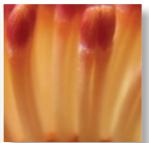






SUSTAINANCE CONNINGTON





















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The City of Stonnington is committed to sustainability and promoting sustainability to others.



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Introduction

The City of Stonnington's Sustainable Environment Plan aims to progress the municipality to a sustainable future. A main component of this is engaging and inspiring the community to participate in reducing our everyday environmental impacts. This includes the improvement in the extent and quality of native habitat.

The City of Stonnington is a highly urbanised municipality and although it only contains minor pockets of indigenous vegetation and habitat, Council is sourcing significant opportunities to enhance and protect biodiversity within open space and along natural corridors such as Gardiners Creek.

In addition to creating large areas of habitat in parks and reserves sustainable gardening can contribute to increasing habitat value and reduce our carbon footprint.

Gardening can have a positive benefit to the health of our environment when we;

- Use local plants to provide food and shelter for native mammals, birds and insects
- Conserve water in the garden to help maintain water levels in our reservoirs
- Reduce chemical use in the garden and reduce chemicals in our creeks and streams
- Compost household and garden waste and reduce the amount of waste going to landfill and therefore reduce the amount of greenhouse gas produced

It is easy to create beautiful gardens that suit our local climate and have a low impact on our natural environment. This booklet has been designed to provide information and inspiration to create your own sustainable garden in the City of Stonnington.



Sustainable Garden Design

Many gardens still maintain the traditional layout, which came from English gardens many years ago. This includes a paved sitting area, large open lawn and flowerbeds of exotic plants around the outside. However these gardens often take too much time and precious resources to maintain. On the other hand sustainable gardens, once established, are much less resource intensive.

To design a sustainable garden you need to work out how to create a space you feel comfortable with, enjoy and that suits your local soil and climate.

Garden Design Tips

- 1. Find a style you like which suits your garden so all the paving, pots, water features and plants match, especially in a courtyard garden.
- 2. Do a site analysis. Focus on soil quality, sun, shade, privacy and fire risk potential. This will tell you what your site will let you do.
- 3. List what you <u>need</u> (shed, washing line, kids' swings, entertainment area) and what you <u>want</u> (vegie garden, shade area, pond, fruit tree/s).
- 4. Develop a scaled plan or mark out in the garden what will go where. Consider locations that are practical and look good.
- 5. If your block is on a slope consider building a retaining wall or contouring your garden to prevent water and mulch runoff.
- 6. Make garden beds bigger and lawns smaller.

Raingardens

You may want to consider installing a raingarden near a down pipe to collect and filter stormwater and slow down rainfall during a rain event.

For further information visit the City of Stonnington website at: www.stonnington.vic.gov.au

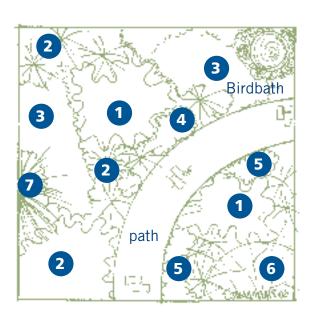
Further Information

www.sgaonline.org.au/design

Following are some design ideas that will help you to have the latest garden styles and utilise indigenous plants for a sustainable garden.

Cottage Garden

The cottage garden look is easily achieved with local plants and the addition of a few other native plants. Unlike the traditional cottage garden, this garden can look interesting and colourful all year round, and it's drought tolerant. Tufted Bluebell (Wahlenbergia communis) looks delightful growing with the grey-leaved Common Everlasting (Chrysocephalum apiculatum).



- 1 Common Everlasting (Chrysocephalum apiculatum)
- 2 Black-anther Flax-lily (Dianella revoluta)
- **3** Tufted Bluebell (Wahlenbergia communis)
- **4** Cut-leaf Daisy (Brachyscome multifida)
- **5** Common Correa (Correa reflexa)
- 6 Rock Correa (Correa glabra)
- **7** Common Tussock Grass (*Poa labillardieri*)









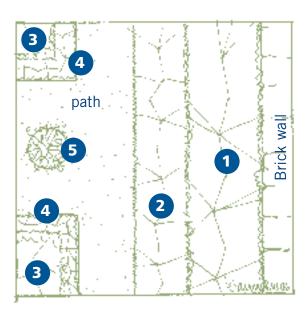






Formal Garden

Some local plants can be grown into neat clipped hedges and shapes to complement the straight lines of a formal garden. These gardens require a bit more maintenance but at least the plants chosen can be drought tolerant. The local shrub Tree Violet (Melicytus dentata), for example, can be pruned to create a formal hedge. In front, Rosemary Grevillea (Grevillea rosmarinifolia) forms a lower hedge, to create a tiered effect.



- **1** Tree Violet (*Melicytus dentata*)
- 2 Rosemary Grevillea (Grevillea rosmarinifolia)
- **3** Hop Goodenia (Goodenia ovata)
- 4 Common Correa (Correa reflexa)
- **5** Running Postman (Kennedia prostrata), growing in an urn





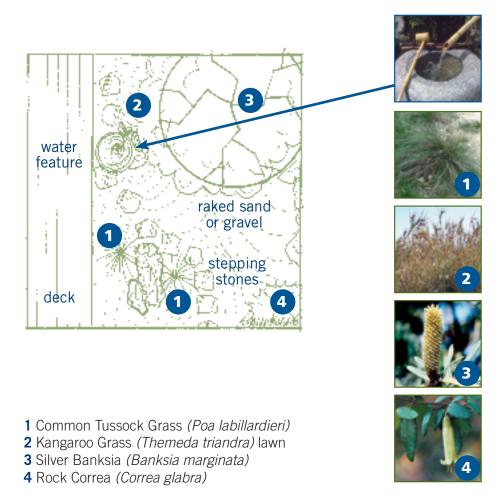






Japanese-Styled Garden

The sculptural and minimal look of a Japanese Garden creates a quiet, thoughtful place. There are many local and native plants that work very well and sit beautifully with Japanese sculptural elements. Clumps of the Common Tussock Grass (*Poa labillardieri*), for example, look dramatic in a gravel garden with feature rocks, such as shown here. Whilst a Silver Banksia (*Banksia marginata*) growing in a lawn of Kangaroo Grass (*Themeda triandra*) can be a sculptural element.



Informal Natural Garden

The famous Australian bush garden has a relaxed easy-care feel about it. Here, a meandering path crosses a dry creek bed. These gardens are a haven for wildlife and a great refuge for humans. With a bit of planning, you can ensure there is something in flower almost all year round.

















- 1 Drooping Sheoke (Allocasuarina verticillata)
- 2 Gold Dust Wattle (Acacia acinacea)
- 3 Black-anther Flax-lily (Dianella revoluta)
- 4 Common Tussock Grass (Poa labillardieri)
- 5 Austral Indigo (Indigofera australis)
- 6 River Bottlebrush (Callistemon sieberi)
- 7 Tufted Bluebell (Wahlenbergia communis)
- **8** Common Everlasting (Chrysocephalum apiculatum)

Plant Selection

Factors that will guide plant selection for your garden include soil type, drainage patterns, aspect (i.e. full sun, part shade and shade) and local climate. Plants need to be grouped together according to their sun/shade, water and fertiliser needs. Visit a nursery for advice on plants to suit the poistion you have in mind.

It is best to use local (indigenous) plants wherever possible because they are well suited to the local soil and climate. They do not require large amounts of nutrients and, once established, little water. There are many beautiful plants local to the City of Stonnington, refer to the Stonnington Local Plant Guide on page 9 of this booklet.

You should always avoid using plants that are known environmental weeds. Two thirds of the weeds found in Victoria's natural environment (parks, and along waterways and coasts) are actually 'garden escapees'. Their seeds are spread from gardens by the wind, birds and animals or by people dumping garden cuttings into the bush and waterways. Weeds compete with our local plants for light, nutrients and water. Before too long they can replace local plants, leaving native animals without food or habitat.

As gardeners we need to know which plants can escape and destroy our unique natural environments. (Refer to the Stonnington Garden Escapees Guide of this booklet)

Consider removing and replacing potential garden escapees with local plants.



Stonnington Local Plant Guide

The following list of species are a selection of ideal plants for gardens in the City of Stonnington as they are local (indigenous) to the area and provide habitat for native wildlife. Indigenous plants are also the most waterwise plants for your garden as they have adapted to the local climate and soil conditions and therefore require less maintenance. See the list of nurseries stocking plants indigenous to Stonnington at the back of this booklet.

Some of these plants provide habitat for









GROUND COVERS & WILDFLOWERS

Austral Stork's-bill (Pelargonium australe)

Requirements: \bigcirc \longrightarrow \bigcirc \$0cm \leftrightarrow 80cm.

Well-drained soils, tolerating dryness once established. Features: Attractive rockery plant.



Bulbine Lily (Bulbine bulbosa)

Requirements: \bigcirc \bigcirc \bigcirc \bigcirc 1 40cm \leftrightarrow 30cm. Well-drained soil.

Features: Beautiful in mass plantings. Plants die back to tuberous rootstock

in dry weather to re-shoot in autumn.



Chocolate Lilv (Arthropodium strictum)

Requirements: \bigcirc \bigcirc \bigcirc \bigcirc 170cm \leftrightarrow 50cm. Well-drained soil. Adaptable to most soils. Features: Chocolate-scented flowers brighten a rockery. Beautiful in mass plantings. Can be planted as bedding plants.







Climbing Saltbush (Einadia nutans)

Requirements: \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 1m.

Tolerates dry soils.

Features: Grey-green foliage.

Attractive small red berries after flowering.

A useful groundcover for rockeries.



Clustered Everlasting (Chrysocephalum semipapposum)

Well-drained soil.

Features: Very hardy. Prune in winter to rejuvenate. Great in rock gardens, in pots, under trees or in an open position in the garden.



Common Correa (Correa reflexa)

Requirements: \bullet \bullet HHH \downarrow 60cm \leftrightarrow 1.5m.

Well-drained soil and excellent for dry, shady positions.

Features: Establishes well under existing trees.

Responds well to a light pruning.



Common Everlasting (Chrysocephalum apiculatum)

Requirements: \bigcirc \blacktriangle \$20cm \leftrightarrow 1m.

Well-drained soil.

Features: An excellent rockery plant with contrasting silver foliage. Prune regularly to encourage new growth.











Kidney Plant (Dichondra repens)

Requirements: ◆ ◆ ♦ ↑ prostrate → 30cm Well-drained soil.

Features: An excellent lawn substitute in moist, shady areas where traffic is very light.



Native Flax (Linum marginale)

Requirements: \bigcirc \bigcirc \bigcirc \bigcirc \bigcirc 40cm \leftrightarrow 40cm.

Well-drained soil.

Features: Grows mostly in the cooler months and dies back after flowering. Remove old stems in autumn. Can grow in pots, rock gardens and around ponds.



M CAR

Pale Flax-lily (Dianella longifolia)

Requirements: ● ◆ \$ \$0cm ↔ 50cm.

Well-drained soil.

Features: Hardy, easily maintained plant. Ideal for growing close to trees.

W Con



Running Postman (Kennedia prostrata)

Requirements: \bigcirc \longrightarrow \downarrow prostrate \leftrightarrow 2m. Accepts most soils, but avoid poor drainage. Features: Attractive as a ground cover, in tubs, hanging baskets, cascading over rocks, walls and under trees.

















Tufted Bluebell (Wahlenbergia communis)

Requirements: $\textcircled{\bullet} \Leftrightarrow \textcircled{\bullet} \updownarrow 30cm \leftrightarrow 15cm$.

Moist, well-drained soil.

Features: Looks great in containers or when planted amongst grasses.





CLIMBERS

Purple Coral Pea (Hardenbergia violacea)

Requirements:

to the prostrate of the or climber ↔ 3m. Well-drained soil. Features: Climbing plant useful as a screening plant. Grows well in pots.



Wonga Vine (Pandorea pandorana)

Requirements: \Leftrightarrow \diamond \uparrow prostrate or climber \leftrightarrow 3m.

Moist, well-drained soil.

Features: vigorous climber grows well amongst established trees or over a pergola.





GRASSES, RUSHES & SEDGES

Kangaroo Grass (Themeda triandra)

Requirements: $\textcircled{\bullet} \bullet 150 \text{cm} \leftrightarrow 40 \text{cm}$.

Adaptable to most soils.

Features: Attractive tufting grass.









Spiny-headed Mat-rush (Lomandra longifolia)

Requirements: $\textcircled{\bullet} \Leftrightarrow \textcircled{\bullet} \updownarrow 180 \text{cm} \leftrightarrow 50 \text{cm}$.

Well-drained soil, tolerating dry shade. Features: Excellent contrasting plant with its bright green strappy leaves. Grows well under established trees.



Velvet Tussock Grass

(Poa morrisii)

Requirements: ● ◆ \$ \$50cm ↔ 30cm.

Moist well-drained soil. Features: Beautiful foliage. Attractive contrasting plant.



SHRUBS

Austral Indigo (Indigofera australis)

Requirements: $\textcircled{\bullet}$ $\textcircled{\bullet}$ $\textcircled{\bullet}$ 1 2m \longleftrightarrow 2m.

Well-drained soil. Lime tolerant.

Features: Needs regular pruning for shaping.



Gold Dust Wattle (Acacia acinacea)

Requirements: $\textcircled{\bullet}$ $\textcircled{\bullet}$ $\textcircled{\bullet}$ HHH \updownarrow 2m \longleftrightarrow 2m.

Adaptable to most soils.

Features: A good low screening plant.

Suitable for large pots.







Hop Goodenia (Goodenia ovata)

Requirements: $1.8m \leftrightarrow 1.5m$. Prefers damp soil.

Features: Fast growing. It responds well to pruning.



Pink Bells (Tetratheca coliata)

Well drained soil. Tolerates heavy soil and lime.

Features: Small clumping shrub. An attractive container plant.



TREES

Drooping Sheoak (Allocasuarina verticillata)

Requirements: $\textcircled{\bullet}$ \bigstar 7m \leftrightarrow 4m. Well-drained soil. Features: A graceful tree, excellent as a

screening plant. The golden effect of the small flowers is an attractive feature of this tree.





Silver Banksia (Banksia marginata)

Requirements: $\textcircled{\bullet} \Leftrightarrow \bigstar \updownarrow 10m \leftrightarrow 5m$.

Well-drained soil.

Features: Bushy form makes it an excellent

screening plant.



Further Information

Visit the City of Stonnington website for more information on plants local to the area: www.stonnington.vic.gov.au

Sustainable Plant List

Please see below for a selection of native plants that would also be suitable for a sustainable garden. These plants are all low water users.

| COMMON NAME | BOTANICAL NAME | FORM | CONDITIONS |
|-------------------------|----------------------------------|---------------|------------|
| Bottlebrush | Callistemon 'Kings Park Special' | Small Tree | |
| Cabbage Tree | Cordyline australis | Tree | © |
| Californian Lilac | Ceanothus 'Blue Pacific' | Tall Shrub | (*) |
| Catmint | Nepeta cultivar | Ground Cover | (*) |
| Coastal Rosemary | Westringia fruticosa | Medium Shrub | (*) |
| Correa | Correa 'Dusky Bells' | Small Shrub | (a) |
| Creeping Boobialla | Myoporum parvifolium | Ground Cover | (a) |
| Crepe Myrtle | Lagerstromia 'Yuma' | Small Tree | (*) |
| Flax | Phormium cultivars | Strap Foliage | (*) |
| Grevillea | Grevillea 'Ivanhoe' | Tall Shrub | © |
| Hebe | Hebe 'Blue Gem' | Small Shrub | (a) |
| Heliotrope "Cherry Pie" | Heliotropium arborescens | Cottage | (a) |
| Hibiscus | Hibiscus syriacus | Tall Shrub | (a) |
| Jerusalem Sage | Phlomis fruticosa | Cottage | (a) |
| Lavender Cotton | Santolina chamaecyparissus | Cottage | (a) |
| Lemon-scented Gum | Corymbia citriodora | Tree | © |
| Penstemon | Penstemon cultivars | Cottage | (a) |
| Plumbago | Plumbago auriculata | Medium Shrub | (2) |
| Rock Thryptomene | Thryptomene saxicola | Small Shrub | (a) |
| Rosemary | Rosemarinus officinalis | Small Shrub | (a) |
| Sage | Salvia species | Cottage | (4) |
| Salmon Correa | Correa pulchella | Small Shrub | (4) |
| Sea Lavender | Limonium perezii | Cottage | (a) |
| Swan-neck Agave | Agave attenuate | Strap Foliage | (4) |
| Wallflower | Cheiranthus 'Winter Cheer' | Small Shrub | (4) |
| Weakleaf Yucca | Yucca flaccida | Strap Foliage | (4) |
| Weeping Bottlebrush | Callistemon viminalis | Medium Shrub | (a) |
| White Correa | Correa alba | Small Shrub | (a) |
| Willow Myrtle | Agonis flexuosa | Medium Tree | (*) |

LEGEND:

Full Sun = Part Shade =



Stonnington Garden Escapee Guide

All the plants listed in this section are serious garden escapees in Stonnington. These species can smother, choke, replace and out-compete native vegetation in Stonnington's environment. Please do not plant these species. If you have them in your garden, we encourage you to remove them. They can be replaced with one of the suggested similar non-invasive indigenous species or from species mentioned in the previous section, 'Stonnington Local Plant Guide', in this booklet.

Weed Control Techniques



Hand Pull: hand removal of plant, most suitable for small plants and seedlings.



Cut & Paint: cut the plant stem and immediately apply an appropriate herbicide to the stump.



Solarisation: covering plants with a plastic sheet with buried edges for a four-week period. This allows the heat from the sun to kill off the plants underneath.



Mulch: smothering plants with a thick layer of appropriate mulch. Ensure that the chosen mulch is weed-free.



Scrape & Paint: scrape the outer layer of an area of the plant stem and immediately apply an appropriate herbicide. Most appropriate on vine weeds.



Spray: apply herbicide to the surface of the foliage.



Drill & Fill: use a drill or other small tool to cut into the outer bark layer and apply an appropriate herbicide to the soft layer underneath the bark.

If using chemicals to control weeds remember:

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

CLIMBERS AND CREEPERS

Bluebell Creeper (Billardiera heterophylla)

Vigorous climber. Contains toxins. Replace with: Common Appleberry (Billardiera scandens)









Blue Periwinkle (Vinca major)

Forms thick carpets in creeks and bushland Replace with: Purple Coral Pea (Hardenbergia violacea)









English Ivy (Hedra helix)

Fast climber can grow to 30m up trees or creeping along ground and forming carpets. Can cause eye and skin irritation.

Replace with: Small-leafed Clematis (Clematis microphylla)

Control:





Japanese Honeysuckle (Lonicera japonica)

The berries are very poisonous and the leaves may also be toxic.

Replace with: "Old Man's Beard" Clematis (Clematis aristata)

















GRASSES and HERB



Agapanthus (Agapanthus praecox subsp. orientalis)

Leaves poisonous. Sticky sap can cause mouth ulcers.

Replace with: Black anther Flax-lily

(Dianella revoluta)





Arum Lily (Zantedeschia aethiopica)

Highly poisonous. Escapes into creeks. Replace with: Black anther Flax-lily (Dianella revoluta)







Monbretia (Crocosmia x crocosmiiflora)

Leaves and flowers die back each year only to grow back in dense clumps. Replace with: Long-leaf Mat-rush





SHRUBS

Cotoneaster (Cotoneaster spp.)

Berries contain toxins that can be harmful to infants if eaten.

Replace with: Prickly Currant-bush (Coprosma quadrifida)















English Broom (Cytisus scoparius)

Seeds poisonous if eaten in quantity. Replace with: Golden Spray (Viminaria junceae)







Flax-leaf Broom (Genista linifolia)

Seeds highly poisonous. Replace with: Gold Dust Wattle (Acacia acinacea)







Fountain Grass (Pennisetum setaceum)

Up to 1m tall, distinctive flowerheads from January to April. Replace with: Wallaby Grass (Austrodanthonia spp.) Control: (







Hawthorn (Craetagus monogyna)

Thorny shrub that harbours rabbits and foxes.

Replace with: Tree Violet (Melicytus dentata)

















Large-leafed Privet (Ligustrum lucidum)

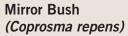
Leaves and fruit are poisonous.

Replace with: Rock Correa (Correa glabra)









Shiny green leaves used as whistles by children.

Replace with: Boobialla (Myoporum insulare)

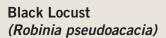








TREES



Poisonous bark, roots, seeds and pods. Thorns can cause irritation.

Replace with: Snowy Daisy-bush (Oleria lirata)













Cherry Plum (Prunus cerasifera)

Edible fruit. Foxes and bird spread the seed. Common along roadsides.

Replace with: Victorian Christmas Bush (Prostanthera lasianthos)











Cootamundra Wattle (Acacia baileyana)

Fine, fern-like silvery-blue leaf, flowers June to September. Replace with: Black Wattle (Acacia mearnsii) or Silver Wattle (Acacia dealbata)











Desert Ash (Fraxinus angustifolia)

Glossy bright green leaves with serrated edges. Distinctive winged seed capsules. Replace with: Blackwood

(Acacia melonoxylon)



Sweet Pittosporum (Pittosporum undulatum)

Dark green leaves, small creamy-white flowers. Distinctive, yellow fleshy fruit. Replace with: Sweet Bursaria (Bursaria spinosa)

Control: (





Willow-leaf Hakea (Hakea salicifolia)

A native plant commonly sold as a drought-tolerant hedge plant. Replace with: Yellow Hakea (Hakea nodosa)















Habitat Gardening

Attracting native animals to your garden can add extra colour and interest. It can assist pest control by attracting insect predators and contribute to keeping native animal populations viable by providing a pathway for them to commute between bushland areas. All you have to do is supply your garden visitors with food, water and shelter.

Birds

Birds are beautiful creatures that are a joy to watch in any garden. In addition, many birds feed on plant pests such as aphids and scale, contributing to non-chemical pest control in the garden! To attract birds to your garden consider the following points.

Shelter: birds need shelter from predators such as cats and predatory birds. Help protect your feathered visitors by providing prickly or dense plants at various levels in your garden.

Water: a reliable water source, particularly in summer will attract birds to your garden. If you install a birdbath, place it near dense or prickly plants to provide birds with protection from predators.

Food: Small birds – Silvereyes, Blue Wrens, Finches, Fantails and Thornbills forage in the lower levels of the garden. They feed on insects and help to keep plant pest numbers down. Native grasses such as Tussock Grass (*Poa labillardieri*), Kangaroo Grass (*Themeda triandra*) and Wallaby Grass (*Austrodanthonia* spp.) provide an important source of food for grass seed eating birds such as Red-browed Finches and Crested Pigeons.



Adult male Superb Fairy-wren (Malurus cyaneus).



Grevillea (Grevillea longistyla).

Honey Eating birds – Honeyeaters, Red Wattlebirds and Spinebills are specialist nectar feeders. They use their brush-like tongues to collect nectar from the flowers of Melaleucas, Correas (*Correa reflexa* or *C. glabra*), and Silver Banksias (*Banksia marginata*). They also like to eat insects as a source of protein.

Parrots – Crimson and Eastern Rosellas feed on Eucalypt flowers and seeds, while Cockatoos and Galahs prefer the seeds of Hakeas (*Hakea nodosa*), Callistemon (*Callistemon sieberi*) and Eucalypts (*Eucalyptus radiata* or *E.ovata*). Red-rump Grass Parrots feed on grass seeds.

Large birds – Magpies, Kookaburras and Butcherbirds feed on larger insects, small lizards and skinks.



Butterflies are a welcome addition to any garden and with a few simple design principles are easily attracted.

Nectar traps: Colourful, massed flower beds draw butterflies in and keep them happily moving through the garden. They are attracted to a large range of coloured flowers, in particular blue, yellow and red.

Flowers: Simple, flat flowers make it easier for butterflies to extract nectar. Double flowers (multiple layers of petals) are difficult for butterflies to feed from, but



Crimson Rosella (Platycercus elegans).



Australian Painted Lady (Vanessa kershawii)

simple flowers like Daisies, Pelargoniums (*Pelargonium australe*), Bluebells (*Wahlenbergia communis*), Saltbush plants (*Atriplex cinerea*), and Pea flowers (*Bossiaea prostrata*) are more suitable.

Position: Butterflies use the early morning sun to warm themselves and retreat to cooler, shadier places during the heat of the day. Providing a sheltered position that combines warmth and protection is ideal.

Also consider adding flat rocks for butterflies to bask and to court each other. Mud puddles or a dish of damp sand can provide them with water and salts.

Host plants: Incorporate host plants for butterflies to lay eggs. Caterpillars are generally small and shy, and won't devastate the garden. Popular indigenous plants include Bursaria (Bursaria spinosa) and Mat rush (Lomandra longifolia), and grasses such as Kangaroo Grass (Themeda triandra), Wallaby Grass (Austrodanthonia spp.) and Tussock Grass (Poa labillardieri).

Lizards

Most lizards found in the garden are little Grass Skinks that feed on insects and larvae. You may be fortunate enough to encounter a larger lizard such as a Blue-tongue or Shingleback, but these beautiful creatures are not as common as they used to be.

To create lizard habitat in your garden, provide the following:

- Tussock grass and hiding spots between rocks and logs for protection.
- A protected sunny spot on a rock, log or brick path.
- Natural leaf mulch to support the insects and larvae they feed on.

Where possible avoid using snail bait as Blue-tongue lizards will eat the poisoned snails.

Frogs

What could be more interesting than watching tadpoles grow into frogs and then being serenaded by their calls at night. Frogs also help control pests in your garden as they eat flies, mosquitoes, slugs, snails and even spiders.



Common Blue-tongue Lizard (Tiliqua scincoides,



Juvenile Growling Grass Frog (Litoria raniformis)

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

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

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

Your frog garden should also have:

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

Frog-friendly plants:

Tufting plants - Pale Rush (Juncus pallidus) or Black-anther Flax-lily (Dianella revoluta).

Bog plants - Thatch Saw-sedge (Gahnia radula), Knobby Club-rush (Isolepis nodosa), Tassel Cord Rush (Restio tetraphyllus).

Water plants - Common Nardoo (Marsilea drummondii), Tassel Sedge (Carex fascicularis), and Water Ribbons (Triglochin procerum).



Common Nardoo (Marsilea drummondii)

Things to avoid:

- Fish most fish will eat tadpoles.
- Fountain pumps tadpoles and eggs can be killed by them.

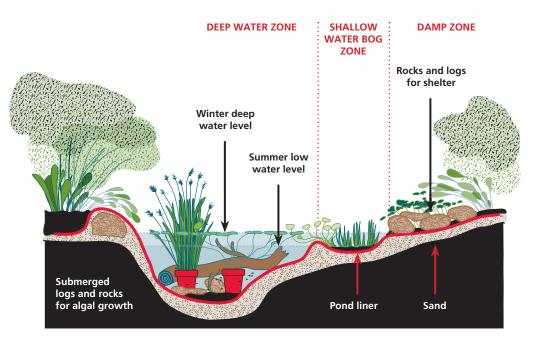
- Cats and dogs protect the frog area of your garden with sharp, spiky plants.
- Chemicals frogs eat insects, so you don't want to spray them. Frogs are very sensitive to chemicals which can be absorbed through their thin skin.
- Allowing floating plants such as Duckweed or Azolla to cover the top of the pond. This can result in reduced oxygen levels for tadpoles.



Striped Marsh Frog (Limnodynastes peroni).

- Cleaning out the pond too often tadpoles need some material to be breaking down in the pond water to provide food for them.
- Collecting tadpoles from the wild is illegal in most parts of Australia.

Diagram below: The elements of a frog-friendly garden pond or frog bog



Mammals

As the human population grows urban development has replaced natural habitat. Our unique native animals have either adapted or suffered a dramatic decline due to loss of habitat and traditional food, disruption of breeding cycles and road kill incidents. While you may be incredibly lucky to encounter a koala or echidna, you are more likely to have possums and bats as regular visitors.

Possums: Common Brush Tail and Ringtail Possum populations have adapted magnificently to the urban environment. With an abundance of highly nutritious food and great nesting sites in the roofs of buildings, their populations are higher in the urban areas than in the bush.



Sugar Glider (Petaurus breviceps).

If possums are becoming a problem you may try the following techniques recommended by the Department of Sustainability and Environment (DSE):

- Build a floppy fence around the garden. Use 80cm wide, heavily galvanised chicken wire, bury the bottom 20cm and support the remainder on vertical lengths of flexible, high-tensile fencing wire.
 Bend the wire to curve the upper section outwards. When the possum attempts to climb the fence it will bend over and then spring back.
- Use collars to protect fruit trees.
- Repellents recent tests showed none of 15 repellent compounds effectively prevented possums damaging ornamental trees or fruit (further information on repellents is available on the DSE website).

If on the other hand you would like to attract possums, or particularly the more vulnerable animals such as the Sugar Glider to your garden, you could plant Banksias, Callistemons, Wattles, Teatrees and Eucalypts. Put in some appropriate nesting boxes to provide a safe, warm haven. It is important not to feed wildlife as human food can be dangerous and cause serious dietary imbalance.

Lawn Alternatives

Traditional turf lawns are often high water users. If you are looking for an attractive living lawn alternative, that can withstand periods of low water supply and less ongoing maintenance, you could consider a range of native grasses or plants depending on the look you are trying to achieve.

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

Ground cover plants - use ground cover plants that form dense mats, don't require mowing and perform well in shade. Examples include: Creeping Saltbush (*Atriplex semibaccata*), Climbing Saltbush (*Einadia nutans*), Kidney Plant (*Dichondra repens*) and Creeping Boobialla (*Myoporum parvifolium*).

Native wildflowers – planting out a mass of native wildflowers to create a meadow look can be spectacular, particularly in spring and summer. This works very well as a front lawn alternative. Examples include: Tufted Bluebell (Wahlenbergia communis), Chocolate Lily (Arthropodium strictum), and Bulbine Lily (Bulbine bulbosa).



Neeping Grass



Kidney Plant



Common Everlasting and Cut-leaf Daisy

Vegetable Gardening

Growing fruit and vegetables commercially uses a large amount of energy and chemicals for heating, cooling, spraying weeds and pests, and transporting produce. Fruit and vegetables begin to lose their vitamins as soon as they're picked. After five days some have lost 40–50% of the vitamins. Growing your own vegetables is easy, and even easier if you've improved your soil. They're healthier, convenient and children love to watch them grow.

'No Dig' Vegie Gardens

A 'no dig' garden is easy to set up and requires very low on-going maintenance. It can be built as a garden bed or in any container, save on water and fertiliser and potentially recycle kitchen and garden waste. Remember, greywater is illegal on produce gardens. Ideally you have a rainwater tank to ensure you can water whenever your vegie garden requires watering. Details on government rebates for rainwater tanks are available from www.ourwater.vic.gov.au/saving/home/rebates/

HOW TO BUILD A NO DIG GARDEN ON EXISTING LAWN OR ONTO SOIL:

- 1. Mark out and form the walls. These should be <u>at least</u> 20cm high. You can use anything including old rocks, sleepers, bricks, blocks or pavers.
- 2. Line the base with a 3–5mm thickness of newspaper to suppress weeds; and wet thoroughly.
- 3. Then stack alternating layers of fine and coarse compostable materials. For example, start with a layer of pea straw, then a thin layer of cow manure, a layer of compost, and repeat the layers finishing with a thick compost layer.
- 4. Planting can be done into the top compost layer. Trowel a small hole to fit the seedlings in and plant. Water in well. The plant will eventually establish a strong root system in its nutritional base.
- 5. As the seedlings grow and the layers rot down, top up with more layers of manure and compost.
- 6. Mulch around your seedlings well with a pea straw and dig this into the soil as it rots down, before topping the mulch up.

You can also build a no dig garden in a large container, simply do the same as above, but omit step 1.

Pots and containers make attractive vegetable gardens particularly on sealed surfaces. Locate one near the back door for easy access to delicious, fresh kitchen herbs.

Organic Produce Tips

- 1. Most fruit and vegetables grow well in the full sun with plenty of water, organic fertiliser and compost.
- 2. Don't use treated pine in vegetable gardens as the chemicals in the timber can leach into the soil.
- Use recycled plastic sleepers or recycled bricks to make raised beds. These will not rot.
- 4. Rotate the position of vegetables in your garden every year to stop diseases from spreading.
- 5. You will need to apply water regularly to your vegetable garden, so consider installing a rain water tank.
- 6. Regularly check for pests, especially snails on new seedlings.
- 7. Use low impact alternatives (such as pyrethrum and garlic sprays) at recommended doses to control pests.
- 8. Use heritage seeds for more variety and often superior flavour.
- 9. You can plant early, mid and late season tomatoes.



Further Information

For monthly produce planting guides visit: www.sgaonline.org.au/ info_inyourpatch

Pesticides, Herbicides and Fertilisers

Pesticides, herbicides and fertilisers can be transferred from our home gardens to the natural environment. Sprays can drift in the wind and powders wash into waterways. Strong pesticides and herbicides can kill native insects, plants and animals, while the application of too much fertiliser may lead to extra nutrients in our waterways, contributing to blue-green algae outbreaks harmful to animals and sometimes people.

Safe Chemical Tips

Many insects in the garden such as ladybirds are good guys that will eat pests such as aphids. If you overuse chemicals you may also kill beneficial insects and make your pest problem harder to control. Multi-sprays in particular kill anything they touch.

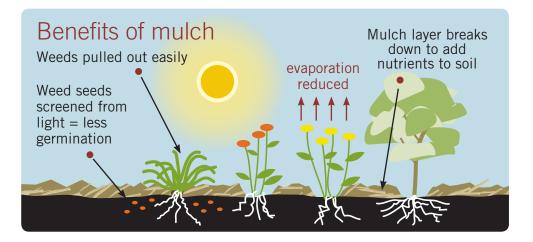


A local pond suffering from algae due to a high nutrient load from stormwater runoff.

- 2. Remove pests by hand or use natural alternatives such as pyrethrum and garlic spray to control pests. Even natural alternatives should be used with care in controlled doses.
- 3. Too much fertiliser makes plants produce a lot of leafy growth that often becomes a target for pests.
- 4. Organic fertilisers such as compost, manures, seaweed and fish emulsion break down more slowly than synthetic (chemical) fertilisers and generally match the rate at which plants need the nutrients. Synthetic fertilisers break down quickly and can burn plant roots.
- 5. Organic fertilisers improve soil structure meaning the soil is better able to hold water and make it available to plants. Synthetic fertilisers add nothing to the soil structure and tend to move easily from the soil after heavy rain or watering.
- 6. When a plant looks sick the worst thing you can do is feed it!
- 7. Sterilise your secateurs with methylated spirits between pruning plants to prevent the spread of disease.

Caring For Your Soil

Healthy soil = healthy plants. Soil needs organic matter such as leaf litter, compost, manure and grass clippings. Worms break down organic matter to make food for plants, and worm burrows allow air into the soil so that plant roots can breathe. Organic matter needs to be replaced as plants absorb nutrients. Compost adds nutrients to the soil, improves water holding capacity and needs to be dug in. Mulch is placed on top of the soil to reduce water evaporation and control weed growth. If organic matter is mixed with mulch the material can "cake" up and form an impermeable barrier that rain can't get through.



Soil Improvement Tips

- Soil should be damp before you add mulch. Generally spring is the best time to apply mulch, once the winter rains have soaked in.
- Mulches made from recycled organics are an excellent choice as they save water, are long-lasting and feed the soil when they break down.
- Avoid small particle mulches ('fines') as they tend to clump together and repell water. Chunky mulch of varying size is ideal for the garden bed and straws that break down quickly are best for vegetable gardening.
- 4. Pea straw is a good option if you have not mulched the soil for a long time as it breaks down quickly, returning nutrients to the soil.

- Soil improvement (such as pea straw on the soil surface) is generally only required for exotic plants, vegetables and fruit trees. Most local and native plants like a relatively infertile soil so they prefer a bush mulch or recycled timber mulch on its own without soil improvement.
- When buying new soil for your garden, buy a soil that is mixed with recycled organics or compost.
- Don't cultivate your soil unless it is very compacted after building works. Digging destroys the soil structure, which thereby destroys air holes and drainage spaces.
- When watering use a trigger hose with a spray setting so as not to compact the soil as the water hits. The concentrated pressure of the water stream can close up valuable air spaces.

Further Information

www.sgaonline.org.au/soil www.sustainability.vic.gov.au



Compost

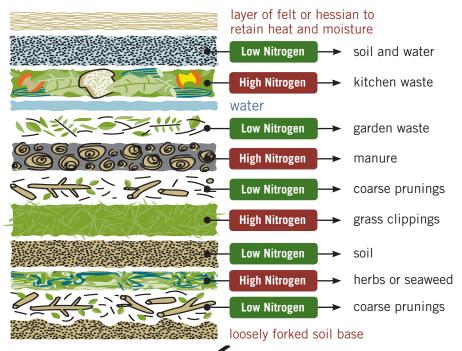
Composting or worm farming your food scraps, grass and garden clippings (organics) can provide vou with an excellent source of free garden food and soil improver. In addition to creating great fertiliser, it reduces greenhouse gases, saves water and dramatically reduces the amount of waste going to landfill.

Composting Tips

- 1. Your compost bin or heap should be located on soil, so that it drains well and worms and bacteria can enter the bin to decompose the waste.
- 2. a) All compost bins or heaps need a balance of materials that:
 - Are high in nitrogen, such as blood and bone, Dynamic Lifter or chicken manure. Kitchen scraps and grass clippings also contain nitrogen.
 - Contain carbon, such as dried leaves or shredded newspapers.
 - Aim for a ratio of 30 parts carbon: 1 part nitrogen.
 - b) In addition, the compost heap or bin needs:
 - Water enough so that the contents are moist but not wet.
 - Oxygen added by regularly turning over the contents.
 - Warmth locate your compost bin in a sunny place, but not with direct sunlight all day.
- If you are left with half decomposed lumps in your compost add smaller pieces of food to the bin/heap to ensure it all decomposes evenly. Always crush eggshells.
- Ants and slaters are an indication your heap is too dry. Add a sprinkling of water or less dry matter.
- Meat scraps or fish bones can be added to compost, but only if it's working efficiently and quickly. They are best avoided so not to encourage vermin, especially over summer.
- Visit the SGA website for information on compost trouble shooting. www.sgaonline.org.au/info science of composting

This diagram is an example of the different layers (each 3-10 cm). Alternating kitchen and garden waste layers with an occasional layer of manure works well. Avoid thick layers of lawn clippings.

Building a Layered Compost Heap



Add to your compost

- fruit and vegetable scraps
- coffee grounds and tea bags
- egg shells and animal fur
- onions and cut up citrus fruit
- pizza and egg cartons
- vacuum cleaner dust
- pure cotton articles (cut up)
- grass clippings (3-4cm layers)
- cut up prunings
- weeds without seed heads
- blood and bone
- shredded newspaper
- small amounts of wood ash

Keep out of your compost

- fish and meat
- cat and dog droppings; consider a pet poo worm farm instead
- big woody prunings
- bulbous weeds e.g. oxalis spp.
- weeds with runners e.g. couch grass
- bleached or glossy office paper
- pineapple tops
- avocado seeds

Worm Farming

Keeping earthworms in containers and feeding them fruit and vegetable scraps is an excellent way to reduce the amount of organic waste you place into your garbage bin. This decreases the amount of waste sent to landfill. Worms produce a rich inexpensive garden fertiliser, called castings (poo) and worm tea (wee), that is great for your garden. Worm farms are ideal for people living in flats or houses with small backyards. They can be purchased from garden centres and hardware stores and come with instructions, bedding material and a bag of worms. There are specific composting worms that eat food scraps only and are different to the earthworms that you find in your garden. Composting worms are Tiger Worms, Red Wrigglers and Indian Blues.

Keep Your Worms Happy

Moisture – worms need to keep their skin cool and moist to breath. Keep a few layers of moist newspaper over the top of your worms before placing a lid on your worm farm. Do not flood your worms and take care not to leave your worm farm uncovered if it rains. If your worm farm is too wet you may have huge numbers of small vinegar flies (a small amount are healthy). Likewise if you find worms drowned in the worm tea at the bottom of your worm farm your system is too wet. Add some torn up newspaper to absorb the excess moisture.

Temperature – worms stop eating if they are cold and will die if they are too hot. They like a temperature between 18-24°C so it is important to keep your worms in a shady place out of direct sunlight in summer and warm in winter.

Food – worms may not eat for the first few weeks after introduction and then slowly build their appetite. If you are adding more food than the worms can eat your worm farm may become smelly as the food is rotting. Be sure to monitor and adjust the amount of food you are giving your worms. If your worm farm is attracting rats and mice you are adding the wrong foods.

Using Your Castings and Worm Tea

Castings can be mixed directly into the soil around your plants or before you add seedlings to the soil. Worm tea is a strong nutrient boost for your plants and needs to be diluted 1:10 in water before you add to your plants.

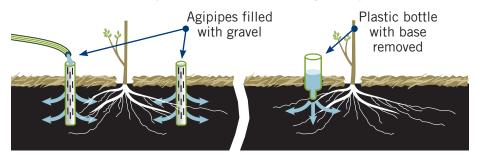
Saving Water In The Garden

Australia is one of the driest continents on earth. In Melbourne, it has been predicted that our water demands will exceed our supply within 15 years. Water use in the garden is a major contributor to high water consumption levels throughout Stonnington. By improving the soil and using alternative water sources for the garden such as rain water collected in tanks, storm water directed into the garden, grey water, and installing efficient irrigation systems along with good garden design, significant water savings can be made.

Water Tips

- 1. Plant local native indigenous plants or other non weed, drought tolerant species and lawn to reduce water use and maintenance.
- 2. Water the base of plants, not the leaves and use mulch to reduce evaporation and run-off.
- 3. Use a drip watering system or porous hose which cuts wastage by ensuring that the water only goes where it is needed.
- 4. Avoid micro-sprays. They waste up to 70% of the water through drift and evaporation and if the soil is mulched, water will not penetrate the soil.
- 5. Check and clean your irrigation system every spring.
- 6. Position irrigation systems so that water isn't wasted on paths, patios, driveways and buildings.
- 7. Install garden tap timers to reduce over-watering.
- 8. Use a rain sensor in your garden so that watering doesn't occur automatically when it is wet.
- 9. Check the weather forecast to avoid watering before rain.

Watering: Deep watering of trees/large shrubs delivers water slowly to the roots and encourages deep roots.



Rainwater Tanks

A rainwater tank is a good way to reduce the amount of mains (drinking) water used on your garden. Collecting rainwater from the roof will provide water for the garden that is not subject to the same restrictions as mains water.

Rainwater tanks can also be used to directly supply water to the toilet, bathroom, laundry and kitchen. If mains water is connected to a rainwater tank the water must be used in compliance with current water restrictions for garden use. Victorian Government rebates are available to cover some of the costs of installing rainwater tanks. Conditions apply. Contact your local water retailer for further



information or visit www.ourwater.vic.gov.au/ourwater/water_smart_rebates

The ideal tank size will depend on what the water will be used for, the size of your roof and local rainfall patterns. The larger the tank the more expensive it will be, and obviously the more room it needs.

A smaller tank might be enough to provide 'opportunity' water for occasional use, but is not likely to last through the summer. For greater certainty of supply, and to reduce your water use overall, a larger tank is needed. A tank holding 3000 litres or more is ideal for summer watering. Also consider whether a pump will be needed to move water around your garden, as there will be less water pressure coming from a rainwater tank.

Within the City of Stonnington a planning permit is not needed for rainwater tanks up to 4,500 litres, provided your property is not within a planning overlay.

Further Information

For further information on rainwater tanks and associated planning issues visit: www.stonnington.vic.gov.au/rainwatertanks

Greywater

Greywater is domestic wastewater, excluding toilet waste which is sometimes referred to as blackwater. It can be a good water resource in dry periods but its reuse can carry health and environmental risks.

The best quality greywater comes from the rinse water of your washing machine, bath, shower or hand basin. Toilet and kitchen wastewater should always go to sewer. Untreated greywater can be diverted on a temporary basis to sites within your backyard using a bucket or diverter. However, the continual discharge of greywater can potentially cause problems for your garden if not managed.

Greywater can contain a number of micro-organisms such as bacteria and viruses, as well as chemicals from cleaning agents, so be careful to follow the tips recommended, particularly rotating the areas you water and refer to the Lanfaxlabs website when choosing detergents. Visit www.lanfaxlabs.com.au

A number of permanent greywater products are on the market. Refer to the EPA Victoria website and download Publication 812. Council regulations also apply on permanent installations. Visit www.stonnington.vic.gov.au/greywater

Do:

- ✓ Only use wastewater from baths, showers, hand basins and washing machines (final rinse water).
- ✓ Only use low phosphate detergents
- ✓ Only use greywater on the garden and rotate the areas you water.
- ✓ Only apply water that the soil can absorb.
- ✓ Wash your hands after watering with greywater.

Don't:

- ★ Water vegetable gardens if the crop is to be eaten raw.
- ✗ Use greywater that has any faecal contamination, for example wastewater used to launder nappies.
- ✗ Use kitchen wastewater (including dishwashers) due to high concentration of food wastes and chemicals.
- X Store greywater for more than 24 hours.
- ★ Let children or pets drink or play with greywater.
- ★ Allow greywater to flow from your property or enter stormwater systems.

STOP:



- **X** Using greywater during wet periods.
- ★ Using greywater if odours are generated and plants do not appear to be healthy.

Further Information

www.epa.vic.gov.au www.sgaonline.org.au www.stonnington.vic.gov.au

Sustainable Product Selection

When buying products for the garden we often don't think about where they have come from, for example, red gum trees grow in woodlands which are part of an intricate ecosystem that supports native fauna. Red gum timber is used to produce items such as bark chips, tomato stakes and railway sleepers – harvesting this product is unsustainable. With some thought we can support more environmentally sound practices through the products we choose for our gardens and homes.

Alternative Product Tips

- 1. Visit www.timbershop.org to find out which timbers are sustainable. While some outdoor furniture companies claim teak is plantation-harvested in Asia, this magnificent tree is a rainforest plant that cannot be grown in plantations.
- 2. Grass trees, tree ferns and native orchids may have been sourced illegally from the forest. Plants should be sold with a government tag stating they have been legally collected.
- 3. Make sure you ask where mulch has come from as some are sourced from the logging of old growth forests or contain weed seeds.
- 4. Ceramic pots fired using gas and produced locally have a lower environmental impact than those fired using coal or wood and transported from overseas.
- 5. River pebbles may have been sourced from waterways in developing countries such as China and India. This destroys the local ecosystem and causes silt to wash down stream to communities who rely on the river for drinking and washing. Use locally crushed rock and granitic gravel.

Sustainable Shopping Tips

- 1. Ask where a product comes from and avoid buying unsustainable products.
- 2. Use sustainable products such as secondhand bricks, recycled timbers or recycled plastic sleepers.
- 3. Take your own reusable bag to carry home products.
- 4. Reuse your plastic plant pots or return them to a garden centre pot recycling bin.

For Further Advice

The following City of Stonnington reserves have been designed to embrace natural bushland revegetation and recreate an ecosystem that existed before European settlement and urbanisation. Visit these reserves to experience a native habitat and have the chance to see a variety of native mammals, birds and insects.

Glen Iris Wetlands: High Street, adjacent to Gardiner's Creek (Melway ref 59 K9 and K10), Glen Iris.

Malvern Urban Forest: Between Dandenong Road and Waverly Road (Melway ref 69 B2), Malvern East.

Muswell Bend Park: Between Brixton Rise and High Street (Melway ref 59 K8), Glen Iris.

Glen Burn Bend Reserve: End of Brixton Rise (Melway ref 59 J7), Glen Iris.

Useful links:

Department of Sustainability and Environment

www.dse.vic.gov.au

Melbourne Water
www.melbournewater.com.au

Sustainable Gardening Australia www.sgaonline.org.au

Sustainability Victoria www.sustainability.vic.gov.au

Weed Society of Victoria www.wsvic.org.au

Wildlife Victoria www.wildlifevictoria.org.au For free sustainable gardening information and advice go to:

www.sgaonline.org.au

For advice on indigenous plants: St Kilda Indigenous Nursery Co-operative (SKINC)

525 Williamstown Road, Port Melbourne. Ph: 9645 2477

Victorian Indigenous Nursery Co-operative (VINC) Yarra Bend Road. Fairfield

Ph: 9482 1710

Further reading:

Australian Plants Society Maroondah (2001) *Flora of Melbourne*, Hyland House, Melbourne, Victoria.

Blood, K. (2001) *Environmental Weeds: a Field Guide for SE Australia*, CH Jerram and Associates, Melbourne, Victoria.

Costermans, L.F. (1933) *Native Trees and Shrubs of South-Eastern Australia*, Lansdowne Publishing Pty
Ltd, Sydney, New South Wales.

Hodges, J. (1996) *The Natural Gardener*, Angus & Robertson, Melbourne, Victoria.

Jones, D.L. (1944) *A Field Guide to the Native Plants of Melbourne*, Bloomings Books, Melbourne, Victoria.

Marriot, N. and J. (1998) *Grassland Plants of South-Eastern Australia*, Bloomings Books, Melbourne, Victoria.

Roads, M.J. (1989) *The Natural Magic of Mulch,* Greenhouse Publications, Elwood, Victoria.



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