# Your Indigenous Garden

Sustainable gardens for local wildlife

## Credits

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Hand drawn botanical images: Tim Connell

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## Introduction

Our gardens provide an opportunity to support Whittlesea’s unique plants and animals. Local or indigenous plants can be used in any style of garden, and provide a stepping stone for native birds and animals to move safely across our highly urbanised landscape.

### Our changing environment

Alterations to the natural environment can have a number of effects including a decrease in habitat and a loss of biodiversity.

#### Urbanisation

In Whittlesea, rapid development and population growth has increased pressures on our native wildlife. As development increases, our native animal habitat becomes more isolated and fragmented. This makes it difficult for wildlife to breed, forage, find shelter, and move across the landscape, resulting in a decline in species diversity and abundance. Replacing areas of native vegetation with surfaces such as concrete also contributes to an increase in temperatures in urban areas known as the urban heat island effect.

#### Climate change

Changes in our global climate are impacting our natural environment. Predictions for Whittlesea show that we will experience:

* Lower rainfall
* More intense storms
* Increased heatwaves and hot days.

It is difficult for plants and animals to adapt quickly to new conditions, resulting in a loss of biodiversity including, native species and communities.

#### Bushfires

Fire has long been part of the Australian landscape and indeed many plants are dependent on fire for seed germination. However, climate change modelling predicts more frequent and intense fires across a longer bushfire season. The impact of such fires on biodiversity is complex and difficult to predict, however there is significant concern for the ability of flora and fauna to recover from such fire events.

#### Weeds

Many non-indigenous species can become invasive, competing with indigenous plants for space, nutrients, water and light. This results in a reduction of habitat for wildlife and a loss of biodiversity. For more information, refer to pages [38-40](#_Weeds).

#### Pest animals

Invasive pest animals (non-native) have a devastating impact on native wildlife, plant communities and fauna habitats across a broad range of natural, agricultural and urban environments through predation, degradation, competition and exclusion. Specifically, pest animals destroy native habitat, which decreases species diversity and abundance. For more information, refer to pages [21-23](#_Pest_animals).

#### Pollution

Herbicides, pesticides and fertilisers from our gardens can enter our stormwater system, where they end up polluting our local waterways and harming plants and wildlife. For more information, refer to page [27](#_Non-chemical_pest_control).

### Whittlesea plant communities

Plant communities are groups of plants that share a common environment. Species are indigenous to that place and naturally occur together because they have similar needs. Whittlesea has 36 plant communities, which are grouped into six floristically similar communities for this guide.

#### 1. Basalt Plains Grassland

Noted for the richness and diversity of grasses and wildflowers, and characterised by an absence of trees, although scattered groups or individual trees may appear on rocky rises and along water courses. It is restricted to basaltic soils on the plains that extend from the Plenty River westward.

#### 2. River Red Gum Grassy Woodland

Primarily open woodland dominated by River Red Gums with a grassy understorey. Smaller trees and shrubs form scattered groups in the woodland.

It occupies flats and gently undulating country and lower slopes of hills.

#### 3. Riparian Complex

Occurs in narrow sections alongside creeks and rivers, and also found on adjacent floodplains. Defined by an overstorey of River Red Gum, Swamp Gum or Manna Gum and has a distinct shrub layer consisting of Swamp Paperbark, Woolly Tea-tree and River Bottlebrush.

#### 4. Dry Sclerophyll Forest or Box-Stringybark Woodland

Dominant vegetation type on dry lowland hills and slopes. The main overstorey trees are stringybark and box-type eucalypts. The understorey depends on the aspect and ranges from very grassy to grassy with a pronounced shrub layer. Most common is a layered effect with a variety of overstorey trees, small trees, shrubs, climbers, wildflowers and grasses.

#### 5. Valley Grassy Forest

Occurs on sheltered slopes and lowlands in the east. The overstorey of this vegetation is dominated by Candlebark, Yellow Box, Narrow-leafed Peppermint and in the very wettest aspects Manna Gum and Swamp Gum.

#### 6. Damp Sclerophyll Forest

This tall open forest occurs on higher slopes in the north and on a variety of soils. The reason for its distribution is rainfall; it requires 900-1000mm per year. Several species of eucalypt occur, including Messmate and Mountain Grey Gum most commonly, but also Mountain Ash, Manna Gum and Silvertop Ash.

Discover which plant community your home is located in, contact Council’s Sustainable Land Management team on 9217 2471 or sustainability@whittlesea.vic.gov.au. For local plants belonging to each community refer to pages [30-38](#_Thirty_common_local).

### River Red Gums - an iconic species

Mature River Red Gums in an open plains grassy environment are recognised as one of the most important visual features of Whittlesea’s local landscape. Many large old trees are estimated to be between 200 and 800 years of age, pre-dating European settlement, and have significant local heritage and environmental values.

The majestic River Red Gum has smooth, dull grey bark which is sometimes cream or reddish in patches. Their gnarled appearance with massive trunk, heavy twisting branches and broad open canopy make them relatively easy to identify and are a significant feature in the landscape.

River Red Gums are a particularly important species for Aboriginals where the bark was used for making canoes and shields (which created scar trees), the wood for weapons, and the gum treated burns and diarrhoea. Significant trees were also used as meeting places or corroborees.

River Red Gum trees are important in providing habitat for local wildlife, mainly birds and mammals, through the formation of hollows. If you look closely at a large old tree you will likely notice a number of hollows that have developed along the trunk but also at the end of large branches. When a branch falls off a tree it creates a wound that allows air and water in, which over time begins to rot and eventually forms a hollow. Tree hollows are the natural habitat of many species of possum, gliders, small marsupials and microbats as well as parrots, lorikeets and cockatoos to name a few.

Fallen limbs on the ground also provide similarly important habitat for small marsupials and reptiles. The City of Whittlesea’s River Red Gum Protection Policy recognises the intrinsic value of these trees in establishing character and identity in the urban and rural areas.

## Trees

“I like to climb trees and I hold on very tight, then I climb down carefully” Spencer (Aged 4)

Trees live for many years and are a dominant feature of a garden and an important source of food and shelter for wildlife. Selecting the correct tree therefore requires careful consideration.

Tree selection needs to take into account the conditions of your site, and your next door neighbours. When deciding where to locate your tree you need to consider the following potential impacts of the tree once it reaches maturity:

* Will it be clear of overhead and underground services? (Phone 1100 ‘Dial Before You Dig’ if unsure)
* Will it cause damage to buildings, paving or fencelines?
* Will it compete with other trees and shrubs, particularly water hungry eucalypts?
* Is the tree suited to your soil? Changes or additions to soil can work for small trees but are not practical for large trees
* Will your tree receive the recommended sun or shade requirements indicated on the plant label?
* Are allergies such as asthma and hay fever an issue? For more detail visit: [www.asthma.org.au](http://www.asthma.org.au).

If you want to use trees to contribute to the heating and cooling of your house consider selecting a deciduous tree that will shade your house in the summer heat and drop its leaves to allow sunlight through in winter. If possible, plant on the western side of your house to maximise the effect.

### Tree maintenance

Looking after your tree will help maintain a healthy, long lived plant. Particularly in the first 3-5 years your tree will benefit from regular pruning of any diseased branches or deadwood, removing food sources for any fungal pathogens. Pruning will also reduce the incident of branch limbs dropping. It is not a good idea to attach swings or tree houses to a tree as they can create large open wounds or limit trunk growth.

Mulch to a depth of 8-10cm and ensure your mulch extends to the drip line of the tree canopy as a tree’s root system will extend beyond this area.

For a small fee you can order a garden waste bin to collect your leaves, grass clippings, weeds, prunings and small branches. Or you can bundle branches with string (no wire or plastic) ensuring the bundles are up to 1.8m long and 30cm wide. Book your free bundle pick up on 9401 0555 and put on your nature strip the night before.

If you need professional help to prune or remove a tree, you should engage a qualified arborist who is a member of Arboriculture Australia, and phone Council’s Planning Department on 9217 2236 to see if you need a permit.

### Street trees

The City of Whittlesea provides regular street tree maintenance across the municipality in two year cycles. This is designed to maintain clearances over footpaths, roads, nature strips and properties, to enhance the health of the tree, and to comply with legislation. If you are concerned about the health of a street tree, call Council on 9217 2170.

### Planting under trees

Trees greatly benefit from understorey plantings of shrubs, grasses and groundcovers. Understorey plants can assist tree health by shading the soil, building organic matter, attracting animals to feed on insects and encouraging beneficial micro-organisms that help the tree roots access nutrients.

If planting under established native trees, especially eucalypts, you do need to consider a few issues.

1. Take care not to damage the trees surface roots
2. Eucalypts are water hogs! Select indigenous plants that naturally grow as eucalypt understory. Water during establishment
3. Eucalypts protect themselves by releasing chemicals into the soil to inhibit the growth of shrubs and seedlings of other trees. However, not all plants are put off by this. Peas, banksias, grevilleas, correas, lomandras and poas co-exist quite well. The other option is to plant a distance away that’s equal to at least twice the height of the mature tree.

## Garden design

“It makes me happy to have picnics in my backyard with my family”Rylan (Aged 4)

### Site analysis

If you are starting from scratch or redesigning a garden bed, one of the best things you can do is observe your garden for a year. This will give you an accurate picture of your garden through all the seasons when light and shade and moisture can vary enormously. Regardless of whether you have the patience to do this or not, the starting point with garden design is to do a site analysis of your garden. It allows you to identify the pros and cons, limitations and possibilities for your garden. It is also important to work with your site. If you know a section of your garden is shady and damp, select plants that are suited to those conditions rather than trying to change the site.

#### Step 1: What exists?

Create a scaled drawing of your property. Mark in the main structural and environmental features. Fences, pathways, shed, outdoor taps, clothesline, patio, rainwater tank, garden beds, major trees and lawn areas. Where are your sunny and shady areas in summer and winter? Do you have a large paved area near the windows on the north side of your house that reflects the hot summer sun into your house? Do you have any drainage issues where the ground is often too wet or dry?

Consider extending your indigenous garden to your nature strip. It’s a great alternative to the traditional lawn and will change the face of your property. Conditions apply so check-out the [Nature Strip Guidelines on Council’s website](https://www.whittlesea.vic.gov.au/building-planning-and-transport/roads-and-transport/road-and-parking-rules/nature-strip-guidelines) to find out more.

#### Step 2: What are your needs?

Create a wish list. Do you want more space for the kids? A private reading nook? A more inviting outside entertainment area? A front yard that complements the architecture of the house? A herb garden near the back door? More birds visiting? Do you need a deciduous tree to provide summer shade and winter warmth to your house? Does your compost bin receive enough sun? Do you need screening to provide more privacy? Do you want to reduce or remove your lawn? Make a note of the initial major work that would need to be done with each option e.g. garden bed edges curved out; relocate clothesline; break up concrete slab.

#### Step 3: Look at your plants

Remember to work with your site. If you know a section of your garden is shady and damp, select plants that are suited to those conditions. Are your plants a mix of natives (low nutrient needs) and exotics (high nutrient needs)? Are your plants layered with the smallest at the front of your garden beds rising to taller plants at the back? Have they been grouped according to their water needs? Do you have any trees that may need attention? If you have a lawn do you want to keep it or reduce it? Do you want to grow vegetables? In garden beds or raised beds? Decide if you want a low maintenance garden or do you enjoy working in the garden regularly?

#### Step 4: What is your style?

Do you prefer a simple or complex garden? Open or private? Pretty and neat? Dramatic and structural? Natural looking? How do you want your garden to feel? Look through gardening magazines or your neighbourhood gardens. Make notes on what appeals to you.

#### Step 5: The research

Create a list of the plants you need to create the style of garden you desire. What sort of cost are you looking at? Remember you can save money if you buy plants as young tubestock. List down any major structures you want. Can you do it yourself, or will you need a professional builder or plumber? Make an estimate of the cost of materials such as pavers, rainwater tanks, raised vegie beds. Can you afford to install and maintain your garden or do you need to look at alternatives or a staged approach?

#### Step 6: Develop a plan

Once you have decided on what you want and what you can realistically achieve and afford, you can play with your garden plan exploring different options. Tracing paper overlays can work well at this stage. Decide what needs to be done first i.e. the big jobs such as reworking your garden bed edges or breaking up a slab of concrete. Focus on one area at a time so you are not overwhelmed. Remember, it doesn’t all have to be done immediately but rather according to a well thought out garden plan.

And lastly, if you would like to turn your nature strip into a beautiful indigenous garden, check-out the [Nature Strip Guidelines on Council’s website](https://www.whittlesea.vic.gov.au/building-planning-and-transport/roads-and-transport/road-and-parking-rules/nature-strip-guidelines) for the application and requirements.

### Bushfire

If you live in a high bushfire risk area within Whittlesea, we recommend you download the <http://www.cfa.vic.gov.au/plan-prepare/landscaping-for-bushfire/>. The document contains detailed information on garden design, maintenance and plant selection to reduce the risk of losing your house or life.

Design considerations include:

* Create areas of low fuel between your house and vegetation. This includes driveways, patios, water features, paths and mowed lawn areas
* Create separation between plants, garden beds and tree canopies. For example: do not plant shrubs under trees; separate garden beds with lawn or paths; and prune branches to a minimum of 2m above the ground
* Use non-combustible materials such as stone, gravel, brick, earth, concrete and galvinised iron for walls, driveways, tanks and paths
* Avoid locating plants near windows, decks, eaves, or overhanging your roofline
* Ensure your house and other structures, such as car ports and sheds, are free of plants that can easily catch fire, such as creepers and vines
* Locate garden sheds away from the house
* Avoid flammable mulch near your house. Use pebbles, gravel or recycled concrete bricks
* Locate trees at least 10m from buildings, separate tree canopies by at least 2m and avoid planting trees with loose bark
* Periodically remove dead branches, bark and leaves from garden beds and gutters.

### Sustainable products

Buying furniture, pots, timber and pebbles for the garden can impact on environmental sustainability. For example, River Red Gum trees grow in woodlands which are part of an intricate ecosystem that supports native fauna – harvesting this product is unsustainable. Avoiding Red Gum sleepers, tomato stakes and posts will help preserve our River Red Gum ecosystems.

There are a number of ways you can reduce the impact of gardening on the environment:

* Consider reusing or purchasing second hand pavers and bricks
* If you cannot source recycled timber use Forest Stewardship Council (FSC) certified plantation timbers rather than imported rainforest timbers
* Consider posts, sleepers and decking made from recycled plastic and waste timber
* Use small amounts of quarried rocks that have been tumbled rather than river stones
* Choose timber sleepers treated with non-arsenic-based chemicals • Local gas-fired ceramic pots have a lower environmental impact than those fired using wood or coal and transported from overseas
* Reuse old pots or containers to make interesting container pots
* Source seeds and plants from reputable suppliers
* Close the loop by buying garden furniture made from recycled plastic
* Consider solar pumps and lights for the garden
* Do a web search for recycled building supplies.

#### Timbers to avoid (rare or threatened species)

* Merbau (also called Kwila)
* Burmese Teak
* Ramin
* Meranti
* African Mahogany (including Sapele)

#### Better alternatives (managed plantations)

* FSC Plantation Eucalyptus
* Bamboo
* FSC New Guinea Teak
* Rubberwood
* FSC Tuan

For more information visit: [www.goodwoodguide.org.au](http://www.goodwoodguide.org.au).

## Growing gardens for children

“It smells nice outside, smells like earth” Lily (Aged 4)

Links with nature are fundamental to children’s understanding about the world, and a direct connection with the natural environment is beneficial to their development. Gardening is a great way to enjoy quality time together, learn new skills, have fun and develop good habits, and wild spaces big and small are the perfect play space.

### Design your own backyard wild space together

#### Engage all senses

Your own backyard can be a place of wonderment. If designed with the five senses in mind, your little oasis will encourage exploration and provide tactile experiences for your children. Consider:

* **Sound** - encourage birds into your garden with bird attracting plants (refer to pages [15-16](#_Plants_that_attract)) and bird feeders. Create garden decorations that make sound such as wind chimes. Plant trees and plants that rustle in the wind
* **Colour** - pick flowering plants and shrubs with contrasting foliage (refer to pages [30-38](#_Thirty_common_local))
* **Smell** - plant fragrant native plants or herbs such as River Mint and Chocolate Lily. Make sure you space scented plants to avoid confusion
* **Taste** - plant native herbs and fruit such as Salted Pig-face, Native Raspberry or Ruby Saltbush, and make sure everything in your garden is non-toxic
* **Touch** - include different textures e.g. rocks, grass, water, fuzzy leaves and soft flowers.

#### Get creative together

* Paint signs and plant labels
* Use items such as old shoes or wheelbarrows as pots
* Build bird feeders, a nest box, and a native bee hotel (refer to page [14](#_Native_bees))
* Create a garden book - include seed packets, children’s drawings of plants you are growing or an autumn leaf collection. Add some facts about what you planted, when, how many and a watering schedule.

#### Plant together

* Plant your tubestock seedlings, trees and shrubs together
* Water plants together
* Weed together
* Create and enjoy together.

#### Learn together

* Learn and teach about what grows where, how much water is needed, what insects will like, what insects to watch out for
* Look out for visiting creatures big and small such as bees, ants, hoverflies, birds, frogs, possums and even Sugar Gliders.

## Wildlife

“I like to see the animals in our yard. We have a tree” Sienna (Aged 4)

Attracting native animals to your garden can add extra colour, interest and enjoyment.

### Native bees

European honey bees were introduced into Australia for honey production almost 200 years ago. Many honey bees have established themselves away from beekeepers’ hives and are now feral, often building hives in tree hollows.

Honey bees out-compete native animals including birds and mammals for nesting hollows and occasionally for pollen and nectar.

Native bees are quite different to honey bees. They are often solitary and nest alone. A single female bee will build a small nest in either a burrow in the ground or burrows in soft timber, rock crevices or in tunnels left behind by wood-boring beetle larvae.

There is often a shortage of suitable nesting places, so native bees will readily locate in a bee hotel and they are easy to make.

Locate your bee hotel under an overhang to protect it from rain. Place it at least 1m but no more than 2m above the ground in a warm, sunny spot. Bees need protection from most pesticides, a source of water nearby and access to clumps of blue, pink, white or yellow flowering plants.

#### Bamboo bee hotel

Bamboo should be cut into short lengths just behind the nodes, so that there is only a hole at one end. Bundle them together with wire or in a frame. Or you can bundle paper drinking straws into a piece of downpipe or an empty drinking bottle.

#### Timber bee hotel

Use blocks of untreated hardwood and softwood to drill holes of varying size. Make the holes smooth and blind (not right through the timber). Drill a variety of hole sizes from 2mm-10mm wide and to a depth of 120-150mm.

### Attracting butterflies and other invertebrates to your garden

Butterflies are a welcome addition to any garden. A dish of damp sand for moisture and salts, a flat rock to bask in the morning sun and a sheltered retreat from the midday sun will attract butterflies to your garden.

Butterflies prefer flat flowers, such as daisies, that are easy to land on to feed on nectar. They are attracted to a range of flower colours, in particular blue, yellow and red. Plant large groups of flowering plants together for a greater chance of attracting butterflies. Include host plants that they can lay their eggs on e.g. Kangaroo Grass *(Themeda triandra)* for Common Browns, or Wallaby Grass *(Rytidosperma spp.)* for Golden Sun Moths.

Native invertebrates such as butterflies, bees, ladybirds, ants, gnats, beetles, spiders, dragonflies and lacewings benefit the environment in many ways. They are plant pollinators, waste recyclers, pest eaters and an important source of food for native birds, frogs, reptiles and mammals.

Plants to attract butterflies and other invertebrates include:

* Clustered Everlasting *(Chrysocephalum semipapposum)*
* Common Everlasting *(Chrysocephalum apiculatum)*
* Chocolate Lily *(Arthropodium strictum)*
* New Holland Daisy *(Vittadinia cuneata)*
* Common Tussock-grass *(Poa labillardieri)*
* Kangaroo Grass *(Themeda triandra)*
* Sweet Bursaria *(Bursaria spinosa)*
* Spiny-headed Mat-rush *(Lomandra longifolia)*
* Austral Indigo *(Indigofera australis)*
* Hop Goodenia *(Goodenia ovata)*
* Native Tree Violet *(Melicytus dentatus)*
* Woolly Tea-tree *(Leptospermum lanigerum)*

### Plants that attract small birds

Small birds, such as Silvereyes, Red-browed Finch, Eastern Yellow Robin, Spotted Pardolotes, Grey Fantail and Superb Fairy-wren, forage in the protected lower levels of the garden. They feed on insects, caterpillars and spiders and eat berries and seeds.

The following indigenous plants are an example of some plants that will attract small birds to your garden:

* Berry Saltbush *(Atriplex semibaccata)*
* Prickly Moses *(Acacia verticillata)*
* Climbing Saltbush *(Einadia nutans)*
* Small-leaved Clematis *(Clematis microphylla)*
* Common Tussock-grass *(Poa labillardieri)*
* Kangaroo Grass *(Themeda triandra)*
* Native Tree Violet *(Melicytus dentatus)*
* Sweet Bursaria *(Bursaria spinosa)*

### Plants to attract parrots

Parrots feed on a variety of food sources. Some such as Eastern Rosellas, Rainbow Lorikeets, Gang-gang Cockatoos and Musk Lorikeets feed on the flowers and seed of eucalypts, she-oaks and bottlebrush. Red-rumped Parrots feed mainly on the ground, sourcing indigenous grass seed. Long-billed Corellas dig for ground tubers and Yellow-tailed Black-Cockatoos love to find grubs hiding under tree bark. The following indigenous plants will attract parrots to your garden:

* Lightwood *(Acacia implexa)*
* Black She-oak *(Allocasuarina littoralis)*
* River Bottlebrush *(Callistemon sieberi)*
* Weeping Grass *(Microlaena stipoides)*
* Common Tussock-grass *(Poa labillardieri)*
* Blackwood *(Acacia melanoxylon)*
* Drooping She-oak *(Allocasuarina verticillata)*
* Silver Banksia *(Banksia marginata)*

### Attracting lizards and skinks to your garden

Australia has more threatened reptile species than any other country in the world. Small reptiles such as lizards and skinks have declined steadily from suburban gardens due to lack of habitat, dog and cat attack, lawn mower encounters and eating snails poisoned by snail bait (even pet-friendly ones). Instead trap snails using a natural snail bait such as a shallow dish of beer set at soil level.

To encourage lizards and skinks, such as the Blue-tongue Lizard, Tussock Skink, Striped Legless Lizard, Marbled Gecko or Garden Skink into your garden, provide some protected flat rocks, logs or brick paving in a sunny spot for them to warm on. Cultivate lots of leaf litter, provide mulch where they can hunt for insects, and tussock grasses for protection. Get your children involved in building deluxe lizard lounges!

#### Plants to attract lizards and skinks:

* Berry Saltbush *(Atriplex semibaccata)*
* Weeping Grass *(Microlaena stipoides)*
* Climbing Saltbush *(Einadia nutans)*
* Kangaroo Grass *(Themeda triandra)*
* Knobby Club-rush *(Ficinia nodosa)*
* Common Tussock-grass *(Poa labillardieri)*

#### Snakes

Snakes perform a vital role in the environment as one of our few native predators. Snakes are shy and will generally avoid a busy residential garden. You can make your garden less appealing by ensuring you avoid having stacks of timber

and tin lying around or long grass. If you do discover a snake in your garden you should not try and handle them yourself. Most bites occur when people try to kill a snake. Not only is this dangerous, but it is illegal to kill a snake in Victoria. Instead contact the Department of Environment, Land, Water and Planning on 136 186 for advice.

### Attracting frogs to your garden

“I wish I had a frog” Ananya (Aged 8)

Frog populations have undergone serious decline in recent decades worldwide. Eastern Australia has been identified as a global hotspot of frog decline with nine species already listed as extinct in the last 20 years. Not only are frogs vulnerable to the issues of habitat loss and feral animal predation, but they are also susceptible to disease, pollution, pesticides and climate change. Whittlesea is home to many species of frogs including the Growling Grass Frog, Pobblebonk and Spotted Marsh Frog. Create a frog-friendly garden and they might move in. Your children will love it!

#### Plants to attract frogs:

**Deep water zone:** Nardoo *(Marsilea drummondii),* Running Marsh-flower *(Villarsia reniformis),* Water Millfoil *(Myriophyllum crispatum)*

**Shallow water zone:** Common Sedge *(Carex tereticaulis),* Common Spike-rush *(Eleocharis acuta),* Tassel Sedge *(Carex fasicularis)*

**Damp zone:** Marsh Club-sedge *(Bolboschoenus medianus),* Swamp Stonecrop *(Crassula helmsii),* Water Plantain *(Alisma plantago-aquatica)*

**Pond surround:** Knobby Club-rush *(Ficinia nodosa),* Loose-flower Rush *(Juncus pauciflorus),* Spiny-headed Mat-rush *(Lomandra longifolia)*

#### Building a frog pond

Locate your pond in a low-lying section of the garden that has 60 to 70 per cent shade. Shade from shrubs and small trees is preferable to large overhanging trees, which may drop too many leaves and cause a build up of nutrients in your pond. You can buy ready-made ponds or dig your own and line it with heavy-duty pond lining. It’s important to ensure your pond has varying depth including a ramped shallow entry point and a deeper section for potted aquatic plants. Be aware that safety fencing may be required depending on water depth. Please check your design complies with relevant regulations.

Visit: [www.vba.vic.gov.au](http://www.vba.vic.gov.au)

Side shelves allow for additional variation and a wider range of plants. Add rocks and logs to create climbing spots and consider using a slab of rock as a water-side observation area. Cover the bottom of your pond with washed gravel. Allow your pond to fill with rainwater or tap water. Frogs are very susceptible to chemicals as they absorb everything through their skin. If you are using tap water, purchase water conditioner from an aquarium shop to remove chloramines and fluoride from the water. Once your pond is full, add your plants.

**Essentials**

A pump should not be necessary. Tadpoles and eggs often die in pumps. As long as you do not have an excess of leaf litter falling into your pond that will result in a smothering layer of algal growth, your pond should remain healthy. Avoid floating aquatic plants such as Azolla *(Azolla filiculoides)* and Duckweed *(Spirodela oligorrhiza)* as they can quickly cover the surface of your pond reducing light and oxygen levels. Do not introduce fish into your frog pond as they will snack on tadpoles.



### Attracting mammals to your garden

Sadly, Australia has the worst mammal extinction rate in the world. Altogether, 18 mammal species have become extinct since the arrival of European settlers in 1788. Twenty per cent of our remaining mammal species are threatened with extinction.

Whittlesea is home to many species of mammals including the Eastern Grey Kangaroo, Swamp Wallaby, Echidna, Wombat, Sugar Glider, Brush-tailed Phascogale, Fat-tailed Dunnart, Platypus and Koala. Mammals more likely to visit your garden include the Ringtail possum, Brushtail possum and microbats. While some gardeners despair when their roses and vegetable crops become the food source of possums, remember that urbanisation has replaced their natural habitat and they have adapted extremely well to suburban properties that offer an abundance of food and excellent nesting sites. Providing trees with hollows or species specific nesting boxes will encourage possums, gliders and microbats to nest away from your roof especially if you close up any entry points.

For further information contact Council for a copy of ‘Small Mammals of the City of Whittlesea’ on 9217 2042.

#### Plants to attract mammals:

* Berry Saltbush *(Atriplex semibaccata)*
* Tasman Flax-lily *(Dianella tasmanica)*
* Kangaroo Grass *(Themeda triandra)*
* Gold-dust Wattle *(Acacia acinacea)*
* Large Kangaroo Apple *(Solanum laciniatum)*
* Silver Banksia *(Banksia marginata)*
* Lightwood *(Acacia impressa)*
* Sweet Bursaria *(Bursaria spinosa)*
* River Bottlebrush *(Callistemon sieberi)*
* Native Tree Violet *(Melicytus dentatus)*
* Blackwood *(Acacia melanoxylon)*
* Silver Wattle *(Acacia dealbata)*



#### Monitoring and nest boxes

Many mammals shelter and breed in tree hollows. Unfortunately deforestation has led to a decline in the number of old trees with well-developed hollows. As it can take 100 years for a hollow to develop, you can help our native mammals by providing species specific nest boxes.

To discover which creature has taken up shelter in your nest box, Whittlesea residents can borrow Council’s nest box camera by contacting Council on 9217 2471. For further information on nest boxes visit [www.latrobe.edu.au/wildlife](http://www.latrobe.edu.au/wildlife).

### Pest animals

Victoria is home to a huge array of invasive pest animals (non-native) that pose a serious threat to biodiversity values in a broad range of environments including, woodlands and forests, waterways, agricultural and urban areas.

Even your local garden is not immune to the impacts of pest animal species. Pest animals threaten and impact widely on biodiversity values through predation, degradation, competition and exclusion, and have economic and potential human health impacts.

A selection of the key pest animal species that impact Whittlesea’s ecological values include:

**Rabbits** - the impact of rabbits are well known and may include:

* Overgrazing and impeding the regeneration of native vegetation, including revegetation
* Selectively grazing the seedlings of many native trees and shrubs
* Erosion of soil.

High numbers of rabbits also attract and support increased fox opportunities to the detriment of native animals.

**Introduced predators** - foxes and cats (both feral and domestic) have a devastating impact on native animals, particularly small species. Urban areas support elevated numbers of foxes due to the availability of food and shelter, placing even more pressure on wildlife living in these environments.

**Indian Mynas** – this is one of the world’s most invasive species. It is common in urban, agricultural and woodland environments. This aggressive species outcompetes native fauna for food, shelter and nesting sites. They use hollows which excludes native hollow-dependant species (e.g. Crimson Rosella and Sugar Glider), disrupts breeding, and potentially causes death to native species due to lack of shelter.

#### Pest animal management

Land owners have a legal responsibility to control declared pest animal species such as foxes and rabbits under the Catchment and Land Protection (CaLP) Act 1994. Land owners are encouraged to control Indian Mynas, which can result in increased species diversity and abundance, particularly in regard to small native bird species and other hollow-dependent fauna.

Effective pest animal management is best achieved using a combination of techniques, including:

* Monitoring for pest animals (e. g. nocturnal spotlight) and their signs (e.g. scats, dens, warrens, scratchings etc.)
* In urban areas, consider using soft jaw traps for foxes and cage traps for feral cats, which allow non-target species to be released. Where fox dens and rabbit warrens are present, fumigation and ripping can be undertaken
* Get involved in an Indian Myna trapping program – contact the Yarra Indian Myna Action Group [www.yimag.org.au](http://www.yimag.org.au)
* Reduce available habitat and other resources:
	+ Remove harbour. Weeds such as Blackberry and Gorse may provide harbour for rabbits and foxes
	+ Prevent Indian Myna nesting in roofs and eaves by blocking holes and regularly checking nest boxes and evicting exotic species
	+ Do not leave waste and rubbish around the house/garden that may attract pest animals
	+ Do not feed wild birds and prevent access to poultry and stockfeed
	+ Install exclusion fencing for foxes and rabbits
	+ Know where your pet cat is at all times, particularly at night. Domestic cats have a major impact on native wildlife
	+ Effective pest animal control is best achieved when coordinated over a wider area, so discuss y our plans with the neighbours
	+ Employ a suitably qualified contractor if required for advice or to undertake control activities.



## Planting and maintenance

There are four important elements to successful planting:

* Plant selection
* Site preparation
* Planting technique
* Maintenance

### Plant selection

When it comes to selecting indigenous plants for your garden always consider which species are most appropriate for your site. For example, a Swamp Gum is well suited for planting in a gully situation but would not do well if planted on a dry hilltop. To find the ideal spot for your plant, consider its soil, moisture and sunlight requirements and potential size when fully grown. Also consider how plants may interact with each other, especially the impact large trees may have in your garden as they mature. If they are not carefully selected and positioned, large trees may shade out sun-loving plants underneath them, impact nearby buildings or plumbing with their vigorous roots, or create problems with leaves dropping in gutters.

When choosing plants from a nursery, remember that tall plants in larger pots will not necessarily give you better results. Tubestock (plants in 15cm tall plastic tubes) will generally catch up with and outgrow larger, more mature stock. They are also easier to establish in difficult sites with poor soils.

For information on plants which are local to Whittlesea refer to pages [30-38](#_Thirty_common_local).

### Site preparation

To find the ideal spot for your plant, consider its soil, moisture and sunlight requirements and potential size when fully grown.

#### Soil

Whittlesea soils are a mix of sands, clays and loams. Indigenous plants are suited to the original soils of the area. However, your garden soil may be depleted, or may have been imported from another area of Melbourne as happens with urban development.

If you have a clay soil that is holding too much water or dries out in summer to be very hard, add a dusting of gypsum and organic matter such as aged animal manure and compost.

A potential problem with sandy soils is that once they have dried out they can become water repellent - water will bead on the surface rather than soaking in. To improve a sandy soil, regularly apply organic matter and mulch.

To improve loam soils, apply leaf litter and mulch. This will replenish nutrients taken up by your plants.

#### Pre-planting mulch

Good quality mulch should be spread over your garden to a minimum depth of 10cm prior to planting. Covering the soil surface with mulch can improve soil structure, nutrient availability and water retention, and prevent future weed growth. Check if there is any existing indigenous vegetation to ensure you do not mulch over the top of it.

Ensure that the mulch you select is made from a sustainable resource. Chipped waste wood and green waste mulches are generally a good option. Always ensure that any green waste has been well composted before use to kill any weed seeds that may be present.

#### Weeds

Weeds should be controlled prior to planting to reduce competition and for post-planting maintenance.

A range of techniques and products can be effective in controlling weeds, including both chemical and nonchemical methods. (For more information, refer to pages [38-41](#_Weeds)).

#### Step 4 - Remove plant from pot

This is best achieved by turning the pot upside down and striking the rim gently against a solid object. When planting good quality tubestock, it is not necessary to ‘tickle’, or tease out the plant’s roots.

#### Step 5 - Place the plant

Place the plant a little lower than the original soil level. Firmly replace the soil around the plant, breaking up any lumps as you go.

#### Step 6 - Water the plant in well

Initially all plants need to be watered individually to settle soil around the root system. Plants may require a good deep soaking once a week when establishing, particularly during dry periods.



### Planting technique

Once your site is well prepared you can begin planting. Generally, planting after the first heavy autumn rain is the best time for dry or exposed sites. For frost prone areas, spring may be a more appropriate time for planting. Try to avoid any planting during the summer period.

#### Step 1 - Prepare the planting

The hole should be approximately twice the width of the plant container and slightly deeper.

Remember to dig the hole into the soil below the mulch – if you plant straight into the mulch your plant will dry out and die.

#### Step 2 Pre-soaking

Give your plants a thorough pre-soaking in a bucket of water prior to planting. In dry soils, fill the hole with water and allow it to drain before planting.

#### Step 3 - Prepare the plant

Any particularly long or coiled roots protruding through the bottom of the pot can be pruned with sharp secateurs before removing the plant from the pot. Some root disturbance is tolerable but be careful not to damage living roots.

### Maintenance

Indigenous plants require very little maintenance. With just a little work each year, your indigenous garden will continue to look healthy, neat and beautiful.

#### Watering

Indigenous plants are suited to where they come from. If they naturally occur in areas of high moisture, they will require additional watering. Most indigenous plants from other ecosystems generally require additional watering only while they are establishing. Monitor them during heat waves and give them a good soaking if they show signs of wilting.

Apply water to the base of the plant and provide a long, deep watering. A rainwater tank for the garden is always a good idea to reduce the amount of mains water used on your garden. Dripline irrigation is an efficient way to deliver water to your plants. Install garden tap timers to reduce over-watering and monitor.

#### Mulch

Mulch is an important part of the garden because it smothers weeds, adds nutrients to the soil and helps hold water in the soil. Bush mulch is ideal for an indigenous garden. When spread on your garden it will create a natural leaf litter look and provide habitat for insects and lizards to shelter and feed. If you have an established habitat garden, you can rely on the natural leaf litter to mulch, saving you time and money. Avoid pine bark mulch as it can burn indigenous plants or slow their growth.

**Mulching tips:**

* Avoid hot, steaming mulch, as this indicates that it is still composting
* Check for and remove mulch-borne seedlings to prevent weed invasion
* Mulch to about 10cm to allow rain penetration, suppress weeds and reduce soil moisture loss.

#### Non-chemical pest control

Herbicides, pesticides and fertilisers from our garden can enter our stormwater system, where they pollute local waterways and harm plants and wildlife. By using non-chemical pest control actions we create healthier habitats.

Consider:

* Checking your garden regularly for pests
* Attracting predatory animals to your garden. Not only do birds, bats, frogs and lizards eat pest insects, but so do ladybirds, praying mantis, hoverflies and dragonflies. These ‘good guys’ are attracted to pots of marigolds, parsley, coriander and dill
* Removing pests by hand or spray with a jet of water
* Trying home remedies such as linseed or fish oil in a shallow dish to catch earwigs
* Placing ground up egg shells around plants to deter snails.

#### Fertiliser

Indigenous plants generally do not require fertilising as they have adapted to suit local soils. A good bush mulch will slowly break down and add nutrients to the soil.

If you do fertilise your indigenous plants, there are commercial products available for native plants that are slow-release and low in phosphate.

**Composting and worm farming**

You can purchase compost bins, Bokashi systems and worm farms at cost price from Council.

For a guide on how to manage your compost or worm farm, download the ‘Home Harvest’ booklet on Council’s website, or call to request a free copy.

How to compost and worm farm workshops are also on the website or subscribe to the What’s Happening sustainability e-newsletter.

Phone 9217 2170 or visit [www.whittlesea.vic.gov.au](http://www.whittlesea.vic.gov.au).

### Watering

Australia is one of the driest continents, and our gardens have suffered through some extreme dry times.

Climate change predictions suggest there will be lower rainfall and more hot days. It is estimated that currently up to 35 per cent of household water use is on the garden. Improving soil and mulching helps, but if you haven’t already, consider using alternative water sources, other than mains (tap) water. Significant water savings can be made by installing rainwater tanks, greywater diverters, building raingardens, directing surface water onto the garden and installing efficient irrigation systems.

#### Alternative water sources

**Rainwater**

Collecting rainwater from your roof is a logical way to reduce the amount of mains water used on your garden.

The ideal tank size will depend on the size of your garden, your roof catchment area and your local rainfall patterns. The larger the tank the more expensive it will be and the more room it will need.

Most rainwater tanks for a garden range from 5,000 – 10,000 litres. They need to be installed on a firm base at least 1m from your property boundary and be connected by a licensed plumber.

You may need to consider whether a pump is needed to move water around your garden, as there is less water pressure from a rainwater tank.

For more information visit [www.sgaonline.org.au](http://www.sgaonline.org.au) and search ‘rainwater tanks’.

**Greywater**

Greywater is domestic wastewater, excluding toilet waste. It can be an excellent alternative source of temporary water for the garden, but care needs to be taken when using it.

Greywater can contain a number of bacteria and viruses, as well as chemicals from cleaning agents. If greywater is to be applied to the garden use low phosphorous and sodium washing powders and only divert grey water from your washing machine’s rinse cycle, bathroom hand basin, shower and bath.

Greywater can only be stored for 24 hours, must be applied sub-surface and cannot flow from your property or enter the stormwater system.

Greywater cannot be used to water produce, other than fruit trees. When applying it to your garden, rotate the areas where it is being applied and ‘flush’ the soil periodically with mains or tank water to prevent a build-up in the soil.

For more information visit [www.epa.vic.gov.au](http://www.epa.vic.gov.au) and search ‘greywater’.

**Stormwater**

Stormwater represents a valuable resource that can be captured and utilised by gardeners. Stormwater is rainwater that runs off across hard surfaces instead of seeping into the ground.

In the natural environment rain slowly percolates into the soil and eventually into our waterways through the groundwater table. The water flow rate is slowed down and as the water seeps through the soil excess nutrients and pollutants are removed.

This process results in high quality water entering our streams and creeks. These days much of our urban landscape is covered with hard surfaces such as roads, driveways and parking lots that are impervious to water.

Consequently when it rains, large volumes of water rapidly enter our stormwater system carrying pollutants, affecting flow rates and often resulting in the erosion of river beds and banks.

#### Raingardens

A raingarden is a gravel filled trench designed to receive stormwater directly from a disconnected downpipe or run-off from surrounding hard surfaces. Water entering a raingarden is slowed and filtered helping to protect our waterways.

Raingardens consist of layers of soil for filtration, gravel for drainage, and plants that can tolerate both extreme wet and dry conditions. There are many different types of raingardens from planter boxes to a trench.

#### Downpipe diversion

By diverting one or more downpipes around your property you can direct stormwater onto your garden beds or lawn utilising a valuable resource and allowing that water to slow and filter before seeping back into the groundwater table.

A downpipe diversion can easily be fitted to your downpipe by a licensed plumber. For further information on raingardens including downpipe diversion visit [www.melbournewater.vic.com.au/raingardens](http://www.melbournewater.vic.com.au/raingardens).

#### Landscaping

Water can be directed onto your garden beds by gently sloping the surface of driveways and patios. This stormwater runoff from your hard surfaces can be collected in a swale which is essentially a shallow, mounded ditch laid across a contour with a shallow gradient directing runoff towards your garden or a small wetland.

If you are laying pavers consider creating a space between that will enable water to percolate into the soil. There are also commercial concrete grid and modular plastic blocks for paving available. Granitic and sand paths require more maintenance than concrete but will allow water to seep into the ground.

## Local plants

Plants that are native to a specific area are known as indigenous plants or sometimes ‘local natives’.

### ****Indigenous plants****

Whittlesea has a vast array of species of indigenous plants that differ to those in other parts of Australia, and even parts of Melbourne.

The following table to 30 common local plants are a sample of the diverse range of indigenous plants of Whittlesea. Visit the indigenous nurseries listed on page [43](#_Indigenous_nurseries) for a wider range and expert advice on how to grow and maintain your plants.

Each listed plant indicates which native animals it will attract (refer to bullet points below for a short description of each animal category), and which vegetation communities each plant belongs to.

#### Animals

* Butterfly - Butterflies such as the Australian Painted Lady.
* Small bird - Small birds such as wrens, robins and fantails.
* Parrot - Parrots such as rosellas, lorikeets and cockatoos.
* Lizard - Lizards such as skinks and Bluetongue Lizards.
* Frog - Frogs such as the Pobblebonk and the Spotted Marsh Frog.
* Mammal - Mammals such as microbats, dunnarts and possums.

### Thirty common local plants

#### Trees

##### Black She-oak (Allocasuarina littoralis)

* Small upright tree with fine green branches
* Fast-growing to 5-8m in full sun
* Prefers well-drained soils
* Red female flowers and brown male flowers March–June.

Animals: butterfly, parrot

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Valley Grassy Forest

##### Lightwood (Acacia implexa)

* Graceful, long-lived wattle
* Fast-growing, slender tree to 6m
* Thrives in dry, sunny spots with shallow soils
* Attractive pale yellow flowers October–November.

Animals: butterfly, parrot, mammal

Vegetation communities: Basalt Plains Grassy Woodland, River Red Gum Grassy Woodland, Dry Sclerophyll or Box-Stringybark Woodland

##### Silver Banksia (Banksia marginata)

* A striking feature tree or excellent screen plant
* Grows to 10m tall in full to part sun
* Well-drained soil, but tolerates being wet in winter
* Bright yellow flower spikes September–April.

Animals: butterfly, parrot, mammal

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland

#### Shrubs

##### Austral Indigo (Indigofera australis)

* A graceful, open shrub to 2m tall and wide
* Grows in well-drained soil in shade to full sun
* Mauve to pink flowers September–November
* Benefits from pruning after flowering.

Animals: butterfly, small bird

Vegetation communities: Dry Sclerophyll or Box-Stringybark Woodland, Valley Grassy Forest

##### Common Correa (Correa reflexa)

* Fast-growing shrub to 2m tall and wide
* Grows in dry, shady positions and under existing trees
* Green or red bell flowers March–September
* Benefits from pruning after flowering.

Animals: butterfly, small bird

Vegetation communities: Dry Sclerophyll or Box-Stringybark Woodland

##### Gold-dust Wattle (Acacia acinacea)

* Open, spreading shrub grows 1-3m
* Tolerates poor soils
* Grows in full to part sun
* Bright yellow flowers August–November
* Responds well to pruning.

Animals: butterfly, parrot, mammal

Vegetation communities: River Red Gum Grassy Woodland, Dry Sclerophyll or Box-Stringybark Woodland, Valley Grassy Forest

##### Grey Parrot-pea (Dillwynia cinerascens)

* Attractive shrub that grows to 1.5m tall and wide
* Adaptable, but ideal for dry, shady positions
* Yellow and orange flowers from July–November
* Responds well to pruning after flowering.

Animals: butterfly, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll or Box-Stringybark Woodland, Damp Sclerophyll Forest

##### Hop Goodenia (Goodenia ovata)

* Fast-growing plant to 2m tall and wide
* Favours damp soils, but tolerates dryness.
* Full to part sun
* Vibrant, yellow flowers August–February
* Prune to maintain compact shape.

Animals: butterfly, small bird

Vegetation communities: Riparian Complex, Valley Grassy Forest, Damp Sclerophyll Forest

##### Large Kangaroo Apple *(Solanum laciniatum)*

* Fast-growing shrub to 3m tall and wide
* Hardy in most soils and sun conditions
* Purple flowers from September–March
* Responds well to hard pruning
* Relatively short-lived (2-5 years)
* Unripe berries are toxic.

Animals: small bird, mammal

Vegetation communities: River Red Gum Grassy Woodland, Riparian Complex, Valley Grassy Forest

##### Native Tree Violet (Melicytus dentatus)

* Spreading shrub 2-4m tall and 1-2m wide
* Masses of small, fragrant cream flowers September–November
* Lush growth in lightly shaded, damp conditions.

Animals: butterfly, lizard, small bird

Vegetation communities: Riparian Complex, Dry Sclerophyll or Box-Stringybark Woodland

##### Prickly Moses (Acacia verticillata)

* Open shrub grows to 4m tall and 3m wide
* Fine, prickly foliage an ideal refuge for small birds
* Yellow flower spikes from June–December
* Tolerates a variety of soil and sun conditions.

Animals: butterfly, small bird, parrot, mammal

Vegetation communities: River Red Gum Grassy Woodland, Riparian Complex, Valley Grassy Forest, Damp Sclerophyll Forest

##### River Bottlebrush (Callistemon sieberi)

* Open to dense weeping shrub
* 3-10m tall and 2-6m wide
* Cream to pink flowers November–May
* Adaptable, but prefers moist to wet conditions.

Animals: butterfly, parrot, mammal

Vegetation: Riparian Complex, Valley Grassy Forest

##### Snowy Daisy-bush *(Olearia lirata)*

* Open shrub grows to 3m tall and 1m wide
* Profuse clusters of white, daisy-like flowers September–December
* A shade lover that thrives in sheltered spots with well-drained soil.

Animals: butterfly, small bird

Vegetation: Damp Sclerophyll Forest

##### Sweet Bursaria (Bursaria spinosa)

* Stunning feature plant or useful hedging plant.
* Grows 2-6m tall in a variety of conditions.
* Sweetly scented flowers from December– March.
* Attractive bronze seed capsules following flowering.

Animals: butterfly, small bird

Vegetation Communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll or Box-Stringybark Woodland, Valley Grassy Forest

#### Grasses, sedges and rushes

##### Common Tussock-grass *(Poa labillardieri)*

* Tussock forming grass grows to 70cm tall and wide
* Produces flowering stems October–February
* Full to part sun
* Grows in most soils with reliable moisture.

Animals: butterfly, lizard, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Valley Grassy Forest, Damp Sclerophyll Forest

##### Kangaroo Grass (Themeda triandra)

* Attractive feature plant or mass planted
* Tussock grows to 40cm tall and 80cm wide
* Distinctive flower heads December–March
* Prefers well-drained soils in full to part sun.

Animals: butterfly, lizard, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Spiny-headed Mat-rush *(Lomandra longifolia)*

* Hardy, fast-growing tussock to 1m high and wide
* Excellent for difficult spots like embankments and rockeries
* Clusters of small flowers September–December
* Grows in most soil types in full to part sun.

Animals: butterfly, lizard, small bird, frog

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Valley Grassy Forest

##### Weeping Grass (Microlaena stipoides)

* Fine grass to 20cm, can be cut as a lawn
* Narrow, arching flower heads September–November
* Grows best with some shade and reliable moisture
* Will tolerate drier conditions and full sun.

Animals: butterfly, lizard, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

#### Vines and creepers

##### Purple Coral-pea (Hardenbergia violacea)

* Attractive, fast-growing creeper
* Can be trained on a trellis or over a retaining wall
* Showy purple flowers from July–November
* Full to part sun with well-drained soils.

Animals: butterfly, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Small-leafed Clematis (Clematis microphylla)

* Vigorous climber can be trained on a trellis or fence
* Star-like flowers from July–November
* Attractive, feathery seed heads after flowering
* Well-drained soil in full to part sun.

Animals: butterfly, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

#### Lilies, daisies and others

##### Berry or Creeping Saltbush *(Atriplex semibaccata)*

* A vigorous groundcover that establishes well under trees
* Low, spreading shrub up to 20cm high and 3m wide
* Small flowers peaking November–February, followed by red succulent fruit
* Well-drained soils with full to part sun.

Animals: butterfly, lizard, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex

##### Black-anther Flax-lily *(Dianella admixta)*

* Long-lived plant, easy to maintain
* Spreading tussock 30cm tall to 1m wide
* Blue flowers August–May, followed by purple berries
* Prefers full to part sun, well-drained soils.

Animals: butterfly, lizard, small bird, frog, mammal

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Clustered Everlasting (Chrysocephalum semipapposum)

* Hardy, spreading herb can grow to 1m high and 3m wide
* Golden flowers August–March
* Grows in full to part sun. Variable soils
* Responds well to pruning after flowering.

Animals: butterfly

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Common Everlasting (Chrysocephalum apiculatum)

* Spreading herb for a sunny position
* Moist soil. Will tolerate dryness once established
* Excellent plant for mass planting
* Bright yellow flowers mainly September–December
* Prune to encourage new growth.

Animals: butterfly

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland

##### Grass Trigger-plant (Stylidium graminifolium)

* Tufted plant to 25cm
* Pink flowering spikes up to 1m tall from September–December
* Prefers full sun with moist, well-drained soil
* Tolerates both wet and dry periods once established.

Animals: butterfly

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest, Damp Sclerophyll Forest

##### Ivy-leaf Violet *(Viola hederacea)*

* A fast-growing groundcover with creeping stems
* Ideal for moist, shady positions
* Attractive flowers most of the year, especially June–March.

Animals: butterfly, frog

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest, Damp Sclerophyll Forest

##### Kidney-weed (Dichondra repens)

* Fast-growing, matting groundcover
* Tiny, greenish flowers September–December
* Prefers shade and moist conditions
* Lawn alternative for a shady section of the garden.

Animals: lizard, frog

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Running Postman (Kennedia prostrata)

* Trailing, hardy groundcover
* Grows well in pots and hanging baskets
* Scarlet pea flowers April–December
* Prefers a sunny spot with well-drained soils.

Animals: butterfly, small bird

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Tall Bluebell (Wahlenbergia stricta)

* Erect, clumping herb to 40cm
* Light blue flowers August–January
* Full to part sun
* Well-drained soils, tolerates some dryness
* Excellent plant for mass planting.

Animals: butterfly

Vegetation communities: Basalt Plains Grassland, River Red Gum Grassy Woodland, Riparian Complex, Dry Sclerophyll Forest or Box-Stringybark Woodland, Valley Grassy Forest

##### Tasman Flax-lily (Dianella tasmanica)

* Attractive, long-lived plants with broad, strappy leaves
* Grows to 1.5m high and wide
* Blue flowers from February, followed by purple berries
* Performs best in moist, shady spots.

Animals: butterfly, lizard, small bird, frog, mammal

Vegetation communities: Damp Sclerophyll Forest

## Weeds

When a plant thrives and invades an area where it does not naturally occur, it is known as an invasive plant, pest plant or weed.

Plants can spread from people dumping garden cuttings in parks, nature reserves and waterways. Wind can blow seeds many kilometres, for example a plume of Pampas Grass can produce 100,000 seeds per plume and be carried over thirty kilometres. Seeds and cuttings can also be carried by water, tools, vehicles, clothing, pets, birds and animals.

Weeds are a problem because they outcompete indigenous plants for light, water and nutrients. In a short time they can replace indigenous plants, effectively removing the food source and habitat of local wildlife.

It is therefore important to know which plants are a problem in Whittlesea so you can avoid planting them or consider removing them if present in your garden.

Ensure you dispose of all plants and cuttings in a Green Waste bin to avoid spreading to other areas.

More information can be found at [www.whittlesea.vic.gov.au](http://www.whittlesea.vic.gov.au) and search ‘Weeds and pest plants’.

### Ten common weeds

##### Agapanthus (Agapanthus praecox ssp. orientalis)

Removal:

* Hand weed
* Spray

Replacement plant: Black-anther Flax-lily *(Dianella admixta)*

##### Angled Onion (Allium triquetrum)

Removal:

* Hand weed
* Solarise
* Spray

Replacement plant: Austral Stork’s-bill *(Pelargonium austral)*

##### Blue Periwinkle *(Vinca major)*

Removal:

* Hand weed
* Mulch
* Solarise
* Spray

Replacement plant: Purple Coral-pea *(Hardenbergia violacea)*

##### Brooms (Genista spp.)

Removal:

* Hand weed
* Cut and paint
* Spray

Replacement plant: Slender Bitter-pea *(Daviesia leptophylla)*

##### Cootamundra Wattle (Acacia baileyana)

Removal:

* Hand weed
* Cut and paint
* Spray

Replacement plant: Silver Wattle *(Acacia dealbata)*

##### Cotoneaster (Cotoneaster spp.)

Removal:

* Hand weed
* Cut and paint
* Drill and fill

Replacement plant: Dusty Miller *(Spyridium parvifolium)*

##### English Ivy (Hedera helix)

Removal:

* Hand weed
* Mulch
* Cut and paint
* Spray

Replacement plant: Small-leafed Clematis *(Clematis microphylla)*

##### Pittosporum (Pittosporum undulatum)

Removal:

* Hand weed
* Cut and paint
* Spray

Replacement plant: Blackwood *(Acacia melanoxylon)*

##### Swamp Foxtail Grass (Pennisetum alopecuroides)

Removal:

* Hand weed
* Spray

Replacement plant: Common Tussock-grass *(Poa labillardieri)*

##### Wild Watsonia (Watsonia meriana var. Bulbillifera)

Removal:

* Hand weed
* Spray

Replacement plant: Spiny-headed Mat-rush *(Lomandra longifolia)*

## Local places of inspiration

“I love fungi! It’s amazing, like aliens sometimes” Luka (Aged 8)

Wild spaces such as conservation reserves are the perfect play space for developing the motor skills of children through climbing, walking, running and jumping on uneven surfaces. We’ve picked a few ecologically significant sites you can visit with the family and enjoy.

### Epping North Conservation Reserve

This reserve demonstrates the natural landscapes that existed in the area prior to residential development.

Look out for:

* Animals using the hollows in the mature River Red Gums
* Wild flowers upon the stony knoll shrub land including the nationally endangered Matted Flax-lily and the r are Tall Vanilla-lily
* Look and listen for frogs, wetland birds and other small wildlife around the low-lying swampy spots
* Snakes may be encountered - be alert and aware.

Located at Chigwell Place, Epping North.

### Quarry Hills Bushland Park

First proposed in the early 1990’s and now a reality, the Quarry Hills Bushland Park conserves the threatened grasslands and woodlands of the Western Basalt plains.

Look out for:

* Birds of prey riding air currents
* Bush birds chasing insects
* Small marsupials hunting at dusk
* Shiny skinks basking in the sun
* Grasshoppers and butterflies escaping over orchids, Milkmaids and Chocolate Lilies.

Located at Swamp Gum Gully, shelter and car park, Gravlier Way, South Morang.

### Growling Frog Golf Course

This site is unique with golf recreation and environmental conservation co-existing.

The site’s conservation areas include the rocky knolls, rock walls, hollow bearing trees, wetlands and streams. They provide roosting, nesting and foraging for a range of native wildlife.

Look out for:

* Colourful birdlife! There have been over 200 different species recorded here
* Native ducks and herons
* 200 year old River Red Gums
* Birds of prey riding the air currents.

Located at 1919 Donnybrook Road, Yan Yean.

### Prescribed burns

Fire is a bushland management tool used to manage weeds and help regenerate native plants. This method recognises the use of fire by Aboriginal owners of the land who relied on fire to replenish food sources for subsistence living.

Prescribed burns are delivered in Whittlesea’s conservation reserves by experienced and qualified practitioners, and each burn has a Fire Management Plan. Adjoining residents are notified before starting operations.

If you have any concerns about a prescribed burn contact Council’s Parks and Open Space Department on 9401 0587, or if there is a fire nearby call 000 immediately.

This method is suited for bushland reserves only, not for gardens.

### Management of local reserves

Council’s bushland reserve management is guided by three key principles;

* •protect and enhance habitat for local biodiversity
* •control invasive pests and threats
* •provide a safe and enjoyable user experience and interface with surrounding suburbs.

## Reference, advice and local groups

### Indigenous nurseries

##### Merriang District Landcare Nursery

Whittlesea (by appointment)

Tel: 0456 884 266

[www.merriang.org.au](http://www.merriang.org.au)

##### La Trobe Wildlife Sanctuary

Ring Road, Bundoora

Tel: 9479 1206

[www.latrobe.edu.au/wildlife/retail-shop](http://www.latrobe.edu.au/wildlife/retail-shop)

##### Edendale Indigenous Nursery

Gastons Road, Eltham

Tel: 9433 3703

[www.edendale.vic.gov.au](http://www.edendale.vic.gov.au)

##### Victorian Indigenous Nursery Co-operative

Yarra Bend Road, Fairfield

Tel: 9482 1710

[www.vinc.net.au](http://www.vinc.net.au)

### Local conservation groups

Whittlesea’s ‘Friends of’ and Landcare groups are dedicated to restoring Whittlesea’s intrinsic ecological values in the face of rapid growth. Search the community directory on Council’s website to find a group.

### Useful websites

[Sustainable Gardening Australia](http://www.sgaonline.org.au)

[Indigenous Flora & Fauna Association](http://www.iffa.org.au)

[Natureshare](http://www.natureshare.org.au)

[Australian Plant Society, Victoria](http://www.apsvic.org.au)

[Weeds Australia](http://www.weeds.org.au)

[The Field Naturalists Club of Victoria](http://www.fncv.org.au)

[Yarra Indian Myna Action Group](http://www.yimag.org.au)

[Department of Environment, Land, Water & Planning](http://www.delwp.vic.gov.au)

[Country Fire Authority](http://www.cfa.vic.gov.au)

### Council’s free environmental guides

Most can be found on Council’s website, or requested by contacting Council:

* Home Harvest booklet: a guide to growing fresh food
* Whittlesea’s Indigenous Plants list
* Wattles of the City of Whittlesea booklet
* Small Mammals of Whittlesea booklet
* Burnt trees fact sheets
* Seasonal guide to weed management on rural properties
* Practically Green at Home booklet.

### Council’s sustainability newsletters

1. **What’s Happening sustainability e-newsletter.** Bi-monthly update on local sustainability events. Subscribe on Council’s website.
2. **Whittlescene newsletter** includes sustainability news and events (seasonal). Delivered to community facilities or your door.
3. **Rural News** for local farmers/landholders. Delivered to properties greater than 2 ha.

## City of Whittlesea contact details

Council Civic Centre, 25 Ferres Boulevard, South Morang, Vic 3752

Epping Depot, 68 Houston Street, Epping

Westfield Customer service, McDonalds Road, South Morang

Postal Address: Locked Bag 1, Bundoora MDC, Vic 3083

Telephone: (03) 9217 2170

Fax: (03) 9217 2111

Email: info@whittlesea.vic.gov.au

[Whittlesea website](http://www.whittlesea.vic.gov.au)

Contact the Sustainability Planning team about Council’s environment guides/ fact sheets, sustainability newsletters, events, biodiversity, household and land management practices.

Phone: 9217 2042

Email: sustainability@whittlesea.vic.gov.au