can still be challenging. Garden water use is a major contributor to summer water consumption in our region.

Improving the soil and using additional water sources for the garden such as separate rainwater tanks from sheds can greatly improve watering capacity through summer months. Significant water savings can be made through good garden design and installing efficient irrigation systems.

Water Tips

- Plant local indigenous plants to reduce water use and group plants according to their water needs.
- Research the most efficient watering system for your garden. A drip watering system or porous hose will reduce wastage by ensuring that the water only goes where it is needed. Avoid micro-sprays - they waste up to 70% water through drift and evaporation and may not penetrate the soil.
- Position irrigation systems so that water isn't wasted on paths, patios, driveways and buildings.
- Install garden tap timers to reduce over-watering.
- Water in the early morning to prevent the water evaporating before it reaches your plant roots.
- Check the weather forecast to avoid watering before rain.
- Check and clean your irrigation system every spring.

Be fire wise - don't use all your water on your garden!

In our bushfire prone region, it is important that you have a dedicated water supply for firefighting purposes. Maintain a separate water source for garden irrigation.

Growing Food

Growing your own food can be rewarding and very nutritious. Spending time in the garden is known to reduce stress and provides a connection to the seasons as you plant, nourish and harvest. Your vegetable garden doesn't need to be completely self-sustaining, even simple herbs or a single crop each year may be enough. Why not get together with neighbours and organise to all grow different crops that you can share and swap? This can be a great way to build a sense of community and get out in the garden.

You may want to learn more about growing food or even venture into the world of Permaculture, composting or beekeeping. Check your local Neighbourhood or Community House for classes and workshops that can help you learn and grow.

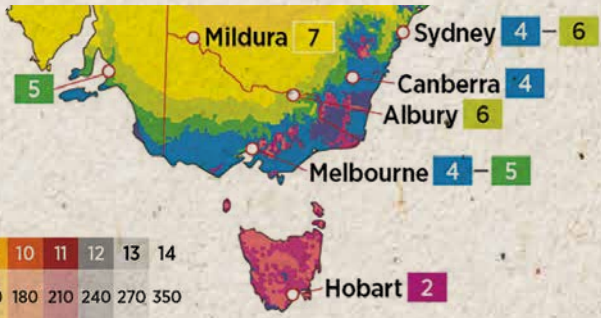
There are also a number of indigenous food plants that grow well here in the cool mountain areas, such as the Pepperberry (*Tasmannia lanceolata*), Warrigal Greens (*Tetragonia tetragoniodes*), and Apple Berry (*Billardiera scandens*). You can find them at many nurseries, but remember to mention that you live in a Cool Zone.

What about Chooks?!

Keeping chickens is good fun and they are great compost activators. Keep them safe from foxes with an enclosed pen that provides shelter and water, with enough room for the hens to scratch around and you will be rewarded with fresh eggs!

What to plant ... and when to plant it

This map shows the different Climate Zones in South-Eastern Australia. The Kinglake Ranges are considered a **Cool Highland Area (HZ 2) which means we have a short growing time and we are often 2-4 weeks behind growth you may see in metropolitan Melbourne (HZ4-5)**



HZ	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Average days above 30°C per year	< 2	7	14	30	45	60	90	120	150	180	210	240	270	350

SEASON	HERBS	VEGETABLES	OTHER JOBS
SUMMER	basil, chives, corriander, lemongrass, mint, oregano, parsley, thyme, rosemary, tarragon	beans, beetroot, cabbage, capsicum, carrot, cauliflower, cucumber, English spinach, kohlrabi, leek, lettuce, onion, parsnip, pumpkin, radish, silver beet, spring squash, swede, sweet corn, tomato, turnip and zucchini.	Make sure you keep the vegetable garden well-watered. The best time for watering is early morning or evening. Mulch will help keep your soil cool and retain moisture.
AUTUMN	chives, corriander, garlic, lemongrass, marjoram, mint, oregano, parsley, thyme, rosemary, tarragon	broad bean, beetroot, cabbage, carrot, cauliflower, Chinese broccoli, Chinese cabbage, English spinach, leek, lettuce, onion, parsnip, potatoes, shallots, silver beet, swede and turnip.	This is your main harvest time. A great time to preserve, pickle and store your garden produce.

SEASON	HERBS	VEGETABLES	OTHER JOBS
WINTER	chives, cress, curry, dill, mint, parsley, sage and thyme.	artichoke, asparagus, beetroot, broad beans, broccoli, Brussels sprout, cabbage, carrot, cauliflower, celery, endive, leek, lettuce, onion, peas, snow peas, silverbeet, spinach and radish.	Prepare your beds with a thick layer of compost and animal manure and top with mulch to process over the colder months to be ready for the Spring. Sow seeds of early Spring crops like tomatoes in late Winter and keep undercover until the weather warms up enough to plant the seedlings.
SPRING	basil, chives, coriander, dill, mint, oregano, parsley, sage and thyme.	beetroot, broccoli, cabbage, capsicum, carrot, cauliflower, celery, cucumber, eggplant, endive, leek, lettuce, onion, pak choi, pea, spinach, spring onion, strawberry, sweet corn, zucchini and tomato (plant seedlings after the last frost has passed).	Keep a check on those weeds throughout Spring as they can choke out your crops. Pull them out and compost them or feed to the chooks.

Further information is readily available through online sources: search for 'planting guides for cool zones', or search for 'Australian planting guides'.

Don't forget to plant flowers for the bees and butterflies who will return the favour by pollinating your fruit and vegetables for a good harvest!

Habitat Gardening

Attracting native animals to your garden can add extra colour and interest. These animals can assist with pest control and the pollination of many plants. By thinking of our gardens as habitat, we can provide food, water, shelter and even places to nest.

Birds

Birds are some of the most conspicuous visitors to our gardens. They manage pest insects that can have an impact on food crops and ornamental plants. A habitat which will attract birds to a native garden needs to include shelter, food and water.

Trees with hollows or nest boxes provide important shelter for birds, like parrots and owls. Smaller birds can also nest in prickly plants and even ground ferns in your garden.

A reliable water source in the shade, through summer months, will attract birds to your garden and provide relief from summer heat. A diversity of plants that flower, fruit and seed at different times helps to extend the nectar cycle by providing feeding sites for many months of the year. Avoid placing excess seed, bread or scraps in artificial feeders: these can create dependent birds and also create a possible nuisance. Importantly, it also creates a risk of making birds ill if fed inappropriate foods.

Small birds, such as Silvereyes, Fairy Wrens, Robins, Fantails and Thornbills, forage on insects at ground level in the garden. Allowing some tussocks of native grasses, such as Alpine Tussock (*Poa sieberiana*) and Weeping grass (*Microleanea stipoides*), can provide foods for seed-eating birds like Finches and Pigeons.

Honeyeaters, Wattlebirds and Spinebills drink the nectar of native flowers like Grevilleas, Correas, Banksia and many plants with bell shaped flowers.

Larger parrots enjoy feeding on woody seed cones from Hakeas and Sheoaks while large birds like Magpies, Kookaburras, Currawongs and Butcherbirds feed on larger insects and small lizards. Lyrebirds feed on insects, worms and spiders. Many of these animals lower in the food chain will be present if there are rocks or logs scattered through a garden.

Blue Wren

Scarlet Robin

Red-browed Finch

Butterflies & other pollinators

Insects, such as bees and butterflies, play a vital role in the pollination of native plants. Without these insects, our local plants would never set seed or provide valuable food for native animals.

Diversity is the key to success for pollination. Planting a range of plants from different plant families which have different colours and flowering times throughout the year may encourage useful insects to visit your yard or garden.

These insects use different plants on which to lay their eggs - on leaves, stems and roots. Some insects like native wasps can prey on other pest insects and act like nature's pest controllers.

Blue banded bee in Common Heath

King Parrot in Round-leaf Pomaderris

Australian Painted Lady

Frogs

What could be more interesting than watching tadpoles grow into frogs and then being serenaded by their calls at night?

Frogs also help control pests in your garden: they eat flies, mosquitoes, slugs, snails and even spiders.

In order to enjoy frogs in your garden, you will need to provide a pond with certain features, but you'll also need to live near an existing frog population.

A frog pond can incorporate one or all of the requirements for each part of the frogs' lifecycle:

- Damp bog zone for adult frogs.
- Shallow water zone for laying eggs.
- Deep zone of at least 30cm for tadpoles.

Your frog garden should also have:

- Soft, thick vegetation that droops into the water, for shelter and protection.
- Rocks, logs, bark and leaf litter.
- Mostly shade.
- Sloping sides to enable the frogs to crawl out.
- Been made from non-toxic materials (concrete ponds will need to be sealed and plastic ponds be made of food-grade plastic).
- Food plants for tadpoles (and they will eat them, so don't put your prize waterlily in there).

Frog-friendly plants:

- **Tufting plants** – Pale Rush (*Juncus pallidus*) or Black-anther Flax-lily (*Dianella admixta*).
- **Bog plants** - Common Sedge (*Carex tereticaulis*), Knobby Clubrush (*Ficinia nodosa*), Common Rush (*Juncus australis*) and Austral Gypsywort (*Lycopus australis*).
- **Water plants** – Common Nardoo (*Marsilea drummondii*), Purple Loosestrife (*Lythrum salicaria)*, Tassel Sedge (*Carex fascicularis*) and Water Ribbons (*Triglochin procerum*).

Southern Brown Tree Frogs

Brush Tail Phascogale

Mammals

People have moved to the Kinglake region over the years because, amongst other things, they love the unique natural environment. Living in such a beautiful area also means that we live in close proximity to our unique native animals, such as wallabies, wombats, possums, echidnas and koalas. We even have less common and threatened animals such as bandicoots, greater gliders and phascogales. Mature trees contain hollows which become shelter and breeding sites for many of these animals.

Swamp Wallaby

Sharing our space with mammals in particular can present some unique challenges as we struggle between the delight of spotting a cute little sugar glider and pulling our hair out when we discover a wombat has made a feast of our carefully tended garden. It's all a question of give and take!

Food: If you would like to attract animals like possums or gliders to your garden, plant Wattles, Bottlebrush and Banksias. These plants encourage bird pollinators as well as insects, which will create a food source for microbats. Alternatively, keeping wildlife out of vegetable gardens can be achieved by use of fencing and plastic guards. Be careful to select netting which won't entangle birds or bats - netting that you cannot poke your finger through is best.

Water: A shaded water source, particularly in summer, will also attract wildlife to your garden.

Nest box installation

Shelter

Many of Australia's unique animals have evolved to use tree-hollows.

Mature trees, whether living or dead, that contain hollows are necessary for shelter and breeding sites for micro-bats, possums and gliders.

Tree-hollows are formed by the action of fungi and/or termites, usually where the tree has suffered limb or trunk damage. Large tree-hollows can take many years to form, in some cases 150+ years. Even when a hollow branch or tree falls to the ground, the hollows will continue to be used by ground-dwelling animals.

You can attract mammals to your garden by providing a variety of different nest boxes, designed to suit the varying requirements of the different species. This is also a great strategy for luring possums away from nesting in your roof.

Why install nest boxes?

Many areas of bushland don't contain enough natural tree-hollows for the wildlife that lives in the area.

Nesting boxes are a great way to survey secretive native animals in your local area.

Even where there are natural tree-hollows, nest-boxes can still be used and will help you see what animals live on your property.

If you install and maintain well-built nest-boxes, they'll last for many years and will provide homes for many generations of the animals that use them.

Which animals of the Kinglake Ranges use nest-boxes?

Birds: Crimson Rosellas, King Parrots, Owlet Nightjars and White-throated Tree-creepers.

Mammals: Common & Mountain Brush-tailed Possums; Greater, Sugar, & Feathertail Gliders; Brush-tailed Phascogales, Ringtail Possums and Agile Antechinus.

Bats: Local micro-bats use hollows and nest-boxes.

For further information on building, installing and maintaining nest boxes, contact your local Landcare Group.

Sugar Gliders in nest box

PLANT SELECTION

Plant selection is very important for a great looking garden. Considering soil types, drainage, aspect (i.e. full sun, part shade, and shade) and local climate will all influence your plants' survival. The right plants can provide shade in summer or may produce edible fruit. Some plants do best when grouped, based on their sun/shade, water and fertiliser needs. Nurseries and plant labels can help provide information about the specific needs of plants.

Blue Wren

Local (indigenous) plants are well suited to the local conditions and require little care once established.

This section of the booklet provides examples of indigenous plants that are well suited for gardens in and around Kinglake, and which will provide suitable habitats for native wildlife. The nurseries listed at the back of this booklet often stock these and other plants that may be well-matched to your garden needs.

Try to avoid plants that are known environmental weeds which may become a 'garden escapee'. If you have some of these plants in an existing garden, you can contain their spread by collecting seed heads and disposing of cuttings and clippings carefully. Refer to the 'Garden Escapees' section in this booklet for a list of known weedy plants in our region.

KEY

Some of these plants provide habitat for:

- Insects
- Mammals
- Frogs
- Birds
- Food plant for caterpillars
- Butterflies

Size:

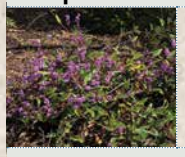
- Height
- Width

Requirements:

- Full sun
- Part shade
- Full shade
- Drought tolerant
- Needs seasonal water

Kinglake Indigenous Plants

GROUND COVERS AND CLIMBERS

NAME	REQUIREMENTS	FEATURES	HABITAT
Clustered Everlasting (*Chrysocephalum semipapposum*)			
	50cm ↔ 1m Variable moist to dry soils.	Variable forms. Excellent rockery plant with contrasting silver foliage. Prune regularly to encourage new growth.	
Purple Coral-pea (*Hardenbergia violacea*)			
	Height Creeper/scrambler. Well-drained soil.	Showy climber of many forms/cultivars including some which can pollute indigenous bushland form.	
Common Heath (*Epacris impressa*)			
	0.5m ↔ 0.2m Well-drained soil.	Grows well in rockeries. Vic floral emblem.	
Pink Bells (*Tetratheca ciliata*)			
	0.5m ↔ 0.2m Prefers well-drained clay or sandy soil.	Clump forming plant with small leaves and attractive pink flowers Aug-Dec.	
Ivy-leaf Violet (*Viola hederacea*)			
	↔ 1m Height Prostrate Well-drained soil.	Ideal for shaded areas of the garden	

KINGLAKE INDIGENOUS PLANTS

GRASSES AND LILIES

NAME	REQUIREMENTS	FEATURES	HABITAT
Tasman Flax-lily (*Dianella tasmanica*)			
	80cm ↔ 50cm Well-drained, moist soil.	Hardy, easily maintained plant. * Useful local alternative to Agapanthus for garden edging.	
Purple-sheath Tussock-grass (*Poa ensiformis*)			
	50cm ↔ 30cm Adapts to moist or slightly dry soil.	Fast-growing grass. Readily self-seeds. Good erosion control.	
Spiny-headed Mat-rush (*Lomandra longifolia*)			
	1m ↔ 1m Moist, well-drained soil.	A hardy, structural plant.	
Weeping Grass (*Microlaena stipoides*)			
	1m ↔ 60cm Moist, well- drained soil.	Evergreen good lawn grass for shady sites.	
Grass Tree (*Xanthorrhoea australis*)			
	3m+ Well-drained soils.	Slow growing. Tolerates dry once established. Prominent after bushfires.	

KINGLAKE INDIGENOUS PLANTS

FERNS

NAME	REQUIREMENTS	FEATURES	HABITAT
Fishbone Water-fern (*Blechnum nudum*)			
	0.5m ↔ 1m Moist to wet humus soil.	Erect clump forming plant. Single or mass planting.	
Mother Shield-fern (*Polystichum proliferum*)			
	1m ↔ 1m Moist, well-drained soil, tolerating dry when established.	Tufted fern suitable for planting in the ground or a pot. Spreads easily via frond fernlets (bulbils)	
Soft Tree-fern (*Dicksonia antarctica*)			
	12m ↔ 2m Moist humus-rich soil. Not in full sun.	Commonly sold as bare trunks. Ensure you only buy plants sold with a permit tag.	
Rough Tree-fern (*Cyathea australis*)			
	15m ↔ 0.4m at base Moist soils, tolerating dryness and some sun once established.	A hardy, slow growing, long-lived plant. Ensure you only buy plants sold with a permit tag.	

KINGLAKE INDIGENOUS PLANTS

SHRUBS

NAME	REQUIREMENTS	FEATURES	HABITAT
Austral Indigo (*Indigofera australis*)			
	2m ↔ 2m Well-drained soil. Lime tolerant.	Needs regular pruning for shaping.	
Hairpin Banksia (*Banksia spinulosa var cunninghamii*)			
	3m ↔ 4m Prefers moist well drained soils.	Good under trees and pruned for screens. This variety not suitable for alkaline soils	
Dusty Miller (*Spyridium parvifolium*)			
	1.5m ↔ 1.5m HHH Moist, well-drained soil tolerating dryness.	Compact small-leaved shrub. Ideal for borders.	
Common Correa (*Correa reflexa var reflexa*)			
	1m ↔ 1m HHH Well-drained soils.	Very variable species which can interbreed. Excellent for dry, shady sites including under trees.	
Victorian Christmas Bush/Corranderrk (*Prostanthera lasianthos*)			
	2-8m ↔ 2-4m Moist well-drained loamy soil. Tolerates light frost and snow.	Tall fast-growing screen or hedge plant, but, vulnerable to strong winds.	

KINGLAKE INDIGENOUS PLANTS

TREES

NAME	REQUIREMENTS	FEATURES	HABITAT
Silver Wattle (*Acacia dealbata*)			
	20m 6m Prefers moist, well-drained soil.	Easily and fast grown, large, spreading tree.	
Blackwood (*Acacia melanoxylon*)			
	5-30m+ 4-15m Prefers deep, moist soil, but adaptable. Will tolerate dry conditions once established.	A fast growing, long-lived tree providing good screening and shade.	
Mountain Grey Gum (*Eucalyptus cypellocarpa*)			
	0-40m 12-30m Prefers deep moist soil, but adaptable to most.	Good shade and shelter. Very long leaves, smooth bark and white flowers.	
Hazel Pomaderris (*Pomaderris aspera*)			
	5-12m 3m Prefers well-drained, moist, humus-rich soil.	Hardy, spreading small tree. Quick growing.	

Lawn Alternatives

If you are looking for a lawn alternative, that can withstand periods of low water supply and needs less ongoing maintenance, you could consider a range of native grasses or plants depending on the look you are trying to achieve.

Cut-leaf Daisy

Kidney Plant

Bulbine Lily

Cut-leaf Daisy

Native grasses – one of the most successful native grasses for creating the look of a traditional lawn is the native Weeping Grass (*Microlaena stipoides*). It can be mown regularly and will grow well in a wide range of soils. Weeping Grass is drought, frost and shade tolerant, but does not cope with heavy traffic or dog urine. Excellent for a front lawn and it can be grown from seed or seedlings.

Ground cover plants - use ground cover plants that form dense mats, don't require mowing and perform well in shade. Examples include: Kidney Plant (*Dichondra repens*), Native Mint (*Mentha diemenica*), Ivy-leaf Violet (*Viola hederaceae*), and Hairy Speedwell (*Veronica calycina*).

Native wildflowers – planting out a mass of native wildflowers to create a meadow look can be spectacular, particularly in spring and summer. This works very well as a front lawn alternative. Examples include: Tufted Bluebell (*Wahlenbergia communis*), Chocolate Lily (*Arthropodium strictum*), Bulbine Lily (*Bulbine bulbosa*), Milkmaids (*Burchardia umbellata*), Cut-leaf Daisy (*Brachyscome multifida*), and other indigenous ground covers, lilies and grasses as listed on the previous pages.

Weeping Grass

Native Paper Daisy

Ivy Leaf Violet


Bottle brush

Hedge Selection

Hedges or screening can be created for windbreaks, shade, garden dividers, privacy, noise control, plant variety, contrast or aesthetics. They can be clipped, formal, or informal and are usually composed of shrubs or even small trees.

Many local indigenous plants make good hedges or screening bushes despite generally having been overlooked for a long time by many gardeners and landscapers. Prickly Currant-bush (*Coprosma quadrifida*), Wedge-leaf Hop Bush (*Dodonaea viscosa ssp cuneata*), Bottle-brushes (*Callistemon species*), Correas, Sweet Bursaria (*Bursaria spinosa*) are all useful and attractive for bird habitat, feeding, and pollination.

Some often suggested hedging species can become quite invasive, such as Pittosporum tenuifolium from New Zealand, especially the variety "James Stirling,". You and your neighbours could soon be weeding out unwanted seedlings all around the area after the hedge is established. Even Sweet Pittosporum (*Pittosporum undulatum*) from East Gippsland is invasive in our higher rainfall area and should be avoided (*see the Garden Escapees section*).

Instead, try a non-invasive local indigenous plant that is suitable for our growing conditions and consider the size, shape, and density that you are after. You can even try some imaginative topiary (hedge shaping) on suitable local subjects such as Prickly Currant-bush. Space plants to overlap for dense hedging or small gaps for an open effect or plant windbreaks in two staggered rows. Pinch and prune early top shoots for compact growth then weed, compost, mulch, and water to assist.

Silky Golden-tip

Rare Local Flora

In 2008, a pipeline development near Kinglake exposed a patch of rare plants, including Pomaderris vacciniifolia (Round-leaf Pomaderris), thought to be some of the last estimated 150 plants of that species left in the world.

The subsequent furore over the potential destruction of this rare plant led to it eventually becoming listed as Critically Endangered, the highest national category of risk of extinction.

Fire plays an important role in the evolution of many Australian plant species. The plants of the Kinglake Ranges have developed the ability to regenerate after fire.

The Black Saturday bushfires in 2009 stimulated germination of seeds lying dormant in the soil and gave the Round-leaf Pomaderris a boost in numbers. The Kinglake Landcare Group worked with the Murrindindi Shire Council and Parks Victoria to ensure the survival of the plant, by propagating, planting, and distributing the plant around the district. We now estimate that numbers in our district alone are in the thousands.

Round-leaf Pomaderris *(image credit: Shannon Cobern)*

Round-leaf Pomaderris

Wild populations of Round-leaf Pomaderris predominantly occur in fragmented stands in the upper catchments of the Yea and Yarra Rivers.

Populations are confined to areas surrounding Healesville, Toolangi, Kinglake, Flowerdale and Glenburn.

In a sheltered forest environment, it is a slender shrub growing to a height of 3 metres. In an open position Round-leaf Pomaderris will grow up to 4 metres tall and 2 metres wide.

The shrub is covered with creamy white flowers in late spring.

The seeds of Round-leaf Pomaderris attract King Parrots and Crimson Rosellas in early summer.

The Round-leaf Pomaderris is just one of the many rare, vulnerable, or threatened plants found in forests, on properties and along roadsides in the Kinglake Ranges. Others include Creeping Grevillea (*Grevillea repens*), Silky Golden-tip (*Goodia pubescens*), ferns and orchids.

Hyacinth Orchid

(image credit: Shannon Cobern)

PEST MANAGEMENT

KINGLAKE GARDEN ESCAPEES

The following list of species pose a significant threat to Kinglake's natural environment. These species can smother, choke, replace and out-compete native vegetation in our environment.

Please do not plant these species.

If you have them in your garden, we encourage you to remove them.

Tutsan

Australian Magpies

WEED CONTROL TECHNIQUES

	Hand Pull	Hand removal of plant, most suitable for small plants and seedlings.
	Cut & Paint	Cut stem and immediately paint an appropriate herbicide to the stump.
	Solarisation	Covering plants with a plastic sheet with buried edges for a four-week period. This allows the heat from the sun to kill off the plants underneath.
	Mulch	Smothering plants with a thick layer of appropriate mulch. Take care that the chosen mulch is weed- free.
	Scrape & Paint	Scrape the outer layer of an area of the plant stem and immediately apply an appropriate herbicide. Most appropriate on vine weeds.
	Spray	Apply herbicide to the surface of the foliage.
	Drill & Fill	Use a drill or other small tool to cut into the outer bark layer and apply an appropriate herbicide to the soft layer underneath the bark.

DISPERSAL KEY

- Wind
- Water
- Birds
- Animals
- Dumped garden waste
- Contaminated soil
- Vehicles

If using chemicals to control weeds, remember:

- Use chemical control only if non-chemical control is unsuitable.
- Do not spray chemicals in high temperatures or if rain is forecast within 24 hours.
- Spray when plants are actively growing.
- Some chemicals require an Australian Chemical Users Permit (ACUP).
- Always read the label on the product and follow the directions for application rates, safety procedures and handling as a minimum precaution.

KINGLAKE GARDEN ESCAPEES

CLIMBERS AND CREEPERS

NAME	FEATURES	DISPERSAL	CONTROL
Blue Periwinkle (*Vinca major*)			
	Forms thick carpets in creeks and bushland.		
English Ivy (*Hedera helix*)			
	Fast climber can grow to 30m up trees or along the ground to form dense carpets.		
Wandering Creeper (*Tradescantia albiflora*)			
	Can cause allergic reaction in dogs with skin irritation particularly on the stomach.		

Some weeds can be mistaken for native plants. For further weed identification we also recommend having a look at the Shire of Yarra Ranges' Plant Directory.

Australian Magpie

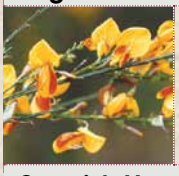
KINGLAKE GARDEN ESCAPEES

GRASSES AND HERBS

NAME	FEATURES	DISPERSAL	CONTROL
Monbretia (*Crocosmia x crocosmiiflora*)			
	Leaves and flowers die back each year only to grow back in a dense clump.		
Tutsan (*Hypericum androsaemum*)			
	Yellow flowers Oct-Jan. Fruit round, red becoming black.		
Wood Forget-me-not (*Myosotis sylvatica*)			
	A very weedy herb that grows from 20-50 cm tall to cover bushland with a blue carpet of flowers.		
Pampas Grass (*Cortaderia selloana*)			
	Huge perennial grass growing to 2-6m tall with large cream flower plumes Mar-May.		
Foxglove (*Digitalis purpurea*)			
	Herb to 1.5m. White, pink or purple flowers blotched inside.		

KINGLAKE GARDEN ESCAPEES

SHRUBS

NAME	FEATURES	DISPERSAL	CONTROL
Montpellier Broom (*Genista monspessulana*)			
	Seeds highly poisonous.		
English Broom (*Cytisus scoparius*)			
	Large shrub to 4m usually loses leaves over winter. Yellow flowers Oct-Dec.		
Spanish Heath (*Erica lusitanica*)			
	Slender, erect woody plant to 2m.		
Blackberry (*Rubus fruticosus aggregate*)			
	Prickly scrambling shrub with red to black fruit.		
Cotoneaster (*Cotoneaster spp*)			
	Berries contain toxins that can be harmful to infants if eaten.		
Tree Lucerne (*Chamaecytisus palmensis*)			
	Large shrub to 4m. Flowers cream to white June-Dec.		

KINGLAKE GARDEN ESCAPEES

TREES

NAME	FEATURES	DISPERSAL	CONTROL
Sweet Pittosporum (*Pittosporum undulatum*)			
	Dark green leaves, small creamy-white flowers. Distinctive, yellow fleshy fruit.		
Monterey Pine (*Pinus radiata*)			
	"Christmas tree" with distinctive pinecones.		
Holly (*Ilex aquifolium*)			
	Wavy green leaves and red berries in autumn.		
Willows (*Salix spp.*)			
	Long drooping branches. Often planted along waterways.		

NEW AND EMERGING WEEDS

NAME	FEATURES	DISPERSAL	CONTROL
African Weed Orchid (*Monadenia bracteata*)			
	Invasive perennial		
Alluminium plant (*Lamium galeobdolon*)			
	Invasive perennial		

Disposing of Weeds

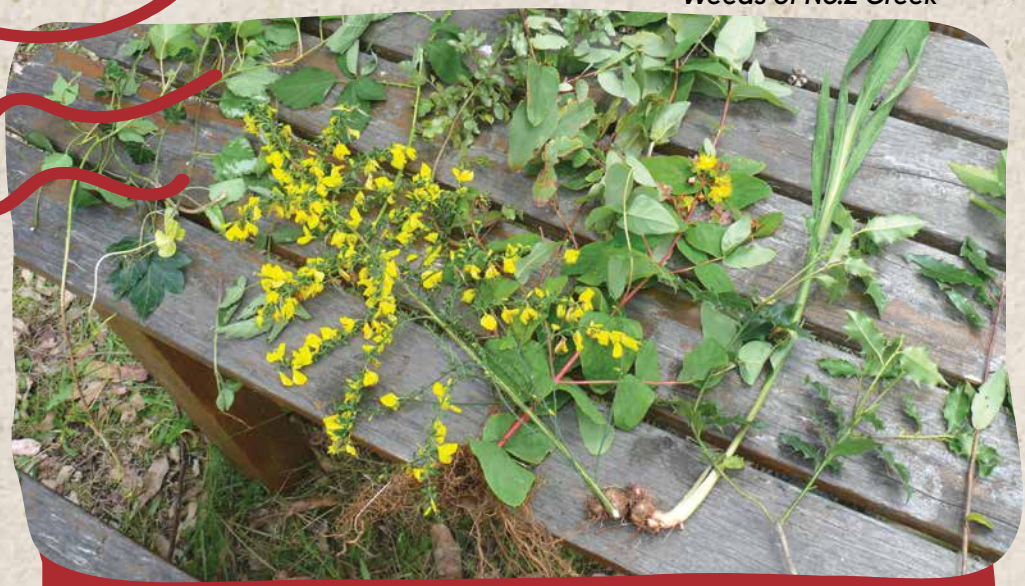
Weeding is one of the most time consuming and regular activities in the garden and in Kinglake's high rainfall environment weeds are a regular chore most of the year.

Disposing of weedy material incorrectly can spread more weeds, increasing the amount of weed control that is needed. Composting weeds is not always effective and weed seeds or roots can continue to thrive.

There are a range of other options for effectively disposing of weeds, including burning (when it is safe to do so). Wrapping weeds in black plastic bags and leaving them to solarize over an extended period will eventually kill weedy material including the roots and runners. Soaking weeds in large buckets of water for several weeks can break down the weeds and create a useful weed 'tea' that can be a useful organic fertilizer.

Avoid storing weeds in piles near the edge of bushland - this is how many garden plants become escapees, creating invasive weeds in our natural environment.

Weeds of No.2 Creek



Green waste can be disposed of at Murrindindi Shire Council Resource Recovery Centres. Free domestic green waste disposal is available during October & November, in preparation for the CFA declared Fire Danger Period, and in April each year, as well as after major storm events.

Chemicals

Chemicals, such as herbicides and pesticides, can be useful in treating weeds and pests. However, when used incorrectly or without care they can have a harmful impact on both gardens and the natural environment. By reducing the amounts of potentially harmful chemicals, we can minimise the potential for 'off-target' damage to desirable plants and useful insects. Many of these insects are important for pollinating food plants and our native flora.

Consider what non-chemical pest control methods might be available or less harmful in the long run to plants and soil. Mulches and organic manures may be a better option than synthetic fertilizers to improve soil condition for garden plants.

It is important to consider timing, season and weather when applying chemicals to make sure their use will be effective. Avoid times when wind might blow sprays away or when rain will wash chemicals off surfaces and potentially spread them into nearby waterways. On hot days, plants may be under heat stress, making some herbicides ineffective. Using chemicals to spray some annual weeds after they have set seed can also be an ineffective use of chemicals in the garden.

Always read the label of any chemicals and only use them according to the instructions on the label. If you are still unsure if a chemical is the best thing to use, seek further advice from garden or farm supplies specialists.

Weed control tools

Landcare groups often run short courses in how to use farm chemicals safely.

Queensland Fruit Fly

Rabbits

Animal Control

The Kinglake Ranges is home to many pests including foxes, Queensland Fruit Fly, rabbits, deer, Common Myna birds, European wasps and European honeybees.

Queensland Fruit Fly (QFF): QFF is one of Australia's worst horticultural pests. It is now prevalent in Melbourne and surrounding areas and is a serious threat to all food growers. The QFF lays its eggs in common fruits and vegetables, grown commercially and in the home garden. The larvae cause fruit to rot and go putrid. Infested fruit must be disposed to avoid spread to neighbours or nearby farms. Place fruit in sealed plastic bags and leave in the sun for seven days to destroy eggs and maggots – do not put them in compost. For more see Fruit Fly Free Yarra Valley.

Rabbits: Rabbits are a serious pest in the Kinglake Ranges. We all have a role to play in controlling rabbits on our land. The Murrindindi Shire Council website has a brochure to guide you in the most successful control techniques.

Your local Landcare group can help you gain the skills and knowledge required to safely use animal control baits and chemicals.

QFF trap used to monitor population

Deer on night vision camera

Trapped young fox

Deer: Deer numbers are increasing in the Kinglake Ranges. Deer cause a lot of damage to agriculture and gardens, and destroy areas of native vegetation. They are also a major hazard on roads. The Victorian Deer Control Community Network provides a state-wide forum to share information and experiences and propose solutions to substantially reduce the impact of feral deer across Victoria.

Foxes: Across Australia the fox has played a major role in the decline of birds, mammals and reptiles. Foxes threaten locally significant species like Long-nosed Bandicoot, Lyrebirds and Phascogales. Foxes cause significant losses to farmers. preying on lambs, kid goats and poultry. The King Parrot Pest Animal Co-operative Project has a coordinated, community-based approach to managing foxes across the Kinglake Ranges and encourages baiting, soft-jaw & cage trapping, shooting, and den fumigation.

Domestic Pets

It is essential to secure cats and dogs on your property, especially at night, so they don't prey on native animals. It is best to secure pets, indoors or in enclosures. Collar bells on cats have limited success. **Never dump unwanted pets in natural areas; it is cruel and illegal.**

CONTACTS

Local suppliers

Plants & Supplies

- **Oldfields Garden and Farm**
  Kinglake West
  5786 2171
- **Antique Perennials**
  Kinglake
  0416 132 965
- **Fern Acres**
  Kinglake West
  5786 5031
- **Steve & Heather's Trees**
  Flowerdale
  0412 334 521
- **Affordable Plants**
  Glenburn
  0428 770 002
- **Steve Davies Nursery**
  Kinglake West
  0411 733 636
- **Stringybark Nursery**
  St Andrews
  9710 1223
- **Valley of a Thousand Hills Farm Nursery**
  Reedy Creek
  5784 9286
- **Tallarook Trees**
  Tallarook
  0422 625 973
- **Redgate Revegetation**
  Alexandra
  0412 197 889
- **La Trobe University Indigenous Plant Nursery**
  Bundoora
  9479 1206
- **Kuranga Nursery**
  Mt Evelyn
  9760 8100
- **Di's Delightful Plants**
  Lilydale
  9735 9179

Weeds Control Contractors

- **Fauna Connection**
  Ferntree Gully
  0407 155 013
- **Habitat Land Management**
  Thomastown
  0438 100 048
- **Warrawee Holdings**
  Glenburn
  0418 544 493
- **Envirotechniques**
  Eltham
  9431 6555

Sugar Glider

Kinglake Landcare Group has no affiliations with any of the suppliers listed here. Details correct at time of printing - refer to the Mountain Monthly local business directory for current details.

Advice

Ecological Consultants

- **ID Ecological Management**
  Research
  9437 0555
- **Practical Ecology**
  Preston
  9484 1555
- **ABZECO**
  Eltham
  9431 5444
- **Habitat Management Services**
  Panton Hill
  0408 700 096

Tree Services

- **Morgan's Tree Services**
  Kinglake
  0419 895 464
- **Star Tree Services**
  Upper Plenty
  5783 3170
- **Habitat Ecology**
  Healesville
  0419 591 168
- **We Cut Trees**
  Lilydale
  0430 519 552

For further advice to help you care for your patch, contact or search online for:

- **Kinglake Landcare Group** 0419 858 504
- **Upper Goulburn Landcare Network**
  0413 855 490
- **Goulburn Broken Catchment Management Authority**
  (03) 5822 7700

Other regional Landcare Groups

- **Flowerdale Landcare Group**
- **Strath Creek Landcare Group**
- **Yea River Landcare Group**
- **Strathewen Landcare Group**
- **St Andrews Landcare Group**
- **Whittlesea Landcare Group**

Other resources

- **CFA Plan & Prepare** website
- **Buzz of the Bees beekeeping group** at the Kinglake Ranges Neighbourhood House
- **Birdlife Australia Backyard Birdcount** website
- **Murrindindi Shire Council**
  Senior Environment Assessment Officer
  5772 0333

Local Wildlife Rescuers

- **Kim Hunter** 0427 334 346
- **Murrindindi Wildlife Shelter**
  0430 440 286


Kinglake
LANDCARE
Upper Goulburn
Landcare
Network