That’s why I’m digging sustainable gardening

Sustainable gardening tips to save time, money, water and support our native wildlife
Message from the Lord Mayor

Growing our urban forest

Brisbane is a great place to live, work and play and we enjoy a fantastic climate and outdoor lifestyle. Communities, families and residents across the city are seeking to reconnect with nature and gardening. That is why it is one of my top priorities as Lord Mayor to continue to enhance our environment.

Most of the green cover in Brisbane suburbs comes from everyone’s backyard. So every tree, shrub or native grass that you plant is helping to grow our urban forest. Trees and plants provide a home for Brisbane’s unique birds, animals and insects, give Brisbane its unique character and provide shelter and shade to our city.

Council’s citywide vision is to achieve 40% natural habitat cover by 2031. To reach this target, Council has a number of projects aimed at restoring forest and wildlife habitat across Brisbane to create a legacy for future generations to enjoy.

You can play an important role in keeping Brisbane clean, green and liveable by using gardening methods that are kind to our environment. Sustainable gardening methods include mulching and composting, planting appropriate plants in the right place and reducing the use of non-organic fertilisers and other chemicals which can damage our waterways.

Thank you for taking the time to read this guide, I look forward to working with you to make our city an even better place to live.

Graham Quirk
LORD MAYOR

Sustainable green gardening

Sustainable gardening methods play a vital role in reducing waste going to landfill, for chemicals entering our creeks and streams, conserving water and providing food and habitat for our native wildlife.

Sustainable gardening can be achieved through thoughtful planning. Plants that are well-suited to your garden and local conditions, will thrive and need less maintenance and watering. Careful choices of landscape elements will make your garden more attractive and provide food, water and shelter to our unique wildlife.

Growing even a small amount of your own food can make a difference to your budget and to the environment, and the good news is that you don’t need to have a big garden.

In fact, you can grow food in pots on a balcony, on a sunny window sill or in hanging baskets.

This guide provides a wealth of sustainable gardening information to assist you, whether you are getting started or have an established garden. There’s everything from designing your garden, what to plant and when, how to care for and maintain your plants, and the many benefits of bringing biodiversity into your garden.

There are tips and advice on balcony and small space gardening, plant selection and care and managing pests. You’ll find valuable local knowledge through the tips and hints provided by Brisbane residents, along with fun quotes, to help inspire you.
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Sustainable gardening

Why we garden

Gardening is good for your health, wealth and happiness. It enriches our lives and the world in which we live. People have been gardening indoors and outdoors for thousands of years and the enjoyment of gardening is universal.

Creating and growing a beautiful and functional garden gives us a great sense of achievement. Each time we venture into our garden we are reminded of our efforts because it is constantly evolving and changing. It is rewarding because the act of growing plants is full of creativity and wonder.

Gardening is good for your health and provides an opportunity to be active. Being outside, enjoying Brisbane’s subtropical climate and diverse plant and animal life, is so rewarding. Each season brings new opportunities to your garden.

The garden provides a place for families to connect. Children can find it a place of learning and wonderment. There is nothing more exciting than watching what you have planted grow and come to life with flowers, fruit or vegetables. Gardening teaches patience and encourages responsibility and commitment.

By supplementing some of your family’s food bill with organic home-grown produce you may save many hundreds of dollars over a year and improve your health through better nutrition and regular exercise.

Have we lost the skill of gardening?

Thirty years ago, many of us had a basic understanding of gardening principles. As our lives became busier, much of the desire and need to grow plants at home diminished. The improvements in food production technology and modern farming practices, that produce high yields and cheaper imports, have made food cheaper and more plentiful.

Communities across Australia look to reconnect with nature, the outdoors and fresh, healthy food, gardening is experiencing a real resurgence.

This guide aims to give you the tools you need to convert your interest into a beautiful, thriving and sustainable garden – whether you live in a house, townhouse or apartment.

Backyard gardening in the 1950s
What is sustainable gardening?

Sustainable gardening means that it contributes to, rather than takes away from, the Earth. It uses fewer resources and inputs from elsewhere, recycles resources and focuses on holistic outcomes. It seeks to conserve water, reduce waste going to landfill, decreases chemicals ending up in our creeks and streams, and provides food and habitat for our wildlife.

Because it is sustainable (meaning it sustains itself), this gardening technique can require less work to maintain, making it a more efficient, productive and less time-consuming activity in our already busy lives.

Why we need to garden sustainably

Sustainability is a principle that influences our decisions on how to maintain and enhance our quality of life, both now and in the future. Council encourages all residents to garden sustainably.

Sustainable gardening starts with thinking about exactly what we want from our gardens and what smart choices we need to make to achieve this. Whether we want our gardens to provide colour, shade, flowers, food or privacy, the principles are the same. We can achieve this with thoughtful planning, protecting native vegetation, removing environmental weeds, mulching and composting garden beds, using water efficiently, planting appropriate plants in the right place, using plants to help cool our houses and reducing the use of non-organic fertilisers and pesticides.

Give yourself a tick if you…

☐ Have designed your garden to make the most of cooling breezes and provide shade to protect your home from the hot summer sun.
☐ Have created a layered garden of trees, shrubs, grasses and groundcovers to create a haven for birds, butterflies, frogs and other native wildlife.
☐ Use Australian native, locally-indigenous plants, rather than invasive exotic plants.
☐ Grow some of your own produce.
☐ Make and use your own compost, or use a worm farm.
☐ Use mulch to keep the soil cool, moist and weed-free.
☐ Have a rainwater tank.
☐ Use only organic fertilisers and sprays.

Brisbane’s urban forest – how you are helping

Did you know that the backyards of Brisbane’s suburbs provide most of the green cover in the city? This contributes immensely to Brisbane’s urban forest. Just try to imagine what Brisbane would look like without our trees and plants. Every tree, shrub, native grass or groundcover that you have or that you plant is helping to grow Brisbane’s urban forest. This keeps our city green, clean, cool and more liveable for everyone to enjoy. For more information on Brisbane’s urban forest, visit www.brisbane.qld.gov.au
Sustainable gardening

This means that more carbon dioxide is being expelled and less plant matter is available to absorb the gas.

Carbon dioxide is a greenhouse gas that traps heat in the atmosphere. Life on Earth would cease to exist without this gas keeping the planet warm. The rapid increase of carbon dioxide in the atmosphere causes the Earth to become increasingly warmer, like a greenhouse.

While planting more trees is a good start, using less fossil fuels is also critically important. By making some behavioural changes such as walking or cycling, using public transport, driving your car less, using less electricity or buying green power, and growing or buying locally-grown, seasonal produce, you can greatly reduce your carbon footprint. This benefits the world in which we live and the Brisbane we love, now and for future generations.

The carbon cycle

[Diagram of the carbon cycle showing the processes of photosynthesis, plant respiration, animal respiration, root respiration, decay organisms, and fossilization.]

What is carbon?

Carbon is a biological element found in all living things, soil, ocean and the air. In nature there are continuous cycles of life and death, of which carbon is a key element.

Carbon is produced when plants absorb carbon dioxide (CO₂) and sunlight in their leaves and water from their roots. These plants are then eaten by animals. Carbon is returned to the atmosphere as carbon dioxide when animals breathe and plants respire, and then returned to the earth when they die and decompose.

However, since the Industrial Revolution began in the mid 1800s, the burning of fossil fuels (coal, gas and oil) and the high level of deforestation throughout the world has increased the amount of carbon dioxide in the atmosphere.
What can you do?

Visit www.brisbane.qld.gov.au for more information on reducing your carbon footprint.

What is Council doing?

Council is continually working to protect our natural environment. Many successful projects are delivered because of the cooperation between the Brisbane community and Council. Here are some examples.

- Council owns and manages more than 2000 parks and natural areas.
- The Bushland Preservation levy has purchased more than 3000 hectares of bushland and wetland since 1991.
- Through the Green Heart program, Council is helping residents, schools, businesses and community groups take practical steps to reduce their environmental footprint and live more sustainably.
- More than 2000 hectares of bushland is currently protected through the Wildlife Conservation Partnerships program and more than 100 hectares of waterways and bushland each year are rehabilitated by dedicated Creek Catchment and Habitat Brisbane groups.
- The Wipe Out Weeds program prevents new environmental weeds from establishing and treats existing weeds in priority areas. As part of the Brisbane invasive species management plan, Council created the online weed identification tool to help residents identify and remove pest weeds from their garden. Visit www.brisbane.qld.gov.au to use this tool.
- Environmental and sustainability grants help the community to undertake environmental and sustainability initiatives and environmental restoration projects. These have included the rehabilitation and release of native wildlife, support for community gardens, energy efficiency projects, and projects to improve our natural environment.
- Sustainable living seminars and workshops are offered across Council’s libraries. Facilitated by experienced gardening experts, participants can learn about propagating a garden, how to grow specific plant types successfully and sustainable practices to grow food and maintain an organic backyard.
- Council’s Free Native Plants Program offers Brisbane residents free native plants to plant in their home gardens, and schools, clubs and community groups to plant on their grounds.
- Community street tree planting events are fun events where local residents are involved in planting shade trees in their suburban streets.
Sustainable gardening
Everyone has their own style and your garden shouldn’t be any different. In this section you will find some hints and tips about things to think of when you are designing your garden.

Brisbane’s subtropical climate allows a wide range of plants to grow successfully. Whether you live in a house, townhouse or unit, your garden design can encourage a smooth transition between your indoor and outdoor living areas. This allows you, your family and friends to take advantage of Brisbane’s subtropical lifestyle and the best of Brisbane’s climate all year round.

A great garden complements our natural environment and our homes. Getting the design only half right means that soils can be washed away, spaces are unused, plants die and creeks are in danger of being polluted by chemical runoff and sediment. A good design starts with a plan.

**Designing your garden**

Sustainable gardens stand the test of time and low maintenance means less work and cost, and more time to enjoy. Whether starting from scratch or re-thinking an existing layout, good design begins with asking the right questions. Impulsive and unplanned buys are likely to cost you time and money down the track. You may wish to contact a landscape architect or garden designer for professional guidance, or you can use one of the many search tools available on the internet.

**GARDENING QUOTE**

*My garden is my most beautiful masterpiece.* Claude Monet

Here are some simple things to think about when designing your outdoor area.

- Which directions do breezes come from?
- Does this area receive morning or afternoon sun? Hot afternoon sun will encourage you to plant a shade tree or screening hedge.
- Is the area steep or flat? This will influence how water flows and collects.
- What kind of soil do you have? Is it sandy, clay, loam or a combination? Your soil type will influence what type of plants you can grow, what soil improvement you may need and dictate watering requirements.
Consider planting a layered garden where your design features shady trees, flowering shrubs, groundcovers and hardy tufting plants.

What do you want your garden to achieve? Grow some food? Create a fantastic floral display? Enhance your privacy? Provide shade from the hot western sun? Encourage wildlife? …or just make it that special place for you and your family?


Does your budget allow you to make small or major changes?

Design for your lifestyle. For example, choose plants that are low maintenance, low cost, wildlife friendly, provide shade, colour and texture or privacy and security.

Ensure your vegie garden/herb pots are easily accessible to your kitchen.

Are you beside a major road? Well-selected screening plants beside your fence will provide you with added security.

Walk around local streets to see how your neighbours have designed their gardens and look at what plants work well in the area. Visit display villages to see how landscapers have incorporated design and plant elements into the gardens.

Garden design plan after site analysis
What might have worked in your previous garden doesn’t necessarily mean it will work in your new setting. Be open and flexible with your plans.

Consider how much time, energy and money you can afford to give to your garden initially and over the years ahead.

Once you have completed your site analysis, prepare a garden design plan based on the opportunities and constraints identified.

**Garden design ideas**

- Create and use shade to reduce air temperature, water waste and evaporation.
- Provide interest all year by incorporating a mix of species with large-leafed colourful foliage such as crotons, cordylines and acalyphas, and flowering trees such as golden pendas, poincianas and frangipanis.
- Celebrate Brisbane’s native endemic plants for their beauty and habitat value.

**GREEN TIP**

Medium-sized shade trees (up to 7m) planted on the western side of a single-storey home can reduce summer cooling energy needs by 17%.

**GREEN TIP**

Remember to be a considerate neighbour by placing saucers under your pots to ensure there’s no run off to the balcony below. Let the saucers dry out occasionally to minimise mosquitoes.

Visit www.sgaonline.org.au for more information on sustainable garden design principles.

Give yourself a tick if you…

- Have a planting plan that includes grouping plants according to their water, sun and soil requirements.
- Have chosen hardy, low-maintenance plants that suit the area, soil and conditions.
- Have allocated a spot for your compost bin to help you with your lawn clippings and prunings, or ordered a Council green waste bin.
- Have considered how water flows naturally and where it collects on your property.
- Have designed your garden to take advantage of cooling summer breezes and planted accordingly in the sunny and shady spots.
- Use and enjoy your outdoor area constantly and couldn’t imagine life without it.

**Balcony gardens**

If you live in a unit or townhouse, your outdoor living space, i.e. deck, verandah, patio, balcony or pergola is an integral part of your home. There are lots of ways you can add plants and garden features to bring your ‘outdoor room’ to life. Hanging baskets, large pots and clusters of herbs, all combine to make your deck or balcony a welcoming green space.

**RESIDENT’S TIP**

*Use plants suitable to the climate and don’t overwater them* – Pop Don
Tips for balcony and small space gardens

High-rise gardening can be an extra challenge because of more exposure to sun and wind, but you can still create a thriving balcony garden. Some design tips include the following.

■ Check out how much sun your outdoor area receives and for how long. Take note of wind strength. By considering these factors, you will be able to determine which plants are best suited for growing in your garden.

■ Choose your garden type based on what you are trying to achieve. Would you like lots of colour, foliage, texture, edible or statement plants?

■ Incorporate the design – consider the view from inside before deciding on your design. Sometimes a large feature plant, trellis or water feature as the focal point is enough to draw the eye. Consider hanging baskets or vertical growing plants to utilise small space.

■ Invest in a vertical garden. This is a versatile way to make use of a blank wall in a small space. Your plants grow naturally upwards, mimicking how they would grow in a ground garden bed. Many of the styles available in the market come as DIY kits, which make home installation easy. This style of garden is perfect for herbs, veggies and flowering plants and is removable, should you ever change address.

■ Weigh it up – pots are heavy when they are full of soil, water and plants. To ensure stability of your deck, always ensure that you use lightweight pots and regularly check wooden decking for signs of rot or termite damage.

■ If your balcony gets battered by strong wind, consider planting a windbreak by growing climbers or shrubs on a trellis. Compact screening plants such as smaller illypillys are a good option.

■ Think about the logistics of carrying pots, plants, mulch and potting mix to the balcony if you live in a multistorey apartment. Planter boxes would be a better choice than lots of small pots which tend to dry out quicker and blow over more easily.

■ Consider the balcony balustrade of your outdoor area. A balcony with glass balustrades will conduct a considerable amount of reflective heat to your plants should this area face the hot western summer sun. Choose your plants according to these conditions. Decks that have slat-style balcony balustrades will allow air movement around your pots and plants.

■ Consider fragrant plants so you can enjoy their scents inside and outside your home, but be mindful of your neighbours as highly-scented plants can affect asthma or other allergies.

■ There are many pot options specifically designed for use in small areas such as balconies or courtyards. Plant towers and stackable containers are a great way to grow a variety of flowers, herbs and vegies. Many planters have wheels so you can move them around to suit the conditions and sun intensity.

RESIDENT’S TIP

Container planting is great for small spaces and for rental properties – Megan
If you are keen to put your own touch on the planters, recycle other containers such as a colander, old teapots or metal watering cans for a nostalgic look or repaint old worn pots in colours to match your mood and décor.

You may be several storeys up but bugs will still find your plants. Be aware that you still need to keep these in check. There are many natural and organic options available.

If your balcony spends most of the day in shade, go for shade-loving plants. If it faces the hot afternoon sun, plants adapted for drier conditions will do well.

Keep it simple and low maintenance – if it is easy to care for, then it is less likely to become cluttered and neglected with too many plants, or a storage area by default.

**RESIDENT’S TIP**

*Get outside, plant something. And enjoy life. You’ll be amazed what grows – Conway*

**GREEN TIP**

During hot summer months you can protect plant roots from burning by putting your potted plants inside larger empty plastic pots (double potting). This stops the roots and soil being directly affected by heat generated on the surface of the pot.
Once you have your garden design completed, it’s time to take a trip to your local plant nursery for advice on selecting plants. This section provides some suggestions for you to follow.

A thriving garden is a combination of healthy soil, suitable plants, correct site preparation and ongoing maintenance.

**GREEN TIP**

Always read the plant label carefully remembering that the information provided is a guide only. Plant growth is determined by many factors such as soil type, planting method (plant pot or in-ground), water availability, hours of sunlight exposure, fertiliser usage, climate and season.

**A checklist before you plant**

- Know the dry, moist, sunny and shady areas of your garden or balcony. Choose plants that will be suitable for each of those areas.
- Get to know your soil – is it clay, loam, sand, combination? Will you need to add organic matter to improve the soil and ensure a good start for your plants?
- Consider the overall garden design – what are your expectations?
- Design and create a layered garden. This will provide height and depth to your garden and will encourage all sorts of critters that will help with pest control.
- Prepare the site for planting – dig to loosen up the soil and add some organic matter (compost). This will help give your plants a great start.
- Lay out the pots before you plant. This will give you a great indication of how the finished garden will look and you can adjust as you go before you plant.
- Choose suitable plants – read all about the right plants for your needs, visit public gardens and open gardens, talk to your local nursery or landscape expert and avoid weed species that will cause problems for you and your local area.
- Keep in mind the mature height and spread of trees including potential root growth when you plant.

**Getting to know your soil**

Brisbane has many soil types. The most widespread is shallow, gravelly red and yellow loamy topsoil over clay. The other main soil types are shallow gravelly soils, deep red loamy soils and dark alluvial soils.

In many parts of Brisbane, urban development has impacted and changed the landscape. Soils are often low in nutrients, compacted or poorly drained and may also contain hidden contaminants, like lead paints that have permeated and tainted Brisbane soils. Gardeners need to be aware of their soil and its history and choose plants and gardening practices to suit the circumstances. Further information can be found on p57.
How to test your soil texture

<table>
<thead>
<tr>
<th>Soil type</th>
<th>Texture test result</th>
<th>Drainage test and result</th>
<th>Suggested soil improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand</td>
<td>Will not mould and feels very gritty.</td>
<td>Dig a hole and fill with 30 cm of water. Water is drained in less than 1 hour = poor water holding capacity.</td>
<td>– Mix compost into top 30 cm. – Add 75 mm organic mulch layer on top.</td>
</tr>
<tr>
<td>Loam</td>
<td>Can be moulded but only into shorter rolls and feels slightly gritty and crumbly.</td>
<td>Dig a hole and fill with 30 cm of water. Water is drained in 2-5 hours = good balance of drainage and water holding capacity.</td>
<td>– Maintain with ongoing mulching and compost additions.</td>
</tr>
<tr>
<td>Clay</td>
<td>Can be moulded into long, thin rolls and feels smooth but pliable.</td>
<td>Dig a hole and fill with 30 cm of water. Water is drained in more than 10 hours = poor drainage.</td>
<td>– Add gypsum to responsive clays. – Cultivate soil (e.g. with rotary hoe) to 30 cm. – Add organic mulch to surface layer only.</td>
</tr>
</tbody>
</table>

Plant nutrients at a glance

Regular nutrition is essential to promote health and vitality. But, like us, too much of one thing is not good and balance is the key.

Plants require a mixture of primary macronutrients, secondary macronutrients and trace elements for optimum growth and health. But what are these?

**Primary macronutrients** are the main source of elements required for sustained and healthy plants.

**Nitrogen (N)** is important to plants as this helps produce chlorophyll (for green leaves) and build amino acids.

**Phosphorus (P)** is the most widely used of the main elements as it promotes growth in plants and their root systems, and helps with flowering, fruiting and seed development.

**Potassium (K)** assists plants to produce chlorophyll by making cells stronger. This helps plants fend off disease and pests, and maintain water levels within the cells.

**Secondary macronutrients** are essential for healthy plants, but are required in much smaller amounts.

**Calcium (Ca)** helps build strong cell walls and roots.

**Magnesium (Mg)** is important for photosynthesis and keeping your plants green.

**Sulphur (S)** helps produce plant proteins and chlorophyll and is responsible for some of the flavours that our vegetables have.

**Trace elements** (chemical compounds that are essential for all living things to function properly. They are required in minute amounts.)

**Iron (Fe)** is good for growth.

**Manganese (Mn)** is important for the formation of plant proteins.

**Boron (B)** assists with cell formation for shoots, flowers, roots and fruit.
**GREEN TIP**

Not all potting mixes are the same. Buy the best quality potting mix that you can afford. Look for those that display the Australian Standard certification ticks. This way you’re ensuring that your money is being well spent on a quality product. Poor quality potting mixes contain less beneficial organic matter, will have poor water holding capability and will require the addition of fertilisers and compost.

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**Copper** (Cu) is important for carbohydrate and protein metabolism.

**Zinc** (Zn) assists with growth and development of roots and tips.

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**Right plant, right place, right reason. Why?**

This statement says it all. Before you plant, take the time to do some research on the plant and species, and where in the garden you want it to grow. This will save you time and money in the long run.

It is important to remember that you make the decision on where to put your plant, the plant itself has no choice in the matter. What it does after it is planted is determined by many factors and many are again influenced by your initial decision. A poorly-chosen spot in the garden at planting time can either create a sickly specimen or a plant that grows out of control and does not meet your needs or objectives.

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**RESIDENT’S TIP**

*Different plants need different amounts of food and water – Izabel (aged 10)*

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**Suitable plants**

The best plants for your garden are those that are suited to your local soil and climate, thrive on available moisture, suffer from few pests or diseases, and that provide food for you or food and habitat for wildlife. In addition, plants with attractive foliage or flowers provide our gardens with a vivid display at key periods during the year.

Give yourself a tick if you...

- Have found out what type of soil you have.
- Have done some research on plants that are suitable for both the site and conditions.
- Have taken the time to see what grows well around your neighbourhood.
- Have checked Council’s online weed identification tool guide at www.brisbane.qld.gov.au to ensure you don’t accidentally purchase any invasive plant species.

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**GARDENING QUOTE**

*Someday someone’s sitting in the shade today because someone planted a tree a long time ago.* Les Brown

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**GREEN TIP**

Dial before you dig. Call 1100 to check you’re not planting over plumbing, sewer pipes, service or power lines, or phone Council on 3403 8888.

The following tables show some suggestions to create a layered and habitat-friendly garden.
Groundcovers, grasses and vines

Groundcovers planted on slopes can prevent soil being washed away in heavy rain. Vines provide shade when grown over pergolas and privacy when grown over fences. They can also shade and soften balcony walls. Check with your neighbours and body corporate first.

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Features</th>
<th>Growing preferences</th>
<th>Wildlife promoting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Brachyscome spp.</td>
<td>Forest daisies</td>
<td>Small compact plants, daisy-like white, blue or mauve flowers.</td>
<td>Prefers moist soils with good drainage, full sun.</td>
<td>Butterflies, lizards</td>
</tr>
<tr>
<td>2 Dianella spp.</td>
<td>Flax lillies</td>
<td>Strappy groundcover; beautiful blue flowers on long spike in spring and summer, followed by blue berries.</td>
<td>Full sun to shade; well-drained soils preferred.</td>
<td>Lizards, birds, butterflies</td>
</tr>
<tr>
<td>3 Viola banksii</td>
<td>Native violet</td>
<td>Pretty creeping groundcover for borders and rockeries; tiny violet flowers mainly in spring and summer; usually sold as Viola hereacea.</td>
<td>Shade and semi-shade; grows in most soils; prefers some moisture.</td>
<td>Butterflies</td>
</tr>
<tr>
<td>4 Doodia aspera</td>
<td>Rasp fern</td>
<td>Excellent low, mat-forming fern to 30-40 cm high; attractive pink flush on new fronds.</td>
<td>Shade and semi-shade; tolerates dry conditions.</td>
<td></td>
</tr>
<tr>
<td>5 Pandorea jasminoides</td>
<td>Bower of beauty</td>
<td>Popular light native climber; showy pink flowers with a red throat; white forms also available.</td>
<td>Full sun and semi-shade; moist soils.</td>
<td>Birds</td>
</tr>
</tbody>
</table>
Low shrubs – 1-2 metres

Low shrubs provide welcome hiding places for skinks and blue-tongue lizards. Flowering varieties attract birds and butterflies. Because they’re small, these shrubs suit any size garden and many are happy living in a pot on a balcony or patio.

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Features</th>
<th>Growing preferences</th>
<th>Wildlife promoting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austromyrtus dulcis</td>
<td>Midyim berry</td>
<td>Up to 1 m; can be grown in tubs and rockeries; white flowers in summer.</td>
<td>Full sun and semi-shade; sandy soils preferred.</td>
<td>Birds</td>
</tr>
<tr>
<td>Westringia fruticosa</td>
<td>Coastal rosemary</td>
<td>Silver-grey foliage and showy white-mauve flowers; hardy; coast-tolerant plant.</td>
<td>Full sun to part shade; prune to shape if desired.</td>
<td>Insects</td>
</tr>
<tr>
<td>Melaleuca linarifolia ‘Claret Tops’</td>
<td></td>
<td>Low, fine-leaved hedging species; 1-1.5 m topped by reddish new growth.</td>
<td>Full sun; grows in most soils; tolerates wetter sites.</td>
<td>Birds, possums</td>
</tr>
<tr>
<td>Syzygium australe ‘Aussie Boomer’</td>
<td>Aussie boomer</td>
<td>Dense light-green foliaged shrub to 2 m; ideal for sites where a medium screen height is required.</td>
<td>Full sun and semi-shade; grows in most soils.</td>
<td>Birds, possums</td>
</tr>
<tr>
<td>Zingiber spectabilis</td>
<td>Beehive ginger</td>
<td>Tropical herbaceous plant to 2 m producing large leaves and very attractive long-lasting flowers shaped like a beehive.</td>
<td>Part shade; well-drained rich soils.</td>
<td>Frogs</td>
</tr>
</tbody>
</table>
Medium shrubs create the backbone of garden design. Many provide good screens for your garden or courtyard.

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Features</th>
<th>Growing preferences</th>
<th>Wildlife promoting</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Banksia spinulosa</td>
<td>Golden candlesticks</td>
<td>Spiky foliage and showy golden flower spikes; favourite of nectar-eating birds and gliders.</td>
<td>Very hardy shrub; prefers well-drained soils in full sun or part shade.</td>
<td>Birds, gliders</td>
</tr>
<tr>
<td>12 Callistemon spp</td>
<td>Bottlebrushes</td>
<td>Popular native shrubs with showy bottlebrush flowers in many colours; often flower over extended periods; many species and cultivars.</td>
<td>Full sun; hardy in most situations.</td>
<td>Birds, micro-bats, possums</td>
</tr>
<tr>
<td>13 Pavetta australiensis</td>
<td>Butterfly bush</td>
<td>Open, glossy-leaved shrub to 3 m; rounded heads of white, perfumed flowers in spring; useful edge species in rainforest plantings.</td>
<td>Full sun and shade; well-drained soils.</td>
<td>Butterflies</td>
</tr>
<tr>
<td>14 Brunfelsia australis</td>
<td>Yesterday, today and tomorrow</td>
<td>Sweetly-scented and colourful flowering shrub; mauve to white flowers; hardy; available in a range of forms and heights.</td>
<td>Sun and semi-shade; well-drained soils.</td>
<td></td>
</tr>
<tr>
<td>15 Codiaeum variegatum</td>
<td>Croton</td>
<td>Striking foliage plant; many cultivars available offering splashes and spots of colour in red, purple, green and yellow.</td>
<td>Full sun and semi-shade, well-drained soils.</td>
<td></td>
</tr>
</tbody>
</table>
**Small trees – 5-8 metres**

Smaller trees are suitable for many suburban blocks and add height to your garden. They also provide shade for your home and protection for shade-loving plants.

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Features</th>
<th>Growing preferences</th>
<th>Wildlife promoting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>16</strong> Cupaniopsis anacardioides</td>
<td>Tuckeroo</td>
<td>Excellent medium shade tree; glossy foliage and orange fruits; hardy.</td>
<td>Suited to a wide range of soil conditions; full sun to part shade.</td>
<td>Birds, butterflies</td>
</tr>
<tr>
<td><strong>17</strong> Atractocarpus fitzalanii</td>
<td>Brown gardenia</td>
<td>Glossy, dense, large-leaved native species; scented flowers; reach 6-7 m when grown in the garden.</td>
<td>Full sun to shade; moist well-drained soils.</td>
<td>Birds</td>
</tr>
<tr>
<td><strong>18</strong> Plumeria rubra</td>
<td>Frangipani</td>
<td>Small dome-shaped deciduous tree with brittle, stubby branches; clusters of fragrant white, pink or red flowers cover the tree in summer.</td>
<td>Full sun; hardy in a range of soils.</td>
<td></td>
</tr>
<tr>
<td><strong>19</strong> Xanthostemon chrysanthus</td>
<td>Golden penda</td>
<td>Small to medium rounded tree growing to 6-8 m; glossy, dark-green leaves; large golden blooms cover the tree in autumn.</td>
<td>Full sun; well-drained soils.</td>
<td>Birds</td>
</tr>
<tr>
<td><strong>20</strong> Buckinghamia celsissima</td>
<td>Ivory curl flower</td>
<td>Dense-foliaged tree to 8 m, covered in masses of cream, scented flowers in summer.</td>
<td>Full sun; moist well-drained soils.</td>
<td>Possums, birds, butterflies</td>
</tr>
</tbody>
</table>
Tall trees have real wildlife value, providing animals with food and nesting sites. While some may not fit into an average suburban garden, many are iconic Brisbane trees that can be seen in your local streets and parks.

<table>
<thead>
<tr>
<th>Botanical name</th>
<th>Common name</th>
<th>Features</th>
<th>Growing preferences</th>
<th>Wildlife promoting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Araucaria cunninghamii</td>
<td>Hoop pine</td>
<td>Majestic native pine; an iconic species of Brisbane.</td>
<td>Adaptable to most soils; hardy; salt spray tolerant.</td>
<td>Birds, possums</td>
</tr>
<tr>
<td>Delonix regia</td>
<td>Poinciana</td>
<td>Popular ornamental flowering tree common in older Brisbane suburbs; thick stout trunk often buttressed; dome-shaped canopy is covered in red flowers in summer.</td>
<td>Full sun; well-drained and composted soils.</td>
<td>Birds</td>
</tr>
<tr>
<td>Brachychiton acerifolius</td>
<td>Flame tree</td>
<td>Medium to tall tree reaching 10-12 m; brilliant red flowers in summer following spring leaf drop; large glossy leaves.</td>
<td>Full sun; deep well-drained soils.</td>
<td>Birds, butterflies</td>
</tr>
<tr>
<td>Waterhousea floribunda</td>
<td>Weeping lillypilly</td>
<td>Fast-growing, medium sized tree reaching up to 10 m; cream fluffy flowers in summer; dense weeping habit and dark-green foliage; also great screen.</td>
<td>Full sun and semi-shade; moist well-drained soils.</td>
<td>Birds</td>
</tr>
<tr>
<td>Stenocarpus sinuatus</td>
<td>Wheel of fire</td>
<td>Reaching up to 10 m with glossy dark-green leaves; 7 cm diameter orange-red flowers in early summer.</td>
<td>Full sun to part shade; well-drained soils.</td>
<td>Birds</td>
</tr>
</tbody>
</table>
When to plant and why

It is a good idea to plant during spring and autumn. At this time of year, plants have a better chance of establishing themselves before the heat of summer and the dry cold of winter. Giving your plant a good start in life will ensure it remains healthy and productive whether it is a seasonal vegetable or a flowering or fruiting tree or shrub.

The best way to manage your garden is to have a planting calendar. In the calendar you can note what to plant and when to fertilise and what other garden maintenance might be required. Doing little chores regularly makes maintaining your garden easier.

What to consider when planting

- Read plant labels carefully as they provide specific information on growth and care requirements.
- Avoid importing topsoil for your garden. It’s expensive, environmentally unsound and may harbour garden nasties like declared weeds or fire ants. Instead, use organic compost and mulch to improve the existing soil.
- Apply at least 75 mm of mulch to garden beds and keep it away from plant stems to prevent collar rot.
Brisbane’s climate is great for growing food plants and fresh, home-grown, organic fruit and vegetables. If space is limited consider tubs, pots or stackable planters as a great alternative.

Careful positioning of tall, shady trees can cool your house in summer but always plant powerline-friendly trees. If you are unsure what to plant, contact your local plant nursery or Energex’s ‘Safetree plants’ website at www.energex.com.au

If you live in, or next to, bushland be proactive about fire management. Place garden beds and trees away from the house, regularly clean gutters and remove vegetation overhanging your roof. For more information about protecting your property visit www.brisbane.qld.gov.au or call Council on (07) 3403 8888.

**Companion planting**

When we think of companion planting we generally think of planting for pest management. However, the idea also includes other plant partnership aspects that you can use in your garden. An example includes planting shade-loving plants among your taller trees and shrubs. The taller vegetation will provide the shade and leaf mulch and the low-growing plants will keep the ground cool and damp. This encourages good garden health and ongoing benefits to plants and wildlife.

Companion plants will not stop all unwanted bugs from feasting on your plants but they may help to keep away some insects and chewing critters. Just remember that one marigold isn’t going to fend off all invaders and you may need to step in from time-to-time.
While it is not an exact science, the concept of growing other plants among your shrubs, fruit and vegies has merit. Sometimes it comes down to choosing plants that perform well together. For example, many plants give off smells from their leaves and roots and others will attract pollinating insects.

**Shade and feature trees**

Shade and feature trees can make a dramatic statement in your garden. To keep your tree the focal point of your garden it is important to take the time to choose the species best suited to your needs and the environment.

Trees should be seen as an asset to your home and caring for them is not as hard as you might think. Having them regularly inspected by a qualified arborist before storm season will ensure your tree continues to provide you and your family with many years of benefits and pleasure.

**GREEN TIP**

To help you manage trees on the footpath or in a road reserve in front of your property, Council provides permits for minor street tree pruning work. To apply for a permit for minor street tree pruning or to request street tree maintenance or planting, please phone Council on (07) 3403 8888 or visit www.brisbane.qld.gov.au

**Some tips about planting trees**

- It’s all about choice and placement. Plant larger trees around the perimeter and smaller-growing shrubs closer to your home.
- Establish new trees correctly. Deep watering will encourage roots to grow down further and anchor the tree.
- Be mindful of the critical root zone size of mature trees to ensure long-term health and safety (see maintenance section on page 46).
- Planting trees together will provide a buffer and by planting small shrubs among the trees, any wind will be driven upwards, thus taking any constant whip pressure off the trunk.

Great examples of shade and feature trees for Brisbane suburbs include:

- blueberry ash (*Elaeocarpus ‘Prima Donna’*)
- aniseed myrtle (*Backhousia anisata*)
- lemon aspen (*Acronychia acidula*)
- native gardenia (*Atractocarpus fitzlanii*)
- frangipani (*Plumeria rubra*)
- golden penda (*Xanthostemon chrysanthus*)
- tuckeroo (*Cupaniopsis anacardioides*)
- ivory curl tree (*Buckinghamia cellisima*)
- lemon scented myrtle (*Backhousia citriodora*)
- flame tree (*Brachychiton acerifolius*)

Council’s website lists other native plants that are great for Brisbane conditions including groundcovers, climbers, tufting plants, grasses, and shrubs. Visit www.brisbane.qld.gov.au to see the list.
Give yourself a tick if you…

☐ Have taken the time to research a tree and decided on the best planting location and season.

☐ Have designed your garden to best suit your needs, e.g. shade from the western sun.

☐ Have located and contacted a qualified arborist in your area to have your trees inspected.

The following table is a guide when planting new trees or undertaking construction in your backyard. An arborist can plan a root management scheme that might involve regular pruning of small surface roots next to a structure before they grow big enough to cause damage.

<table>
<thead>
<tr>
<th>Tree at mature height</th>
<th>Distance from building/fence/services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 5 m</td>
<td>minimum 1 m</td>
</tr>
<tr>
<td>5-10 m</td>
<td>minimum 3 m</td>
</tr>
<tr>
<td>10-20 m</td>
<td>minimum 5 m</td>
</tr>
<tr>
<td>&gt;20 m</td>
<td>minimum 10 m</td>
</tr>
</tbody>
</table>

**Existing tree roots**

If you are planning to build a new home and your block of land already has mature trees, you need to decide before you build whether or not any of those trees may pose a problem in the years ahead. Disruption to tree roots during building of your home or changing natural drainage patterns can make existing trees unstable and often the effects of these changes won’t appear for several years.

Always have trees inspected by a qualified arborist prior to the development of your home. You will need to check with Council on any protection your trees may have. For information on the Natural Assets Local Law (NALL), which protects natural assets including trees, visit www.brisbane.qld.gov.au and search for ‘NALL’.

Now that you are ready to plant, here’s a guide on how to successfully establish your plant.

**GREEN TIP**

Avoid planting large trees near sewer pipes. Help keep tree roots out of the sewer system by ensuring pipes on your property are well maintained and properly repaired. Remember faulty pipes encourage tree root problems.

**GARDENING QUOTE**

A city without trees isn’t fit for a dog. [www.treenet.org](http://www.treenet.org)
**Correct planting technique**

1. Dig a hole at least twice as wide and slightly deeper than the pot size.

2. Loosen the soil at the sides of the planting hole. Fill the hole with water and allow to drain away.

3. Add some soil wetting agent to the hole and mix through half of the backfill soil. This will help to retain moisture in the soil for longer and reduce watering requirements.

4. Gently remove the plant from the pot and place it in the hole with the top of its root ball level with the surrounding ground. Backfill the remaining soil.

5. Press the backfill down with your hands and make a saucer-shaped depression around the plant to hold water.

6. Water the plant thoroughly after planting.

7. Water the plant once a week for the first two months using no more than twice the volume of the original pot. Thereafter, water when the soil feels dry, watering until soaked but not saturated.

8. Mulch a zone of at least half a metre and 75 mm thick will help to retain moisture and discourage weed growth. To prevent collar rot, avoid placing mulch against the stem of the plant.

9. Fertilise with composted animal manure, grass clippings or leaf litter to provide adequate nutrients. Don’t put fertilisers/manures at the bottom of the hole as this will burn the plants’ roots. Mix the fertiliser with mulch or apply on the surface. Avoid using commercial fertilisers during dry conditions as they require lots of water and may damage your plants if incorrectly used. Use strictly in accordance with manufacturer’s specifications.

10. To encourage bushier growth, prune broken branches or suckers from new plants.
Superb fairy-wren
Bringing biodiversity into your urban garden

Sharing your garden with wildlife

The Brisbane of today is a very different place from how the first European settlers saw it more than 150 years ago. Development, population, and infrastructure have changed the landscape and impacted our wildlife population and their natural habitat.

Creating a welcoming habitat garden

A good habitat garden encourages a wide variety of wildlife, some as residents and some as visitors. Unfortunately, many of our urban gardens do not offer wildlife enough food, water or shelter. By making some easy changes to your garden you can encourage wildlife such as birds, butterflies, insects, possums, lizards and frogs.

To increase the biodiversity of your backyard and enhance its attractiveness to wildlife, include landscape elements that provide water, food and shelter. Simple things like planting local native plants (including those that produce nectar and seeds and provide nesting materials), providing a bird bath or frog pond as a water supply and carefully placing rocks and logs around your garden will help bring your garden to life.

RESIDENT’S TIP

*Plant native plants in your garden, they will attract birds and insects* – Alice (aged 10)

RESIDENT’S TIP

*Put in a water pond to attract frogs to keep insects down* – Tom

**Common jezebel**
Bringing biodiversity into your urban garden

Below are some things to consider when creating your habitat garden.

- Use local plants sourced from a reputable nursery.
- Create a layered garden by planting trees, shrubs, grasses and groundcovers of varying heights. This will create a multistorey home for wildlife. The more levels you have, the more biodiversity your garden will support.
- Plant a variety of flowering plants that bloom at different times of the year. This will keep birds, butterflies and bees fed and busy all year.
- Be a responsible pet owner – keep your pets inside, especially at night.
- Reduce or stop using pesticides and poisons in your garden as these can unintentionally harm or kill native wildlife.

Benefits of habitat gardening

The presence of native animals in your garden brings many benefits, providing colour, sound, life and, in many cases, pest control. Birds, frogs and lizards are some of the species that should be welcomed into your garden.

Blue-tongue lizards, water dragons and skinks are great companions for your garden. They love snails, slugs and other slippery pests and will happily keep these under control at no cost to you. To encourage them into your garden, ensure there is plenty of leaf litter or mulch and plant some groundcover plants like brachyscomb or native grasses such as kangaroo grass or dianella. Including rocks or logs in your garden will give lizards places to shelter and hide from birds and domestic pets.

Sugar glider

WILDLIFE TIP

Do not remove logs, rocks or pebbles from a natural area as you will deprive animals living in that area of their homes and food sources. You could also unknowingly spread unwanted weeds or pests.

GREEN TIP

Avoid using snail baits if you want blue-tongue lizards in your garden. If a blue-tongue eats a snail that has been poisoned by bait, the lizard will also die from secondary poisoning.

Birds also play an important role in the garden. They bring song, colour and life and are efficient bug catchers. It’s always best to plant food plants for birds like grevillea, hakea, bottlebrush, lillypilly and banksia to allow them to eat a natural diet. To give smaller birds, like wrens and willy wagtails, shelter and protection, plant thick bushy shrubs like westringia or callistemons in your garden.

For more information on how to attract birds to your garden visit:
www.backyardbuddies.net.au
www.birdsinbackyards.net
Interference from humans can throw out a bird’s nutritional balance and may mean they will become reliant on your handouts. This can lead to aggressive behaviour and increase the spread of disease from unclean feeding stations. An overabundance of uneaten seeds can attract rodents, and seeds may become toxic to your feathered visitors. Also avoid feeding birds bread, as this can lead to malnutrition, or blockages in their digestive tracts which may lead to illness or early death.

Some good websites to help you plan your frog pond include:
www.frogs.org.au
www.ranafrog.org.au/ponds01

Encouraging frogs is another fantastic way to bring biodiversity to your garden. Creating a frog pond will encourage native frogs to visit and will provide a great place for them to live and breed. Before you build your frog pond take the time to research what is required for a successful project, as you want to attract frogs and not cane toads. It is also important to remember your neighbours and be mindful of where you place the pond.

**RESIDENT’S TIP**

**Plant lots of trees which encourage birds. The trees and birds bring life, colour, movement, interest and great joy** – Helen

**RESIDENT’S TIP**

**To deter cane toads from your frog pond use a raised pond or, if your pond is at ground level, densely plant clumping natives such as lomandras and dianelas sedges continuously around the perimeter** – Anna

**WILDLIFE TIP**

**Wildlife water pond**

A well-constructed wildlife pond is a beautiful addition to your garden. By including a range of native plants around the pond, you will provide food, water and an attractive haven for many diverse animals.
Bringing biodiversity into your urban garden

Encouraging beneficial bugs to your garden

All too often, any bug that walks, flies, hops or crawls will meet an untimely death in your garden as it might chew or destroy your favourite plants. They generally meet their death by asphyxiation from bug spray or get squished under your shoes.

However, not all bugs are going to view your plants as an all-day buffet. Many bugs can be beneficial to your garden and can be great indicators of the health of the local environment.

Some good bugs to invite into your garden are centipedes, beetles, bees, butterflies, lacewings, ladybirds and garden spiders. These creepy crawlies enjoy dining on garden pests such as aphids, mites, mealy bugs, small caterpillars and flying insects like flies and moths.

You can encourage beneficial bugs into your garden by providing plants such as geraniums, daisy-like flowers (brachyscome, sunflowers, asters), coriander, parsley and many of our native flowers. They will also help to pollinate your plants. The first step is put away the insecticides, pesticides and other chemicals which harm or kill beneficial bugs.

For more information about attracting beneficial bugs to your garden visit:

www.urbanvegetablepatch.com/tag/beneficial-bugs/

WILDLIFE TIP

Did you know that it takes more than 100 years for suitable nesting hollows to develop in mature native trees? Many Australian birds, bats and mammals rely on these hollows for safety and security and as a place to raise their young. Unfortunately, nesting hollows are becoming rarer as mature trees are lost to development. You can do your bit at home by building a nesting box. The design of the box will depend on the species but there are many design options available online. Many produce stores or nest box suppliers carry assembled nest boxes and can provide you with instructions on correct installation.
**Invasive pest animals**

While we’d like to encourage native animals into our backyards, there is the potential for unwanted pests like foxes, wild dogs, cane toads and feral cats to be attracted to our very inviting urban environment. They are very adaptable to new surroundings and will seek out food, water and shelter where they can.

Each night, make sure you remove food and water from pet bowls as leftovers will attract foxes, rodents, cane toads and feral or stray cats and dogs. These animals can pass on diseases to your pets, so by removing the food source they are less likely to visit your home.

The common myna is an introduced bird species that is considered to be the equivalent of a backyard bully. They are very aggressive to other birds (and sometimes small children) and will move into other native birds’ nesting hollows if the opportunity presents itself. They are known to toss out unhatched eggs and fledglings. These birds are easily identifiable by their bright yellow beaks and legs, and brown/black bodies. The Australian noisy miner is less of a colour show-off but also has an aggressive, territorial nature.

Cane toads are another introduced species that, in less than 100 years, have spread over several states and are still heading west. These pests upset and destroy natural ecosystems and cause problems for our native frog and reptile populations.

Foxes, wild dogs and feral cats are three other pests that have been introduced into Australia. They are *Class 2 declared pests* under the *Land Protection (Pest and Stock Route Management) Act 2002*. Between them, these pests kill more native wildlife than any other invasive species and are very active within our urban environments.

They are opportunistic hunters and will prey on your backyard chickens, eat any leftover pet food and steal from unsecured rubbish bins. Foxes are also a potential carrier of disease such as the rabies virus.

There are some bird species that residents probably regard as pests, but which are an important part of our natural environment. These include brush turkeys, ibis, magpies, sulphur-crested cockatoos and crows. Unfortunately for these birds, the loss of their native habitat has forced them to move into suburbia. To ensure our health and safety, and that of our wildlife, it is best to minimise direct contact or conflict with these species.

While some of their behaviours are seasonal (e.g. brush turkey’s mound building and magpie swooping in early spring), others are learned. Not securing rubbish bins or leaving out uneaten pet food will encourage more of this learned behaviour.

For more information about living with Brisbane’s native wildlife and how you can be a good wildlife neighbour, visit www.brisbane.qld.gov.au
Once you have established your sustainable garden, the next step is to know how to care for it through regular maintenance. This section will provide some information for you to follow.

A sustainable garden is a winner in the maintenance stakes. It is low maintenance because it needs less mowing, less pruning, fewer chemicals and less watering. This means you will spend less time maintaining it and more time enjoying it!

Compost

Compost is a complete DIY plant food and soil conditioner. It is great for soil structure, root growth, soil water-holding capacity, and helps to increase the presence of worms and other beneficial organisms. It turns everything from vacuum cleaner dust to eggshells into free fertiliser. Most importantly, it diverts nutrient-rich organic waste back into your garden, rather than into a landfill site, helping to reduce damaging greenhouse gases. Remember: healthy living soil = healthy plants.

How to make compost

Your compost will be healthiest and most efficient if it’s built using a layered method. The four key compost ingredients are nitrogen, carbon, oxygen and water. In our Brisbane climate, a 50% carbon/50% nitrogen ratio is ideal, with oxygen and water added as needed.

**Nitrogen** – added by green and fresh ingredients such as:

- fruit and vegie scraps
- fresh lawn clippings
- tea leaves/bags, coffee grounds
- manure from grass-eating animals i.e. horse, cow, sheep, chicken, bird
- egg shells.

**Carbon** – added by dried and aged ingredients such as:

- dried leaves and brown grass clippings
- scrunched/shredded newspaper
- paper towels and cardboard
- small twigs and small sticks
- vegie seedlings at the end of their season
- straw
- vacuum cleaner bag contents.

**Oxygen** – added by mixing and aerating your compost weekly.

**Water** – added by watering the compost during construction, and when you notice it is dry while stirring. Your compost should always be damp, but not wet.

For a great guide on how to compost, or to find out about Council’s free composting and worm farming workshops, visit Council’s website or call Council on (07) 3403 8888.
Caring for your compost

Proper compost pile maintenance involves occasional turning and adding acceptable materials to the pile. Some rules to follow are:

- Alternate nitrogen-rich materials with carbon-rich materials, making the layers 5-10 cm deep.
- Sprinkle soil or finished compost between every few layers.
- Add oxygen by turning the pile regularly (the more you turn it, the sooner it will be ready to use).
- Keep moist but not wet.

Avoid adding:

- animal meats, fats or products (as this will attract vermin)
- weeds (all weeds should be avoided to prevent them resprouting)
- pet droppings (these should be avoided if the finished compost will be used on a vegetable/fruit bearing plant)
- twigs thicker than your thumb as these will take a long time to break down
- rose cuttings to avoid hurting yourself during harvesting
- seafood
- diseased plants as the disease may spread throughout your garden.

Compost tips

It is handy to keep a separate bin in your kitchen for fruit and vegetable scraps for your compost heap. The compost is ready for garden use when it has reduced to a dark, fine, earthy-smelling soil-like material, or when you can no longer recognise any of the materials you added. This may take between three to six months depending on the type of compost bin you use and how often you turn and mix the contents.

GREEN TIP
If you cannot compost, try a worm farm or offer your vegetable scraps to your neighbours who have a compost bin or chickens.

GREEN TIP
If your chosen method of composting is a compost heap or compost enclosure, remember to keep your compost covered and turn regularly to discourage rat and mice infestation.

RESIDENT’S TIP
Recycle takeaway coffee cups into pots for seedlings – Barbara
Once you start mixing your compost, the layers of carbon and nitrogen will be disturbed. This is normal and will help to distribute the decomposing microorganisms throughout the pile to continue the break-down process.

If you are looking for an easy and simple DIY version of a composter, then a compost tube using a bucket or a piece of poly pipe might be for you – visit www.offbeathome.com/2012/07/worm-tube-composting for more information.

My whole life has been spent waiting for an epiphany, a manifestation of God’s presence, the kind of transcendent, magical experience that lets you see your place in the big picture. And that is what I had with my first compost heap. Bette Midler

However small your garden, you must provide for two of the serious gardener’s necessities, a tool shed and a compost heap. Anne Scott-James
**Marvellous mulch**

Even if you don’t have a compost heap or bin, you can still enjoy the marvellous benefits of mulch. Simply spread weed-free dry grass clippings, leaves and shredded prunings on top of the soil to a depth of 15 cm for course material such as leaves and shredded prunings and only 2.5 cm for fresh grass clippings. Remember to keep the mulch away from plant stems to avoid collar rot.

**GREEN TIP**

If you put mulch on too thickly, a crust may develop and prevent water penetration. It’s always a good idea to periodically turn over your mulch to aerate it and to assist with decomposition.

**Benefits of mulch**

Mulch can:
- suppress weeds
- act as a natural slow-release fertiliser
- provide a home for plant-friendly insects and other beneficial organisms
- keep up to 70% more water in the soil than unmulched soil
- keep soil temperature stable

For more information on composting or mulching visit www.brisbane.qld.gov.au or call Council on (07) 3403 8888.

**GREEN TIP**

Improve your soil by adding organic matter. Your garden worms will break down the nutrients which will improve its texture and structure making it great for plant growth.

**Mulch versus no mulch**

![Diagram showing the benefits of mulch compared to no mulch](image-url)
Hooray for worms!

If you don’t have room for a compost bin, consider setting up a worm farm. You can either buy one from a hardware store or supplier, or make your own. Worm farms are a great alternative to compost if you live in an apartment or townhouse.

Compost worms are great gardeners. They eat all your fruit and vegetable scraps and produce microbe-rich castings that are full of nutrients for plants. The liquid castings are a fantastic fertiliser and can be used instead of commercial fertilisers. The liquid should be diluted at a rate of 1:10 (i.e. one part ‘worm tea’ to 10 parts water) to ensure you don’t burn or overfeed your plants.

Garden earthworms are just as hard working. They munch up organic matter creating tunnels for air, water and delicate roots through the soil as they go. They play a very important role in a healthy, sustainable garden.

For more information about worm farming and Council’s free worm farming workshops, visit www.brisbane.qld.gov.au

GREEN TIP

Remember that compost worms are a different species to garden worms. Compost worms are surface dwellers and are one of nature’s best recyclers. Garden earthworms are great at deep burrowing which helps loosen soil and allows water and air down to the roots of plants.
Fertilisers

Some forms of fertiliser are often expensive, require a lot of water and may not even be necessary. Check any nutrient deficiency symptoms in foliage with your local nursery. Avoid chemical fertilisers and go organic with your own mulch and compost.

Nitrogen-rich fertilisers cause algal blooms and increase weed growth in our waterways. This disturbs the ecological balance for animals and plants that live there. Some native plants, such as banksias and grevilleas, are sensitive to phosphorus so avoid using fertilisers and greywater on these.

If you feel as though you have to use extra fertilisers:
- confirm why you need them
- never allow fertilisers to run into creeks or stormwater drains
- follow the manufacturer’s instructions carefully
- ensure that you dig the fertiliser in well to minimise the chance of run-off
- never fertilise a dry plant. Always ensure that you have given the pot or garden bed a good deep watering before and after applying fertiliser. This will protect your plants from fertiliser burn.

Don’t over-fertilise your plants.

Target spray on pest only.

Space plants to encourage air circulation.

Leave grass clippings on lawn.

Use greywater to fertilise.

LAWN (reduce lawn area)

Identify the problem.

Don’t spray/sprinkle chemicals on a windy day or before rain.
Lawn care

Australians love their lawns. There is nothing more iconic than a game of backyard cricket with your family and neighbours. Lawns give functional, recreational and aesthetic value to our homes and streets.

A well-maintained lawn adds value to your home by:

- reducing reflective heat produced from hard surfaces, e.g. concrete, pavers
- controlling soil erosion
- stabilising soils and reducing dust
- filtering and trapping rain and water and reducing runoff into stormwater drains
- complementing your flowering shrubs and trees
- producing oxygen and reducing greenhouse gases by absorbing carbon dioxide
- providing a safe surface for kids to play games and sport
- changing your perception! View mowing your lawn as a form of exercise rather than a chore.

But as much as we enjoy our own private green space, keeping the lawn at its peak requires regular maintenance. Here are some tips for maintaining your lawn.

- Only water when your grass needs it. This will encourage the roots to grow deeper so you will water less long term. Lawn, unlike many other plants, will regenerate after rainfall.
- Fertilise sparingly during autumn and spring or before good rainfall. Too much fertiliser will result in excess growth and increased garden maintenance. Fertilisers can be washed into stormwater drains and into our local creeks.
- Aerate your lawn with a garden fork periodically to increase airflow to the roots, allow for continued water penetration and reduce compaction from cars and foot traffic.
- Mow your lawn on the highest level setting. This will avoid scalping your lawn, minimise evaporation and leave your lawn less vulnerable to weed infestation.
- Wash your car on the lawn. The soap residue will run off onto the lawn and not down the stormwater drain.

RESIDENT’S TIP

To get the best out of your watering regime, water either first thing in the morning or in the late evening – Carol

GREEN TIP

On hot summer days, lawn temperatures will be around 10 °C cooler than bare soil and at least 20 °C cooler than pavers or concrete.

RESIDENT’S TIP

Houses are just houses. To make a home, a house needs a garden – Karen

GARDENING QUOTE

Gardening is learning, learning, learning. That’s the fun of them. You’re always learning. Helen Mirren
Mowing
How do you rate as a mower? Give yourself a tick if you:

☐ compost or mulch weed-free grass clippings
☐ have replaced some of your lawn with gardens and/or vegie patch
☐ only cut the top third of the grass
☐ mow regularly during the summer growing season
☐ don’t use a catcher on parts of the lawn you don’t often visit
☐ use a mulching mower that shreds clippings finely
☐ service your mower regularly and keep the blades sharp
☐ are a considerate neighbour, who only mows and whipper snips between 7am-7pm Monday-Saturday and or after 8am on Sunday
☐ water your lawn with greywater from your laundry or shower, or have installed a rainwater tank
☐ use an energy-efficient, hand-push mower
☐ practice safety in the garden by wearing a wide-brimmed hat, long-sleeved shirt, gardening gloves, sunglasses, sturdy shoes and sunscreen.

Pruning
Some native plants, such as bottlebrush and tea tree, benefit from pruning. It promotes flowering and prevents the plant from becoming straggly or woody. You can keep your pruning chores to a minimum by choosing plants that grow to a size that suits their location.

Pruning your trees is a good idea to reduce their centre of gravity. When pruning a tree make sure you do not cut back the lower limbs as this will make the tree top heavy. If in doubt contact a qualified arborist for advice.

Always dispose of your prunings by one of the following methods.

- Get a green waste recycling bin from Council.
- Buy your own mulcher to shred larger prunings before placing them in your green waste or compost bin.
- Separate green waste and general waste before going to the Council transfer station.
- Contact a reputable garden waste removal service that mulches, recycles and collects your garden clippings and prunings.
- If your prunings show signs of disease or fungus, place them in a black plastic bag and dispose of the bag in your general waste bin. Prunings that contain diseases or fungus are best not composted in your compost bin.

RESIDENT’S TIP
Use finely crushed volcanic rock in your garden as it’s cheap and full of minerals – Daniel
Keep your garden tidy all year round

Green waste recycling bins are the easy and affordable way to get your garden into shape and are collected fortnightly from your home.

Recycling your lawn clippings, prunings and leaves is good for the environment and ensures that your garden waste is reused as compost and mulch, helping to create a more sustainable, green and clean city.

To find out more visit www.brisbane.qld.gov.au/waste or call Council on (07) 3403 8888.
**Garden waste disposal**

A big threat to our natural environment is the dumping of rubbish including garden waste and lawn clippings.

Garden waste, such as plant prunings, soil and grass clippings can introduce or spread weeds, plant diseases or pests such as fire ants into bushland. Their introduction causes competition with native plants and can destroy habitat. If native plants suffer, so do the native birds, animals and insects that need those plants for food and shelter. Green waste can also add fuel to the bush and during the hot dry summer season, increase the risk and intensity of bushfire.

Dumping rubbish, including garden waste such as grass clippings and prunings, is illegal and penalties apply. Be responsible and take your garden waste to one of Council’s four transfer stations or order a Council green waste bin.

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**GREEN TIP**

Old potting mix can be added to your compost, turned into your garden beds, spread around your vegie patch or reconditioned by adding and mixing manure and aged compost into the potting mix.

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**Water sense**

As Australians, we live on the driest inhabited continent on Earth. Drought and excessive rainfall are a periodic reality for most parts of Australia, including Brisbane, and we need to be smart about how we use the water available to us, even in the good times. By following good water management practices we can lessen the pressure on this precious resource not just for today, but for the future.

It has been estimated that up to a third of water wasted in the garden is through inefficient watering practices, e.g. not mulching, having water-repellent soils and poor garden design. Here are some tips to reduce any water wastage.

- Always check first to see if your plants need watering. An easy way to test is to insert your finger into the dirt and then remove it to see if the soil on your finger is wet or dry.

- Use a soil wetting agent to assist with the soil’s ability to absorb water more efficiently.

- After you have watered, check to see how far it has penetrated. Ideally, it should be to a depth of 10 cm.

- Group plants with similar watering requirements together.

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**GREEN FACT**

Roadside or bushland dumping is illegal and penalties apply. If you see someone dumping waste illegally, ‘dob in a dumper’ by calling Council on (07) 3403 8888. Write down the registration number, make and model of the vehicle as well as the time and place. For safety reasons, don’t confront the dumpers.
Green Gardening Guide

Garden care

- Mulch your gardens and pots well. Mulch made from recycled organics (i.e. sugar cane mulch) is a great water saving product.
- Think about replacing your lawn with garden beds or use a more waterwise variety of grass – check with your local plant nursery on the best variety for your area. Lawns are resilient so if your lawn goes brown, it will rejuvenate with the next good rainfall.
- Water pots and plants on a low-pressure setting on your hose. This will allow deep water penetration of your plants. Spray settings will only provide surface watering.
- Deep watering is more beneficial than frequent surface watering as this encourages deep root growth.
- Install a rainwater tank.
- Use greywater from your laundry and bathroom. Just remember not to use this water on your edible vegetables or phosphorus sensitive natives.

Give yourself a tick if you:
- use mulch on your pots and gardens
- group plants together with similar watering needs
- have a rainwater tank and/or a grey water diverter
- water early in the morning or late in the afternoon (in accordance with current restrictions)
- have planted waterwise plants
- use a soil penetration water device or soil wetting agent to provide deep watering to your plants
- use grey water on your plants (except some natives and edible plants)
- have planted a shade tree to reduce evaporation
- have reduced the size of your lawn
- have less than 50% of your garden area planted with lawn.

For information on water restrictions that may be in place, contact the Queensland Government on 13 74 68.

GREEN TIP

To ensure that your plants grow strong and deep roots, heavy and occasional watering is the best approach. Little and often shallow watering techniques will cause your plants to produce surface roots and the plants will lose their drought tolerance.

GREEN TIP

Greywater can contain elevated levels of sodium, phosphorus and contaminants. Avoid using it on grevilleas, banksias, azaleas, gardenias or directly on edible crops.

GARDENING QUOTE

I like gardening – it’s a place where I find myself when I need to lose myself. Alice Sebold

RESIDENT’S TIP

Bury your scraps in your garden – Lorena (aged 12)
What to do to protect your special tree

Trees

Your garden is a reflection of you and a specially-planted tree can represent a significant event in your family (e.g. child’s birth) or just a statement to your home. It’s important to look after not just your special tree but all trees in your property.

Give it loving care by:

- mulching the critical root zone (see picture opposite)
- hiring a consulting arborist to inspect, prune or remove dead or dangerous branches from your trees.

Tree root maintenance

A tree’s ‘critical root zone’ is the area directly underneath the canopy of a mature tree, right down to the root structure.

All activities in this zone have a direct impact on the tree and its roots. Tree health, vigour and stability are linked to root health. Any damage to the roots can weaken branches in the tree’s canopy. Weak roots mean unstable trees during extreme weather conditions.

When working in the critical root zone, avoid:

- digging
- root cutting or other damage
- filling
- spilling chemicals
- compaction
- vehicular traffic
- paving.

What NOT to do to protect your special tree
The following are ways to avoid any problems that roots might cause.

- Plant trees away from structures. A guide to how far is available in the ‘Plants and planting’ section of this booklet or check with your local plant nursery.
- Repair faulty stormwater and sewer pipes.
- Choose small-to-medium trees.

**GREEN TIP**

Ensure you read and understand the label before you purchase a product and follow the use, dosage and safety requirements as stated.

**Preparing for fire/storm season**

Brisbane’s sub-tropical climate means our city is prone to severe weather events like storms and bushfires. To lessen the potential for damage it is best that you prepare your home early for the summer season.

Here are some simple steps to protect your property.

**Before fire season**

- Clean out roof guttering. Leaf litter can accumulate in your house gutters which may ignite from flying embers during bushfires. These embers can travel many kilometres on the wind. Use gutter guards to prevent leaf build up.
- Create a barrier/fire break between bushland and your home.
- Ensure that you have an easily-accessible and fire-safe escape road route should you need to leave.

**Before storm season**

- Check and repair any loose roofing tiles or sheets. Check and clean downpipes, guttering and drains to ensure water drains away quickly. Use gutter guards to prevent leaf build up.
- Hire a qualified arborist to inspect your trees for dead branches, weak branch attachments, decay, poor weight distribution and dangerously-crowded branches or root damage.
- Remove any overhanging branches near your home and clear your yard of loose materials and rubbish.

**Always be storm and fire smart**

For more information on preparing for Brisbane’s severe weather season visit www.brisbane.qld.gov.au/beprepared.

On this website you can also register to receive severe weather alerts via email, SMS or recorded phone message, through Brisbane Early Warning Alert Service.

You can also stay up-to-date through Council’s Facebook and Twitter social media channels.

**Safety in the garden**

As much as we enjoy being in the garden, we always should be mindful of good safety practices.

- Don’t leave garden tools, hoses, watering cans or other solid objects lying about for people to trip over.
- Always store rakes, hoes, spades, forks, secateurs and shears out of the reach of children.
- Always be careful when handling organic mulch, compost and fertilisers. Use gloves and a mask to ensure you don’t inhale any microorganisms.
If you are injured while working in the garden, apply appropriate first aid and seek medical attention.

Always be aware of possibly finding rusty nails or other dangerous objects when you’re digging in the garden.

Always mow wearing covered shoes, a hat, sunglasses and sunscreen.

Always wash your hands with soap and water after working in the garden, even if you have worn gloves.

When moving pot plants, always bend your knees when you lift the item or use an upright trolley for large pots as using your back can cause injury.

When working in the garden on hot days, always ensure that you have plenty of cool water to drink and take regular breaks out of the sun.

Always practice the following when handling fertilisers and chemicals.

Always read, understand and follow the directions on the label.

Ensure you understand the rate of application and wear gloves.

Store chemicals and fertilisers out of reach of children.

Don’t spray on windy days or when the temperature is over 30 ºC.

Dispose of chemical containers using manufacturer’s requirements.

If you are having some problems with garden pests please consider using organic alternatives that have a minimal environmental impact. More information is in the ‘Bringing biodiversity into your backyard’ section in this guide.

Tips for an environmentally-friendly garden

Spray plants with natural insect controls such as garlic spray, white oil or dishwashing detergent (see residents’ tried and true recipes on the next page).

Encourage visits by birds and other helpful animals by providing suitable habitat.

Get Mother Nature on side with companion planting and by choosing plants that attract insect predators (such as ladybeetles) or release natural pest deterrents (such as marigolds).

GREEN TIP

Remember to practice ‘sun safety’ whenever you are in the garden and always wear a hat, long sleeves, covered sturdy shoes, sunglasses and sunscreen.
Prevention is best. Keep plants healthy, weed free and disease resistant. Select plants less susceptible to insect invasion.

Use natural pesticides such as pyrethrum spray and derris dust. However, use them sparingly as they too can cause environmental harm.

To reduce fungal problems remove old leaves, avoid watering leaf surfaces and keep mulch from base of stem.

**GREEN TIP**

Residents’ tried and true sustainable garden remedies:

<table>
<thead>
<tr>
<th>AILMENT</th>
<th>REMEDY</th>
</tr>
</thead>
<tbody>
<tr>
<td>To deter white cabbage moth</td>
<td>Boil lettuce leaves and use the water on cabbages, cauliflower, brussel sprouts</td>
</tr>
<tr>
<td>For sooty mould</td>
<td>Add 1 tsp cooking oil + 1 tsp detergent + 500 ml water – spray on</td>
</tr>
<tr>
<td>To deter/kill aphids, slugs, beetles</td>
<td>Mix 3 cloves garlic + squirt of washing up liquid + 500 ml water and spray on</td>
</tr>
<tr>
<td>Black spot on roses</td>
<td>Mix 1 tsp sunflower oil + 2 tsp bicarb soda + 1 drop washing detergent + 1 litre water – spray on</td>
</tr>
</tbody>
</table>

**WILDLIFE TIP**

**Brush-turkeys**

The brush-turkey is a protected native bird and they play an important role in natural pest management. However, during the mating season (August to December) they can disrupt gardens by raking mulch into nesting mounds. To learn how to live with your turkey visitors during this season, visit www.brisbane.qld.gov.au

**Garden nasties**

**Invasive plants**

Many attractive garden plants have a secret life as weeds in our bushland. There are more than 200 backyard beauties that become bushland bullies when they jump the garden fence. Once there, they smother and kill native plants, removing food and shelter for our wildlife.

Invasive plants are the main threat to biodiversity in our natural areas and they represent the second biggest threat to biodiversity after vegetation clearing. Council spends over $5 million each year on weed management in our natural areas, parks and waterways and 85% of the species treated are garden escapees. So we are all really important partners in helping to reduce weeds by buying non-invasive species from a reputable nursery, removing invasive weeds from our gardens and not dumping garden waste in the bush.

Council has an online weed identification tool and videos of the seven most common weed control methods to help you identify and control weeds.
To locate this useful tool, find more information or share your knowledge about weeds, visit www.weeds.brisbane.qld.gov.au

Here you can view information on common weeds and recommended control techniques.

You can also join your local Habitat Brisbane group and help remove weeds from Brisbane’s bushland.

**Myrtle rust**

Myrtle rust is a serious fungal disease and it affects plants in the myrtaceae family which includes Australian natives, eucalyptus, melaleuca and callistemon. It originated in South America and has the potential to be devastating to the plants in this family. Myrtle rust is easily spread via spores which may be carried on any infected plants, clothing, insects, animals, machinery equipment and airborne dispersal.

If you suspect myrtle rust on your property, please notify Biosecurity Queensland on 132 523 or call the Exotic Plant Pest Hotline on 1800 084 881. For more information on myrtle rust please visit www.daff.qld.gov.au

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**Mosquitoes and midgies**

Mosquitoes and midgies can turn a great afternoon BBQ or picnic into an unpleasant event. Mozzies can also carry debilitating diseases such as malaria and Ross River Fever. As mosquito larvae can only survive in standing water, help protect yourself and your garden from mosquitoes and midgies, by following the tips below.

- Regularly check for mosquito larvae (wrigglers) and empty any still water from containers, including plant saucers, tyres and tyre swings, buckets, bird baths and pet bowls. Replace with fresh clean water where necessary.
- Keep roof gutters clear from built-up leaf litter to prevent rain water collecting.
- Wear long-sleeved, light-coloured and loose-fitting clothing if you are outside at dusk and dawn.
- Use natural repellents such as citronella, mosquito coils and lanterns.
- If you have a water feature in your garden, ensure that you cycle the water regularly.

**Rainwater tanks and mosquito prevention**

Mosquitoes breed if they get inside a tank or systems where water does not drain from pipes, gutters and plumbing.

You can stop mosquitoes breeding in your rainwater tank by:

- ensuring there is no debris in the tank
- installing a gutter design that does not allow water to pool
- ensuring water does not pool on the tank lid
- sealing all entry routes to the tank including the inlet and overflow pipes with mosquito-proof screens.
Fire ants/yellow crazy ants

Fire ants have a very painful sting (it feels like a burning match is held against the skin) and have a very negative impact on biodiversity. Other ants that may cause problems around the home include green-head ants, meat ants, sugar ants and funnel ants.

Fire ants were discovered in South East Queensland in 2001 and even though many have been eradicated, there is always a risk of finding them in plant soil, mulch and potting mix. If you buy these, ask your garden supplier to certify that they are free of fire ants.

Yellow crazy ants were discovered in Brisbane in 2004. They don’t sting but spray formic acid that irritates the skin and eyes of people and pets.

**PEST TIP**

Termites (white ants) can cause thousands of dollars worth of damage to homes in a relatively short period of time. To prevent any problems, always ensure that:

- you don’t have garden beds against your home
- keep weep holes clear
- keep any pieces of timber away from your home and up off the ground
- replace any leaking garden taps
- contact a qualified pest manager at least once a year to carry out a termite inspection of your home. Details can be found in the yellow pages under ‘pest control’.

**RESIDENT’S TIP**

Put sand in the saucers of pot plants – it keeps the mozzies away – Michael

**GREEN TIP**

If you think you have fire ants or yellow crazy ants, immediately phone the Department Agriculture, Fisheries and Forestry on 132 523. For more information please visit www.daff.qld.gov.au.
In this section we’ll look at the benefits and the easy way of growing some of your own fresh produce and the benefits of keeping backyard chickens.

There is a great sense of satisfaction in eating and sharing home-grown fruit and vegetables. Not only is the food you grow fresh from the garden, you know exactly what has gone into the production of it. In addition, you can become a little less dependant on supermarket fruits and vegetables.

Growing your own food also means that you reduce your ‘food miles’. On many occasions, the produce is picked and packed months before you take it home and many fruit and vegetables lose some of their valuable nutrients during the storage and transportation phase. Transporting foods over long distances can also create more greenhouse gases.

While we can’t grow all our food at home, the next best thing is buying local and seasonal produce that takes less energy and fewer chemical applications to produce.

**Supplement versus self-sufficient**

Self-sufficiency means growing enough food to take care of all your food needs. While being a great initiative, this is not realistic for most people with small gardens and busy lives. However, supplementing the fruit and vegies you purchase with even a little of your own will make a difference to the environment. Sharing surplus produce and talking to others about their gardening successes and challenges also provides you with the opportunity to be part of a wider network of people with similar interests and ideas.

**RESIDENT’S TIP**

Teach your children early how to garden, and to enjoy weeding – Lisa

**GREEN TIP**

Replace some lawn with a vegie or herb patch.
Growing your own

Small is good

Growing even a small amount of your own food can make a difference to your budget and to your environment, and the good news is that you don’t need to have a big garden to grow food. In fact, you can grow food in a small, bright spot on a balcony in pots, on a sunny window sill or in hanging baskets. Creeping or climbing herbs, fruits and vegetables such as mint, strawberries and oregano do well in hanging baskets. The more upright herbs like parsley and basil, and vegetables like, spinach, asian and salad greens combine well as companion plants in pots.

Growing food plants up trellised walls (passionfruit, tomatoes and snowpeas) or cascading over a balcony stacked in pots (herbs, lettuce) or well-drained old plastic containers (potatoes) maximises the use of what might seem like a very small space.

GREEN TIP

GROWING A MEAL IN A POT

Eggplants with shallots or chives and basil.
In winter, grow coriander with lettuce, and chillies do well with a selection of Thai vegies such as bok choy and pak choy.
Combine a selection of lettuce varieties together with baby beetroot and baby spinach for a great salad mix.

GREEN TIP

Edible flowers are also a great mix in a green salad or fruit salad. Flowers such as marigolds, nasturtiums, violets, calendula petals, rose petals and zucchini flowers are all great floral additions.

RESIDENT’S TIP

I grow strawberries in my old gumboots – Charlotte (aged five)

RESIDENT’S TIP

Plant seeds in your garden and grow food – Molly (aged seven)
No-dig gardening

No-dig gardens have to be the easiest way to grow fresh home-grown vegetables as these are built above the ground, unlike the traditional digging up of soil to make an in-ground garden bed. These gardens are easy to assemble and disassemble, and best of all, better on your back and knees.

There are many commercial non-organic versions (e.g. durable steel) available in different shapes, sizes and colours or you could choose to make your own from untreated hardwood sleepers. They work well as a permanent fixture of if you’re a renter, they can be dismantled and moved when you do.

To learn more, visit your local Council library and borrow some reference books on no-dig gardens or visit:
www.communitygarden.org.au or www.sgaonline.org.au

GREEN TIP

Growing healthy food isn’t all about compost, water and mulch. By preparing your vegetables in a safe way, you will protect yourself from any cross contamination.
• Thoroughly wash all dirt from produce prior to storage and eating.
• Remove outer leaves of greens, especially from the bottom of plants (ie lettuce).
• If you are unsure of the history of your soils, peel all root vegetables which have been in direct contact with the soil.
• In the kitchen, use one cutting board for raw meats and another for vegetables/fruit.
• Always wash hands before preparing and eating food.

Children participating in growing, harvesting and cooking

Encouraging children to grow food will help a new generation learn more about where food comes from, its importance, sustainability and the environment, all while having fun. All you need is a pot, good quality potting mix, a sunny spot, some radish or bean seeds and water and the next generation of gardeners can watch a tiny seed grow into something they can eat in just a few short weeks.

Growing food plants at home is something that children and adults can do together and an activity that entices even the fussiest eater to try something new. Snow peas, baby carrots, radishes and tiny tomatoes are among the easiest vegetables for children to grow. It is also a great way for children to learn some basic cooking skills once the vegetables are picked.

GREEN TIP

Always use hardwood if you’re building raised garden beds. Good options include red gum and cyprus, as these are safe and are from a sustainable source. Avoid using treated pine as the chemicals used to treat the wood are toxic and may leach into the soil in your garden bed.

GREEN TIP

If you are after a quick and easy no-dig vegie bed then use a lucerne or hay bale. You can either use the bales as a perimeter for a larger style garden bed or plant directly into the bale. There’s lots of information on the web or you could visit a local city farm or community garden for more information.
Fruit trees versus shade trees

Living in larger houses or on small blocks of land has forced many of us to choose between planting shade or a fruiting tree. Often shade wins out in this hot climate. However you can have both.

Choosing dwarf fruiting trees allows you to have the best of both shade and fruit. A tree such as Davidson’s plum is ideal for narrow space and a dwarf mulberry provides shade and the white fruit does not stain.

Many of our favourite fruiting trees are now available in dwarf and multi-grafted varieties so there will be something to suit your needs and tastes. These smaller trees are grown especially to allow easy harvesting of the fruit and will grow happily in the ground or in a large tub, so are suitable for pergola or balcony growing.

Check out your local nursery or visit your local Council library for more information on fruiting trees suited to your conditions.

RESIDENT’S TIP

Plant seeds you have collected into toilet rolls and plant into the ground. The paper breaks down and holds moisture – Jan

GREEN TIP

For the best freshness, look for foods that are grown locally and are in season.

Organics and similar

To be considered truly organic, fruit or vegetables must have been grown in an area free from synthetic chemical fertilisers, fungicides, herbicides and pesticides and free from genetically modified organisms for three years. A minimum three year period is needed to cleanse a site of most non-organic products.

Organic gardening does not mean that you can’t use anything. There are many products that are ok to use to deter pests or kill diseases, but it is recommended that they are used sparingly. Even organic products can harm beneficial insects and other organisms. Organic gardening also means using covers to protect your produce or companion planting methods which mix with other plants in the vegetable garden to confuse pests or attract animals that will eat the pests.

There is lots of information out there on organic gardening. Visit your local Council library and discover what’s available or log onto some of the websites listed at the back of this booklet.

Chemicals suitable for organic gardens can be found on the Australian Organic website www.austorganic.com

GREEN TIP

Save your seeds or share them with others. Brisbane’s local seed networks are groups of people who enjoy swapping seeds and cuttings. For more information visit www.seedsavers.net to find what groups are in your local area.

RESIDENT’S TIP

Snails love beer, so put some in shallow containers and place where they congregate and goodbye snails, Kaput! – Colleen
Crop rotation

What is crop rotation? Crop rotation is a basic principle designed to minimise pests and diseases, lessen the use of chemicals and maintain a healthy soil by alternating the planting of the same crop variety repeatedly.

When practicing crop rotation, it is important to familiarise yourself with plant family names. This will ensure that the same family of plants are not planted in the same spot year after year.

The following are benefits of crop rotation.

- Reducing the potential for pests and diseases to remain in the soil by removing the host and breaking its lifecycle.
- Maintaining a balance of nutrients in the soil as some crops will draw more of one kind of nutrient (i.e. nitrogen) from the soil than other crops.
- Maintaining your soil pH and nutrient levels which will help all your vegetables get the most from the soil.
- Improving soil structure by alternating the planting of shallow-rooted vegetables (i.e. spinach, lettuce) with deep-rooted vegetables (i.e. carrots and potatoes).

For more information on crop rotation and its benefits, please visit www.sgaonline.org.au or contact a Council-supported city farm or community garden.

Gardening in Brisbane’s urban soils

Since Brisbane was settled, the landscape and environment has been altered due to development that has occurred. Over this time, some products may have found their way into soils and could pose risks to people.

Common contaminants that may be found in urban soil may occur in properties that were developed before 1980 (when lead paint was phased out), or located adjacent to heavily trafficked roads prior to 2002 (when lead in petrol was phased out), or developed on or near previous industrial activities.

Not all urban soils will be affected, but as gardeners we need to be aware of our soil and its history and by taking some simple steps, you can still safely and confidently garden. There are several actions that you can take.

- Do not dig into or disturb affected soils. Build raised garden beds or garden in containers.
- Cover walkways and other areas of exposed soil with mulch, grass, paving or other groundcover to reduce dust migration onto plants. Reduce dust by wetting the soil and equipment before working in the garden.
- Locate food gardens away from painted buildings that were constructed prior to the 1980s.

Be mindful that root crops such as carrots, onions and potatoes are least appropriate to be grown in urban soils as they are in direct contact with the soil. Fruiting plants such as tomatoes, capsicums, apples and cucumbers are safer. As an alternative, plant non-edible plants in your garden to provide colour or shade to your garden or join your local community garden.

GREEN TIP

Propagate your seedlings in egg cartons. Once your seedlings are big enough (in accordance with the instructions on the seed pack) you will be able to plant them out in the garden, egg carton and all. The egg carton will break down in the soil and provide compost for your plants.
Love your chooks

Keeping chickens in the backyard is a fun and interactive pastime for all the family. Kids learn so much about the cycle of life when chickens are a part of the family.

Chickens can fulfil many eco-friendly roles in your garden. Apart from providing tasty eggs, free-range chickens can control insects and weeds and eat your leftover vegie scraps. They are also great at keeping your soil healthy by scratching and foraging for insects and also providing great fertiliser for your garden.

If you are concerned about the history or quality of your soil:

- Ensure chickens do not have access to bare soil. Restrict their free ranging foraging areas
- Chickens require access to a dust bath. Provide a large shallow pan (such as a children’s pool) filled with loose clean soil, sand, hardwood ashes or a combination of all.

To learn more, visit your local Council library and borrow some reference books on keeping chickens in urban backyards, or visit:

www.livinggreener.gov.au
www.citychicks.com.au
www.sgaonline.org.au
www.brisbane.qld.gov.au

Native bees – get the buzz

If you’d like to take ‘growing your own’ a step further, have you considered keeping a hive of Australian native stingless bees? These can be a great addition to your backyard, whether you’re an avid gardener or just someone who loves to have unusual wildlife visiting your garden.

There are more than 1500 different species of native bees in Australia, but the stingless species are mainly found in the north and eastern areas. *Tetragonula carbonaria* (previously known as *Trigona carbonaria*) is one of the stingless species that live in South East Queensland.

Native bees will assist with the pollination of the plants in your garden. They produce a unique flavoured honey, ready for you to spread on your toast at breakfast.

Like commercial honey bees, native bees live within a highly ordered social structure but because they are stingless they are much easier to handle even for the novice beekeeper.

For more information on keeping the Aussie bee buzzing visit:

www.aussiebee.com.au
www.mycitygarden.com.au
More green information

Want to know more? How can you get involved?
Council has many initiatives and programs dedicated to creating a clean, green and biodiverse city. You will find some information on many of these in the next few pages.

Green Heart program
Council holds a series of Green Heart events throughout Brisbane. These events are a great way to learn more about living sustainably and there’s something for everyone – gardening talks, displays, demonstrations and free activities for all ages.

Visit www.brisbane.qld.gov.au/greenheart to find out how Green Heart can help residents, schools, businesses and community groups take practical steps to reduce their environmental footprint. Here you can find out about our annual calendar of Green Heart events and register to receive regular information and support for living sustainably.

Free Native Plants program
Schools and community groups can apply to Council for up to 50 specially-selected free native plants from July each year. Ratepayers are entitled to two free native plants each year. The selection includes a range of native plants such as trees, shrubs, groundcovers, climbers and grasses.

Grant programs
Council’s grants programs provide funding to help local non-profit community groups and individuals to develop and improve facilities and services in Brisbane. Some of the grants available include, Cultivating Community Gardens Grants, Native Wildlife Carer Grants, Sustainability Grants and Environmental Grants. Visit www.brisbane.qld.gov.au for more information on Council’s grant programs.

Community street tree planting events
Council conducts tree planting events in many suburban streets each year. If you are interested in taking part in greening your street, the schedule can be found at www.brisbane.qld.gov.au or phone Council on (07) 3403 8888.
**Council’s library sustainability seminars**

These free, fun and hands-on seminars are held throughout the year at several Council libraries. So come along to a sustainable living seminar and find out how you can lead a more sustainable lifestyle and help create a better Brisbane for now and into the future. Bookings are essential. To find out more or to make a booking call Council on (07) 3403 8888.

**Community gardens and city farms**

There are many community gardens and a few city farms across Brisbane, in parks, community centres, schools and on private land such as churches. Community gardens are a place where local people of all ages and cultures can come together to grow fresh produce, learn, relax and make new friends. It really is a place where the community comes together for a common goal. City Farms are on a much larger scale and provide enhanced learning experiences by conducting accredited horticultural and permaculture education courses.

If you would like to get involved in one of Brisbane’s popular community gardens visit www.brisbane.qld.gov.au to find a community garden near you. Experienced and novice gardeners from all ages and cultures are welcome. Brisbane City Council supports and is part of the growing network of community gardens across Australia.

More information can be found at:
- www.norheystreetcityfarm.org.au
- www.communitygarden.org.au
Council's Green Commitment

Council is committed to increasing natural habitat cover across the city to 40% by 2031 which will ensure the long-term survival of Brisbane’s unique flora and fauna.

Habitat Brisbane and Creek Catchment groups

Each year many dedicated residents get involved in voluntary habitat restoration projects to improve their local natural environment. These Habitat Brisbane groups focus on restoring areas in parks, remnant bushland, wetlands and along Brisbane waterways.

Most people associate the word ‘catchment’ with dams, but every creek, stream and river has its own catchment. We all live in a catchment and can influence the quality of the waterways and ultimately Moreton Bay. The Creek Catchment Program works with catchment groups to protect and restore catchments through improved awareness of catchment issues in the wider community.

Wildlife Conservation Partnership program

Over 50% of Brisbane’s natural environment is contained within private ownership. The Wildlife Conservation Partnership program offers voluntary programs that encourage and assist landholders to provide habitat for wildlife on their properties. Land for Wildlife, Voluntary Conservation Agreement (VCA) and Voluntary Conservation Covenants (VCC) are the initiatives offered through this program.

If you are interested in joining one of the many Habitat Brisbane or Catchment Groups or own land you would like to register within the Land for Wildlife program, visit www.brisbane.qld.gov.au. Groups are always pleased to welcome new participants.

Brisbane Botanic Gardens, Mt Coot-tha

The 52-hectare Brisbane Botanic Gardens, Mt Coot-tha is Queensland’s premier subtropical botanic gardens. There is plenty to do at the gardens including free guided walks, school groups can participate in Lessons in the Gardens, or visit the Herbarium and the Planetarium. Keep an eye out for opportunities to visit special plant exhibitions that are on throughout the year. While you are visiting the gardens make sure you take the time to see our beautiful Australian natives at the Native Plants for Brisbane garden display.

City Botanic Gardens

The City Botanic Gardens beside the Brisbane River was established in 1828 to provide food for the early penal colony. The garden’s plant collections include the first Queensland native plants to be formally planted and exotic plants imported in colonial days to establish crops for the new Brisbane colony.

Take a free walking tour with volunteer guides and discover the many changes these gardens have seen over the past 150 years.
Boondall Wetlands Environment Centre

The Boondall Wetlands are Brisbane’s largest wetlands, located on the edge of Moreton Bay between Nudgee Beach, Boondall and Shorncliffe.

Visit www.brisbane.qld.gov.au to discover more about the wetlands including track maps for you to download and a printable checklist for birds of Boondall Wetlands.

Downfall Creek Bushland Centre

The Downfall Creek Bushland Centre is located within Raven Street Reserve, which is part of the 120-hectare Chermside Hills Reserves. Visit www.brisbane.qld.gov.au for opening hours and things to see and do.

2 Million Trees – Our Urban Forest project

The 2 Million Trees project started in November 2007 with the aim of restoring bushland, developing wildlife corridors, providing shade to cool the city and to keep Brisbane looking green.

The 2 millionth tree was planted in February 2012, on one of over 78 project sites covering almost 500 hectares of land in the Brisbane area.

The planted trees will provide shelter, nesting sites and food for many types of wildlife, and will continue to improve and enhance the city’s unique biodiversity and create an environmental legacy that contributes to a cleaner and greener Brisbane.

Arbor Day

To celebrate Arbor Day each October, Brisbane schools are entitled to an additional allocation of up to 50 free plants to beautify their school grounds.

Brisbane schools have been celebrating this traditional tree planting day since 1890. This is a great way for students, parents and teachers to make an environmental difference at their school for today and into the future.

Natural Assets Local Law (NALL)

Council’s Natural Assets Local Law 2003 helps to protect our natural assets, including bushland areas, wetlands, water corridors and trees in urban environments. Council made amendments to the NALL in 2014 to assist residents and businesses to either nominate for or manage protected vegetation on or adjacent to their properties. The changes simplify and streamline processes and in some cases reduce costs and time for owners of land with protected vegetation.

This law may affect you if you own land or occupy land:

- near a river or waterway
- in a bushland area
- in an emerging community (future urban land) with large trees
- with a Council street tree on the footpath.
Native Wildlife Ambulance Service

Council offers this service to rescue and rehabilitate native wildlife across Brisbane City. To report a sick, injured or orphaned native animal please phone Council on (07) 3403 8888, 24 hours a day.

Green web sites

ABC Gardening Australia – www.abc.net.au/gardening
Australian Institute of Horticulture – www.aih.org.au
Sustainable Gardening Australia – www.sgaonline.org.au
Queensland Arboricultural Association – www.qaa.net.au
Biosecurity Queensland (Department of Agriculture, Fisheries and Forestry) – www.daff.qld.gov.au/biosecurity
Weeds Australia – www.weeds.org.au
Department of Environment and Heritage Protection – www.ehp.qld.gov.au
Society for Growing Australian Plants – www.sgapqld.org.au
Greening Australia – www.greeningaustralia.org.au
Healthy Waterways – www.healthywaterways.org
Brisbane Organic Growers Inc. – www.bogi.org.au
Successful gardening with Annette McFarlane – www.annettemcfarlane.com
Save Our Waterways Now – www.sown.com.au
References and recommended reading


Acknowledgements

Sustainable Gardening Australia
www.SGAonline.org.au

Photographic credits

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# Image courtesy of Geoff Pegg, Department of Employment, Economic Development & Innovation
Cooling the planet starts in your backyard.

Growing your own food and purchasing in-season produce from local suppliers is a great way to reduce your environmental footprint.

When you see the 'I Green Heart BNE' symbol you know that it involves advice or a Council initiative to help create a sustainable, green and clean Brisbane.

To show your love for Brisbane and find more tips on living sustainably visit www.brisbane.qld.gov.au

That's why I'm growing a greener Brisbane.
Gardening calendar monthly tips

JANUARY
• Fertilise all garden beds. This is optimum growth time.
• Water the garden in the morning or evenings while it is cool. Soils will retain more moisture at this time.

FEBRUARY
• Mulch all garden beds to conserve precious moisture. It is best to use organic material like old manure, lucerne hay or cane trash. Fallen leaves are also a good mulch.

MARCH
• Autumn is a good time of the year for planting trees and shrubs. They have time to establish in the warmer, moist soils before the cooler weather comes.

APRIL
• Feed lawns to keep them going over the winter months.
• Plant capsicum, French beans, garlic, leeks, onions, potatoes, silverbeet, spinach.
• Feed your roses.

MAY
• When mowing, cut the lawn on the highest setting. It will cope better with the cooler conditions.
• As weather cools reduce the watering of your indoor plants.

JUNE
• Plant winter vegetables, like beetroot, broccoli, cabbage, capsicum, potatoes, silverbeet, spinach.
• Fertilise your citrus, passionfruit, native plants.

JULY
• Do not forget to fertilise winter growing vegetables.
• Make some garden beds or do repairs while the plant growth cycle is at its slowest.

AUGUST
• Check your lawn for weeds. Control with organic spray.
• Turn your garden beds over to aerate before you re-mulch.

SEPTEMBER
• Spread organic mulch over all garden beds.
• Gain inspiration by visiting open gardens in your area.

OCTOBER
• Feed your potted plants for summer flowering and fruiting.
• Start to prepare for storm/fire season.

NOVEMBER
• Fertilise all your plants in the garden.
• Plant pumpkin, rockmelon and watermelon.

DECEMBER
• Plant basil at the same time as tomatoes. They make great companion plants.
• Put your feet up and enjoy your garden after a years work.

List here anything new that you have learnt or practices that you will continue to follow.

Happy gardening!