

sustainable gardening IN NILLUMBIK













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INTRODUCTION

Sustainable gardening is about maximising the benefits to our natural environment and reducing negative environmental impacts that gardening can have.

Gardening can have a positive benefit to the health of our environment. 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 and by composting our household and garden organic waste we reduce the amount of waste material 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, as they require less watering, lower application of fertilisers and chemicals, 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 designed to enable you to conduct a sustainability audit on your garden. Different sustainability themes are addressed and in each section you simply tick a box if it is something you

Nillumbik Enviro Events

Nillumbik runs an annual Enviro Events program of workshops on many aspects of sustainable gardening from composting to water efficient gardening and plant propagation. Contact Council for a brochure: 9433 3210 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 both six months and 12 months. You can then start working towards making 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. Therefore, 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 sustainable garden you need to take time to work out how to create a space you feel comfortable with, and enjoy and suits your local soil and climate.

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 grout to their water, sun and soil needs	ups plants according	
	have designed your garden for low v	vater use (see p. 12)	
	have thought about the amount of vocippings and prunings) generated by identified ways for managing it on sit or mulching)	y your garden and	
	have replaced concrete with gravel to soak in (creating a permeable surface		
	have designed your garden to have f create appeal	low and interest to	
	have designed your garden to be a p to socialise.	lace for people	
		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, kids swings, entertainment area) and what you want (vegie garden, shade area, pond, fruit tree/s).
- 4. Develop 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, and a pond where it can be seen from inside the house.
- 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 10–15cm 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 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 (leaf litter, compost, manure, grass clippings). Worms break down organic matter to make food for plants, and worm burrows allow air into the soil so that plant roots can breathe. Organic matter needs to be replaced as plants absorb nutrients. If organic matter is not added, the soil becomes hard, 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 to achieve if you look after your soil.

Give yourse	lf a tic	k if you:
-------------	----------	-----------

check mulch levels and replace every year to bring back to 8–10cm deep	
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 Sooro //	

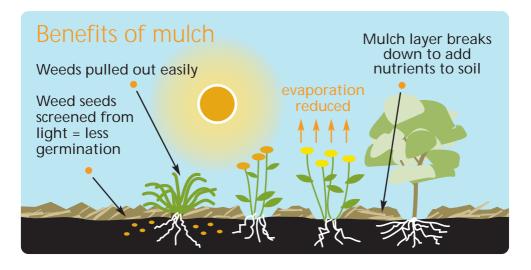
Soil Score

/6

SOIL IMPROVEMENT TIPS

- Soil should be damp before you add mulch, generally spring is 1. the best time to apply mulch, once the winter rains have soaked in.
- 2. Mulches made from recycled organics are an excellent choice as they save water, are long-lasting and feed the soil when they break down.
- 3. Spreading compost over your soil (under the mulch layer) will encourage worms in your garden.

- 4. Pea straw and lucerne are good options if you have not mulched the soil for a long time as they break down quickly, returning nutrients to the soil. Bark mulch has very few nutrients so don't rely on it to improve 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 so they prefer a bush mulch or recycled timber mulch on its own without soil improvement.
- 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. Don't cultivate your soil unless it is very compacted after building works. Digging destroys the soil structure, which thereby destroys air holes and drainage spaces.



Further Information

The Natural Gardener – Jeffrey Hodges
The Natural Magic of Mulch – Michael J. Roads
www.sgaonline.org.au
www.ecorecycle.vic.gov.au

COMPOST - FASY AND FUN

Composting or worm farming your food scraps, grass and garden clippings (organics) can provide you with an excellent source of free garden food and soil improver. Composting organics (rather than putting them in the green bin) 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 and a great activity for the kids. It's not hard and almost half of household rubbish can be turned into compost that's useful for your garden.

make your own compost
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 the red bin
put green waste out for collection less than four times per year
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

Compost Score

/6

COMPOSTING TIPS

use a worm farm.

Give yourself a tick if you:

- 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 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.

- 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.
 - · easy access.
- 4. 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. (Refer to the SGA or Ecorecycle website for details.)

Add to your compost

- fruit and vegetable scraps
- coffee grounds
- tea bags
- egg shells
- onions
- citrus fruit (cut up)
- sour milk and yoghurt
- 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 (put in the green bin)
- meat (put in the green bin)
- cat and dog droppings (put in the red bin) – consider a pet poo worm farm instead
- big woody prunings (put in the green bin)
- bulbous weeds e.g. oxalis spp. (put in the green bin)
- weeds with runners –
 e.g. couch grass (put in the green bin)
- bleached or glossy office paper – harmful chemicals (put in the yellow bin)

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 turn 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, however they do indicate that your compost will not decompose fast enough.

Attracting flies?

If you see tiny flies (*Drosophila* spp.) 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.

Visited by rats, mice, blowflies or maggots?

Meat scraps or fish bones can be added to compost but **only** if it is working effectively. 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.



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!

CLOSING THE LOOP

For excess garden material or food scraps place loosely (i.e. not wrapped in bags or paper) in your kerbside green bin. This material is recycled and made into soil conditioner and compost for the garden.

COUNCIL COMPOST BINS AND WORM FARMS – GET STARTED

Nillumbik Shire Council has compost bins and worm farms available for sale at cost price.

Further Information

Make Your Own Compost – Yvonne Cave Gardening Down-Under – Kevin Handreck www.sgaonline.org.au www.nillumbik.vic.gov.au or call 9433 3111 www.ecorecycle.vic.gov.au



WATER

Australia is the driest populated continent in the world and yet we are also the highest consumers of water per capita. Water use in the garden is a major contributor to high water consumption levels throught the shire. By improving the soil, efficient irrigation and good garden design, significant water savings can be made in the garden.



Give yourself a tick if you:

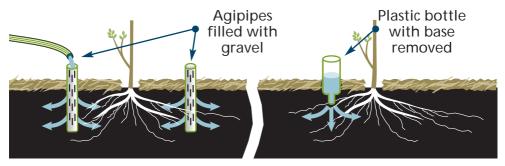
have 30% or more of your garden planted with species listed in the Nillumbik local plant guide (pp. 19–24)
have less than 50% of your garden area taken up by lawn
have mulched all of your garden beds and pots
don't have a lawn, or if you do, cut it longer (8–10cm) over summer
do not water your garden
water around the plant root zone with long, infrequent watering in the cool of the day
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
recycle greywater from the laundry and bathroom to the garden using EPA approved techniques or systems.

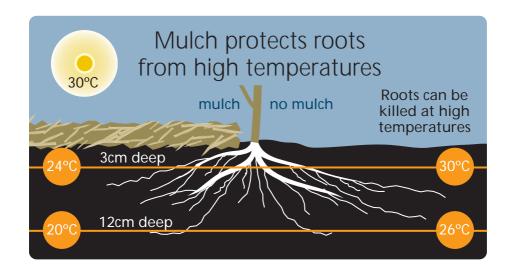
Water Score

WATER TIPS

- 1. After you have watered dig down to see how far it has penetrated, it should be at least 10cm.
- 2. Install a large rainwater tank (3000 litres of water in a tank for summer is ideal).
- 3. Check and clean your irrigation system every spring.
- 4. Mulch all your garden beds and pots. Mulch made from recycled organics is a great water saving product.
- 5. Micro-sprays waste up to 70% water through drift and evaporation and if the soil is mulched, water will not penetrate to the soil. Use drip irrigation instead.
- 6. Water pots and plants with a low pressure on the hose. The water should be running slowly, not on a spray, as this does not penetrate very deeply.
- 7. Go for a tough drought tolerant grass like Sir Walter Buffalo; a native grass such as *Microlaena stipoides* (won't take football games, but is fine for walking on); or a native groundcover like *Myoporum parvifolium* for the front garden.
- 8. To avoid potential health risks greywater from the bathroom and laundry must be collected and used according to EPA and council regulations.
- 9. Check the weather forecast to avoid watering before rain.

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





Further Information

Waterwise Gardening - Kevin Walsh

Waterwise House and Garden - Allan Windust

Water Efficient Garden - Wendy van Dok

www.sgaonline.org.au

www.savewater.com.au

www.epa.vic.gov.au

www.yvw.com.au

www.ourwater.vic.gov.au

www.nillumbik.vic.gov.au



GREYWATER

Greywater is domestic wastewater, excluding toilet waste. The best quality greywater comes from the rinse water of your washing machine while toilet and kitchen wastes should always go to sewer. Untreated greywater can be diverted on a temporary basis to sites within your backyard. Greywater can contain a number of micro-organisms such as bacteria and viruses, as well as chemicals from cleaning agents. The continual discharge of greywater can potentially cause problems for your garden.

A level subsurface trench is one option for applying diverted greywater. Slotted stormwater pipe placed in the trench, and covered with gravel

assists in conveying the water along the length of the trench. An alternative is to collect greywater in a bucket and apply the water to areas of greatest need.

Dos:

- divert only low risk greywater such as final rinse water of washing machine
- it is preferable to apply greywater below ground
- only use low phosphorous detergents (powdered detergents also contain large volumes of salts, which can affect the salinity in your garden).

Further Information

www.epa.vic.gov.au www.sgaonline.org.au Water Efficient Garden – Wendy van Dok

Don'ts:

- do not divert kitchen wastewater as this has high levels of contaminants
- do not divert greywater with any blood or faecal contamination, such as water used to wash soiled nappies
- do not water vegetables for human consumption with greywater
- do not allow greywater to pool or stagnate as this will cause odours and attract pests
- never store untreated greywater
- never pipe greywater into existing irrigation systems
- never allow people or pets access to areas where greywater is being reused
- never allow greywater to enter the stormwater system or neighbouring properties.

PLANT SELECTION

Local (indigenous) plants are suited to the local soil and climate. They do not require large amounts of nutrients and once established, use little water. There are many beautiful plants local to the Nillumbik area which offer shelter and are an important food sources for local birds, insects, reptiles and animals. (Refer to the Nillumbik Local Plant Guide pp. 19–24 of this booklet or the Nillumbik Shire Council booklet *Live Local Plant Local.*)

Two thirds of Victoria's environmental weeds are garden escapees. Their seeds can be spread from our gardens by birds and other animals or by people dumping garden waste into our bushland and waterways. Weeds compete with local native plants for light, nutrients and water. As gardeners we need to know which plants can escape and invade our unique natural environments. (Refer to the Nillumbik garden escapee guide pp. 26-31of this booklet or the Nillumbik Shire Council Environmental Weeds brochure.) Consider removing and replacing garden escapees as there are many beautiful local native plants that make great alternatives.

Plants should be grouped together according to their sun/shade, water and fertiliser needs. You need to select 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
have more than 30% of your garden planted with plants listed in the Nillumbik Local Plant Guide (pp. 19–24)
have more than 30% of your garden planted with sustainable plants listed on p. 25
do not have any of the plants listed in the Nillumbik garden escapees guide (pp. 26–31) 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 early spring and autumn. Never plant in summer.
- 2. Fast growing plants (e.g. jasmine, variegated pittosporum) are great as screening plants because they quickly fill an empty space. However, they keep growing and growing and growing! They then become high maintenance plants and produce large amounts of green waste due to regular pruning needs. A preferred option is to wait for slower growing plants to reach the height you want.
- 3. There is a tree to fit every size garden. Trees provide shade, 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 exotic plants can be used together to create successful gardens, but care is needed at the planning stage.
- 5. Recycle weed prunings in the green waste bin, or investigate different methods of home composting. For further information contact Council's Waste Education Officer on 9436 3555.
- 6. Nillumbik Shire Council has a number of grants available for residents to remove specific weeds to protect and enhance biodiversity on their property. Contact Council's Land Management Officer on 9433 3211 for further details.

Refer to the list of nurseries stocking indigenous plants suitable to the Shire of Nillumbik on the back cover of this booklet.

Further Information

Flora of Melbourne – Society for Growing Australian Plants (Maroondah)

Environmental Weeds - Kate Blood

Grow What Where - Australian Plant Study Group

The Australian Garden - Diana Snape

Australian Plants for Mediterranean

Climate Gardens - Rodger Elliot

www.sgaonline.org.au

www.weeds.org.au

www.dpi.vic.gov.au

NILLUMBIK LOCAL PLANT GUIDE

The following list of species make great plants for Nillumbik gardens as they grow within the Shire naturally and provide habitat for native wildlife. See the list of nurseries stocking plants indigenous to Nillumbik on the back cover of this booklet. For further indigenous plant species, please refer to Council's *Live Local Plant Local* booklet.

GROUNDCOVERS and WILDFLOWERS

Purple coral pea (Hardenbergia violacea)

Requirements: Full/semi sun;

well-drained soil.

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

Black anther flax-lily (Dianella revoluta)

Requirements: Full/semi sun;

well-drained soil.

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

trees. Butterfly attracting.

Clustered everlasting (*Chrysocephalum semipapposum*) Requirements:

Full/semi sun. Dry soil.

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

Creeping bossiaea (*Bossiaea prostrata*) Requirements:

Easy to grow in well-drained soils.

Features: Grows well under other plants.



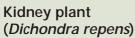






Cut-leaf daisy (Brachyscome multifida)

Requirements: Full/semi sun; prefers moist soil and will tolerate dryness once established.
Features: Grows well in pots.
Fast growing. Light pruning after flowering. Butterfly attracting.



Requirements: Semi sun/full shade; well-drained soils.
Features: An excellent lawn substitute in moist shady areas where traffic is light.

Native flax (Linum marginale)

Requirements: Full/semi sun.
Dry soil and poor drainage.
Features: Grows mostly in the cooler months and dies back after flowering. Remove old stems in autumn. Can grow in pots, rock gardens and around ponds.

Running postman (Kennedia prostrata)

Requirements: Full/semi sun. Accepts most soils but avoid poor drainage.

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: Full/semi sun;

moist well-drained soil

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

Butterfly attracting.



GRASSES

Kangaroo grass (*Themeda triandra*) Requirements:

Full/semi sun; adaptable

to most soils.

Features: Habitat for insects, lizards and birds. Butterfly attracting.

Silky blue-grass (*Dichanthium sericeum*) Requirements:

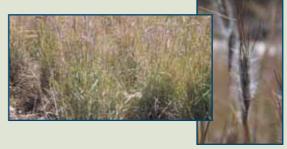
Full sun; well-drained heavy clay soils. Features: Blue-grey appearance provides great contrast.

Wallaby grasses (Austrodanthonia spp.)

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

Features: Excellent contrast plant in landscaping. Can make an excellent lawn if infrequently mown.







SHRUBS (up to 4m)

Austral indigo (Indigofera australis) Requirements:

Any position; well-drained soil.

Features: Responds well to regular pruning. Butterfly attracting.

Drooping cassinia (Cassinia arcuata) Requirements: Full/semi sun; well-drained soil. Features: This graceful plant is easy to grow.

Gold dust wattle (*Acacia acinacea*) Requirements:

Full/semi sun; adaptable to most soils Features: A good low screening plant. Suitable for large pots/tubs. Annual pruning is beneficial. Bird attracting.

Hop goodenia (Goodenia ovata) Requirements:

Any position; prefers damp soil Features: Fast growing. It responds well to pruning.











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

Any position; it tolerates dryness once established Features: Attractive

tall shrub.

River bottlebrush (Callistemon sieberi) Requirements:

Full/semi sun; adaptable to many soils.

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.

Features: Ideal as a low screen. Bird attracting.

Rosemary grevillea (Grevillea rosemarinifolia) Requirements: Full/semi

sun; well-drained soil
Features: Pruning will
encourage more compact
growth. Grows well in
large pots/tubs.











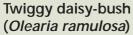
Tree violet

(Hymenanthera dentata)

Requirements: Full/semi sun;

well-drained soils

Features: It has violet coloured berries and provides excellent habitat for birds and possums.



Requirements: Full/semi sun;

well-drained soils

Features: Pruning as the flowers begin to fade usually encourages

a further flush of flowers.





TREES (over 4m)

Black sheoke (Allocasuarina littoralis)

Requirements:

Full/semi sun:

well-drained soil;

Features:

Excellent screen plant and windbreak. Food source for birds.

Lightwood (Acacia implexa)

Requirements:

Full/semi sun; most soils

Features:

Small screen or shade tree. Bird attracting.









SUSTAINABLE PLANT LIST 🗸





These plants aren't indigenous but include great natives and low water users.

COMMON NAME FORM CONDITIONS **BOTANICAL NAME** Cabbage palm Cordyline australis Tree Correa baeuerlenii Strap Foliage Chef's cap correa Bougainvillea Bougainvillea traillii Climber Climber Bower vine Pandorea jasminoides Autumn sage Salvia gregii Cottage Blazing star Liatris spicata Cottage California lilac Ceanothus spp. Ground Cover Prostrate juniper grevillea Grevillea junipera prostrata **Ground Cover** Pachysandra Pachysandra terminalis Ground Cover Fan flower Scaevola aemula Groundcover Glossy abelia Abelia x grandiflora Medium Shrub Mexican orange blossom Medium Shrub Choisya ternata Medium Shrub Geraldton wax Chamelaucium uncinatum Wax flower Eriostemon myoporoides Medium Shrub Bird of paradise Perennial Strelitzia reginae Enamel flower Adenandra uniflora Small Shrub Silver bush Convolvulus cneorum Small Shrub Gum rock rose Cistus ladaniferus Small Shrub Dwarf willow myrtle Agonis flexuosa nana Small Shrub Small crowea Crowea exalata Small Shrub NZ rock lily Arthropodium cirrhatum Strap Foliage Lily turf Liriope muscari Strap Foliage Anigozanthus Bush Gem hybrids Strap Foliage Kangaroo paw Grevillea Grevillea 'Ivanhoe' Tall Shrub Medium Shrub Albany woolly bush Adenanthos sericea Melaleuca bracteata Tea tree Tall Shrub 'Revolution Green' Willow myrtle Tree Agonis flexuosa Coral gum Eucalyptus torquata Tree Bottle brush Callistemon 'Kings Park Special' Tree



NILLUMBIK GARDEN ESCAPEE GUIDE

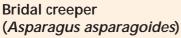
All the plants listed in this section are serious garden escapees in Nillumbik. Please do not plant these species, and if you have them in your garden, consider removing them. They can be replaced with one of the suggested similar non-invasive indigenous plants.

CLIMBERS and CREEPERS



Blue periwinkle (Vinca major)

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



A scrambling climber. Leaves shiny, broadly oval to round. 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)

Bluebell creeper (Sollya heterophylla)

Vigourous climber. Contains toxins. Replace with: Common appleberry (*Billardiera scandens*)













Morning glory (*Ipomoea indica*)

Fast growing climber. Leaves spear shaped, bright green.

Replace with: Large bindweed (Calystegia sepium)

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)

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*)

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*)











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)



Pampas grass (Cortaderia spp.)

Leaves easily cut the skin and cause irritation when handled.

Replace with:

Thatch saw-sedge (Gahnia radula)

(Goodenia ovata)













SHRUBS



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







Cotoneaster (Cotoneaster spp.)

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

Replace with:

Prickly currant-bush (Coprosma quadrifida)



English broom (Cytisus scoparius)

Seeds poisonous if eaten in quantity Replace with:

Slender bitter-pea (*Daviesia leptophylla*) and Golden spray (*Viminaria junceae*)



Flax leaf broom (Genista linifolia)

Seeds highly poisonous

Replace with: Slender
bitter-pea (Daviesia leptophylla)
and Golden spray
(Viminaria junceae)



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 (Optunia spp.) Replace with: Kangaroo apple (Solanum laciniatum)



Sweet briar (Rosa rubiginosa) Replace with: Sweet bursaria (Bursaria spinosa)





TREES X

Cootamundra wattle (Acacia baileyana)
Replace with:
Black wattle
(Acacia mearnsii)





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





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



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



CHEMICALS

Chemicals and fertilisers can be transferred from our home gardens to the natural environment. Chemical sprays can drift in the wind and powders can wash into waterways. Strong chemicals 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 v	yoursel	f a	tick	if \	ou:

•	
	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 damage chemicals p. 35)
	avoid using chemicals before it rains or on windy days
	use chemical alternatives (e.g. garlic sprays) or if you do use sprays, you target 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 due to additional pruning.

Chemical Score

7

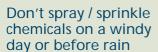
CHEMICAL TIPS

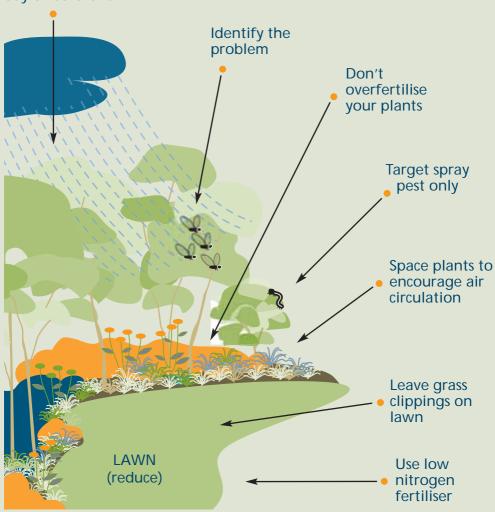
1. Many insects in the garden such as ladybirds are good guys that will eat pests such as aphids. If you overuse chemicals in your garden you may also kill beneficial insects and make your pest problem harder to control. Multi-sprays will kill anything they touch.





Reducing chemical usage





- 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 soil structure while 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
www.ecorecycle.vic.gov.au – Free Household Chemical
Collection Program

SGA LOW ENVIRONMENTAL DAMAGE 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 which have minimum environmental impact or ask your local garden centre for any new products.

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 Formula 3 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 RTII



INSECTICIDES CONT.

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

Growing fruit and vegetables commercially uses a large amount of energy and chemicals for heating, cooling, spraying weeds and pest and for 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 fertliser and compost, while local 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 and in big pots.
- 3. Don't use treated pine in vegetable gardens as the chemicals used to treat the timber can leach into the soil.
- 4. Use recycled plastic sleepers to make raised beds. These will not rot.
- Rotate the position of vegetables in your garden every year to stop diseases from spreading.
- 6. Use natural alternatives such as pyrethrum and garlic sprays to control pests.



- 7. You will need to apply regular water to your vegetables and check for pests, especially snails on new seedlings.
- 8. Use heritage seeds for more variety and often superior flavour. You can plant early, mid and late season tomatoes.

Further Information



PRODUCTS

When we buy products for the garden we often don't think about where they have come from, for example, red gum trees grow in woodlands which are part of an intricate ecosystem that supports native fauna. Red gum timber is used to produce items such as bark chips, tomato stakes and railway sleepers – harvesting this product is unsustainable. Huge amounts of shiny river pebbles are dug out of active rivers in Asia so we can create a garden feature.

ask where a product comes from and avoid buying unsustainable products
use sustainable products, such as secondhand bricks, recycled timbers, plastic sleepers
take your own plastic bag or canvas bag to a garden centre to carry home products and plants

reuse your plastic plant pots or put them in the yellow bin

Product Score /4

ALTERNATIVE PRODUCT TIPS

or a garden centre pot recycling bin.

Give yourself a tick if you:

- 1. There are usually alternative gardening products available. For example, pebbles quarried in Victoria from inactive streambeds are acceptable because they are not destroying living habitats.
- 2. Look up <u>www.timbershop.org</u> to find out which timbers are sustainable. While many outdoor furniture companies claim teak is plantation-harvested in Asia, this magnificent tree is a rainforest plant that cannot be grown in plantations.
- 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 they have been legally collected.

- 4. Make sure you ask where mulch has come from as some varieties are sourced from the logging of old growth forests and others may contain weed seeds.
- 5. Ceramic pots fired using gas and produced locally have a lower environmental impact than those pots fired using coal or wood and transported from overseas.



Further information

Forest Friendly Building Timbers – The Wilderness Society www.sgaonline.org.au www.timbershop.org www.ecorecycle.vic.gov.au



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 time. You can then keep working towards making your garden more sustainable.

Think Global Act Local

	^
	What I need to do to make my garden more sustainable:
-	
•	
•	
•	
•	
•	
•	

FOR FURTHER INFORMATION

For free sustainable gardening information and advice go to www.sgaonline.org.au

Or visit the following SGA environmentally accredited nurseries in the Nillumbik area for advice on sustainable gardening:

Diamond Valley Garden Centre Yan Yean Road, Plenty

Rivers Garden & Home Kurrak Road, Yarrambat

Hurstbridge Nursery Heidelberg-Kinglake Road, Hurstbridge Nurseries stocking indigenous plants suitable for the Shire of Nillumbik

Wyeena Nursery Kangaroo Ground-St Andrews Road, Smiths Gully 9710 1340

Edendale Indigenous Community Nursery Edendale Farm Community Environment Centre Gastons Road, Eltham

Keelbundoora Indigenous Nursery LaTrobe University, Ring Road,

Wildlife Reserve, Bundoora Phone 9482 1710

Victorian Indigenous Nurseries Cooperative (VINC) Yarra Bend Road, Fairfield Phone 9482 1710









Further reading

Live Local Plant Local, Nillumbik Shire Council 2005

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.