



Introduction to Habitat Gardening

Habitat gardening (or wildlife-friendly gardening) involves looking at your garden and finding ways of enhancing it to attract more wildlife. By choosing to be a part of the Gardens for Wildlife Program (G4W), you are helping your local environment by increasing biodiversity outcomes through your habitat garden.

Habitat gardens can be any shape, size or style so the possibilities in your space are limitless. Any change to your garden is valuable and will go a long way to supporting native wildlife.



ACKNOWLEDGEMENT OF COUNTRY

Whitehorse City Council acknowledges the Wurundjeri Woi-wurrung people of the Kulin Nation as the traditional owners of the land. We pay our respects to their Elders past, present and emerging.

Cultural Heritage surrounding Indigenous Plants in Whitehorse

The indigenous plants on Whitehorse land have developed through years of land management by the Wurundieri Woi-wurrung People. Indigenous plants are an integral part of Wurundjeri cultural heritage and by planting them in your garden, it is a way of acknowledging this connection. Barkandji woman, Zena Cumpston, created the following resource for any group or individual interested in indigenous plant use and is a great starting document for implementing culturallyimportant ecological knowledge into your gardening. The booklet also includes plant labels for common plants found on Kulin Nation Country which you can use in your own garden.

Indigenous plant use -Zena Cumpston

Learning and using the Indigenous names of the plants in your garden can be another way to further this connection to culture.

The following link created by Museums Victoria lists indigenous plant names of species located in their Bunjilaka Aboriginal Centre and many of these plants could be integrated into your habitat garden.

The Plants of the Milarri Garden - Museums Victoria



SECTION 1: GUIDING PRINCIPLES FOR HABITAT GARDENING

Mimic your Local Bushland

We strongly encourage you to draw inspiration from nearby remnant bushland areas.

Most of plant species found within these areas are indigenous to Whitehorse. Over time, indigenous plants have adapted to thrive in the local climatic and environmental conditions so they are easy to maintain.

In addition, they provide food and shelter for our local wildlife and balance the natural life cycles in an ecosystem. Embedding indigenous plants will help your garden resemble the natural wildlife environment. Whilst we encourage you to include indigenous plants in your garden, you should not be limited to creating a garden entirely from these plants. The intention behind using a higher proportion of these plants is the help it contributes to local ecology. This operates to protect interactions between wildlife and local plants in our environment.



The City of Whitehorse has more than 350 beautiful parks and 20 bushland reserves catering for nature lovers, walkers, cyclists, children and adults.

Prioritising Biological Diversity

Healthy biological diversity centres on the diverse web of relationships between plants, animals, insects all the way down to our soilmicroorganisms. Biological diversity is essential to the healthy functioning of our natural ecosystems, contributing to clean air, clean water and fertile soils

Increasing plant diversity within your garden and avoiding harmful or disruptive practices (e.g the use of chemicals) can help support this web of relationships and lead to the most positive wildlife outcomes. Natural ecosystems develop more easily with a diverse range of plants supporting it and also ensures animals can rely on a range of species for food and shelter.

Alongside other habitat gardeners, you can become part of a collective effort to grow a living landscape for native wildlife within an urban environment.





Soil Food Water Shelter

SECTION 2:

A RECIPE FOR A GARDEN HABITAT



Key Elements for Habitat Gardens

The key elements of a wildlife friendly garden can be grouped into four fundamental groups; soil, food, water and shelter. Incorporating a greater variety of elements within these groups will enhance the supportive capability of your garden to support local wildlife. Star recommendations for indigenous plants are highlighted in each section.

A more comprehensive list of plants can be found in your Gardening with Indigenous Plants book (p. 25 - 74).

Gardening with Indigenous Plants















1) Soil: provides an environment for plant growth

Having healthy soil is a crucial element for your garden habitat. Healthy soil should smell pleasant, be moist, crumbly and allow plants to penetrate deep into the ground. If your soil doesn't match this description and is dry to a cement-like texture, it might need organic matter such as manure, mulch or compost. This layer of organic matter should be placed on top of your soil and will be key in rebuilding good soil ecology by providing food for important

fungi, bacteria and microinvertebrates such as millipedes and earthworms. These creatures are often overlooked but play the most critical roles in maintaining soil health and creating a habitat for macro-invertebrates such as ground beetles, spiders and centipedes.

Increasing the presence of life underground will provide food and habitat for higher-level species such as small lizards, frogs and insectivorous birds into your garden.









2) Food: sources such as nectar, pollen, fruit, seeds and leaves

Plants with rich nectarproducing flowers will attract honeyeaters, other nectarfeeding small birds, butterflies and bees and many other



important pollinating and predatory insects. A favourite of many insect pollinators is Sweet Bursaria (Bursaria spinosa, p. 36) which is an excellent nectar and pollen source. In return, the insects pollinate the plant's flowers.

Transfer of pollen between flowers of the same species enables fertilisation and seed development. Butterfly larvae eat Bursaria leaves and it also provides shelter for birds, especially when planted along edges and fence lines. Another food-rich prickly species is the Prickly Currant Bush (Coprosma quadrifida, p. 46).

Other nectar-rich species include Yarra Burgan (Kunzea leptospermoides, p. 39) with small, white, nectar-rich flowers and Rock Correa (Correa glabra, p.47) which has lovely pale green bell-shaped flowers.

Butterflies are also nectarfeeders and love plants such as Long Purple Flag (Patersonia occidentalis, p. 62) and Everlasting (Xerochrysum spp., p. 52). Group flowers of similar colours together as they are more attractive to both butterflies and gardeners. Scrambler and climber plants like Purple Coral Pea (Hardenbergia violacea, p.68) and Mountain Clematis (Clematis aristata, p. 67) will also provide colourful displays in spring and are a great food source for insects.



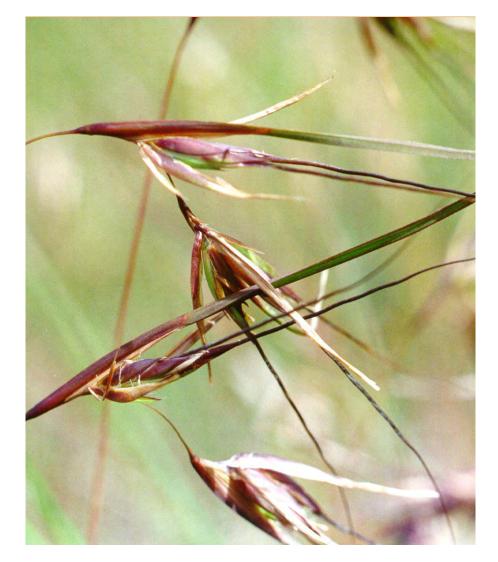


Bell shaped Correa flowers



White Bursaria flowers.





Kangaroo Grass has seeds with long awns.

Seeds

Seeds from native grasses and trees in your garden are an important protein-filled food source for ants and seedeating birds such as Eastern Rosellas and native pigeons (e.g Crested Pigeon).



3) Water: for drinking and habitat purposes

Dish of water

Local birds visiting your garden will require a source of water to drink and bathe in. A hanging bird bath is ideal and should be near a dense prickly bush to offer a quick escape from predators like such as cats, foxes and larger or aggressive birds.

Ensure the water is replaced and refilled regularly - every few days – to dispose of spoiled food particles and droppings which may spread bird diseases. A shallow water dish with a stick or small branch placed on the ground is ideal for lizards and small reptiles. Place this dish amongst some rocks and shrubs in case a quick hideaway is needed.



Frog bogs and ponds

You can provide a habitat for frogs even on small properties. Constructing a frog bog is the most effective strategy to attract frogs into your garden as standing water is necessary for most species to breed. Frog habitats can be as 'formal' or natural looking as you like, there are no rules. Here are some tips for getting started:

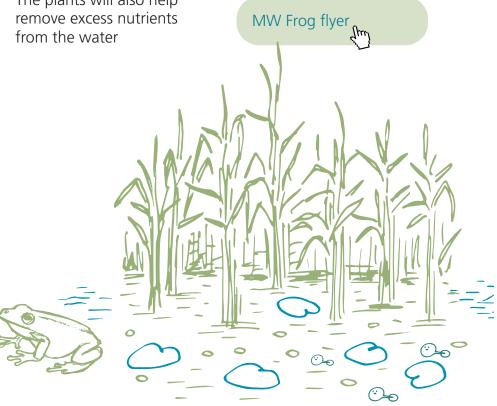
 Choose an area of your garden that is partially shaded. Some sunlight is important as this will allow tadpoles to seek their preferred temperatures, speed their development and encourage the growth of algae and other plants that tadpoles like to eat

- The chosen area should be moist or holding water
- If you decide to create

 a frog bog with water
 holding capacity, extensive
 shallow areas are preferred by
 many semi-aquatic or
 bog plants
- Heavy vegetation (strappy plants and small shrubs) in and around the bog will provide tadpoles shelter from birds and give frogs a comfortable resting place as well as protection from predators and wind. The plants will also help remove excess nutrients from the water

- Gentle slopes, instead of steep and vertical walls, allow a smooth gradation for small frogs to escape
- Local plant varieties such as Hop Goodenia (Goodenia ovata, p. 48) or Flax Lilies (Dianella sp., p. 59-60) will attract insects into your garden, providing a great food source for frogs.

The following link will be a great starting resource for you to begin your frog-friendly garden journey:





4) Shelter: provides opportunities for refuge from bad weather, predators and provides nesting spaces

Tall trees and hollows

A tree in your garden is a fantastic asset to bring in wildlife and provide canopy cover. Trees provide food and shelter for a range of local wildlife from insects to large mammals.

To protect the health and longevity of any existing trees apply a layer of mulch over their root system, right out to the drip line. This will protect their root system, limit erosion, supress weeds and promote overall garden health. Wherever possible, fill spaces between large trees with shrubs, thereby providing habitat for small birds.





Chainsaw hollow

Habitat trees

Dead or dying trees also make a fabulous habitat. If left upright to decompose naturally, they can become 'habitat trees'. Above the ground, habitat trees are a great food source for insects and microorganisms and higher branches serve as excellent lookouts for larger birds such as Tawny Frogmouths. On the ground, decaying logs on your garden floor also act as 'nurse logs' for new seedlings and make shelter spaces for lizards, skinks and geckos.

Most notably, animals such as bats, birds and sugar gliders rely

on natural hollows, cracks and crevices in habitat trees for their survival. Hollows are important breeding sites for many species whilst other cracks and crevices are hiding places for possums. If you have an old tree that can remain as a habitat tree, it is possible select branches can be removed to reduce the risk of limb failure instead of the complete removal of trees. Retaining old trees with their precious hollows is incredibly important for wildlife in urban areas. Speak to an arborist and make the most informed decisions for your garden.



Planting a tree

If you do not have a large old tree in your garden, planting one is a great choice and will provide a range of benefits to your habitat garden. These include; moderating climate, provide shade and help with moisture retention. If you do not have the space for a large tree, there are some smaller species to choose from that will provide many of the same benefits. For instance, the Coral Gum (Eucalyptus torquata) – a small (4-8m), shade-tolerant tree with

unusually-shaped red buds and the Fuchsia Gum (Eucalyptus forrestiana) – a beautiful, highly ornamental, small (3-6m) tree with pendulous yellow flowers. They are both beautiful tree species that would fit in a smaller space. These Eucalypt species are not indigenous to Whitehorse but can be found at commercial nurseries around Melbourne. Choose a site for your tree where it has plenty of room to grow to its full size without affecting surrounding structures.

Nest boxes

Consider including an artificial nest box if you don't have mature trees with nesting hollows to provide a refuge for visiting birds. Each species has different needs so make sure to get a box which is designed for the species you would like to attract to your garden.



Dense shrubs

Small birds and honeyeaters rely on dense prickly bushes with fine leaves to shelter, rest and breed in.

Sweet Bursaria (Bursaria spinosa, p. 36) is a great nectar food source and provides a safe nesting site and refuge for smaller birds. To achieve this, plant Bursaria seedlings close together to produce an impenetrable hedge. For a formal look, clip regularly or allow to grow unchecked for a natural, taller and more open hedge. In either structure, Bursaria provides a haven for smaller birds that would otherwise be driven out of your garden by larger, more dominant birds.

Bursaria bushes also provide an intricate architecture of thorns and twiggy foliage, a crucial element required by numerous spider species to construct their webs. During flowering periods, insects are attracted by the abundance of nectar and are entrapped in the spider snares. Spider webs have an important role in attracting native birds such as Grey Fantails and Robins who depend upon the collection of spider webs for successful nest building.



Nest Building



Bushy Needlewood

Other prickly species such as the Bushy Needlewood (Hakea decurrens, p. 38) and Prickly tea-tree (Leptospermum continenale, p. 39) are also great options to provide refuge for small birds.



Grasses and Tussock plants

Native grasses and strappy leaved plants are structurally important for a variety of wildlife. Butterflies and moths use grasses as a safe space to lay their eggs; birds use grass for nest building and reptiles like skinks and lizards shelter from birds amongst the tall grasses.

Tussock grasses such as Poa species (e.g Sword Tussock Grass (Poa ensiformis, p. 64) and strappy plants like the Spiny Headed Mat-rush (Lomandra longifolia, p. 61) grow in a variety of conditions and are hosts for native butterflies. Butterflies use these plants to lay their eggs and caterpillars find safe shelter within their leaves which also provide a good source of food.



Logs, rocks and mulch

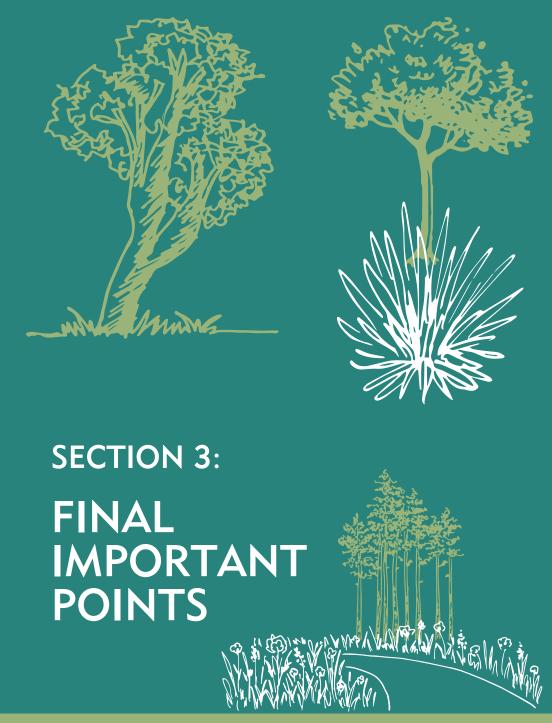
Like mulch, logs are important to include in your habitat garden as they conserve niches of damp soil, which in turn allows soil invertebrates to thrive. For larger ground invertebrates, logs can be great mini-windbreaks, providing shelter from extreme weather conditions. Rocks are also a great inclusion into your garden. The cracks and hollows around rocks are important shelter spaces for wildlife.

When not tucked away in these spaces, lizards and skinks bask on these rocks in the sun to stay warm and the rocks will retain their heat, even during cold spells. To minimise the risk of predation, lizards and skinks will only expose certain parts of their bodies at different times and choose to hide others. Therefore, finding a sunny spot and creating a rock pile amongst some grasses is a great way to create the most supportive habitat for these creatures.

Butterflies also rely on rocks to warm their wings and as a courting space. A few flattish rocks in your garden near a water will make a great landing space.



Lizard on Rock





Eliminating and Preventing Weeds in your Garden

Environmental weeds are one of the major threats to our natural environment. Not only do they change the natural plant diversity, they are able to successfully outcompete native plants for essential resources (e.g light, nutrients, and water).

There is a great benefit to native flora and fauna to strategically remove weeds identified in your garden visit. Carefully dispose of all garden waste in council green waste collection bins.

It is no coincidence that the weediest natural areas are those closest to urban settlements. Most of the weeds found in bushland come from inappropriate disposal following removal from properties. Please ensure that you are disposing of your weeds correctly.

For a list of the environmental weeds of Whitehorse, see pages 75-87 of Gardening with Indigenous Plants.

A thick layer of mulch is a great element to include in your garden due to its benefits to weed inhibition. The mulch will cover the soil, making it difficult for seeds to land as well as depriving the seeds that have landed the light they need to germinate.

For more information on mulching, see page 11 of Gardening with Indigenous Plants.

Wildlife-safe Gardens

Occasionally, there are challenges faced when creating a wildlife-friendly garden. Here are some of the challenges and ways they can be managed:

Pest bird invasions

Larger, introduced bird species often demonstrate aggressive territorial behaviour towards smaller, native birds.

Common Mynas eat pet food and compete with native species for hollows.

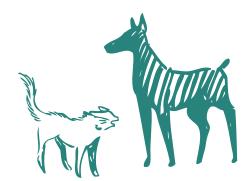




These behaviours can

come in the form of food





Pet control

Cats and dogs are one the main threats to native wildlife. Cats will prey on lizards and skinks so make extra effort to create secure hiding locations for these creatures with logs, rocks and densely branched plants. If you are a cat owner, sign up to Safe Cat Safe Wildlife to receive more advice on how to create a feline-friendly garden.

Safe Cat, Safe Wildlife



Sharing habitat space with a harvest garden

Adding indigenous plants around your food-producing plants will provide habitat for beneficial insects and small birds which can help with pest control and pollination. Many gardeners like to protect

their food-producing plants with netting structures.

It is important to use wildlifefriendly netting with holes smaller than the diameter of your finger as birds and other wildlife are less likely to get caught. Netting should also be attached taut on a frame.

The following resource should help you choose and implement ideal netting methods:

Use of fruit netting -Agriculture Victoria 1m



Capturing Changes in your Garden and Sharing Experiences

Before you start planting it is a good idea to take some photos of your garden. Photos are a great way to see how things change over time.

Whitehorse residents have really taken to the Gardens for Wildlife program and the effort you make in attracting animals, birds and insects into your garden will be supported and appreciated, not only by the local wildlife but by your local human community too.

Be sure to display your letterbox plaque proudly and share the benefits with your neighbours.





There are a number of online platforms that we encourage you to use to share what's going on in your garden, including sightings of animals and indigenous plants.

• Sign up to iNaturalist and become part of a global community of nature enthusiasts. Use the app to share pictures of creatures you find in your garden.



 There is a Facebook group named 'Gardens for Wildlife Victoria community' where other program users share posts with information, ideas and successes to link G4W communities across the state.

Join the Facebook Community Group



 Send pictures to our email gardensforwildlife@whitehorse.vic.gov.au so we can share your habitat garden with other Whitehorse G4W participants in our season newsletter.

Where to Buy Indigenous Plants

Whitehorse has two indigenous plant nurseries run by volunteers. We are very lucky! You can use the voucher you received at your visit at either nursery. Their websites both have a huge amount of information about local plants and are a great resource as you progress your habitat gardening journey.



Bungalook Nursery

107 Fulton Road, Blackburn South 3130

wcipp.org.au

wcipp@yahoo.com.au

0488 829 711

Refer to their website for operating hours.



Greenlink Nursery

41 Wimmera Street, Box Hill North 3129

greenlinkboxhill.org

Q 0479 121 653

Refer to their website for operating hours.

Resources to Assist in Native Species Identification







Resources to Help with your Habitat Gardening Journey





Organisations who Work to Promote and Protect





Indigenous Flora and Fauna Association



The Gardens for Wildlife program would not be possible without the support of our amazing volunteers. They give their time to spread ideas and support habitat gardening goals across Whitehorse. Thank you for your support!

Thanks to Sarah Yong for authoring this document.



