A plant selection for pollinating insects

Eucalyptus trees are essential ingredients in any native pollinator habitat. They will attract pollinators when they are flowering and provide homes for many species of insect when they are not. But don't stick with one species or tree, plant several different species to extend the flowering times.

Shrubs like Tea-trees and Bottlebrushes will reward you with a wide range of native bees and other pollinating insects.

The native daisies and members of the pea family are also important species for a balanced and diverse habitat garden.

Don't forget to include some native grasses and smaller herbs as these also provide important habitat and are food plants for the larvae of many of our most attractive insects such as butterflies.

Trees

A Eucalypt in flower will attract a diverse range of insects, some as pollinators, some as hunters looking for other insects as food and some that want to feed on the sap or live in the crevices in the bark or other parts of the tree even when it is not flowering. They are a major component of our environment, and their survival is essential to the survival of our insects and in turn, the survival of the species that depend on the insects as food.

Most local (Central Victorian) Eucalypts have the added advantage of being Koala food trees as well as being a major food source for pollinating insects like our native bees, and a home to countless other species. The following table lists many local species plus a few from other regions that are outstanding performers.

Acacia species can often carry significant numbers of beetles and other insects as many species collect and eat the pollen. The flowers do not produce nectar, but some native bees have been observed feeding from the small gland on the leaf edges. The Banksias also provide nectar to our bird species and their time of flowering extends the period during which the local native bees can gather and store food for their developing larvae.

Manna Gum – *Eucalyptus viminalis* (Local)	Candlebark – *Eucalyptus rubida* (Local)
Snow Gum – *Eucalyptus pauciflora* (Local)	Swamp Gum – *Eucalyptus ovata* (Local)
Redgum – *Eucalyptus camaldulensis* (Local)	Yellow Gum – *Eucalyptus leucoxylon* subsp. *pruinosa* (Local)
Yellow Box – *Eucalyptus melliodora* (Local)	Red Box – *Eucalyptus polyanthemos* (Local)
Grey Box – *Eucalyptus macrocarpa* (Local)	Long-leaf Box – *Eucalyptus goniocalyx* (Local)
Messmate Stringybark – *Eucalyptus obliqua* (Local)	Red Stringybark – *Eucalyptus macrorhyncha* (Local)
Narrow-leaf Peppermint – *Eucalyptus radiata* (Local)	Broad-leaf Peppermint – *Eucalyptus dives* (Local)
Red Ironbark – *Eucalyptus tricarpa* (Local)	Scentbark – *Eucalyptus aromaphloia* (Local)
Yellow Gum (dwarf red flowering) – *Eucalyptus leucoxylon*	WA Flowering Gum – *Corymbia ficifolia* (frost sensitive)
Buxton Silver Gum – *Eucalyptus crenulata*	Various Mallee Eucalypts
Silver Banksia – *Banksia marginata* (Local – Tree Form)	Coast Banksia – *Banksia integrifolia*
Blackwood – *Acacia melanoxylon* (Local)	Black Wattle – *Acacia mearnsii* (Local)




Shrubs

The mid storey is also host to a wide range of species and a recent RMIT study covering urban environments recognised that the indigenous shrub layer had the second highest rating of the mid storey, for native insect diversity. (The highest was the grasses – see below). The shrubs listed below are species we have seen with a rich diversity of insect visitors and a high visitation rate. It is no surprise to us that the Myrtle family (see images above), the Pea family and the Daisy family dominate the list.

Australian Natives	**Introduced Garden Plants**
Tea-tree – *Leptospermum* species	Grey-leafed Europs – *Europs pectinatus*
Bottlebrush – *Callistemon* species	Sage – *Salvia* species
Bottlebrush – *Melaleuca* species	Lavender – *Lavandula* species
Fringe Myrtle – *Calytrix tetragona*	Rosemary – *Salvia rosmarinus*
Burgan – *Kunzea* species	Butterfly Bush – *Buddleja* species
Rosy Baeckea – *Euryomyrtus ramosissima*	Rock Rose – *Cistus* species
Native Pea – *Pultenaea, Dillwynia, Daviesia, Bossiaea* species	Valerian – *Centranthus ruber*
Common Wedge Pea – *Gompholobium huegelii*	Abelia – *Abelia* species
Daisy Bushes – *Olearia* species	*Weigela* species
Grey Everlasting – *Ozothamnus obcordatus*	Vervain – *Verbena* species
Wattles – *Acacia genistifolia, A. provincialis, A. pycnantha*	*Citrus* species
Correa species including *C. glabra* and *C. alba*	
Thryptomene species especially *T. calycina*	
Philotheca (Eriostemon) species	
Sweet Bursaria – *Bursaria spinosa*	
Hop Goodenia – *Goodenia ovata*	
Tree Violet – *Melicytus dentatus*	

Herbs and Herbaceous plants

The native plant species with the most “hits” in our survey is the commonly found Sticky Everlasting – *Xerochrysum viscosum* but the other everlastings and paper daisies are not far behind. The top of the list for non-native plants is the weedy Cat’s Ears - *Hypochaeris radicata* which is often mistaken for the Dandelion. While we are not in the business of promoting weed species, we do note that in many degraded habitats the Cat’s Ears is one of the few flowers available to pollinators and they depend on it for their survival. The solution is to first provide alternative food resources, and then remove the weeds. The little Mexican Fleabane (also known as Seaside Daisy) is another outstanding non-native performer in gardens. Garden herbs are also strong performers with the mint family and the Apiaceae family (Parsley, Coriander, Carrot) attracting a wide range of pollinators.

Australian Natives	Introduced Garden and Pasture Plants
Sticky Everlasting – *Xerochrysum viscosum*	Cat’s Ears – *Hypochaeris radicata*
Everlastings – *Chrysocephalum* species	Mexican Fleabane – *Erigeron karvinskianus*
Hoary Sunray – *Leucochrysum albicans*	Yarrow – *Achillea millefolium*
Button Daisies – *Leptorhynchos* species	Borage – *Borago officinalis*
Swamp Daisy – *Allittia cardiocarpa*	Various Mints – *Mentha* species
Daisies – *Brachyscome* species	Marigold – *Calendula officianalis*
Native Plantain – *Plantago varia*	Hyssop – *Hyssopus* species
Bluebells – *Wahlenbergia* species	Clovers – *Trifolium*, *Lotus* & *Medicago* species
Tall Lobelia – *Lobelia gibbosa*	Onion family – *Allium* species
Sweet Hound’s Tongue – *Cynoglossum suaveolens*	Plantain – *Plantago lanceolata*
Blue Pincushion – *Brunonia australis*	Lucerne – *Medicago sativa*
Willow-herb – *Epilobium* species	*Agastache* species
Fireweeds – *Senecio* species	Basil and Oregano

Prostrate – Ground covers

Good ground cover is important to pollinators and other insect species. However, it does not always have to be plants, and some of the best ground cover for biodiversity is the natural leaf litter and accumulation of decomposing plant material along with its associated fungi. A cushion of Bryophytes (Mosses and Liverworts) and Lichen species is also a wonderful ground cover, readily absorbing rainfall and allowing it to penetrate the soil instead of immediately running off. There are, of course, ground hugging plants and climbers like the Swamp Isotome which also double as a valuable food resource to pollinators. This species may find its own way to the margins of a farm dam where it attracts butterflies and native bees to feed on its massed flowers.

Australian Natives	Introduced Garden Plants
Purple Coral Pea – *Hardenbergia violacea*	Catmint – *Nepeta* x *faassenii*
Trailing Podolobium – *Podolobium procumbens*	Strawberries – *Fragaria* species
Matted Bush-pea – *Pultenaea pedunculata*	
Matted Bossiaea – *Bossiaea decumbens*	
Swamp Isotome – *Isotoma fluviatilis*	
Creeping Boobialla – *Myoporum parvifolium*	

Grasses, Lilies, and grass-like plants

The grasses and other monocots such as the sedges and lilies are vital for the maintenance of good insect diversity. They not only provide pollen to species like our native bees, but they also are a major source of food for the larvae of many insects. The pithy culms of some sedges and rushes may be used by some native bees for nesting, as is the *Xanthorrhoea* flower stem.

Australian Natives
Kangaroo & Wallaby Grasses – *Themeda* & *Rytidosperma* sp.
Matt-rushes – *Lomandra* species
Rushes & Sedges – *Juncus*, *Carex*, *Cyperus*, *Baumea* species
Lilies - *Burchardia umbellata*, *Arthropodium* sp, *Bulbine* sp
Flax-lilies – *Dianella* species
Grass-trees – *Xanthorrhoea* sp.

Connecting Habitat

Planting a mix of species from all of our listed sections (trees, shrubs, herbs, ground covers and grasses) will certainly provide you with an insect friendly habitat. By studying the flowering times of species before you make your selections, and then mixing some non-native species into your garden, you will extend the overall flowering period and increase the available food resources. Do not underestimate the benefits that a few kitchen herbs and vegetables will provide to our native pollinators as well as your own diet.

Connecting your garden to the insect pathways in our landscape will also produce an amazing boost to your pollinator species diversity. Waterways, roads, shelterbelts, and remnant bush patches all provide insects with the means to move across the landscape. It is up to us to ensure these habitat pathways are connected.

Artwork by Brian Bainbridge

The Upper Campaspe Landcare Network has produced this guide to complement our Pollinator Corridors project.

Talk to your local Landcare group about how you can be involved in this project and how you can access the UCLN native flora seedbank. Look out for opportunities to learn more about our pollinators via our seminars, and work with your neighbours to get our landscapes connected.

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