

Sustainable Gardening in Frankston City



opportunity » growth » lifestyle



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Introduction

Sustainable Gardening is about maximising the benefits and reducing negative impacts to our natural environment.

Gardening enriches the environment in many ways. For example, if we plant local plants we provide food and shelter for birds and butterflies. By conserving water in the garden we help maintain our water storages. Composting our household and garden organic waste reduces the amount of waste going to landfill, which reduces the amount of greenhouse gas produced. If we purchase products made from renewable resources for the garden, we can help to protect our old growth forests and river ecosystems.

It is easy to create beautiful gardens that suit our local climate and soil types and have a low impact on our natural environment. Sustainable gardens can be introduced gradually – for example, when an exotic plant dies, replace it with a local species. Sustainable gardens are low maintenance, because they require less watering, lower application of fertilisers and chemicals, and less mowing and pruning.

It is important that we create diverse and interesting gardens for family and friends to come together to work, play and socialise. It is also important to consider where the products we use in our garden have come from and the impacts our purchasing decisions can have on other communities.

This booklet has been created to enable you to conduct a sustainability audit of your garden. Different sustainability themes are addressed and in each section you simply tick a box if it is something you are doing in your garden. Boxes you have not ticked indicate what you can start working on to make your garden more sustainable.



Garden design

Many gardens today 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. Today, our busy lifestyles often prevent us from spending time in the garden and gardens are becoming smaller with children tending to spend more time inside. Interior design, architecture, cars and fashion change to suit new lifestyles. It's time gardens did. To design a sustainable garden you need to take time to work out how to create a space that suits you, your soil and the local climate. If you can provide habitat for native fauna that is even better!

Give yourself a tick if you:

- Have a plan of sun/shade, slope and soil variation of your property
- Have a rough planting plan that groups plants according to their water, sun and soil needs
- Have designed your garden for low water use (see p.10)
- Have thought about the amount of waste (e.g. lawn clippings and prunings) generated by your garden and identified ways for managing it on site (composting or mulching)
- Have replaced concrete with gravel, creating a permeable surface, to allow more water to soak into the ground
- Have designed your garden to have flow and interest to create appeal
- Have designed your garden to suit your family's needs, e.g. space to socialise, washing line, space for pets and play

Design Score

/7

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. Undertake a site analysis of your property (sun, shade, slope, privacy – all the problems that need solving) which will tell you what your site will let you do.

3. List what you need in your garden (shed, washing line, children's swings, entertainment area) and what you want (vegetable garden, shade area, pond, fruit tree/s).
4. Develop a scaled plan or mark out in the garden what will go where, what is practical and where it looks best. For example, placing a new shed in a shady corner, vegetables where they get full sun and a pond where it can be seen from inside the house.
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. If you mulch all beds this will reduce your maintenance and enable you to create interesting areas within your garden.
7. If you want to reduce your lawn area to make bigger garden beds, you need to know what type of lawn you have. If you have a fine lawn grass such as rye or fescue you can mow the lawn low, cover with 8–10 sheets of newspaper (overlapping), add 10–15 cm of pea straw on top, wait three to four months and then plant directly into it. This must be done when the soil is moist and all the grass has died. If you have running grasses such as couch or kikuyu they will not be eliminated by newspaper and mulch. They are very tough grasses to remove and you can try one of three methods:
 - Cover the grass with a sheet of clear plastic for several weeks in hot weather so the grass effectively cooks
 - Mow the lawn area you wish to remove on the lowest mower setting and then dig out the remaining root system
 - Apply herbicide



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 plant roots can breathe. Organic matter needs to be replaced as plants absorb nutrients. All soil types benefit from having organic matter added to improve soil structure and avoid it becoming hard and cracked in summer and a sticky mess in winter. In addition, most people want a low maintenance garden. This is much easier to achieve if you look after your soil. Compost adds nutrients to the soil and improves water holding capacity but needs to be dug in. Mulch is placed on top of the soil to reduce water evaporation and control weed growth. If compost is mixed with mulch the material can “cake” up and form an impermeable barrier that rain can’t get through.

Give yourself a tick if you:

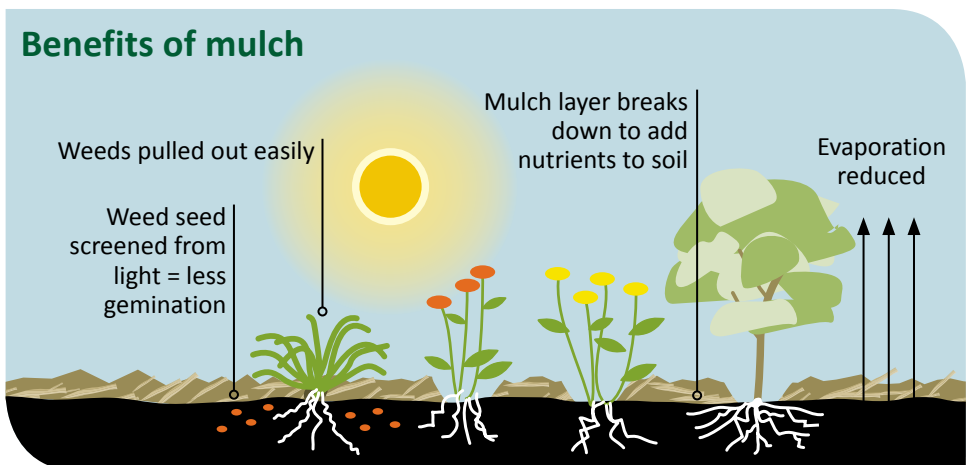
- Check mulch levels and replace every year to bring back to a minimum of 2.5 cm and maximum of 7.5 cm
- Regularly add organic matter (e.g. compost, manure) to your soil
- Know which are the best types of mulch for different types of plants
- Know at least five good things mulch does to reduce maintenance
- Have at least three worms in a spadeful of soil wherever you dig in the garden
- Only dig your soil when you need to

Soil Score /6

Soil improvement tips

1. Soil should be damp before you add mulch. Generally spring is the best time to apply mulch, once the winter rains have soaked in.
2. Mulch made from recycled organics (such as coarse woody material) are an excellent choice as they save water, are long-lasting and feed the soil when they break down.
3. Encourage worms in your garden by digging compost into your soil before topping with mulch.
4. Pea straw is a good option if you have not mulched the soil for a long time because it breaks down quickly, returning nutrients to the soil. Bark mulch has very few nutrients so don't rely on it to add nutrients to your soil.
5. Soil improvement (such as pea straw placed 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. If you mulch, use a bark mulch on its own without soil improvement, or gravel as a mulch.
6. When buying new soil for your garden don't just buy topsoil, buy a soil that is mixed with recycled organics or compost.
7. There is no need to heavily cultivate your soil because it can affect your soil structure. However if you have compacted soil, especially after construction work, cultivating soil (with added organic matter) may help the structure and allow water to infiltrate.

Benefits of mulch



Compost - easy and fun

Composting your food scraps, grass and garden clippings (organics) can provide you with an excellent source of free garden food and soil improver. Composting organics is one of the best things you can do in your garden. As well as creating great fertiliser, it reduces greenhouse gases, saves water and dramatically reduces the amount of waste going to landfill. Composting and getting that perfect mix can also be lots of fun and a great activity for the children. It's not hard and almost half of all household waste can be turned into compost that's useful for your garden.

Give yourself a tick if you:

- Make your own compost or use your green waste bin
- Can list 10 things you can put in compost and three things you shouldn't put in compost
- Do not put food scraps or garden waste in your household garbage bin
- Regularly turn your compost to aerate it
- Use your compost as a fertiliser under mulch, mix with potting mix in containers, use on top of seed beds in the vegetable garden or stewed in water to make a liquid feed
- Use a worm farm

Compost Score /6

Composting tips

1. Your compost bin or heap should be located on soil, not concrete, so that it drains well and worms and bacteria can enter the bin to decompose the waste.
2. All compost bins or heaps need a balance of materials that:
 - Are high in nitrogen, such as fruit and vegetables scraps, green garden prunings, grass clippings, blood and bone or chicken manure
 - Contain carbon, such as dried leaves or shredded newspapers

3. 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 of the heap or bin
- Warmth – locate your compost bin in a sunny place, but not with direct sunlight all day
- Easy access

4. If you are having problems with your compost, visit the websites listed at the back of the book for hints and tips.

Green waste bins for garden organics are available through Frankston City Council.

Add to your compost: ✓

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

Keep out of your compost: ✗

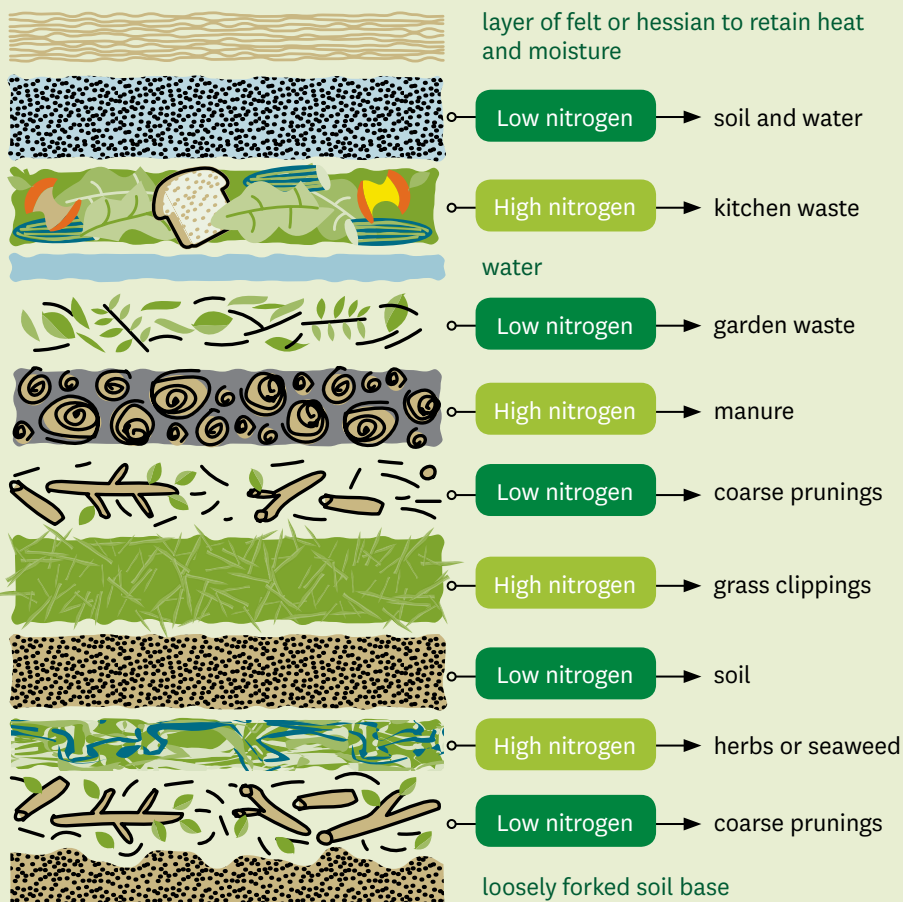
- fish (put in the garbage bin)
- meat (put in the garbage bin)
- cat and dog droppings (bag and put in the garbage bin); consider a pet poo worm farm instead
- big woody prunings (put in green waste bin - size restrictions apply) or take to the Frankston Regional Recycling and Recovery Centre
- bulbous weeds e.g. oxalis (put in the green waste bin)
- weeds with runners e.g. couch grass (put in the green waste bin)
- bleached or glossy office paper which contains harmful chemicals (put in the recycling bin)



Building a layered compost heap

1. Build your compost in thin layers (3–10 cm).
2. Alternate kitchen waste (high nitrogen) and garden waste (low nitrogen) layers.
3. Aim for a ratio of 30 parts carbon to one part nitrogen (30:1)
4. Use a diverse range of materials.

This diagram is an example of the different layers. Alternating kitchen and garden waste layers with an occasional layer of manure works well.



Saving water in the garden

Australia is one of the driest continents on Earth. Average rainfall in southern Australia is expected to decrease as a result of climate change. Water use in the garden can be a major contributor to a household's water consumption, particularly in summer. It is easy to save water in the garden by improving your soil, being selective about the plants you grow, using alternative water sources and through good garden design. You can also save water and improve local water quality through water sensitive urban design treatments, such as raingardens and permeable paving.

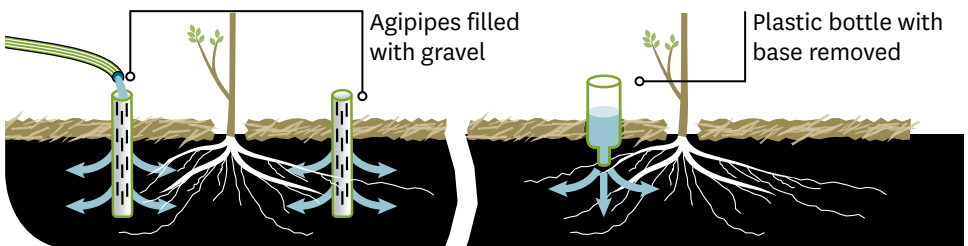
Give yourself a tick if you:

- Have 30% or more of your garden planted with species indigenous to the local Frankston City area (p.18–23)
- Have less than 50% of your garden area taken up by lawn or don't use mains water to water your lawn
- Have mulched all of your garden beds and pots
- Don't have a lawn, or if you do, cut it longer (8–10 cm) over summer
- Don't water your garden with mains water, instead capture and reuse rainwater or greywater
- Water around the plant root zone with long, infrequent watering in the cool of the day
- Use a soaker hose or dripper system beneath mulch instead of sprays
- Have a tap timer, rain sensor or soil moisture sensor
- Have a rainwater tank
- Have a raingarden (treats runoff from roofs and/or hard surfaces) or permeable paving (allows runoff to replenish the soil)
- Recycle greywater from the laundry and bathroom to the garden using EPA Victoria approved techniques or systems

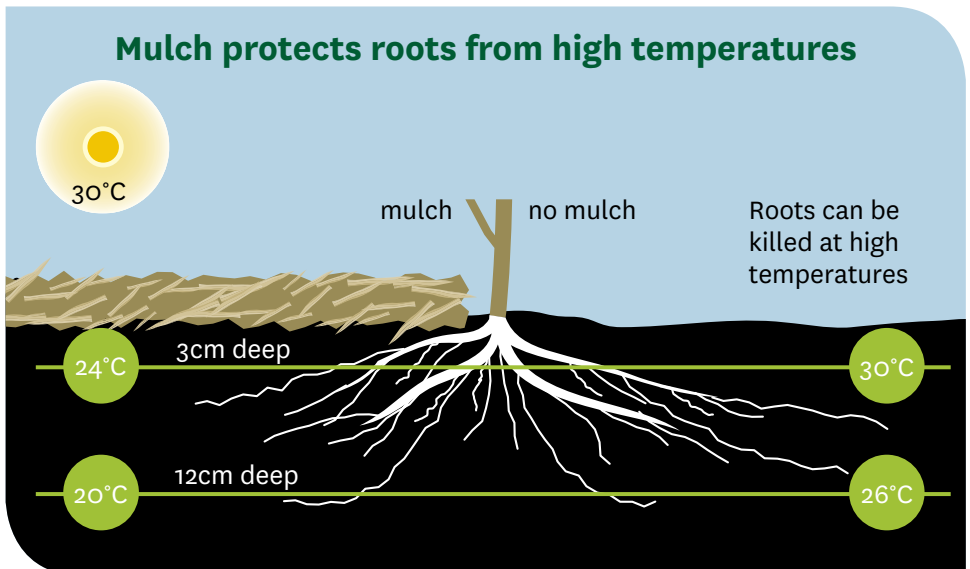
Water tips

1. Have as large a rainwater tank as possible. To determine what size tank best suits your needs, visit the Alternative Technology Association's Tankulator - a free online tool.
2. Check and clean your irrigation system every spring. An efficient irrigation system can save many thousands of litres of water in your garden each year.
3. Use a drip watering system or porous hose which cuts wastage by ensuring that the water only goes to where it is needed.
4. Avoid using micro-sprays because up to 70% of water is wasted through drift and evaporation and if the soil is mulched, water will not penetrate to the soil.
5. Fit tap timers to make sure you don't over-water.
6. Aim to water your garden between dusk and dawn to reduce evaporation and deliver more water to the roots of your plants. If you must water in daylight hours, do it before 10am.
7. Use a rain sensor in your garden so that watering doesn't occur automatically when it is wet.
8. Use a trigger hose to ensure you don't waste water while moving around the garden. Always turn it off at the tap when you have finished in case the hose springs a leak.
9. Ensure that you follow any relevant water restrictions or water saving rules - see Council's website for details.
10. Use an inverted soft drink bottle to give slow constant watering to annuals, ferns and roses.
11. Position irrigation systems so that water isn't wasted on paths, patios, driveways and buildings.

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



12. Use soil wetting agents to hold water in the soil longer and closer to the plants.
13. If you use mulch on your garden beds you'll save up to 73% of the water that normally evaporates. After mulching don't water your garden as much as previously or you'll drown your plants.
14. Plant wind breaks to reduce the wind's drying effects on your garden and group together plants with similar watering needs.
15. Choose local plants that have lower watering needs and suit drier conditions for a water wise garden.
16. Remove weeds regularly because they compete for water with your plants and lawns.
17. Check the weather forecast to avoid watering before rain.
18. Watering your garden and lawn less often but more thoroughly will encourage your plants to extend their roots deeper into the soil making them more drought resistant, hardier and less thirsty.
19. Target the root zone when watering your plants. There is no benefit to spraying the leaves and flowers, in fact on hot, sunny days you will cause damage.



20. You can tell if the lawn or garden has received enough water by inserting a spade or long screwdriver after you have watered. The soil should be moist to 15–20 cm.
21. Never hose down paved surfaces such as driveways and paths. Use a broom and put the sweepings on your compost heap or use them as mulch.
22. A pool cover can save water by preventing evaporation (especially on windy days) and reducing the need to regularly top up your pool water level. Without a cover, over half of the water can evaporate in a year.
23. Do not empty your pool during winter. This can waste over 100,000 litres of water which could be treated without emptying.

Rainwater

Using rainwater in the garden is an easy and effective way to conserve precious drinking water supplies.

Your local rainwater tank supplier can provide you with detailed information to ensure you obtain a tank best suited to your needs and property. Factors to consider are:

- Cost
- How much rain is expected to be captured and how the rainwater will be used
- What size tank is required
- What type of tank material is preferred, such as polyethylene, concrete, galvanised iron or fibreglass
- Site preparation prior to installation, including connection of the overflow pipe to an existing operating stormwater drainage system
- Ongoing maintenance

In addition, permits and approvals can be required for the installation of a rainwater tank on your property. For further information contact Frankston City Council.

To work out what size rainwater tank will best suit your needs, visit Tankulator, a free online calculator developed by the Alternative Technology Association.

Greywater

Many people use greywater to water their gardens. Greywater is wastewater that consists of all non-toilet water and includes wastewater from showers, baths, spas, basins, washing machines, dishwashers and kitchen sinks. The simplest way to use untreated greywater to water the garden is to collect it in a bucket or container. Greywater can contain microorganisms such as bacteria and viruses, and chemicals. The continual reuse of untreated greywater can potentially cause problems for your garden.

By carefully choosing products you use inside the house you can improve the quality of your greywater and avoid damaging the soil, plants or putting people at risk.

Using untreated greywater for sub-surface irrigation, is a great way to reduce the risk of human or animal contact.

Permanent greywater treatment systems are also available and can increase the amount of greywater you can use in your garden, but will require approval from Council and the EPA.

To avoid potential health risks, using greywater from the kitchen is not recommended. Greywater from the bathroom and laundry must be collected and used according to both the EPA and Council regulations and guidelines.

Do:



- Divert only low risk greywater such as final rinse water of the washing machine
- Apply greywater under the surface
- Use detergents with zero or low phosphorus and low sodium levels



Don't:



- Divert kitchen wastewater as this has high levels of contaminants
- Divert greywater with any blood or faecal contamination, such as water used to wash soiled nappies
- Water vegetables for human consumption with greywater
- Allow greywater to pool or stagnate as this will cause odours and attract pests
- Store untreated greywater
- Allow people or pets access to areas where greywater is being reused
- Allow greywater to enter the stormwater system or neighbouring properties
- Store greywater for longer than 24 hours

Plant selection

Local (indigenous) plants are 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 Frankston City. Many of these plants offer shelter and are important food sources for local birds, insects, reptiles and animals.

Two thirds of the weeds found in Victoria's natural environment (in our parks, reserves and along our waterways and coasts) are "garden escapees". Their seeds are spread from our gardens by birds and animals or by people dumping garden cuttings into our bush and waterways.

Weeds compete with our local plants for light, nutrients and water. Before too long they have replaced our 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. (See Frankston City's environmental weeds, p.25-30).

Please consider removing and replacing potential "garden escapees" as there are many beautiful plants that are alternatives. Plants need to be grouped together according to their sun/shade, water and fertiliser needs. If you mix your plants you could be forever replacing dead plants. Go to a nursery or garden centre to find a plant to suit the position you have in mind, not the other way round.



Give yourself a tick if you:

- Know the difference between native, indigenous and exotic plants through talking to your local nursery or using reference material
- Have more than 30% of your garden planted with native or indigenous plants such as those listed in pages 18–23
- Have visited a local nursery to source indigenous plants suitable to your own specific soil and climate conditions
- Know which plants are environmental weeds and do not have them in your garden
- Have at least one shade tree of suitable size for your garden
- Have reduced your lawn area to less than 50% of the total garden area
- Have grouped your plants according to their water, sun and nutrient needs
- Regularly observe native birds, reptiles, insects and animals in your garden

Plant Score**/8****Plant tips**

1. The ideal time to plant is autumn, winter and early spring. Try to avoid planting in summer.
2. Fast growing plants (e.g. jasmine, variegated pittosporum) are appealing at first as screening plants because they grow very quickly and fill a space. However, they keep growing and growing and growing! They then become high maintenance plants and produce large amounts of green waste from regular pruning. It's better to wait for slower growing plants to reach the height you want.
3. There is a tree to fit every size garden. They provide shade, can provide fruit, leaves for mulch, habitat for wildlife, produce oxygen and use up carbon dioxide. If possible, plant a native or indigenous tree.

4. Native, indigenous and exotics can be used together to create successful gardens, but care is needed at the planning stage.
5. Mulch prunings or place in your Council green waste bin. If you don't have one, take them to the Frankston Regional Recycling and Recovery Centre.
6. When selecting an area in your garden to plant a large shrub or tree, avoid planting over sewer or drain pipes because the roots can damage the pipes and create blockages. Tree roots can also damage buildings, footpaths and fences. To find out the location of sewer or drain pipes on your property, contact the local water retailer, South East Water.



Frankston City's local plants

The natural environment of the Frankston City area ranges from coastal dunes to woodlands and waterways. Each of these areas is home to a different group of indigenous plants suited to the conditions of that area. For best results in your garden, choose plants that are best suited to the part of Frankston municipality where you live.

To learn more about the natural vegetation in the Frankston City area, see Council's website or visit Council's Indigenous Nursery.

Climbers



Common Appleberry *Billardiera scandens*

Requirements: Full/semi sun; well-drained soil.

Features: Adaptable, light climber. Grows well under established trees.



'Old Man's Beard' Clematis *Clematis aristata*

Requirements: Full/semi sun; easily grown in well-drained soil.

Features: Attractive climber with feathery seed heads.



Groundcovers and wildflowers



Blue Pincushion *Brunonia australis*

Requirements: Full/semi sun; moist well-drained soil.

Features: Excellent container plant. Beautiful en masse. Short-lived in cultivation. Treat as an annual and collect the seeds to replant.



Groundcovers and wildflowers (continued) ✓

Bulbine Lily

Bulbine bulbosa

Requirements: Full/semi sun; well-drained soil.

Features: Beautiful en masse. Plants die back to tuberous rootstock in dry weather to re-shoot in autumn.



Chocolate Lily

Arthropodium strictum

Requirements: Full/semi sun; well-drained soil. Adaptable.

Features: Chocolate-scented flowers brighten a rockery. Beautiful en masse.



Common Everlasting

Chrysocephalum apiculatum

Requirements: Full/semi sun; well-drained soil.

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



Ivy-leaf Violet

Viola hederacea

Requirements: Moist to wet soil; shade.

Features: A prolific grower once established forming a dense mat. Will perform well in hanging baskets if kept moist.



Groundcovers and wildflowers (continued) ✓

Long Purple-flag

Patersonia occidentalis

Requirements: Highly adaptable.

Features: Suitable for bog gardens or pond edges, but also tolerant of much drier positions.



Grasses ✓

Kangaroo Grass

Themeda triandra

Requirements: Full/semi sun; adaptable to most soils.

Features: Habitat for insects, lizards and birds. Attracts butterflies.



Weeping Grass

Microlaena stipoides

Requirements: Well-drained soil; full sun; shade-tolerant.

Features: An excellent lawn grass that can be mown. Does not tolerate dog urine or heavy traffic. Front lawn alternative.



Shrubs (up to 4m) ✓

Austral Indigo

Indigofera australis

Requirements: Any position; well-drained soil.

Features: Responds well to regular pruning. Attracts butterflies.



Shrubs (up to 4m) (continued)

Burgan

Kunzea ericoides

Requirements: Full/semi sun; adaptable, tolerating wet and dry periods.

Features: Attractive fast-growing shrub, particularly the weeping form. It tolerates hard pruning.



Common Correa

Correa reflexa

Requirements: Full/semi sun; well-drained soil and excellent for dry, shady positions.

Features: Attractive small shrub that establishes well under existing trees. Attracts birds.



Common Flat-pea

Platylobium obtusangulum

Requirements: Full/semi sun; prefers drier, well-drained soil.

Features: Attractive spreading plant.



Common Heath

Epacris impressa

Requirements: Full/semi sun; moist, well-drained soil.

Features: An attractive rockery plant, particularly when planted en masse.



Cushion Bush

Leucophyta brownii

Requirements: Full/semi sun; well drained, dry conditions.

Features: An attractive low shrub that withstands wind and salt spray and responds well to pruning.



Shrubs (up to 4m) (continued)



Hop Goodenia

Goodenia ovata

Requirements: Any position; prefers damp soil.

Features: Fast growing. It responds well to pruning.



Scented Paperbark

Melaleuca squarrosa

Requirements: Full/semi sun; moist to wet soil.

Features: An attractive shrub responding well to pruning. Tolerates wind and salt spray.



Showy Bossiaea

Bossiaea cinerea

Requirements: Full/semi sun; prefers dappled shade; tolerates coastal exposure and light frosts; adapts to most well-drained soil.

Features: An ornamental shrub which may be pruned hard.



Sweet Bursaria

Bursaria spinosa

Requirements: Full/semi sun; well-drained soil.

Features: Clusters of attractive bronze seed capsules follow flowering. Easily grown. Butterfly food plant.



Trees (over 4m)

Blackwood

Acacia melanoxylon

Requirements: Full/semi sun; prefers deep moist soil, but adaptable tolerating dryness once established.

Features: A long-lasting tree providing good screening and shade.



Coastal Banksia

Banksia integrifolia

Requirements: Full/semi sun; well-drained soil, responding to summer watering.

Features: Attractive dark green leaves with silver underside. An excellent ornamental windbreak.



Narrow-leaved Peppermint

Eucalyptus radiata

Requirements: Full/semi sun; well-drained soil.

Features: A graceful upright tree that provides shade. Some forms have an attractive weeping habit.



Silver Banksia

Banksia marginata

Requirements: Full/semi sun; well-drained soil.

Features: Bushy forms make excellent screening plants.



Frankston City's Indigenous Nursery

7 McMannis Way, Seaford (next to Seaford SES)

Frankston City Council's Indigenous Nursery has a range of indigenous plants that are well adapted to local conditions. All seeds and cuttings are collected locally and plants are propagated on the premises.

These plants are drought tolerant, provide great results for your garden with minimal maintenance and enhance the natural environment for wildlife.

Opening hours are limited. See back cover for contact details.



Green waste collection

Frankston City Council provides an optional green waste bin that is collected fortnightly.

Materials such as grass, leaves, flowers, shrubs, prunings, cuttings, branches, as well as weeds such as ivy can be placed in this bin and recycled into garden products such as mulch and compost. The hot composting methods used kill the weed seeds.

Frankston City's environmental weeds

Environmental weeds are a major threat to our natural environment. They have the ability to change and destroy habitats and ecosystems. Many pest plants are “garden escapees”. Seeds are spread from our gardens by birds and other animals or by people disposing of garden waste inappropriately. All the plants listed in this section are serious environmental weeds in Frankston City, dominating indigenous vegetation. Please do not plant these species, and if you have them in your garden, consider removing them. Appropriate weed removal techniques for each plant are included.

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. Beware 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
- Always read the label on the product and follow the directions for application rates, safety procedures and handling
- For guidance on which chemicals have low environmental impacts see SGA's Green Up Product Guide. See website details on p.41
- Do not spray in high temperatures or if rain is forecast within 24 hours
- Spray when plants are actively growing
- Always freshly mix the amount needed to do the job

Environmental weeds can be replaced with one of the suggested similar non-invasive indigenous plants listed in the following section.

Climbers and creepers



Asparagus Fern

Asparagus scandens

A climber that smothers ground flora.

Replace with: Common Appleberry
Billardiera scandens.

Control:



Bluebell Creeper

Sollya heterophylla

Vigorous climber. Contains toxins.

Replace with: Common Appleberry
Billardiera scandens.

Control:



Blue Periwinkle

Vinca major

Forms thick carpets.

Replace with: Purple Coral-pea
Hardenbergia violacea.

Control:



Bridal Creeper

Asparagus asparagoides

Weed of National Significance.

Replace with: "Old Man's Beard" Clematis
Clematis aristata.

Control:



Climbers and creepers (continued)



Cape Ivy

Delairea odorata

Toxic to both people and animals.

Replace with: Purple Coral-pea
Hardenbergia violacea.

Control:



Dolichos Pea

Dipogon lignosus

Vigorous climber that smothers local plants.

Replace with: Purple Coral-pea
Hardenbergia violacea.

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.

Control:



Morning Glory

Ipomoea indica

Fast growing climber.

Replace with: Large Bindweed
Calystegia sepium.

Control:



Wandering Tradescantia

Tradescantia fluminensis

Can cause allergic reaction in dogs, with skin irritation particularly on the stomach.

Replace with: Kidney Plant Dichondra repens.

Control:



Grasses and herbs



Agapanthus

Agapanthus spp.

Leaves poisonous. Sticky sap can cause mouth ulcers.

Replace with: Flax Lily *Dianella spp.*

Control:



Angled Onion

Allium triquetrum

Pungent odour.

Replace with: Bulbine Lily *Bulbine bulbosa*.

Control:



Arum Lily

Zantedeschia aethiopica

Highly poisonous.

Replace with: Flax Lily *Dianella spp.*

Control:



Pampas Grass Species

Cortaderia spp.

Leaves easily cut the skin and cause irritation when handled.

Replace with: Thatch Saw-sedge *Gahnia radula*.

Control:



Paterson's Curse

Echium plantagineum

Highly invasive.

Replace with: Chocolate Lily
Arthropodium strictum.

Control:



Shrubs



Blackberry

Rubus fruticosus

Prickly scrambling shrub.

Replace with: Sweet Bursaria *Bursaria spinosa*.

Control:



Boneseed

Chrysanthemoides monilifera

Weed of National Significance.

Replace with: Hop Goodenia *Goodenia ovata*.

Control:



Boxthorn

Lycium ferocissimum

Thorny shrub. Poisonous.

Replace with: Prickly Currant-bush
Coprosma quadrifida.

Control:



Cotoneaster Species

Cotoneaster spp.

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

Replace with: Prickly Currant-bush
Coprosma quadrifida.

Control:



Flax Broom Species

Genista spp.

Seeds highly poisonous.

Replace with: Golden Spray *Viminaria juncea*.

Control:



Shrubs (continued)

Mirror Bush

Coprosma repens

Shiny green leaves used as whistles by children.

Replace with: Boobialla *Myoporum insulare*.

Control:



Myrtle-leaf Milkwort

Polygala myrtifolia

Highly invasive particularly in coastal areas.

Replace with: Tree Violet *Melicytus dentatus*.

Control:



Sallow Wattle

Acacia longifolia subsp. longifolia

Spreads rapidly in coastal areas.

Replace with: Hop Goodenia *Goodenia ovata*.

Control:



Spanish Heath

Erica lusitanica

Often confused with native heath.

Replace with: Common Heath *Epacris impressa*.

Control:



Trees

Sweet Pittosporum

Pittosporum undulatum

Fast growing invasive plant.

Replace with: Black Wattle *Acacia mearnsii*.

Control:



Chemicals

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

Give yourself a tick if you:

- Check your garden regularly for pest outbreaks
- Know exactly what pest or disease you are trying to control
- Use chemicals that have a low toxin level
- Avoid using chemicals before it rains or on windy days
- Use natural alternatives (e.g. garlic sprays) or if you do use chemical sprays, target only the affected plant(s)
- Use organic fertilisers (compost, manure, seaweed and fish emulsions)
- Don't over-fertilise your plants because it produces excessive plant growth and excess green waste due to additional pruning

Chemical Score

/7

Chemical tips

1. Many insects in the garden such as ladybirds are useful because they will eat pests such as aphids. If you overuse chemicals in your garden you may also kill beneficial insects and make your pest problem harder to control.

Pesticides or natural alternatives rarely target only one bug/disease.

2. Try to avoid using herbicides or pesticides especially when it is windy or if rain is expected in the next few days. Use natural alternatives such as pyrethrum and garlic spray to control pests.

Even natural alternatives should be used with care and the dosage controlled to avoid unintended consequences to other organisms.

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 while synthetic fertilisers add nothing to the soil structure and tend to leach from the soil after heavy rain or watering.
6. If a plant is sick do not add fertilisers because overfeeding can often put additional stress on the plant.



Vegetable gardening

Most commercial fruit and vegetable growing uses a large amount of energy and chemicals for heating, cooling, spraying weeds and pests and for transporting produce. Fruit and vegetables begin to lose their vitamins as soon as they're picked. After five days some have lost between 40% and 50% of their vitamins. Growing your own vegetables is so easy, and even easier if you've improved your soil through composting or worm farming. Home grown produce is healthy, convenient and very rewarding. Even if you only grow tomatoes, herbs and lettuce in a pot, that's a great start!

Give yourself a tick if you:

- Grow any herbs, fruit or vegetables
- Grow lots of produce

Produce Score /2

Organic produce tips

1. Fruit and vegetables generally like to grow in plenty of morning sunshine and need some protection from the hot afternoon sun.
2. Locate annual vegetable beds and herbs close to the house for regular use and attention and locate fruit trees further away.
3. You can make any sized garden or balcony productive. There are many ways you can grow vegetables: pots, converted lawns, no-dig or raised beds that are especially helpful for people with limited mobility.
4. Rotate the position of vegies in your garden every year to minimise pests and diseases and to assist with soil health.
5. Plant companion plants that benefit each other by controlling pests, providing resistance to disease and producing greater yields e.g. tomatoes and basil.
6. Know your climate - select trees and vegies suited to your local conditions.
7. Use, if required, low impact alternatives (such as pyrethrum and garlic spray) at recommended doses to control pests.
8. The addition of compost will greatly improve both clay and sandy soils.
9. Regularly replenish soil by adding compost or worm castings, liquid seaweed and mulch.

10. Use heritage seeds for more variety and often superior flavour.
11. There are many dwarf tree varieties suitable for urban blocks that provide full sized fruit.

Vegetable and herb planting guide:

Melbourne is known as “temperate” or “cool” in terms of climate.

Warm season vegetables and herbs are generally planted out in spring, cool season in autumn. The following is a planting guide for some of the most popular vegetables and herbs.

Warm season: basil, beans, capsicum, carrots, cauliflower, chilli, chives, cucumber, eggplant, lettuce, parsley, potato, pumpkin, spinach, strawberry, sweet corn, tomato and zucchini.

Cool season: broccoli, cabbage, carrots, cauliflower, celery, coriander, garlic, leek, lettuce, onions, peas and spinach.

Community Gardens

These gardens are community spaces where local people get together to grow fruit and vegetables and learn about gardening. Some people have their own plot and others share a garden bed.

It’s a great way to get to know other local keen gardeners, especially if you don’t have much room for a vegie patch of your own. Contact Council to find out if there is one near you.



Habitat gardening

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

Butterflies and bees

Butterflies and bees are important pollinators for any garden and with a few simple design principles are easily attracted, adding movement and colour.

Nectar traps: Colourful, massed flower beds will keep them happily moving through the garden. They particularly like blues, and yellows, while butterflies also like red flowers. Bold clusters of plants attract pollinators more effectively than single plants.



Flowers: A variety of flower shapes will attract a greater number of pollinators, butterflies preferring simple, flat flowers, while honey bees and native bees can handle more complex flower shapes.

For butterflies: daisies, pelargoniums (*P. austral*), bluebells (*Wahlenbergia communis*), saltbush plants (*Atriplex cinerea*), and pea flowers (*Bossiaea cinerea* or *Platylobium obtusangulum*) are especially useful.

For native bees: daisies, banksias (*B. marginata*; *B. spinulosa*), eucalypts (*E. radiata*; *E. pryoriana*), hakeas (*H. decurrens*; *H. nodosa*), tea trees (*Leptospermum continentale*; *L. myrsinoides*), westringias, grevilleas and paperbarks (*Melaleuca squarrosa*; *M. ericifolia*) are useful as well as herbs e.g. lavender, basil, thyme, sage, rosemary, lemon balm and mint.

Position, position, position: Butterflies use the morning sun to warm themselves and retreat to cooler, shadier places during the heat of the day.

A sheltered position that combines warmth and protection is ideal.

Host plants: Butterflies need host plants to lay their eggs. Caterpillars are generally small and won't devastate the garden. Indigenous plants good for egg-laying include bursaria (*Bursaria spinosa*) and mat rush (*Lomandra longifolia*), kangaroo grass, wallaby grass and tussock grass.

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. By providing prickly or dense plants such as hedges at various levels in your garden, and particularly near water sources, you can help protect your feathered visitors.

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. Failing that, put the water source high off the ground in a cleared area so predators can't ambush small birds.

Food: Small birds – silvereyes, blue wrens, finches, fantails and thornbills – forage in the lower levels of the garden feeding on insects and helping to keep your plant pest numbers down. Native grasses such as tussock grass *Poa labillardierei*, kangaroo grass *Themeda triandra* and wallaby grass *Rytidosperma spp.* attract insects to the garden, as do a variety plants such as melaleucas *Melaleuca squarrosa*, teatrees *Leptospermum laevigatum*, wattles *Acacia paradoxa* or *A. acinacea* and daisies *Chrysocephalum apiculatum* or *Brachyscome multifida*.

Nectar Feeders – Birds such as honeyeaters, wattlebirds and spinebills – use their brush-like tongues to collect nectar from the flowers of grevilleas *Grevillea spp.*, melaleucas, correas *Correa reflexa* or *C. glabra*, banksias *Banksia integrifolia* or *B. marginata* and kangaroo paws *Anigozanthus spp.* These birds 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 butcher birds – feed on larger insects, small lizards and skinks.



Lizards

Most lizards we find in our gardens 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, rocks and logs for protection
- A protected sunny spot on a rock, log or brick path
- Natural leaf mulch to support insects and larvae they feed on

Frogs

A frog garden can be a magical place, where you can watch tadpoles grow into frogs and be serenaded by their calls at night. Frogs also help control pests in your garden because they eat flies, mosquitoes, slugs, snails and even spiders.

To attract frogs into your garden you'll need to live near an existing population and provide a pond with certain features.

This includes any/all of the following:

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

Note: Please Place mesh over the frog pond or a fence around it to avoid the risk of drowning by toddlers and young children.

Your frog garden also needs:

- Vegetation that droops into the water, for shelter and protection
- Rocks, logs, bark and leaves
- Plenty of winter sun, good shade in summer
- Sloping sides for frogs to crawl out
- Food plants for tadpoles
- Non-toxic construction materials



Frog-friendly plants include the following:

Grasses – Kangaroo grass *Themeda triandra*, weeping grass *Microlaena stipoides* or wallaby grass *Rytidosperma* spp.

Tufting plants – Kangaroo paw *Anigozanthus* spp. or flaxlily *Dianella* spp.

Bog plants – Soft water fern *Blechnum minus*, thatch saw-sedge *Gahnia radula*, knobby club-rush *Ficinia nodosa*, grassy mat-rush *Lomandra confertifolia* and tassel cord-rush *Restio tetraphyllus*.

Water plants – Common nardoo *Baloskion tetraphyllum*, purple loosestrife *Lythrum salicaria*, tassel sedge *Carex fascicularis*, jointed twig-rush *Baumea articulata* and water ribbons *Triglochin procera*.

Things to avoid:

- Fish, because most will eat tadpoles
- Fountain pumps, because they can kill tadpoles and eggs
- Cats and dogs. Protect your frog area with sharp, spiky plants
- Pesticides, herbicides and fertiliser run off
- Allowing vegetation to cover the top of the pond because it reduces oxygen available to the tadpoles
- Cleaning out the pond too often. Tadpoles need some decomposing matter to provide food
- Cutting long grass without listening and checking for frogs first
- Collecting tadpoles from the wild. It is illegal in Victoria.

Mammals

As the human population has expanded urban development has replaced natural habitat. Our unique native animals have either adapted or suffered a dramatic decline due to loss of habitat, traditional food supply, disruption of breeding cycles or being victims of road kill. To find a native mammal in your garden is cause for celebration! While you may be incredibly lucky to encounter a koala or echidna, you are more likely to have possums and bats as regular visitors to your garden.

Possums: Possums 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. Possums may move into your roof space if there is a hole for them to enter, and are more likely to seek shelter there if you cut down a large tree. If you do need to remove a tree, make sure you put up some nest boxes a few days before, to give the possums an alternative home.

If they are damaging your trees, you can try putting a collar around the trunk to stop them climbing up, or try a natural repellent to keep them away.

Please remember that possums are protected native animals and it is illegal to kill or harm them in any way.

If, however, you would like to attract possums to your garden, particularly species such as the more vulnerable sugar glider, plant banksias, callistemons, wattles, teatrees and eucalypts. Install appropriate nesting boxes to provide a safe, warm haven for our furry friends. It is important not to feed these wild animals because human food can be dangerous to possums and cause serious dietary imbalance.

Bats: There are many beautiful little insectivorous bats in the Frankston municipality. These bats are about the size of a mouse and eat enormous quantities of insects each night. They roost in tree hollows with narrow openings, tree stumps, under eaves and in roofs.

If you use netting on fruit trees, make sure the mesh is fine enough to prevent a finger being passed through and is tightly placed over a frame to prevent both bats and birds becoming entangled.



Other wildlife-friendly practices:

- Reducing the use of pesticides in the garden will provide birds and small bats with a safe food source
- Securing cats and dogs, especially at night, so they don't prey on native animals
- Fencing can be a hazard to many fauna species. Consider replacing your fences with hedges, rocks or other more natural barriers
- Keep the telephone number of a wildlife rescue service in the glove box of your car. See reference list on p.41 for local groups and obtain their current phone numbers.

Give yourself a tick if you:

- Provide a reliable source of water for wildlife
- Have a few prickly or dense plants to provide shelter
- Select plants that attract butterflies
- Don't have a cat or dog, or if you do – secure it at night especially

Habitat Score

/4

Sustainable gardening audit

Conduct a sustainability audit on your garden by counting up the number of ticks you have achieved for each section and your total. Make a note of what you can do to improve your score over the next year. You can then keep working towards making your garden more environmentally sustainable: a haven for precious native flora and fauna as well as for you and your family. Enjoy!

References

This is by no means an exhaustive list, but includes some key references that the editors have found useful. You can search online for more information on various topics of interest.

- Blazey, C. (2012) The Australian Vegetable Garden
- Blood, K. (2009) Environmental Weeds: A Field Guide for SE Australia
- Bull, M. (2014) Flora of Melbourne: A guide to the indigenous plants of the Greater Melbourne area
- Costermans, L.F. (2009) Native Trees and Shrubs of South-Eastern Australia
- French, J. (2009) Backyard Self Sufficiency
- Leech, M (2013) Bee Friendly: A planting guide for European Honey Bees and Australian native pollinators
- Richardson, F.J. et al (2011) Weeds of the South East
- Scott, R. et al (2005) Indigenous Plants of the Sandbelt: A Gardening Guide for South-east Melbourne
- Snape, D. (2011) Australian Garden: Designing with Australian plants
- Strawbridge, D & J. (2010) Practical Self Sufficiency
- Taylor, D. (2012) The Compost Book
- Go to the key sites below and search for your topic of interest:
- Community Gardens
communitygarden.org.au
- Department of Environment, Land, Water and Planning
delwp.vic.gov.au
- Flora for Fauna
Floraforfauna.com.au
- Frankston City Council
frankston.vic.gov.au
- Home Vegetable Gardening
myhomeharvest.com.au
- International Environmental Weed Foundation
iewf.org
- Nest Boxes
birdlife.org.au
- Southern Peninsula Indigenous Flora and Fauna Association
spiffa.org
- Sustainable Gardening Australia
sgaonline.org.au
- Wildlife Rescue:**
- Animalia
animaliawildlife.org.au
- Wildlife Victoria
wildlifevictoria.org.au
- AWARE
awarewildlife.org.au



For further information

FRANKSTON CITY COUNCIL

Civic Centre

30 Davey Street, Frankston 3199

Phone: 1300 322 322

frankston.vic.gov.au

FRANKSTON CITY COUNCIL CUSTOMER SERVICE CENTRES

Go to Council's website or call the number above to find details of a Frankston City Council customer service centre near you.

FRANKSTON INDIGENOUS NURSERY (Frankston City Council)

7 McMannis Way (off McCulloch Avenue)

Seaford 3198 (next to SES)

Phone: 9768 1513

INDIGENOUS NURSERY AT THE BRIARS (Mornington Peninsula Shire)

450 Nepean Highway

Mount Martha

Phone: 5974 8417

CARRUM INDIGENOUS NURSERY

Learmonth Reserve

Cnr Learmonth & Thompson Roads

Patterson Lakes

Phone: 9776 0823

FRANKSTON ENVIRONMENTAL FRIENDS NETWORK

Help care for a Natural Reserve near you! Contact Frankston City Council to find out about the Friends Groups in our area.