# sustainable gardening IN MOONEE VALLEY















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www.mvcc.vic.gov.au

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NOTE THE

## INTRODUCTION

Gardening is all about creating a beautiful environment. Sustainable gardening is about maximising those benefits to our natural environment and reducing some negative environmental impacts gardening can have.

Gardening can have a positive benefit to the health of our environment. If we plant local plants we provide food and shelter for birds and butterflies. By conserving water in the garden we help maintain water levels in our reservoirs. Reducing the use of chemicals in the garden will result in less chemicals in our creeks and streams. By composting our household and garden organic waste we can reduce the amount of waste going into landfill and therefore reduce the amount of greenhouse gas produced. If we purchase renewable resources for the garden instead of non-renewable resources, 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 and have a low impact on our natural environment. Sustainable gardens can be introduced gradually, for example as an exotic plant dies replace it with a local plant. Sustainable gardens are low maintenance, as they require less watering, lower application of fertilisers and chemicals, and less mowing and pruning.

Sustainability also relates to social interaction. It is important that we create diverse and interesting gardens for family and friends to come together to work, play and socialise. This booklet has been designed to enable you to conduct a sustainability audit on your garden. Different



topics are addressed and in each section you simply tick a box if it is something you are doing in your garden. Add up each section and get a total score on the Sustainable Gardening Score Card at the back of this booklet. Make a note of what you have to do to score more ticks in six months and 12 months. You can then start working towards making your garden more sustainable.

# GARDEN DESIGN

Many gardens still have the traditional layout which came from English gardens many years ago. A paved sitting area, large open lawn and flowerbeds of exotic plants around the outside. These days people tend to be busier working and so have less time for the garden. Gardens are becoming smaller and children tend to spend more time inside.

Interior design, architecture, cars and fashion change to suit new lifestyles. It's time gardens did too. To design a good garden you need to take time to work out how to create a garden you feel comfortable with, that you enjoy and that suits your local soil and climate.

#### Give yourself a tick if you:

Have a plan of sun/shade, slope and soil variation in your garden
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 p12)
Have thought about the amount of garden waste (e.g. lawn clippings and prunings) and ways and space for managing on site (composting or mulching)
Have replaced concrete with gravel to allow more water to soak in (creating a permeable surface)
Have designed your garden to have flow and interest to create appeal
Have designed your garden to be a place for people to socialise.

Design Score /7

#### **GARDEN DESIGN TIPS**

1. List what you need (shed, washing line, kids swings, entertainment area) and what you want (vegie garden, shade area, pond, fruit tree/s).

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- 2. Do a site analysis, (sun, shade, slope, privacy all the problems that need solving) which will tell you what your site will let you do.
- 3. Do a scaled plan or mark out in the garden what will go where, practically and where it looks best. For example, placing a new shed in a shady corner, vegetables where they get full sun, a pond where it can be seen from inside the house, and a shade tree to the north of the house.
- 4. Find a style you like which suits your garden so all the paving, pots, water features and plants match, especially in a courtyard garden.
- 5. Make 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.
- 6. 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 10–15cm of pea straw on top, wait 3–4 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 that 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 chemical herbicide.

#### **Further Information**

The Australian Garden – Diana Snape Beautiful Gardens with Less Water – John Patrick Bold Romantic Gardens – Oehme Van Swede Browse through the library

# CARING FOR YOUR SOIL

Healthy soil = healthy plants. Soil needs organic matter (mulch, compost, manure, grass clippings). Worms break it down to make food for plants to use and their burrows allow air into the soil so the plant roots can breathe. Organic matter needs to be replaced regularly as the worms eat it all up and plants absorb the nutrients. If organic matter is not added, the soil becomes like concrete in the summer and a sticky mess in the winter. In addition, most people want a low maintenance garden. This is much easier if you look after your soil.

#### Give yourself a tick if you:

Check mulch levels and replace every year to bring back to 8-10cm deep
 Regularly add organic matter 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 have to.

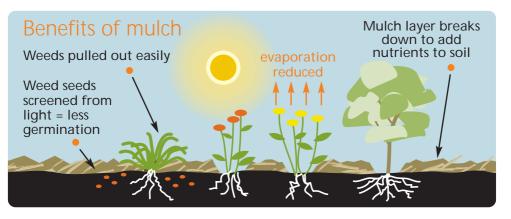
Soil Score /6

#### SOIL IMPROVEMENT TIPS

- 1. Pea straw and lucerne are the best if you have not mulched the soil for a long time as they break down quickly so it's easier for the worms to eat. Bark mulch has very few nutrients so it isn't very good for improving the soil, but it does offer better weed protection.
- 2. Mulches made from recycled organics are an excellent choice as they save water, last well and feed the soil when they break down. You can drop off prunings and collect mulch from Council's Transfer Station.

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- 3. Expansive clay soil in the Keilor and Avondale Heights region would benefit from the addition of gypsum and compost.
- 4. Spreading compost over your soil (under the mulch layer) will encourage worms in your garden.
- 5. The soil needs to be damp before you add mulch so late spring (November) is the best time to put on mulch, once the winter rains have soaked in.
- 6. 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 so they prefer bark mulch on its own without soil improvement.
- 7. When buying new soil for your garden don't just buy topsoil, buy a soil that includes recycled organics or compost.
- 8. Don't cultivate your soil unless it is very compacted after building works. Digging destroys the soil structure, therefore destroying the air holes and drainage spaces that allow water to get to the plant roots.



#### **Further Information**

The Natural Gardener – Jeffrey Hodges Gardening Down-Under – Kevin Handreck The Natural Magic of Mulch – Michael J. Roads www.sgaonline.org.au www.csiro.au

# COMPOST – EASY AND FUN

Composting or worm farming your food scraps, grass and garden clippings (organics) can give you excellent garden food and soil improver that is free. Composting organics (rather than putting them in the rubbish) 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 your waste. Composting and getting that 'perfect mix' can also be lots of fun. It's not hard and almost half of household rubbish can be turned into compost that's useful for your garden.

#### Give yourself a tick if you:

Make your own compost
Can list 10 things you can put in compost
Can list three things you shouldn't put in compost
Ensure your garbage bin is less than half full every week
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 if you live in an apartment or have a small garden.

Compost Score /6

#### **COMPOSTING TIPS**

- 1. Your compost bin or heap should be on soil, not concrete, so it drains well and the 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 blood and bone, Dynamic Lifter or chook manure
  - · Contain carbon, such as dried leaves or shredded newspapers
  - Contain both carbon and nitrogen, such as kitchen scraps, pea straw and green garden prunings.

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- 3. In addition, the compost heap or bin needs:
  - Water, but only enough so that the contents are moist but not wet
  - Oxygen, from air, added by regularly turning over the contents of the heap
  - Warmth, by putting it in a sunny place
  - Easy access.
- Hot (fast) compost takes 3–6 months you need a recipe and to turn the compost every day. Cold (slow) compost takes 6–12 months – just keep adding waste, especially kitchen scraps.
- 5. Compost bins can be purchased from Council's Transfer Station.

#### Add to your compost

- Fruit and vegetable scraps
- Coffee grounds
- Tea bags
- Egg shells
- Onions
- Citrus fruit (cut up)
- Sour milk and yogurt
- Pizza and egg cartons
- Vacuum cleaner dust
- Animal fur
- Pure wool jumpers (that are not good enough for the op shop) and socks (cut up)
- Pure cotton articles (cut up)
- Grass clippings (thin layers 3–4cm)
- Cut up prunings
- Weeds without seed heads
- Blood and bone
- Shredded newpaper
- Small amounts of wood ash

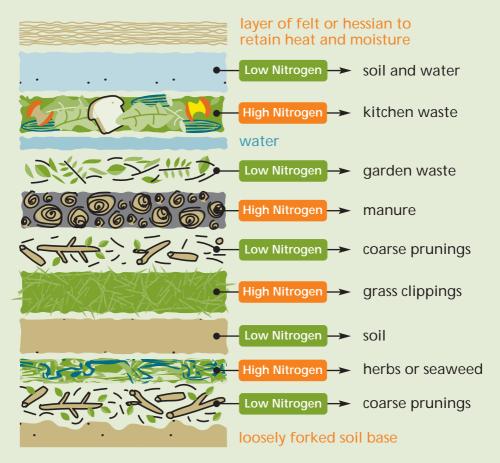
Keep out of your compost 🗡

- Fish
- Meat
- Cat and dog droppings (consider a pet poo worm farm)
- Big woody prunings
- Bulbous weeds (e.g. oxalis spp.)
- Weeds with runners (e.g. couch grass)
- Bleached or glossy office paper (harmful chemicals)

## Building a layered compost heap

- 1. Build your compost in thin layers (3–10cm)
- 2. Alternate kitchen waste (high nitrogen) and garden waste (low nitrogen) layers
- 3. Aim for a ratio of 30 carbon : 1 nitrogen
- 4. Use diversity 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.



#### SOLVING COMMON COMPOST PROBLEMS

#### Why is my compost:

#### Left with half decomposed big lumps?

Adding smaller pieces to the bin/heap should ensure that it all decomposes evenly. Avoid avocado seeds, pineapple tops, twigs and other woody items unless they can be crushed or chopped before adding. Always crush eggshells.

#### Smelly?

**Either:** Too much nitrogen containing matter and not enough carbon. i.e. add more dry materials such as dried chopped up leaves and newspaper.

Or: Make sure you aid decomposition by using a garden fork and turning over the bin/heap occasionally (maybe once a week) to introduce

more air. This prevents anaerobic bacteria from taking over and producing the smells. In a compost bin you can add lengths of slotted agipipe to increase aeration.

#### Crawling with ants and slaters?

The heap is too dry. Add a sprinkling of water or less dry matter. Ants and slaters are not harmful at all but they do indicate that your compost will not decompose rapidly enough.

#### Attracting flies?

If you see tiny flies (drosophila) every time you open the lid, rest assured that they are there because they enjoy the contents of your bin/heap, especially if you have been adding fruit peelings. Add a blanket cover to the contents of your bin/heap, such as hessian sacking or carpet felt underlay.



#### Reduce, Reuse & Recycle

The waste hierarchy (pictured) teaches us to 'Reduce, Reuse & Recycle'. This means that it is always best to buy less, then reuse, before you recycle, in order to minimise waste. The last and least preferable option is to send material to landfill.

#### Visited by rats, mice, blowflies or maggots?

Meat scraps or fish bones can be added to compost but **only** if it is working efficiently and quickly. They are best avoided since they do encourage vermin, especially over summer. Rats and mice enter the bin by digging underneath, so fasten a piece of fine mesh wire under the bin before commencing.

#### Taking so long to do anything?!!!

The carbon/nitrogen ratio needs to be altered. Remember: **too wet**, add dry matter, such as newspaper; **too dry**, add water along with something high in nitrogen such as blood and bone, Dynamic Lifter pellets, or chicken manure. And don't forget to regularly turn the heap over!

#### Further Information

Make Your Own Compost – Yvonne Cave Gardening Down-Under – Kevin Handreck www.sgaonline.org.au Call Council's Citizens Service Centre on 9243 8888

# WATER

Australia is the driest habitable continent in the world and yet we are also the highest consumers of water per capita. We have been in drought conditions for several years. Even though rain falls in winter it is not enough. We are using more water than gets replaced, and each year the reservoirs have less and less water. Up to 30% of domestic water gets wasted in the garden through things like water not being able to penetrate the soil deeply, not using mulch to stop water evaporating, inefficient irrigation and bad garden design.



#### Give yourself a tick if you:

Have 30% or more of your garden planted with plants in the Moonee Valley Local Plants section (p20)
Have less than 50% of your garden area taken up by lawn
Have mulched all your garden beds and pots
Don't have a lawn, of if you do, cut your lawn long (8–10cm) over summer
Water in the cool of the day in accordance with Permanent Water Savings Rules
Water around the plant root zone with long, infrequent watering
Use a soaker hose or dripper system instead of sprays
Have either a timer on your taps or shut off valves on your hoses
Have a water tank
Using Environmental Protection Agency approved techniques or systems to recycle greywater from the laundry and bathroom to the garden.

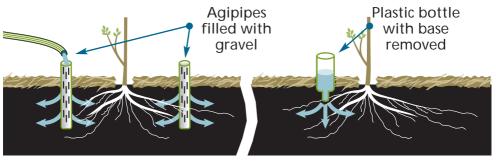
Water Score /10

1. Have as large a rainwater tank as possible, 3000 litres of water in a tank for summer is ideal.

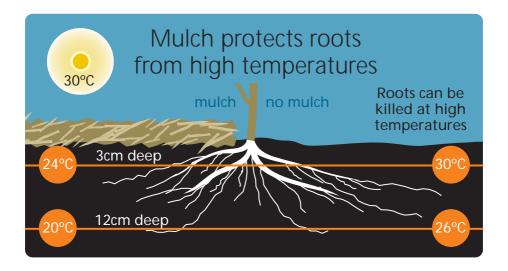
WATER TIPS

- 2. Check and clean your irrigation system every spring. An efficient irrigation system can save up to 46,000 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 micro-sprays. They waste up to 70% water 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. Use a rain sensor in your garden so that watering doesn't occur automatically when it is wet.
- 7. 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.
- 8. If you are using a sprinkler use one that makes big drops of water rather than a fine mist which can be scattered by the wind.
- 9. Use an inverted soft drink bottle to give slow constant watering to annuals, ferns and roses.

# Watering: Deep watering delivers water slowly to the roots and encourages deep roots.







- 10. Position irrigation systems so that water isn't wasted on paths, patios, driveways and buildings.
- 11. Use soil wetting agents to hold water in the soil longer and closer to the plants.
- 12. 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 often or you'll drown your plants.
- **13**. Plant wind breaks to reduce the wind's drying effects on your garden and group together plants with similar watering needs.
- 14. Choose local plants that have lower watering needs and suit dryer conditions for a water wise garden.
- 15. Remove weeds regularly as they compete for water with your plants and lawns.
- 16. Check the weather forecast to avoid watering before rain.
- 17. Stop water evaporating before it reaches your plant roots by watering in the early morning or late evening.
- 18. Water your garden and lawn less often but more thoroughly. This 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. Put an ice-cream container on your lawn or garden before you turn on your irrigation system. When the water in the container is 10 mm deep, you have watered long enough.
- 21. After you have watered, dig down to see how far it has penetrated. It should be at least 10cm.
- 22. 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.
- 23. Use a pool cover. This can save water by preventing evaporation (especially on windy days) and reduce the need to regularly top up your pool water level. Without a cover, over half of the water can evaporate in a year.
- 24. Do not empty your pool during winter. This can waste over 100,000 litres of water which could be treated without emptying.

#### Further Information

Waterwise Gardening – Kevin Walsh Waterwise House and Garden – Allan Windust Water Efficient Garden – Wendy van Dok www.citywestwater.com.au www.sgaonline.org.au www.savewater.com.au

# GREYWATER

The domestic wastewater that comes from the laundry and bathroom is called 'greywater'. Toilet water is termed 'blackwater' and although kitchen water is technically termed greywater, it is treated as blackwater because of the presence of particles of food and fats. Recycling house-hold wastewater for use on garden beds is an excellent way of saving water and money! Unlike rainwater, which is seasonally available, greywater is available every time you shower or wash. Greywater is suitable for ornamental beds, lawns and fruit trees. Systems can be as simple as a flow diversion fitting and hose fed by gravity. Or something more complex involving a sump tank with sub surface agipipe irrigation. The type of greywater system you choose will vary depending on the shape and type of garden you have. Seek the advice of an irrigation consultant at a garden centre.

It is best to avoid irrigating gardens when the following are in your greywater: washing detergents with high phosphorous levels, bleaches and other disinfectants, and fats (from soaps).

#### FOR HEALTH REASONS IF YOU ARE USING GREYWATER:

- 1. Don't use nappy-wash water in greywater.
- 2. Don't allow children to play with or in the greywater.
- 3. Don't allow pets to drink the greywater.
- 4. Use subsurface distribution such as porous hoses or drippers beneath a layer of mulch.
- 5. Avoid applying to edible parts of vegetables.
- 6. Don't allow greywater to leave your property.
- 7. Plumbing regulations state that drainage and water supply work must be carried out by a licensed plumber.

#### **Further Information**

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

## 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 the Moonee Valley area. Many of these plants offer shelter and are important food sources for local birds, insects, reptiles and animals. (Refer to the Moonee Valley Local Plants section p20-25.)

Two thirds of Victoria's environmental weeds 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 homes. As gardeners we need to know which plants can escape and destroy our unique natural environments. (Refer to the Moonee Valley Weeds section p28-33.) Please consider removing and replacing garden escapees as there are so 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 can be forever replacing dead plants. You need to go to a garden centre to find a plant to suit the position you have in mind, not the other way round.



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Give	yourself a tick if you:
	Know the difference between native, indigenous and exotic plants
	Have more than 30% of your garden planted with plants listed in the Moonee Valley Local Plants section (p20–25)
	Have more than 30% of your garden planted with Sustainable Plants listed on p27
	Do not have any of the plants listed in the Moonee Valley Weeds section (p28–33)
	Have at least one shade tree of suitable size for your garden
	Have reduced your lawn area to less than 50% of 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, followed by spring. Never plant in summer.
- 2. Fast growing plants (e.g. jasmine, variegated pittosporum) are great at first as screening plants because they very quickly 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 planning stage.
- 5. Compost weed prunings or put them in the garden waste bin. Cut off the seed heads of any garden escapees and put them in the bin.

Refer to the list of nurseries stocking indigenous plants suitable for the City of Moonee Valley on the inside back cover of this booklet

#### **Further Information**

Plants of Melbourne's Western Plains – Society for Growing Australian Plants (Keilor Plains)
Flora of Melbourne – Society for Growing Australian Plants (Maroondah)
Environmental Weeds – Kate Blood
Grow What Where – Australian Plant Study Group
Habitat Garden – Peter Grant (ABC shops)
The Australian Garden – Diana Snape
Australian Plants for Mediterranean Climate Gardens – Rodger Elliot
www.sgaonline.org.au
www.weeds.org.au
For more information on indigenous Moonee Valley plants, please call Council's Citizens Service Centre on 9243 8888.

Lightwood, (Acacia implexa) refer to Local Plant Guide

● = Full Sun ● = Part Shade ● = Shade
 ● ● = Needs seasonal water ↓ = Height ↔ = Width

# MOONEE VALLEY LOCAL PLANTS

These plants are great plants for Moonee Valley gardens as they grow here naturally and are good for native wildlife.

#### **CLIMBERS**

Features: Useful for providing a light screen. Grows well in pots.



#### **GROUNDCOVERS and WILDFLOWERS**

#### Black anther flax-lily (Dianella revoluta) Requirements: •

Well-drained soil;  $160 \text{ cm} \rightarrow 1.5 \text{ m}$ Features: Hardy, easily maintained plant. Ideal for growing close to trees. Butterfly attracting.

#### Clustered everlasting (Chrysocephalum semipapposum) Requirements: (© ( )

Dry soil; ‡50cm →50cm Features: Very hardy. Prune in winter to rejuvenate. Great in rock gardens, in pots, under trees or in an open position in the garden. Butterfly attracting.

#### Creeping bossiaea (Bossiaea prostrata)

Requirements: ● ● ↓ prostrate → 1.5m Easy to grow in well-drained soils. Features: Grows well under other plants.









#### Cut-leaf daisy (*Brachyscome multifida*) Requirements: (a)

Prefers moist soil; will tolerate dryness once established; ↓30cm ↔60cm Features: Grows well in a pot. Fast growing. Light pruning after flowering. Butterfly attracting.

#### Kidney plant (Dichondra repens)

#### Native flax (*Linum marginale*)

#### Running postman (Kennedia prostrata) Requirements: •

Accepts most soils but avoid poor drainage;  $10cm \rightarrow 1.5m$ Features: Attractive as a groundcover, in tubs, hanging baskets, cascading over rocks, walls and under trees. Insect and bird attracting.













Tufted bluebell (Wahlenbergia communis) Requirements: ♥ ♥ ♦ Moist well-drained soil: \$35cm ↔ 15cm

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

#### GRASSES

Kangaroo grass (Themeda triandra) Requirements: ©

Adaptable to most soils; ↓30cm ↔ 40cm Features: Habitat for insects, lizards and birds. Butterfly attracting.

#### Silky blue-grass (Dichanthium sericeum) Requirements: (2) (2)

Well-drained heavy clay soils; ‡40cm ↔ 80cm Features: Blue-grey appearance provides great contrast.

#### Wallaby grasses (Danthonia spp.) Requirements: •

Well-drained soil; ↓40cm ↔ 80cm Features: Excellent contrast plant in landscaping. Can make an excellent lawn if mown infrequently.











#### **SHRUBS**

#### Austral indigo (Indigofera australis) Requirements: ()

Any position; well-drained soil; 1-2m ↔ 1-2m Features: Responds well to regular pruning. Butterfly attracting.

#### Drooping cassinia (Cassinia arcuata)

plant is easy to grow.

Requirements: 
<sup>●</sup> ◆ 
<sup>●</sup>
Well-drained soil; 
<sup>1</sup>2.5m → 2m
Features: This graceful

Suitable for large pots/tubs. Annual pruning is beneficial. Bird attracting.

#### Hop goodenia (*Goodenia ovata*)









#### Large-leaf bush-pea (Pultenaea daphnoides) Requirements: (2) (\*\*\*)

Any position; it tolerates dryness once established; 1-3m ↔ 50cm-2m Features: Attractive tall shrub.

#### River bottlebrush (Callistemon sieberi) Requirements: @ •

Adaptable to many soils; ‡3-10m ↔ 2-6m Features: Excellent screening shrub. Pruning encourages flowering. Butterfly and bird attracting.

#### Rock correa (Correa glabra) Requirements: © (

Any position; it is easily grown in well-drained soils;  $1-3m \leftrightarrow 1-3m$ Features: Ideal as a low screen. Bird attracting.

#### Rosemary grevillea (Grevillea rosemarinifolia)

# y soils;











#### Tree violet (Hymenanthera dentata) Requirements: 🔍 🎃 🌢

Well-drained soils:  $12-4m \leftrightarrow 1-2.5m$ Features: It has violet coloured berries and provides excellent habitat for birds and possums.

#### Twiggy daisy-bush (Olearia ramulosa)

Requirements: 🔍 🍩 Well-drained soils:  $150 \text{cm} - 2.5 \text{m} \leftrightarrow 1 \text{m}$ Features: Pruning as the flowers begin to fade usually encourages a further flush of flowers.

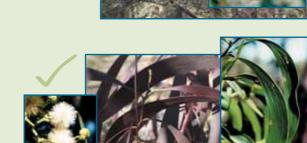
#### **TREES**

Black sheoke (Allocasuarina littoralis) Requirements: 🧶 🌤 🌢 Well-drained soil: 15-15m ↔ 4-7m Features: Excellent screen

plant and windbreak. Food source for birds.

#### Lightwood (Acacia implexa) Requirements: 🧶

Most soils: \$4-8m ↔ 2-5m Features: Small screen or shade tree. Bird attracting.









# TRADITIONAL LAWN ALTERNATIVES

Traditional turf lawns are often high water users and can look unsightly during water restrictions. If you are looking for an attractive lawn alternative, you may want consider these options:

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.



Weeping grass

If you like clumps of tussocky grasses then kangaroo grass (*Themeda triandra*), wallaby grass (*Austrodanthonia spp.*) and tussock grass (*Poa spp.*) are great alternatives.

Use groundcover plants that form dense mats, don't require mowing and perform well in shade. Examples include: kidney plant *(Dichondra repens)*, creeping boobialla *(Myoporum parvifolia)* and native mint *(Mentha diemenica)*.

Planting out a mass of native wildflowers to create a meadow look can be spectacular particularly in spring and summer. This works particularly well as a front lawn alternative.

#### **EXAMPLES OF LOCAL PLANTS TO CONSIDER:**

- 1. Tufted bluebell (Wahlenbergia communis)
- 2. Australian bindweed (Convolvulus erubescens)
- 3. Chocolate lily (Arthropodium strictum)
- 4. Bulbine lily (Bulbine bulbosa)
- 5. Climbing saltbush (Einadia nutans).

Further information:

www.nativeseeds.com.au

www.sgaonline.org.au



 $\bigcirc$  = Full Sun  $\bigcirc$  = Part Shade  $\bigcirc$  = Shade  $\blacklozenge$  = Drought Tolerent ↓ = Height  $\leftrightarrow$  = Width

# SUSTAINABLE PLANT LIST These plants aren't indigenous but include great natives and low water users.

COMMON NAME	BOTANICAL NAME	FORM	CONDITIONS	HxW
Cabbage palm	Cordyline australis	Tree	ه 🏟 🄅	‡3m ↔ 1m
Chef's cap correa	Correa baeuerlenii	Strap foliage	٠	‡1m ↔ 1m
Bougainvillea	Bougainvillea traillii	Climber	۱	
Bower vine	Pandorea jasminoides	Climber	ه 🗭 🄅	
Autumn sage	Salvia gregii	Cottage	ه 🗭 🄅	‡50cm ↔ 50cm
Blazing star	Liatris spicata	Cottage	۱	‡ 30cm ↔ 30cm
California lilac	Ceanothus spp.	Groundcover	ه 🗭 🄅	‡ 30cm ↔ 1.5m
Prostrate juniper grevillea	Grevillea junipera prostrata	Groundcover	۱	‡20cm ↔ 1m
Pachysandra	Pachysandra terminalis	Groundcover	۵ 🔶 🔅	‡10cm ↔ 50cm
Fan flower	Scaevola aemula	Groundcover	ه 🗭 🄅	‡50m ↔ 1m
Glossy abelia	Abelia x grandiflora	Medium shrub	ه 🏟 🄅	‡1.5m ↔ 50cm
Mexican orange blossom	Choisya ternata	Medium shrub	ه 🏟 🄅	‡2m ↔ 2m
Geraldton wax	Chamelaucium uncinatum	Medium shrub	۱	‡2m ↔ 2m
Wax flower	Eriostemon myoporoides	Medium shrub	ه 🐑 🍥	‡2m ↔ 2m
Bird of paradise	Strelitzia reginae	Perennial	۵ 🗢 🍥	‡1m ↔ 1m
Enamel flower	Adenandra uniflora	Small shrub	ه 🐑 🍥	‡ 30cm ↔ 30cm
Silver bush	Convolvulus cneorum	Small shrub	۱	‡ 30cm ↔ 60cm
Gum rock rose	Cistus ladaniferus	Small shrub	۱	‡1m ↔ 1m
Dwarf willow myrtle	Agonis flexuosa nana	Small shrub	۱	‡1.5m ↔ 1.5m
Small crowea	Crowea exalata	Small shrub	ه 🗭 🍥	‡70cm ↔ 1m
NZ rock lily	Arthropodium cirrhatum	Strap foliage	۵ 🗢 🏟	$1m \leftrightarrow 1m$
Lily turf	Liriope muscari	Strap foliage	ه 🏟 🄅	‡ 30cm ↔ 20cm
Kangaroo paw	Anigozanthus Bush Gem hybrids	Strap foliage	ه 🏟 🄅	‡50cm ↔ 50cm
Grevillea	Grevillea 'Ivanhoe'	Tall shrub	ه 🗭 🍥	‡3m ↔ 4m
Flinders ranges wattle	Acacia iteaphylla	Tall shrub	۱ 🔅	‡3m ↔ 2m
Willow myrtle	Agonis flexuosa	Tree	ه 🗭 🍥	‡10m ↔ 8m
Coral gum	Eucalyptus torquata	Tree	ه 🐑 🍥	‡3m ↔ 2m
Bottle brush	Callistemon 'Kings Park Special'	Tree	ه 🗭 🍥	‡4m ↔ 3m
Tea tree	<i>Melaleuca bracteata</i> 'Revolution Green'	Tall shrub	ه 🏟 🄅	$1 \text{4m} \leftrightarrow 2\text{m}$

# MOONEE VALLEY WEEDS

All the plants in this section are serious garden escapees in Moonee Valley. Please do not plant these species, and if you have them in your garden, please remove them and replace them with one of the suggested similar non-invasive indigenous plants.

#### CLIMBERS and CREEPERS

#### Blue periwinkle (Vinca major)

Forms thick carpets. Leaves broad and glossy. Replace with: Purple coral-pea (Hardenbergia violacea)

#### English ivy (Hedera helix)

Fast climber can grow to 30m up trees or creeping along the ground and forming carpets. Shiny, triangular, dark green leaves with pale veins. Poisonous if eaten and can cause skin and eye irritation. Replace with:

Small-leafed clematis (Clematis microphylla)

#### Madeira vine (Anredera cordifolia)

A fast climber that can cover trees up to 30m tall. Fleshy, egg-shaped leaves with a heart-shaped base to 12cm long. Replace with:

Small-leafed clematis (*Clematis microphylla*)





#### Morning glory (Ipomoea indica)

Fast growing climber. Leaves spear shaped, bright green. Replace with: Large bindweed (*Calystegia sepium*)



#### Moth plant (Araujia sericifera)

A climber that can grow to 10m tall. Triangular leaves to 11cm long. Fruit looks like a choko. Poisonous to poultry and dogs. Sap can cause skin irritation. **Replace with**: Common appleberry (*Billardiera scandens*)

# Wandering tradescantia (Tradescantia fluminensis)

Forms thick carpets. Glossy green leaves, oval to 4cm. Can cause allergic reaction to dogs with skin irritation particularly on the stomach.

Replace with: Kidney plant (*Dichondra repens*)





#### **GRASSES** and HERBS

#### Agapanthus (Agapanthus spp.)

Leaves poisonous. Sticky sap can ulcer mouth. Replace with: Pale flax-lily (*Dianella longifolia*)



Arum lily (Zantedeschia aethiopica) Highly poisonous. Replace with: Pale flax-lily (Dianella longifolia)



# Chilean needle-grass (Nassella nessiana)

A Weed of National Significance. Commonly confused with native grasses and grown in many gardens as an ornamental grass. Replace with: Feather spear grass (Austrostipa elegantissima)

Fountain grass (Pennisetum setaceum)

Replace with: Wallaby grass (Danthonia spp.)

#### Pampas grass (Cortaderia spp.)

Leaves easily cut the skin and cause irritation when handled. Replace with: Thatch saw-sedge

(Gahnia radula)









#### Serrated tussock (Nassella trichotoma)

A Weed of National Significance. Commonly confused with native grasses and grown in many gardens, especially rockeries. Replace with:

Common tussock grass (Poa Labillardieri)



#### **SHRUBS**

Boneseed (Chrysanthemoides monilifera) A Weed of National Significance. Replace with: Hop goodenia (Goodenia ovata)





#### Broad-leaf privet (Ligustrum lucidum)

Leaves and fruit are poisonous. Replace with: Rock correa (Correa glabra)

#### Cootamundra wattle (Acacia baileyana)

Replace with: Black wattle (Acacia mearnsii)





Cotoneaster (Cotoneaster spp.) Berries contain toxins that can be harmful to

infants if eaten. **Replace with**: Prickly currant-bush (*Coprosma quadrifida*)



Hawthorn (*Crataegus monogyma*) Replace with:

Tree violet (*Hymenanthera dentata*)



Mirror bush (Coprosma repens) Replace with:

Prickly currant-bush (*Coprosma quadrifida*) and boobialla (*Myoporum insulare*)



Montpellier broom (Genista monspessulana)

Seeds highly poisonous Replace with: Gold-dust wattle (Acacia acinacea)



#### Prickly pears (*Opuntia* spp.)

**Replace with:** Kangaroo apple (*Solanum laciniatum*). Warning: the fruit of the Kangaroo apple is poisonous if eaten when green.

#### Sweet briar (*Rosa rubiginosa*) Replace with: Sweet bursaria

Sweet bursaria (Bursaria spinosa)

#### TREES

Desert ash (Fraxinus angustifolia) Replace with: Blackwood (Acacia melanoxylon)

Pine tree (Pinus spp.) Replace with: Drooping sheoke (Allocasuaraina verticillata)

#### Sweet pittosporum (*Pittosporum undulatum*) Replace with: Muttonwood (*Rapanea howittiana*)

# ES









# CHEMICALS

Pesticides and fertilisers can move from our garden to the natural environment. Sprays can drift in the wind and powders can wash into waterways. Strong chemicals can kill our native insects, plants and animals. Too much fertiliser can put extra nutrients in our waterways and result in blue-green algae growing out of control and harming 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 toxic level (Refer to the SGA Low Environmental Impact Chemicals p38)
Avoid using chemicals before it rains or on windy days
Use chemical alternatives (e.g. garlic sprays) or if you do spray, you target-spray only the affected plant/s
Use organic fertilisers (compost, manure, seaweed and fish emulsions)
Don't over-fertilise your plants as it produces excessive plant growth and excess green waste from additional pruning.

Chemical Score

#### **CHEMICAL TIPS**

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





/7

Chemicals 35

## Reducing chemical usage

## Don't spray / sprinkle chemicals on a windy day or before rain Identify the problem Don't overfertilise your plants Target spray pest only Space plants to encourage air circulation Leave grass clippings on lawn LAWN Use low (reduce) nitrogen fertiliser

#### 36 Sustainable Gardening in Moonee Valley

- 2. Use natural alternatives such as pyrethrum and garlic spray to control pests.
- 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 the 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 between pruning plants to prevent the spread of disease.

### Further Information:

Natural Gardening in Australia – Jeffrey Hodges Natural Control of Garden Pests – Jackie French Plant Protection – Ruth M Kerruish What Garden Pest or Disease is That? – Judy McMaugh www.sgaonline.org.au

Native Flax, (Linum marginale) refer to Local Plant Guide

# CHILDREN IN THE GARDEN

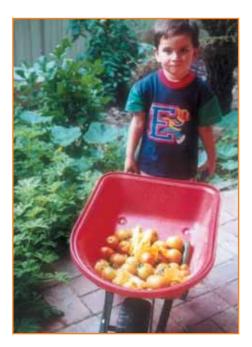
Most children enjoy being outdoors and love digging in the soil, getting dirty, creating things and watching plants grow. When planning a garden for children it is important to use plants that are safe and allow children to experience a range of textures and smells.

A mix of native and exotic plants can include: Firm and soft foliages (lamb's ears), scented flowers (lavender), varying foliage (silky blue grass), butterfly attracting (cut leaf daisy), bird attracting (kangaroo grass) and edible plants (herbs and vegetables).

### EXPERIENCES CAN BE ENHANCED THROUGH INCORPORATING:

- 1. Water features
- 2. Sand pits
- 3. Sculptures and murals
- 4. Varied materials (trellis, pavers, stepping stones)
- 5. Creating secret gardens.

Warning: Remember some plants are poisonous and pose a particular danger to children. Also avoid sharp, prickly and cutting plants around children.



### Further information

Royal Botanical Gardens – Ian Potter Children's Garden: www.rbg.vic.gov.au Poison Information Help Line – 131 126 www.mvcc.vic.gov.au

## SGA LOW ENVIRONMENTAL IMPACT CHEMICALS

Sustainable Gardening Australia in conjunction with the University of Melbourne (Burnley) has rated all horticultural chemicals into three categories: low, medium and high environmental damage. SGA advocates non-chemical prevention such as monitoring for early outbreaks, good air circulation between plants and alternative home remedies, such as garlic sprays. If you must use a chemical please consider the products listed below that have minimum environmental impact.

### **INSECTICIDES**

Beat-A-Bug Happy Roses Spray Beat-A-Bug Insect Spray Confidor Hose On Lawn Grub Killer Confidor Insecticide Aerosol Confidor Insecticide RTU spray Garden King White Oil Aerosol Hortico Derris Vegetable Dust Manutec Dusting Sulphur Multicrop Pyrethrum + Eucalyptus Multicrop Pyrethrum Plus Garlic NG Wasp and Nest Killer Nurseryman's All Season Pest Oil Pest Oil RTU Pyrethrum Time Release Spray Sharpshooter Pyrethrin RTU Success Naturalyte Insecticide TacGel Formula3 Insect Trap Tropico Organic Bug Gun spray Yates Dipel Bio-insecticide Yates Green Earth Insect Spray Yates Pest Oil Yates Rose Blackspot and Insect Killer Yates Scale Gun Yates Slay-Afe Insecticide Yates Surrender RTU Yates White Oil Aerosol Yates White Oil concentrate



### **HERBICIDES**

Brunnings Lawn Food Plus Moss Kill

### **FUNGICIDES**

Baycor Garden Fungicide Chemspray Copper Oxychloride SharpShooter Lime Sulphur Sharpshooter Rid a Rot Fungicide Yates Anti Rot Yates Fungus Fighter Yates Leaf Curl Copper Fungicide Yates Lime Sulphur Fungicide

#### REPELLENTS

Beat-A-Bug Goodbye Snail Beat-A-Bug Poss-Off Spray D-Ter Multicrop Keep Off Spray Multicrop Keep-Off Granules Multicrop Scat Animal Repellent Multicrop Skedaddle Granules Possom Shot Gel Quassia Chips Skunk Shot Gel Animal Repellent Slug It Stay Off Animal Repellent

### **ALGICIDES**

Oase Crystal Clear Stephen Bros Barley algae control

#### MOLLUSCICIDES (SNAIL KILLERS)

Amgrow Enviroguard Snail Bait Multicrop Snail Killer Pellets









## PRODUCE

Commercially growing fruit and vegetables uses a lot of energy and chemicals in heating, cooling, spraying weeds and pest killers 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 vitamins. Growing your own vegetables is so easy, and even easier if you've improved your soil. They're healthier, convenient and children love to watch them grow. Even if you only grow tomatoes, herbs and lettuce in a pot, it's a 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 the full sun with plenty of water, organic fertiliser and compost. On the other hand, local plants and native plants do not need a lot of water and fertliser. It is therefore best to grow them in separate parts of the garden.
- 2. You can grow vegetables in no-dig beds on concrete and in big pots.
- 3. Don't use treated pine in vegetable gardens as the chemicals can leach into the soil.
- Use recycled plastic sleepers to make raised beds. These will not rot after 10 years.
- 5. Rotate the position of vegetables every year to stop diseases spreading.



- 6. Use natural alternatives such as pyrethrum and garlic sprays to control pests.
- 7. Check for bugs, especially snails on new seedlings. Go out at night and drown snails in a bucket of salt water or a beer trap!
- 8. Try heritage seeds. You can plant early, mid and late season tomatoes.

#### Further Information

Backyard Self-Sufficiency – Jackie French The Australian Vegetable Book – Clive Blazey Natural Gardening in Australia – Jeffrey Hodges www.sgaonline.org.au For information on community gardens in Moonee Valley please call the Citizens Service Centre on 9243 8888 or visit www.cultivatingcommunity.org.au



# PRODUCTS

When we buy products for the garden we often don't think about where they have come from. Red gum trees come from woodlands and are part of a system which supports thousands of creatures. When the trees are chopped down all the creatures have nowhere else to go and die out. Many are in serious danger of extinction. We use red gum wood to make things like bark chips, tomato stakes and railway sleepers. Huge amounts of shiny river pebbles are dug out of active rivers in Asia. Whole river systems have been destroyed so we can create a garden feature of river stones.

## Give yourself a tick if you:

 Ask where a product comes from and avoid buying unsustainable products
 Use recycled products, like bricks, timbers, plastic sleepers
 Take your own plastic bag or canvas bag to a Garden Centre to carry home products and plants
 Drop off and collect plastic plant pots from Council's Transfer Station

Product Score /4

## **ALTERNATIVE PRODUCT TIPS**

- 1. There are usually alternatives available. Pebbles that are quarried in Victoria from inactive streambeds are acceptable because at least they are not destroying living habitats.
- 2. Look up www.timbershop.org to find out which timbers are acceptable. While many outdoor furniture companies claim that teak is plantation harvested in Asia, this magnificent tree is a rainforest plant that cannot be grown under plantation.

- 3. Plants such as grass trees, tree ferns and native orchids may have been sourced illegally from the forest. Plants should be sold with a government tag stating that they have been legally collected.
- 4. Use renewable mulches such as mulches made from recycled organics, pea straw or plantation sourced mulch. Recycled organic mulches are good to buy, as not only are they great products, but you are ensuring that garden waste is recycled rather than going to landfill.

## Further information

Forest Friendly Building Timbers – The Wilderness Society www.sgaonline.org.au www.timbershop.org www.ecorecycle.vic.gov.au – for a list of suppliers



Sustainable Gardening Score Card			
SECTION	Now	6 mths	12 mths
Design (7)			
Soil (6)			
Compost (6)			
Water (10)			
Plants (8)			
Chemicals (7)			
Produce (2)			
Products (4)			
TOTAL (50)			

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 have to do to score more ticks in six months and 12 months. You can then start working towards making your garden more sustainable.

### Think Global Act Local



## FOR FURTHER INFORMATION

Moonee Valley City Council Phone 9243 8888 www.mvcc.vic.gov.au

Moonee Ponds Creek Coordination Committee Phone 9333 2406 www.mpccc.org

For free sustainable gardening information and a listing of SGA environmentally accredited nurseries go to www.sgaonline.org.au

For contact details of the following local Friends Groups visit Council's website [Search: Friends]

Friends of Maribyrnong Valley

Friends of Moonee Ponds Creek

Friends of Napier Park

Friends of Steele Creek

Friends of Strathnaver Reserve

Nurseries stocking indigenous plants suitable for Moonee Valley

Victorian Indigenous Nurseries Co-op (VINC) Yarra Bend Rd, Fairfield Phone 9482 1710

CERES Bushfood and Permaculture Nursery 8 Lee St, East Brunswick Phone 9387 4403

Western Plains Flora 628 Wildwood Rd, Wildwood Phone 9740 3178

Newport Lakes Native Nursery 2 Margaret St, Newport Phone 9391 0044

Visit these special places in Moonee Valley:

Strathnaver Reserve, Strathmore Heights (Mel16:E6) Napier Park, Essendon (Mel16:H6) Afton Street Conservation Park, Essendon West (Mel28:E6)

### Further Reading:

Plants of the Western Plains, Society for Growing Australian Plants, Keilor

Plants of the Merri Merri: A Home Gardener's Guide to Using Indigenous Plants in the Northern Suburbs of Melbourne. R. Wigney ed, (1994). Merri Creek Management Committee.

Flora of Melbourne: A Guide to the Indigenous Plants of the Greater Melbourne Area. Society for Growing Australian Plants, Maroondah (Rev. Ed. 2001). Hyland House.

### Citizens Service Centre 9 Kellaway Avenue Moonee Ponds 3039

Transfer Station 188 Holmes Road Moonee Ponds 3039

## Phone 9243 8888

Moonee Valley Language Line			
عربي	Arabic	9280 0738	
中文	Cantonese	9280 0739	
Hrvatski	Croatian	9280 0740	
Ελληνικά	Greek	9280 0741	
Italiano	Italian	9280 0742	
Somali	Somali	9280 0743	
Español	Spanish	9280 0744	
Türkçe	Turkish	9280 0745	
Việt-ngữ	Vietnamese	9280 0746	
	All other languages	9280 0747	
	TTY 9243 9170		