GROW LOCAL

Illawarra Edible Garden Guide

Acknowledgements
A joint sustainability initiative by Wollongong, Shellharbour and Kiama Councils, assisted by the NSW Government through its Environmental Trust.

GROW LOCAL is a two part resource encouraging Illawarra residents, schools, community groups and gardeners to create areas which celebrate the edible, and local native plants that thrive in our region.

GROW LOCAL: Illawarra Edible Garden Guide has been developed by Happy Earth in collaboration with project staff Vanessa John, Jedda Lemmon and many reviewers and contributors from the partner Councils and beyond.

The project team would like to thank the inspiring food gardeners of the Illawarra.

The Story of Happy Earth
'Happy Earth' is the story of a Wollongong couple, Richard Walter and Alison Mellor, who are on an adventure in urban sustainability. Passionate about growing food in the suburbs, they have converted their lawn into a thriving food forest and their swimming pool into a veggie patch. After 3 years, they're growing 90% of their own fresh food. To follow their journey visit www.happyearth.com.au

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This guide is dedicated to the memory of Anders Bofeldt, a talented local botanist who inspired many to love the world of plants, and was amongst the first to introduce some unusual fruit trees to the Illawarra.

Source of Quotes Geoff Lawton (p4), www.permaculture.org.au; Michael Mobbs & Patterson Britton and Partners Pty Ltd (p6), Aussies Sustaining Australia: Showcasing Sustainable Developments Leading the Change, 2006; Helen Cushing (p8), Beyond Organics, Gardening for the Future, 2005; Pat Coleby (p14), Natural Farming, 2004; Linda Woodrow (p17), The Permaculture Home Garden, 2007; Jamie Oliver (p18), Jamie at Home: Cook your way to the good life, 2007; Annette McFarlane (p22), Organic Vegetable Growing, 2002; Jade Woodhouse (p30) Forest Gardening: Food Forests Gorgeous Fruit all year, 2003. Direct quotes received by Happy Earth from residents and community gardens in the Illawarra.

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ILLAWARRA BIODIVERSITY AND LOCAL FOOD STRATEGY FOR CLIMATE CHANGE

This project has been assisted by the New South Wales Government through its Environmental Trust

GROW LOCAL
Illawarra Edible Garden Guide

This resource has been prepared with a companion guide, GROW LOCAL: Illawarra Native Garden Guide. Together they provide a comprehensive introduction to sustainable gardening in our beautiful region.

Why Grow an Edible Garden?

“You can solve the problems of the world in a garden”
- Geoff Lawton

What draws you to creating an edible urban food garden? Is it the taste of fresh garden produce bursting with flavour and health? Those positive feelings you get from knowing you’re helping our environment, or the sense of satisfaction that comes from saying *“I grew those veggies myself,”* as you serve up a delicious meal for your family or friends?

Perhaps it’s about connecting yourself and your children to the seasons and cycles of nature, or strengthening links to your cultural heritage. Growing food builds community, and can strengthen ties to your neighbours, school or interest group. It’s also good for your hip pocket and provides you with the security that you can always put food on the table. There are just so many positive reasons for creating edible food gardens!

All around the world today, a massive grassroots movement of people are creating healthier communities and a healthier planet, through sustainable food production.

It’s all about supporting local farmers, community and backyard food growers, organic and community supported agriculture, farmers markets, the ethical treatment of animals, fair trade, food co-ops and seasonal eating. It’s about sharing knowledge about growing and preparing wholesome, healing food and ensuring all people have access to healthy, culturally appropriate food.

About this Guide

This guide is a small, yet important contribution to this growing sustainable food movement. It's designed to share ideas and inspiration for growing food successfully in urban areas of the Illawarra.

Real life examples of Illawarra residents and community groups growing good food in backyards, schools and community gardens feature throughout the guide. There are also lots of gardening tips for beginners and experienced gardeners alike.

This guide is a companion for your favourite food gardening book, providing information specific to the Illawarra about what grows well here, how to design a veggie patch and food forest for our local conditions and more.

Edible Gardening

Sustainable, Organic Food Gardening Philosophy

“Most water and energy is used to grow and transport food. Thus if a house was to do nothing more than grow all its own food, it would save more pollution and use less water than if it were self sufficient for water and energy.”
– Michael Mobbs

Organic, sustainable food gardens are created and maintained with the long term health and wellbeing of people and the planet at heart.

At the core of organic gardening is building healthy soil. It’s about maximising the life in the soil and allowing plants to source all their nutrients from soils rich with organic matter, rather than from artificial fertilisers. Organic gardening does not use synthetic poisons such as herbicides and pesticides.

Sustainable gardening, like sustainable living, is about seeing ourselves, our homes and our gardens as part of the natural world, part of local and global ecosystems. It’s about exploring the stories behind what comes into our gardens, and what goes out, and thinking about how we can make small positive changes, which have rippling effects far beyond our back fence.

In gardening sustainably, we need to think about how we can leave the land in a better condition than when we started working it. It helps to ask ourselves questions like:

Where do the things I bring into the garden (mulch, seeds, plants, organic fertilisers, building materials, tools) come from?

- Can I source them locally?
- Can I source them second hand?
- Can I creatively reuse unwanted materials?
- Were they produced sustainably and ethically?

Where will the water for the garden come from?

- Can I make my garden water efficient?
- How can I collect and use rainwater or greywater?

How can I garden in a way that helps local biodiversity?

- How can I create habitat for native animals?
- How can I integrate native species that are local to the region?
- Do I know which plants have the potential to become weeds?

How can I manage waste in my garden?

- What can be turned into compost?
- How can I avoid using unnecessary materials?

To be sustainable over the long term, gardens also need to be fun and rewarding – places that lift the soul and are enjoyable to be in. Areas to eat and sit with others, inspiring artworks, amusing scarecrows and beautiful features are just as important as healthy fruit trees. How can you make your garden somewhere people love to be?

Preventing Garden Escapees

Escaped garden plants can cause degradation and loss of native plant and animal habitat, and are a 'key threatening process' for biodiversity in NSW. Some food plants also have the potential to become established in local bushland – blackberries and grafted passionfruit are examples of problem escapees.

GROW LOCAL is about being a responsible, sustainable gardener. We need to ensure that we avoid or strictly manage any plant which has the potential to become a garden escapee. This includes ensuring all fruit is harvested to prevent spreading by animals, and preventing plants from sneaking over your fence. Look for the asterisk (*) in the tables at the back of the guide for food plants that could become garden escapees.

"I feel gardening is not only good exercise but it's good for the soul by being close to nature."
– Donna Alfeo, Wollongong

There's no better way to move towards a sustainable future than growing some of our food in our suburban spaces.

Knowing your Climate

“The contribution of each garden to the wider environment should be as rich and positive as we can help it to be.”
- Helen Cushing

Gardening is very climate specific. What grows well in the Illawarra’s warm temperate climate can be very different to what grows well in cool temperate or tropical regions of Australia.

The Illawarra’s climate is perfect for growing food all year round, with a mild, coastal climate and high rainfall. We don’t get extreme seasonal variations with weeks of frost or snow, months without rain or extended periods with temperatures over 40 degrees, as many parts of Australia do.

But within the Illawarra there are different micro-climates. Temperatures are milder, and winds generally stronger on the open coastal plain compared to the foothills of the escarpment. Suburbs like Wombarra that hug the escarpment can be cooler in the winter as they lose the afternoon sun very early. In low lying areas such as Albion Park, there can be light winter frosts.

Overall, rainfall throughout Illawarra is good, with the coastal plain receiving an average of 1000mm - 1200mm annually. Rainfall increases the closer and higher places are to the escarpment, reaching an average of 1800mm. Good rainfall can be unpredictable and occur at any time of year, but tends to be higher from January to April.

As a coastal area, the Illawarra is fairly windy. Easterly sea breezes are strong in summer, along with cool southerly changes. North-westerly winds at this time can lead to very hot, drying, summer days. In the winter and early spring from June to September there are often strong westerly winds that can gust to over 100km/h and cause damage to gardens, buildings and infrastructure.

Historical climate data taken at the University of Wollongong 1970-2008

Statistics	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature												
Average maximum temperature (°C)	25.6	25.6	24.5	22.5	20	17.6	17	18.3	20.3	22.1	22.9	25
Highest temperature (°C)	44.1	41.7	40.2	35.4	28.5	24.7	25.7	30.3	34.2	38.8	40.6	41.5
Average minimum temperature (°C)	17.9	18.2	16.7	14.2	11.8	9.5	8.3	8.8	10.6	12.6	14.4	16.5
Lowest temperature (°C)	9.6	10.3	9.1	5.1	3.1	2	0.8	2	3.3	4.7	5.4	8.3
Ground Surface Temperature												
Average daily soil min. temperature (°C)	15	15.5	13.8	11	8.4	6	4.6	4.8	6.8	9.3	11.6	13.6
Rainfall												
Average rainfall (mm)	130.3	156.4	160.4	129.3	106.4	112.4	63.4	83.3	67.4	100.5	115.6	94.6
Wind												
Maximum wind gust speed (km/h)	97	84	89	126	108	118	131	148	124	111	108	93

Source: Bureau of Meteorology (www.bom.gov.au)

“Smells are memory triggers: fresh-dug carrots, or tomato leaves, or sun-warmed strawberries take me back to time spent with my parents and grandparents in their gardens. Now I garden with my own children, and I love seeing the look of joy and pride on their faces when they pick something and bring it inside for dinner.”
– Darren Collins, Jamberoo

Many people are surprised that bananas, paw paws, mangoes, avocados and many other tropical fruits and vegetables can be grown successfully in the Illawarra.

Garden Design Principles

“At the Port Kembla Laneway Community Garden, we don’t just grow food, we grow community.”
– Johnny Alevras, Port Kembla Laneway

It can be tempting when you’re feeling inspired to run out and source some fruit trees or veggies and pop them into a convenient spot in the garden. But putting some time and thought into designing a garden is a worthwhile investment. Gardens are constantly evolving and your design will surely change over time, but we all want to minimise those occasions where we start to think ‘why on earth did I plant that there!?!’

Below are some important general principles and questions that are good to keep in mind when designing a food garden. Specific design features for veggie gardens and food forests are discussed in detail further on.

Creating a sketch of your garden plan that considers all of the basic design elements is really helpful. By moving elements of the garden around on paper, you can work out how everything can best fit together.

Limited Time or Space to Grow Food?

In today’s fast-paced world, many of us feel time poor. While fruit trees and food forests take time to establish, they require much less maintenance than a veggie patch. Most veggies are seasonal and need regular maintenance. If you’re squeezed for time perennial veggies and herbs which grow all year round might be the answer – like asparagus or rosemary.

As for space, think creatively because food can be grown anywhere! In your kitchen you can grow sprouts, while under the house mushrooms will thrive. If your garden is quite shady, consider planting dwarf fruit trees or veggies in pots so they can be easily moved to sunny spots. If you’re growing in pots, remember to use quality organic potting mix, water regularly and feed with compost and diluted seaweed. There are also a number of community gardens in the Illawarra which provide a fantastic opportunity to grow food with others.

Identify Needs

People's needs and visions for growing a food garden vary. It's important to have an agreed picture of what your garden will provide. Everyone involved in the garden should be part of the design process.

It can help to make a list of all the things that are most important to you in creating a food garden. Do you want a low maintenance garden, or can you or fellow gardeners make the time to manage a vibrant, large food garden? Do you want to grow most of your own food, or just a handful of special things? What other functions are important for you in the garden, such as play spaces for children, outdoor entertainment areas, habitat for wildlife or space for pets?

Site Analysis

Each garden site is different. Becoming familiar with your site will help you decide how and where to place different parts of your edible landscape.

Some helpful questions to get a sense of the different aspects of your site are:

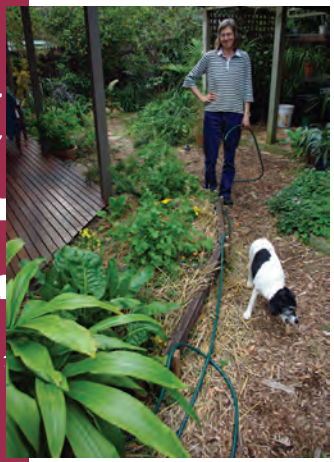
- Where does the sun rise and set throughout the year? Where is it sunny in winter, shady in summer?
- Where do strong winter winds and cooling summer breezes come from?
- How does water enter and leave your site? Where is the soil dry, wet or boggy?
- What is the slope of the land?
- Is your site fire prone?
- How will your garden affect neighbouring buildings and vegetation, and how do they affect your garden?
- Are there powerlines, or underground pipes or cables to be aware of?

"Balconies are perfect for growing perennial herb gardens. Karyn and I often cook Asian or Indian meals so we typically grow galangal, lemongrass, Vietnamese mint, ginger, turmeric, curry leaf tree, perennial coriander, mints and chillis.... all in big pots. While you're at it, be sure to grow a little extra for friends and community."
– John Marsh and Karyn Ridgway, North Wollongong

Synergy and Zoning

The different elements in a well designed garden interact in helpful and positive ways. For example, water hungry plants placed near a garden nursery will 'mop up' any run off, and benefit from regular watering.

These easy pick leafy greens growing at the back doorstep is a good example of Zone 1 planting



Synergy between design elements can help to maximise efficiency and enjoyment by minimising wasted time and energy. Compost bins next to veggie beds make it convenient to harvest and spread finished compost. Placing the veggie beds near your backdoor, rather than down near the back fence, is a great incentive to grab something to add to your meal.

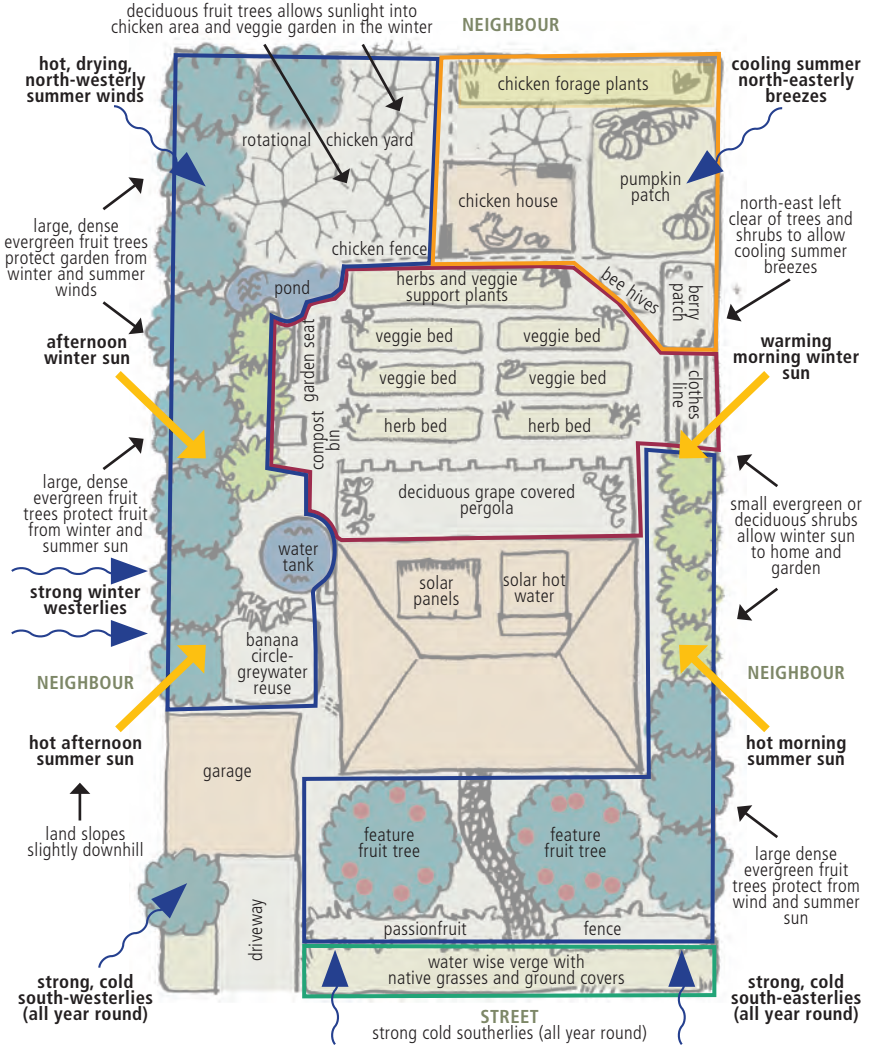
In urban landscape design, it can be helpful to consider some or all of the following 'Zones':

Zone 1 This is the area immediately surrounding the main building (a house, a shed, office, classroom). It's where you put the things you need to visit almost every day, and will usually include vegetable gardens, worm farms and compost bins for kitchen waste.

Zone 2 This is the area that needs less frequent attention, and is great for elements such as perennial plants or your pumpkin patch. Zone 2 is also the place for beehives, chooks or ducks and larger composting systems.

Zone 3 This is where you'd grow your fruit forest, or provide grazing space for larger animals. After establishment there's fairly minimal maintenance, often needing only weekly visits.

Zone 4 Usually furthest from the main building, this Zone is where you might help provide some habitat, featuring hardy local native plants or natural bushland.



NORTH

Example Property Design

fruit trees

deciduous fruit tree

fruit shrub

Zone 1 | Zone 3 | Zone 2 | Zone 4

So what is Permaculture ?

Permaculture is a concept for sustainable design that originated in Australia in the 1970's from the work of Bill Mollison and David Holmgren. With a focus on mimicking natural patterns and relationships, permaculture offers a positive and practical framework for thinking about solutions to environmental, social and economic challenges.

The permaculture approach to design includes thinking in terms of 'Zones', so that elements are placed together in relation to how often they need to be visited or used (and how well they get along). Zones are a flexible concept depending on whether it's a school or a backyard or a small acreage, but they can be useful in planning your garden.

Soils

“Soil is the foundation of life. Its health determines the health of the plants and trees that grow in it, and they in turn determine the health of the animals and the people who eat them and their fruits.”
- Pat Coleby

Soils are amazing living ecosystems. Each handful of soil in an organic garden teems with life. This incredible living system recycles plant and other organic matter quickly and efficiently, eliminating impurities and creating nutrient rich plant food.

Healthy soils have high levels of organic matter. Organic matter is anything that was once living, and it powers the billions of microbes working in the soil. Microbes break down organic matter into an amazing end product called humus. Humus is compost when it’s fully broken down. Humus holds nutrients and water like a sponge, working wonders in the garden. Healthy, living soil truly is your largest rainwater storage device!

Vibrant soils have a ‘loamy’ structure that allows water, plant roots and oxygen to enter with ease. A good balance of minerals such as calcium and magnesium is also vital for optimal soil health. So before doing anything else in your garden, start with improving your soil. Get it healthy and vibrant, and then plant your fruit trees and veggies. Learn all you can about soil. Read about soil building, attend a compost or worm farming workshop run by your local Council, invite your friends over and make some ‘compost tea’! Get to know your soil and undertake some simple soil tests, many of which you can do at home for no or little cost, such as checking how long water takes to drain from a newly dug hole.

Many Soils, Same Approach

No matter what type of soil you are starting with, whether it’s sandy or heavy with clay, the soil improvement techniques are essentially the same. Focus on building up the soil across your whole garden, but concentrate your efforts in the veggie bed and immediately around fruit trees first.

Remember to:

- Increase the soil's organic matter by adding natural soil conditioners such as well-aged animal manures, compost or worm castings.
- Always cover exposed soil with organic mulch. This helps insulate soil biology from extreme temperatures, retains moisture, acts as a weed barrier and adds more organic matter. In the veggie bed ideal mulches are from grassy plants, such as sugar cane mulch. Around fruit trees you can use grass based mulches, but broken down wood based mulches such as wood chips are preferable.
- Replace areas of lawn with selected cover crops, herbs, shrubs and trees to improve soil structure, fertility and organic content. See the support plants section of this booklet for more details.
- Use natural liquid fertilisers and sprays such as worm 'juice', compost tea and liquid seaweed to bring extra nutrients to the soil and plants.
- Minimise disturbing the soil by practising 'no dig' or 'minimal till' gardening.

Professional Soil Testing

If you're really keen on assessing the state of your soil, professional soil tests undertaken in a laboratory can assess the level of different minerals in your soil. From this they can then advise on the correct amounts of important minerals like calcium and magnesium you can add to optimise the health and structure of your soils.

If you are concerned about soil contaminants, you may wish to send away some soil samples for testing. Some suburbs of the Illawarra have a history of heavy industry or chemical agriculture and there may still be contaminants in the soils. Remember even if your soils do have some contaminants, you may still be able to grow veggies in raised beds, or fruit trees which are unlikely to have heavy metals transferred into the fruit.

Your garden soil is the key to the health of your edible plants and yourself

Pest and Disease Management

Planting cabbages during the winter helps to reduce the problem of attack from cabbage white butterfly caterpillars. So can attracting small native birds to your garden, who just love caterpillars!

There's nothing more disappointing than seeing your veggies and fruit trees damaged or destroyed by garden pests or diseases. While there's no magic bullet solution that will banish all pests and diseases, there is a lot we can do to minimise problems and maximise organic harvests.

Two key principles that help minimise the impact of pests and diseases are healthy soils and maximising biodiversity (the variety of life – different plants, animals and environments).

Healthy Soil

Healthy soil makes healthy plants that are well equipped to fight off pests and diseases, just like how a person who enjoys healthy food is more resistant to illness and disease. Check out the previous section for further ideas about building healthy soil.

Biodiversity

Nature is incredibly rich in biodiversity. Diversity creates resilience and the ability to adapt to change. Sustainable organic gardens need to be as rich in biodiversity as they can be. This 'polyculture' style of gardening is starkly different to the 'monoculture' style of industrial agriculture, where just one type of crop is grown for acres and acres. As well as being more sustainable and resistant to devastation from a single pest, polyculture gardens are more productive per acre than monocultures over the long term.

A biodiverse garden has different layers of vegetation, with trees, shrubs, vines and ground covers, as well as sources of water. This encourages animals that help reduce pest problems like small birds, lizards, frogs and predatory insects like dragonflies and praying mantises.

Avoid using any synthetic chemical sprays. And remember, even organic sprays like garlic or chilli sprays harm beneficial insects like bees and ladybeetles as much as they harm pests.

Select trees and veggies that are suited to our local conditions. Trees which are really tropical will struggle in the cooler months of our region, and be vulnerable to disease. In the Illawarra, fruit fly is a well established pest. Plants highly vulnerable to fruit fly infestations such as peaches, nectarines, and large tomatoes are best avoided in a low maintenance organic garden. Swapping seeds and plant material with local gardeners can help you get plant stock that's well adapted to our local conditions.

Plant veggies at the best time of year to avoid peak periods of pests. For example, cabbage, broccoli, cauliflower and other veggies of this family are better planted in the cooler months when there are less cabbage white butterflies around.

Plant 'companion plants' that benefit each other together, such as basil and tomatoes.

Integrate chickens, ducks and other suitable animals into your edible garden to help control garden pests.

Choose 'open pollinated' 'heritage' and 'heirloom' vegetables over modern hybrids as they tend to be more resilient in small scale organic veggie gardens.

Rotate veggies of the same family to different parts of the veggie bed to break the pest and disease cycle in the soil.

Manually remove pests such as caterpillars or provide physical barriers such as exclusion bags over fruit fly susceptible fruits like large tomatoes.

Harvest fruits somewhat early if they will continue to ripen after picking (such as tomatoes and persimmons). This is a good strategy if birds are tough competition for your ripe fruits.

Encourage lizards by providing rockeries and other habitat in sunny areas, as they will help to control snails and slugs naturally.

"Gardening is a way about doing something significant about the greenhouse effect, soil degradation, the ozone layer, fossil fuel depletion, genetic diversity, wilderness preservation, recycling, just about everything."
– Linda Woodrow

The Vegetable and Herb Garden

“Like most people these days, with a busy family life and a hectic working schedule, I began to struggle with finding a balance between the two. I seem to have evened things up a bit now, and it’s all thanks to my veg garden, believe it or not. I love spending the odd hour out there, as it really relaxes me. You might think I sound like a complete hippy now, but growing my own veg for these past few years has filled me with such pride, pleasure and passion.”
– Jamie Oliver

Top 10 Veggies & Herbs

- Zucchini
- Cherry Tomato
- Parsley
- Silverbeet
- Green Beans
- Lettuce
- Cabbage
- Basil
- Potato
- Garlic

Home grown organic produce picked fresh from the garden is just bursting with nutrients and flavour. It is worlds apart from the chemically grown supermarket produce - think of the difference between home grown and conventional tomatoes. Growing your own can be a great money saver, especially for herbs which can be quite expensive to buy but so easy to grow.

Growing your own veggies and herbs can enliven your dinner plate with colourful foods you may have never seen before like purple or white carrots, rainbow silverbeet or yellow cherry tomatoes.

Veggies and herbs can be grown just about anywhere – in pots on balconies or windowsills, in raised beds on top of concrete, in frontyards and backyards, at community centres, in school yards and community gardens.

There’s so much to gain from greening our suburbs with food!

Design

A well designed veggie patch is all about providing fresh organic veggies and herbs year round with minimal work. In addition to the general garden design principles covered earlier in this guide, below are some specific design principles to keep in mind when planning a veggie and herb garden.

Positioning

Veggies and herbs love sun. They need to be positioned where they can get at least six hours of sun a day year round. They're best located close to the house (Zone 1) where you can check on them regularly. An area protected from westerly and southerly winds is ideal.

It's best to keep your veggie beds away from trees, as they can cast too much shade and leach nutrients and water from the beds. As a rough guide, beds should be at least the same distance away from a tree as it is tall – so if a tree is three metres tall, it should be at least three metres away from the veggie beds.

Shape and Size

The shape of veggie beds isn't important and they can be created to best fit your space. What is important is that the shape of the veggie beds allows you to plant and harvest without stepping on the beds and compacting the soil. Raised veggie beds (such as those made from old water tanks) are another option that works especially well for people with limited mobility.

Remember to also 'think up', especially with small gardens. Making the most of vertical space by creating trellises or layers of pots can really help increase your garden's productivity.

As for the size, the only limit is your space and creativity. The amount of produce your veggie beds provide will depend on how much time and effort you put in to building the soil, planting, watering and harvesting. As a guide, fifty square metres of well cared for veggie beds, could provide a family of four most of its veggies and herbs year round.

Narrow veggie beds mean everything is within easy reach, and there's no need to tread on and compact the soil.

Allowing some veggies and herbs to flower, and including local native flowering plants, will attract all sorts of beneficial insects into your food garden.

However modest or grand your design, remember to start small and implement your design in achievable stages.

Efficiency

Design your garden so that it's easy and convenient for you to undertake gardening tasks. It's surprising how much more effort and time it takes to garden if your veggie patch is tucked right down the back of your block rather than at the back door. Installing automatic underground drip irrigation or an automatic watering system for your plant nursery can be huge time savers.

Diversity

Design diversity not only into what you plant in your veggie and herb beds, but the area around the veggie beds. Having a food forest garden, or local native garden rather than lawn will provide habitat for beneficial insects and small birds, add colour and of course if it's a food forest, provide you with lots of fruit!

Construction

Every garden is different, and how to best go about constructing your veggie garden will largely depend on the type and size of garden you're creating. Either way, it's important to first think about how you can build up the soil, and break down the construction process into small, achievable tasks. Inviting some friends around for a working bee and providing a delicious lunch afterwards is a helpful way to kick start the construction process.

Turning Lawns into Lunch

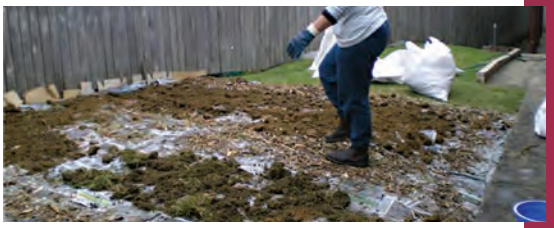
If you're starting your veggie patch on your lawn, a great organic technique to use is 'no-dig gardening.' This technique is much better than just trying to rip out the grass, break up the soil with a shovel and start planting. The soil is usually quite poor underneath grass, and it's a common mistake to try and just turn over the grass and plant straight into the soil.

Creating a No Dig Veggie Garden

1. Mark out the area for your new garden
2. Mow or slash the grass as short as possible
3. 'Sheet mulch' on top of the grass by overlapping wet cardboard or newspapers 8–10 sheets thick
4. Create alternate layers of nitrogen-rich materials (animal manures, kitchen scraps, lucerne, fresh lawn clippings, green plant waste) with carbon-rich materials (straw, sugar cane mulch, dried leaves and lawn clippings). Make the carbon layers about 10 times as thick as the nitrogen layers. Add water and diluted liquid seaweed solution as you go. Build to at least 50cm.
5. Cover with a final layer of straw or hay
6. Leave for 6–8 weeks to break down, OR create holes and fill with compost and plant with leafy greens

Alternatively, you could follow steps 1–3, and use bought soil mix over the sheet mulch. Sprinkle a layer of mature compost or worm castings and add some mulch (straw, sugar cane) and start planting.

This same technique can be used for filling raised veggie beds.



Maintenance

“Gardens don’t appear overnight. Do not be in too much of a hurry to put in permanent paths and edges. The best design solutions often take place after much contemplation.”
– Annette McFarlane

At Dapto Community Farm, people hire plots to grow organic veggies.

Veggie gardens are always changing through the seasons. They need regular attention to thrive. Ideally you should visit your beds briefly each day, and dedicate at least an hour every week for maintenance (more in summer and less in winter). The bigger the beds you create and the more veggies and herbs you grow, the more time is needed.

Below are some key points to keep in mind when maintaining your veggie and herb beds.

Sow and Plant at the Right Time

Many veggies and herbs need particular conditions to thrive, and knowing what to plant when can save you a lot of time and disappointment. For example if you try to grow basil or capsicum in the winter, the soil temperature is too cold for seeds to germinate and grow.

At the back of this guide there is a handy table for herbs and veggies that grow well in the Illawarra. It details the best time for sowing seeds, planting and harvesting and other information about how to make your veggies thrive.

Planting for Continual Harvests

In the Illawarra we’re lucky to be able to grow veggies all year round. By staggering planting and putting in new seedlings every two weeks, you can ensure you have food year round, and not a ‘feast followed by famine!’ Planting different varieties of the same type of plant can also help ensure your harvests don’t all come at once.

Crop Rotation

Change the spot where you grow crops of the same family (see veggie tables at the back of this guide) to help break pest and disease cycles in the soil. Rotating crops can also ensure the same nutrients aren’t always being drawn from the soil.

Building the Soil

Regularly replenish or build up the soil by adding compost, worm castings, liquid seaweed and mulch. Try to always have something growing in the beds – it keeps the soil microbes active and the weeds out. You can rest and revitalise an area for a season by planting a 'cover crop' or green manure.

Mulching

The soil microbes and worms busily working away building your soils are sensitive folk that don't like the sun. Always keep them and your soil covered with mulch – bare soil is dead soil. Mulches rich in sugars such as sugar cane are great for veggie beds.

Saving Seed

Letting some of your best performing veggies go to seed can save you a lot of money buying plants. It also allows your plants to evolve and become suited to your local conditions. If you let some veggies go to seed in the garden, you'll often get them popping up here and there as 'volunteers'. By collecting seeds, drying and saving them, you can propagate them next season or share them with fellow gardeners.

Harvesting

This is of course the fun part! Be diligent checking what needs to be harvested – it's amazing how a zucchini can turn into a marrow if you forget to check on it for a couple of days. Learn a bit about your plants so you know how to store, preserve, pickle or dehydrate them in a way that ensures you get the most out of your garden harvests. Local libraries are great places to look for books about pickling, preserving and drying herbs.

Saving your own seeds helps conserve locally adapted varieties and genetic diversity'

A Flourishing Food Forest

So what is a food forest? Well it's literally a forest of food with incredible diversity and layers of different edible vegetation - ground covers, shrubs, trees, vines and perhaps even water-loving plants growing in ponds. Food forests are earth friendly, people friendly places that just buzz with life. They're very different to a garden of lonely fruit trees surrounded by grass.

Food forest gardening is the most sustainable, easiest and fun way to grow food. They produce abundant harvests year round and create habitat for creatures from the tiniest soil microbes to birds nesting in the trees. They are places that lift the spirit. Many people feel they don't have the space to build food forests, but small food forests can thrive in small backyards and the tiniest of courtyards. Even on balconies and rooftops you can grow a mini food forest – only your imagination is the limit!

"You need to duck hanging fruit as you wander along the small path that winds through a diverse subtropical food forest, framed by native windbreaks and dotted with metal sculptures and colourful mosaics."
– North Wollongong Community Garden Group

Exotic Fruit

Growing your own fruit trees can open you up to an amazing range of exotic fruits that you will never find on the supermarket shelves.

Enjoy the sweet custard flavour of cherimoyas that will have kids forgetting about lollies, amaze your friends with the colour and texture of black sapote (the 'chocolate pudding fruit'), and delight in handfuls of tangy Brazilian cherries.

Brazilian Cherry

Design

In addition to the general garden design principles covered earlier in this guide, below are some specific design principles that are helpful to keep in mind when designing a food forest.

Mimic Nature

Food forests are designed to mimic nature and in doing so help reduce the time and effort required by us. Working with the principles of nature is much easier than working against them!

In nature, the soil is never bare and it's rare to have one kind of plant dominant over a large area – like large expanses of lawn. In creating a food forest the aim is to minimise areas of lawn and bare earth by planting out a diversity of plants including ground covers. This also helps out-compete any weeds.

There is no waste in nature. In designing your food forest garden, think about how you can turn 'wastes' from nearby houses or buildings such as greywater and food scraps into valuable resources for your food forest. Rather than shipping prunings and unwanted plant material off your property in your greenwaste bin, turn them into mulch or compost and help build up your soils over time, just like what happens in nature.

"I found a few citrus trees were great to plant down the side of my house where space is limited. I'm thrilled we get so much fruit off these trees considering they only receive morning sun. They taste so much better than the fruit you can buy from the shops."
– Carol Mellor, Unanderra

Layering

A key feature of food forest gardens is having 'layers' of different kinds of vegetation. A conventional yard might only have a single 'layer' of grass and then one additional 'layer' with a few trees 3–4 metres high. In comparison, a food forest will have a diverse range of ground covers, shrubs, vines, small trees, and tall trees, creating a garden rich with different vegetation levels. By increasing the layers in a garden, you can dramatically increase the variety and amount of food available for harvesting.

Water

Although in the Illawarra we generally have relatively good rainfall, there will be times when you need to water your food forest, especially in the first year or two. With some smart design features, you can minimise the amount of time and effort you need to spend watering. Group plants together that have similar water requirements. For example, grow moisture loving bananas and paw paws close to each other and near a source of water such as grey-water from the laundry, or run off from a roof.

In areas that are drier (e.g. top of the hill) group drought tolerant fruit trees like olives and mulberries together. On slopes, digging swales, which are essentially trenches dug horizontally across the slope, can help capture and absorb water that would otherwise flow off the land during heavy rain. Underground drip irrigation systems hooked up to your water tank can save you time watering. Remember healthy soil is your biggest rainwater tank.

The Right Plants in the Right Place

So what fruit trees do you select for your food forest? And where exactly do you plant them? Choosing a fruit tree that's not suited to our climate and local conditions (which includes the presence of serious pests like fruit fly) means it will be high maintenance, perform poorly or worse wither and die on you. Similarly, a fruit tree well suited to our area but planted in the wrong place (too wet, too dry, too windy etc) will be prone to disease and disappointing harvests. It might even cause a host of other problems such as shading other trees, blowing over in strong winds or blocking solar access to your house.

To minimise the time and effort you spend creating your food forest, it makes sense to carefully position each plant based on their individual needs. This means you need to learn about each plant – what are their requirements for sun, water and fertility? Are they tolerant of strong winds? How tall do they grow? At the back of this guide there are handy tables detailing a range of fruit trees which will grow well in the Illawarra. They also detail each tree's needs and characteristics, so you know what conditions they need to thrive.

In the Illawarra, fruit trees can be planted with care at any time of the year. However autumn is the best time of year to plant evergreen trees, while winter is best to plant deciduous trees. If you're planting trees in the summer, you'll need to be particularly vigilant at ensuring they receive adequate water while the roots establish.

Grafted versus Seedling Trees

Many fruit trees for sale in plant nurseries are grafted. Grafting involves taking a branch from a fruit tree that produces great crops, and literally sticking it onto the main stem of another similar tree, known as the 'root stock.' It's an amazing quirk of nature that the tissues of the branch and the root stock will join and two trees will become one.

Grafted trees have many advantages. They allow you to be sure about the characteristics of the tree – the quality of the fruit, how tall it will grow and what conditions it likes. When you grow a fruit tree from seed, genetics are at play, and you can't always be sure of the characteristics of the new tree. Grafted fruit trees will often fruit quicker than seedling trees. As an example, an avocado grown from seed may take five or more years to fruit, but a grafted avocado can fruit within a couple of years.

"Living in a rental property with a small backyard has never stopped me from growing and gardening. In fact my secret little courtyard garden has provided the perfect canvas to create layers and to add splashes of colour with interesting things growing out of different types of pots, baskets, wheelbarrows and watering cans. I love to grow plants I can eat and use in the kitchen as it creates an ever changing garden that grows, is harvested and replaced by fresh new plants."
– Caren Taylor, Fairy Meadow

Creating a Food Forest Garden

Once you have your design completed, it's time to think about turning your vision into reality. There are many different ways to create a food forest garden. It's helpful to implement your design in stages, breaking it down into small, achievable tasks. Remember food forests come to life over time.

1. Starting a food forest garden begins with sowing beneficial grounds covers like clover and pintos peanut.

2. The beginnings of a food forest. Citrus trees are planted amongst beneficial cover crops and young support trees.

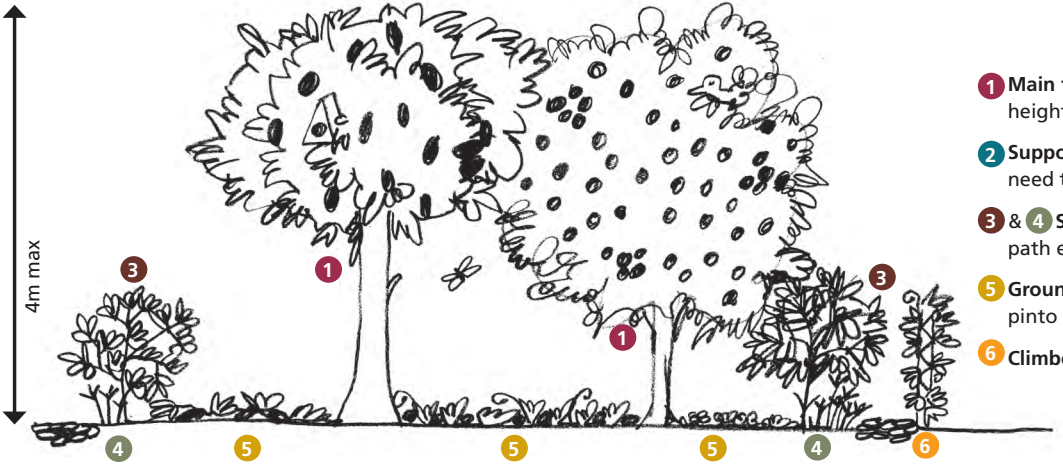
3. The same site a few years on shows the various layers of vegetation in a maturing food forest.

Evolution of a Food Forest

Young, Establishing Food Forest (~2 years)

1. **Main fruit or nut trees** e.g. citrus, macadamia
2. **Support trees** e.g. sickle wattle, bleeding heart
3. **Shrubs** e.g. golden tip, blueberry, galangal
4. **Herbs** e.g. comfrey, parsley, tumeric
5. **Ground covers** e.g. sweet potato, clover, strawberries
6. **Climbers** e.g. passionfruit along fence line

Mature Food Forest (~10 years)



1. **Main fruit trees** - pruned to a manageable height
2. **Support trees** - removed as main fruit trees need their space
3. & 4 **Shrubs and Herbs** - shaded out except on path edges
5. **Ground covers** - mulch or shade tolerant e.g. pinto peanut
6. **Climbers** e.g. passionfruit along fence line

Support Plants

In creating a food forest, there's a really important role played by 'support plants.' Support plants are the herbs, groundcovers, shrubs and trees that are planted at the beginning stage of the food forest. They're often not edible, but work to support the growth and development of your edible plants. They're generally hardy and very fast growing. As your food forest matures, many of these support plants will be replaced or shaded out as the main fruit trees grow in size and create a closed canopy.

"Backyard, small acreage food forest gardening is the gardening method of the future for the future."
- Jade Woodhouse

Support plants are essential for:

Soil Improvement aerating and restructuring the soil, bringing up minerals from deep down in the soil that are inaccessible to most plants, fixing nitrogen and adding carbon to the soil.

Protection protecting plants and soil from strong winds, heavy rain and excessive sun.

Habitat providing food and shelter for wildlife, including beneficial insects and animals.

Food for soil biology, chooks, wildlife and sometimes even us!

Every fruit tree should be inter-planted with support trees and shrubs, and surrounded by a carpet of helpful ground covers and herbs. This is fruit tree heaven compared to being surrounded by lawn, which is very competitive with fruit trees. Some great support plants to grow in food forest gardens in the Illawarra are listed in the table on p31. In general, support plants can be planted with any edible fruit tree, vine or shrub.

Recommended Support Plants for Illawarra Food Forests

Common/Botanical Name	Native	Improves Soil	Protection	Habitat	Edible
GROUND COVERS		Function			
Barrel Medic *Medicago truncatula*		●	●	●	
Native Geranium *Geranium homeanum*	●		●	●	
Lucerne *Medicago sativa*		●	●	●	
Nasturtium *Tropaeolum majus*			●	●	●
Pinto Peanut *Arachis pintoi*		●	●	●	
Red Clover *Trifolium pratense*		●	●	●	
Sweet Potato *Ipomoea batatas*		●	●	●	●
White Clover *Trifolium repens*		●	●	●	
Wynn's Cassia *Cassia rotundifolia*		●	●	●	
TREES		Function			
Bleeding Heart *Homalanthus populifolius*	●	●	●	●	
Sickle Wattle *Acacia falcata*	●	●	●	●	
Sydney Golden Wattle *Acacia longifolia*	●	●	●	●	
Trema *Trema tomentosa*	●	●	●	●	
Native Hibiscus *Hibiscus heterophyllus*	●	●	●	●	

Common/Botanical Name	Native	Improves Soil	Protection	Habitat	Edible
SHRUBS		Function			
Golden Tip *Goodia lotifolia*	●	●		●	
Indigofera *Indigofera australis*	●	●		●	
Pineapple Sage *Salvia elegans*				●	
Pigeon Pea *Cajanus cajan*		●		●	●
HERBS & GRASSES		Function			
Alyssum *Lobularia maritima*				●	
Calendula *Calendula officinalis*				●	●
Comfrey *Symphytum officinale*		●		●	
Citronellas Grass *Cymbopogon nardus*		●		●	
Dandelion *Taraxacum officinale*		●		●	●
Dill *Anethum graveolens*				●	●
Lemongrass *cymbopogon citratus*		●		●	●
Parsley *Petroselinum crispum*		●		●	●
Vetiver Grass *Vetiveria zizanioides*		●		●	
Yarrow *Achillea millefolium*		●		●	

Local natives like this bleeding heart can be attractive and useful support plants.

Building from the Ground Up

“There are a core of seven dedicated volunteers and an itinerant group of more than 30 volunteers who work together on regular events and gatherings such as working bees, daylight saving evenings, fruit & veggie swaps and permaculture and organic gardening workshops.”
– North Wollongong Community Garden Group

Many urban food forests are established from what was a carpet of grass, with only a few trees scattered here and there. Be sure to check your local Council regulations before undertaking earthworks, altering or removing any structures, pruning or removing existing trees. Tree management or preservation policies regulate the pruning or removal of trees, although fruit trees are often exempt.

Here’s a successful recipe for creating food forests in the Illawarra – increase the diversity of groundcovers and herbs first, then plant shrubs and then finally trees and some vines. This is quite a different strategy to the idea of planting fruit trees in a yard full of grass, but there are many benefits to this new approach.

The following series of actions implemented over time, has worked successfully to create food forests in the Illawarra:

- For small areas or garden edges firstly cut the grass short, then smother it by ‘sheet mulching’ with a layer of wet newspaper 8-10 sheets thick. For larger areas, hire a turf cutter and turf cut the grass, then flip each patch of grass upside down.
- Next spread a thin layer of garden soil, or even better compost on top, and seed with ‘green manure crops’ such as lucerne or clover, which are fast growing nitrogen fixing ground covers. Alternatively, mulch the soil with grass clippings, hay, tree mulch or whatever you can find! Beware of using material which may contain weed seeds.
- Working off your garden design, mark out where your fruit trees will go and plant them.
- In between the fruit trees plant out support groundcovers (e.g. pintos peanut, sweet potato, nasturtium), then shrubs (e.g. golden tip, pigeon pea), and trees (e.g. wattles, bleeding hearts).

Sourcing Plants

Once you've decided on your garden design, it's time to start sourcing your plants. Some good places to start searching include:

Your local plant nursery. If you can't find what you're after on the shelves, ask if they can order it in for you.

Local seed saver networks and gardening/ growers clubs (search on-line for Illawarra clubs).

Local market plant stalls.

Community gardens sometimes have plant stock to sell or trade (check the resources section at the end of the guide for community garden details).

Local food gardeners - often cuttings and seed are shared from one gardener to another.

Searching on the Internet for topics like 'organic seeds' or 'subtropical fruit trees' will bring up some great Australian companies that sell plants and seeds that can be hard to track down elsewhere. Plants (yes even trees!) can be posted straight to your front door.

"Naturally it is a place to grow food and the way we do this makes the garden a very special place. We don't have plots at our garden, we grow produce together and then we harvest and share! It is a place where people meet and community connections are strengthened. We welcome anyone who wants to work cooperatively to grow organic food in a sustainable way, no matter what your gardening experience."
– Kiama Community Garden

“The Barrack Heights Community Garden was formed to give the community members of the area the opportunity to grow their own healthy vegetables and fruit. Our garden is not fenced, making it available to all the community. In an area of low income families, the community garden will help to provide free organic food that will enhance their quality of life.”
– Cliff Ball,
Barrack Heights
Community Garden

Top 10 Fruit Trees

- Citrus
- Banana
- Cherimoya
- Macadamia
- Mulberry
- Paw Paw
- Persimmon
- Seedling Passionfruit
- Fig
- Jaboticaba

Top 10 Bush Food Plants

- Macadamia
- Atherton Raspberry
- Davidson’s Plum
- Warrigal Greens
- Lemon Myrtle
- Finger Lime
- Aniseed Myrtle
- Midyim Berry
- Small-leaf Tamarind
- Black apple

Top 10 Support Plants: Trees, Shrubs, Herbs, Ground Covers

- Bleeding Heart
- Sydney Golden Wattle
- Golden Tip
- Pigeon Pea
- Comfrey
- Pinto Peanut
- Sweet Potato
- White Clover
- Lucerne
- Barrel Medic

Keep an Eye on those Support Trees

Support trees are a huge help in the early years of establishing food forest gardens. But a common mistake in creating a food forest garden is planting support trees such as large wattles, and then forgetting to prune them regularly and not removing them as the fruit trees mature. It does your fruit trees, and your harvest basket, no good to be shaded out by a huge non-fruiting tree. Support trees are an essential part of food forests, but be sure to keep them under control.

Maintaining your Food Forest

By keeping in mind the below maintenance tasks (and actually regularly doing the maintenance!), you can ensure your food forest will be producing an abundance of fruit before you know it.

With some creativity, food forests can be created in the smallest of gardens.

Weed Control

A weed is really anything growing where you don't want it to. During the establishment phase, you'll need to be especially vigilant of the grass coming back. Make sure you remove it by the roots. Many plants considered weeds in a manicured lawn like clover and dandelion, are considered useful support plants in a food forest garden. Remember for your fruit trees to thrive, they need the area from their trunk to their 'drip line' (the edge of their canopy) mulched and kept clear of all vegetation, support plants included.

As your food forest matures, you can look forward to minimal weeding as ground covers become well established and fruit trees start to provide good shade.

Mulching

Mulches such as straw, broken down tree mulch, or even dried grass clippings all make suitable mulches for around the base of your fruit trees. Away from the base of your fruit trees, it will be less work and more cost effective to establish ground cover support plants such as clover or sweet potato that act as a 'living mulch'.

Feeding

Fruit trees really benefit from some extra 'food' at times when they're producing new growth and fruiting. The best 'food' is compost and/or worm castings. A splash of diluted liquid seaweed also gives lots of valuable trace nutrients.

How much and how often you feed really depends on the particular fruit tree's needs and the soil type. You can't really apply too much natural foods like compost or worm castings, so don't be too concerned about over-doing it. A couple of buckets per tree twice per year can be used as a rough guide while the tree is young, increasing as the tree matures. Remember to always cover compost or worm castings with mulch. If you also have free-ranging small animals like chickens, and grow 'support groundcovers' in your food forest, you'll be creating rich, fertile soils for your fruit trees to tap into year round.

Watering

The amount and frequency of watering your food forest depends on a number of factors, such as your soil, site location and slope. In general, if there hasn't been any decent rain for a couple of weeks during the warmer months of the year, then a good, deep watering of the garden once a fortnight is

helpful until the next decent rain. Young fruit trees will need extra watering during their first year or two as they get established, so be sure to check them on a weekly basis.

De-Suckering

With your grafted fruit trees, you need to keep an eye on them to make sure the 'root stock' which your fruit tree is grafted onto, doesn't start to grow branches and overtake your fruit tree. Remove any shoots growing from below the graft. Also with bananas, removing excess suckers will help encourage growth of the main stem and fruit – and gives you valuable banana plants to share with fellow gardeners!

Pruning

Many fruit trees need pruning to produce good crops. Deciduous fruit trees in particular need annual pruning. Pruning also keeps trees to a manageable size (no more than 3 metres is ideal) so you can reach the fruit.

Your food forest should not be a towering forest of trees with fruit so high it never gets harvested! If trees are kept small, it also allows you to plant a greater number and diversity of trees. There are three or four main methods of pruning which depend on the fruit tree you are growing. In some cases, pruning the wrong way can lead to no fruit for that year. Ask a fellow gardener, or consult a pruning book to find out what method is best for each particular tree.

Harvesting

Need we say more – this is what it's all about! Build up your creative skills in the kitchen, because a well managed food forest in the Illawarra will provide you with an abundance of fruits, nuts and edible foods all year round.

There's nothing more fun than harvesting fresh, organic fruit!

Pruning ( ) Harvesting ( ) and Fertilising Times ( )

MONTH OF THE YEAR

FRUIT TREES	J	F	M	A	M	J	J	A	S	O	N	D	Size	Sunlight Requirements	Deciduous	Water Requirements	Fruit Fly Resistant	Wind Tolerance	Best Varieties
Apricot *Prunus armeniaca*													small		yes		no	med	Glengarry, Bentley
Apple *Malus domestica*													small		yes		yes	med	Tropical Sweet, Tropical Anna
Avocado *Persea americana*													medium		no		yes	med	Pinkerton, Wurtz
Babaco *Carica petagona*													small		no		yes	low	
Banana *Musa* spp.													small		no		yes	low	Cavendish (Williams), Lady Finger
Black Sapote *Diospyros digna*													large		no		yes	med	
Carambola *Averroha carambola*													medium		no		yes	med	Kary, Kembangan
Cherimoya *Annona cherimola*													med-large		semi		yes	low	Fino de Jete/White
Cherry of Rio Grande *Eugenia aggregata*													small		no		yes	high	
Chestnut *Castanea sativa*													very large		yes		yes	high	
Custard Apple *Annona atemoya*													medium		semi		yes	med	African Pride
Davidson's Plum *Davidsonia pruriens*													medium		no		yes	med	
Feijoa *Acca sellowiana*													small		no		no	high	Duffy, Apollo

Cherry of the Rio Grande

Banana

Cherimoya

Davidson's Plum

FRUIT TREES

Pruning (✂)
Harvesting (▨) and
Fertilising Times ( )
MONTH OF THE YEAR

TREES	J	F	M	A	M	J	J	A	S	O	N	D	Size	Sunlight Requirements	Deciduous	Water Requirements	Fruit Fly Resistant	Wind Tolerance	Best Varieties
Fig *Ficus carica*	▨	▨	▨	✂							▨	▨	medium	☀	yes	💧💧	yes	med	Black Genoa, Excel
Grapefruit *Citrus paradisi*	▨					▨	▨	▨	▨				medium	☀⛅	no	💧💧	yes	high	Marsh, Star Ruby
Lemon *Citrus limon*	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	medium	☀⛅	no	💧	usually	high	Meyer, Eureka
Lime *Citrus latifolia*	▨		▨	▨	▨	▨	▨	▨					small	☀⛅	no	💧💧	yes	high	Tahitian
Longan *Euphoria longan*			▨	▨					▨				large	☀	no	💧💧	yes	high	Biew Kiew, Kohala
Lychee *Litchi chinensis*	▨	▨							▨			▨	med-large	☀	no	💧💧	yes	med	Bosworth 3, Wai Chee
Macadamia *Macadamia* spp.			▨	▨	▨	▨	▨	▨	▨				large	☀⛅	no	💧💧	yes	high	A16, A38, 814
Mandarin *Citrus reticulata*	▨				▨	▨	▨	▨	▨				medium	☀⛅	no	💧💧	yes	high	Emperor, Imperial
Mango *Mangifera inidca*		▨	▨	▨	▨				▨			▨	medium	☀	no	💧💧	usually	high	Valencia, Glenn
Mulberry *Morus nigra* ❀							▨	▨	▨	▨	✂		large	☀	yes	💧	usually	med	Beenleigh Black, White Shatoot
Olive *Olea europaea* ❀		▨	▨	✂					▨				medium	☀	no	💧	yes	high	Kalamata, Manzanillo
Orange *Citrus sinensis*	▨				▨	▨	▨	▨	▨	▨	▨	▨	medium	☀	no	💧💧	yes	high	Valencia, Washington navel
Panama Berry *Muntingia calabura* ❀	▨	▨	▨	▨	▨	▨	▨		▨			▨	medium	☀	no	💧	yes	med	


Fig


Mulberry


Olives


Oranges

❀ *Some food plants have the potential to escape into natural areas. Ensure all fruit is harvested to prevent spreading by animals, and don't let plants creep over your fence. Consider alternatives if you live near bushland.*

FRUIT TREES

Pruning (✂)
Harvesting (▨) and
Fertilising Times (■)

MONTH OF THE YEAR

Plant Name	J	F	M	A	M	J	J	A	S	O	N	D	Size	Sunlight Requirements	Deciduous	Water Requirements	Fruit Fly Resistant	Wind Tolerance	Best Varieties
TREES																			
Paw Paw *Carica papaya*	▨	▨	▨	▨	▨	▨			▨	▨	▨	▨	medium	☀☁	no	💧💧	yes	low	Southern Red, RB3
Peach/Nectarine *Prunus persica*	▨	✂							▨	▨	▨	▨	small	☀	yes	💧💧	no	med	Dwarf varieties
Pear *Pyrus communis*	▨	▨	✂						■				medium	☀	yes	💧💧	yes	med	Buerre Busch, Williams
Pecan *Carya illinoinensis*			▨	▨	▨		✂		■				very large	☀	yes	💧💧	yes	low	Shoshonii, Desirable
Persimmon *Diospyros kaki*			▨	▨	▨		✂		■				medium	☀	yes	💧💧	usually	low	Fuyu, Flat Seedless, Hachiya
Plum *Prunus* spp.									■	▨	▨	✂	small	☀	yes	💧💧	no	med	Low-chill varieties
Pomegranite *Punica granatum*			▨	▨	▨		✂						small	☀	no	💧	no	high	
Sapodilla *Manilkara zapota*	▨	▨	▨						■			▨	medium	☀	no	💧	yes	high	C55, Prolific
Small-leaf Tamarind *Diploglotis campbelli*	▨	▨	■						■			▨	large	☀☁	no	💧💧	yes	high	
Wampee *Clausena lansium*	▨	▨	▨						■			▨	small	☀	no	💧💧	yes	med	Guy Sahm, Yeem Pay
White Sapote *Casimora edulis*	▨	▨	▨						■				large	☀	no	💧💧	no	med	Lemon gold, Golden Globe


Paw Paw


Persimmon


Plum


Sapodilla

FRUIT TREES

Plant Name	Pruning (✂) Harvesting (▨) and Fertilising Times (▢) MONTH OF THE YEAR												Size	Sunlight Requirements	Deciduous	Water Requirements	Fruit Fly Resistant	Wind Tolerance	Best Varieties
SHRUBS	J	F	M	A	M	J	J	A	S	O	N	D							
Acerola Cherry *Malpighia glabra*	▢	▨	▨	▨	✂				▢				small	☀	no	💧💧	yes	med	Florida Sweet
Atherton Rasberry *Rubus fraxinifolius* ❀						▨	▨	▨	▨	✂	▨	▨	small	☀⛅	no	💧💧	yes	low	
Blueberry *Vaccinum* spp.	▨	▨	▢	▨	▨	▨	✂	▨	▨	▨	▨	▨	small	☀	semi	💧💧💧	yes	low	Low-chill varieties
Brazilan Cherry *Eugenia uniflora* ❀	▨	▨	▨	▨	▨	▨	▨	▨	▢		▨	▨	sm-medium	☀	no	💧💧	yes	med	
Coffee *Coffea* spp.					▨	▨	▨	▨	▨				small	☀⛅	no	💧💧	yes	low	
Finger Lime *Microcitrus australasica*			▨	▨	▨	▨			▢				small	☀⛅	no	💧💧	yes	med	Collette
Grumichama *Eugenia brasiliensis* ❀									▢		▨	▨	sm-medium	☀⛅	no	💧💧	yes	high	
Guava *Psidium* spp. ❀		▨	▨	▨	▨	▨	✂		▢				sm-medium	☀	no	💧💧	no	high	Hawaiian, Mexican Cream
Jaboticaba *Myrciara cauliflora*			▨	▨	▨				▢	▨	▨		sm-medium	☀	no	💧💧	yes	high	
Raspberry *Rubus idaeus*	▨	▨	▨	▨			✂		▢				small	☀⛅	yes	💧💧	yes	low	

Acerola Cherry

Hawaiian Guava

Atherton Raspberry

Coffee

❀ *Some food plants have the potential to escape into natural areas. Ensure all fruit is harvested to prevent spreading by animals, and don't let plants creep over your fence. Consider alternatives if you live near bushland.*

FRUIT SHRUBS

Plant Name	Pruning (✂) Harvesting (▨) and Fertilising Times (▬) MONTH OF THE YEAR J	F	M	A	M	J	J	A	S	O	N	D	Size	Sunlight Requirements	Deciduous	Water Requirements	Fruit Fly Resistant	Wind Tolerance	Best Varieties
GROUNDCOVER																			
Strawberry *Fragaria x ananassa*	▨	▨	▨	▨					▨	▨	▨	▨	n/a	☀⛅	no	💧💧	yes	n/a	
Watermelon *Cillrullus lanatus*	▨	▨	▨	▨					▬				n/a	☀	no	💧💧💧	yes	n/a	Sugarbaby
VINES	J	F	M	A	M	J	J	A	S	O	N	D		☀⛅					
Dragon Fruit *Hylocereus* spp.		▨	▬	▨	▨	▨			▬				climber	☀⛅	no	💧💧	yes	med	
Kiwifruit *Actinidia deliciosa*							✂		▬				large climber	☀⛅	yes	💧💧💧	yes	low	Sweetie, H4, (need male pollinator)
Passionfruit *Passiflora edulis* ❀	▨	▨	▨	▨	▨	▨	✂		▬			▨	climber	☀⛅	no	💧💧	yes	med	Purple, Panama Gold (not grafted)
Grape *Vitis vinifera*	▨	▨	▨				✂		▬				large climber	☀	yes	💧💧	yes	med	Golden muscat, Isabella black

❀ *Some food plants have the potential to escape into natural areas. Ensure all fruit is harvested to prevent spreading by animals, and don't let plants creep over your fence. Consider alternatives if you live near bushland.*


Kiwifruit


Dragon Fruit


Passionfruit


Grape

FRUIT GROUNDCOVERS & VINES

Vegetable (Family)	Best Planting Time ( ) Harvesting ( ) MONTH OF THE YEAR												Plant Space (cm)	Time to Yield (days)	Sow Temp (°C)	Companions
ALLIACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Garlic *Allium fistulosum*													15	180+	n/a	most plants except Fabaceae family
Leek *Allium porrum*													10	80+	8-30	most plants except Fabaceae family
Onion *Allium cepa*													15	90+	10-25	most plants except Fabaceae family
Shallots *Allium wakegi*													15	90+	8-30	most plants except Fabaceae family
AMARANTHACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Beetroot *Beta vulgaris*													15	55+	8-30	Brassicaceae family, lettuce, onion
Silverbeet *Beta vulgaris*													30	55+	8-30	Brassicaceae & Alliaceae family
Spinach *Spinacia oleracea*													30	70+	7-25	Fabaceae family, celery
APIACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Carrot *Daucus carota*													10	40+	8-30	most plants, particularly Alliacaece family
Celery *Apium graveolens*													30	90+	10-20	most plants
Parsnip *Pastinaca sativa*													25	110+	5-18	most plants
BRASSICACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Broccoli *Brassica oleracea*													35-50	90+	7-30	Alliaceae & Fabaceae family
Brussels sprouts *Brassica oleracea*													75	160+	7-30	Alliaceae & Fabaceae family
Cabbage *Brassica oleracea*													35-60	75+	7-35	Alliaceae & Fabaceae family
Cauliflower *Brassica oleracea*													45-60	90+	7-30	Alliaceae & Fabaceae family
Chinese greens *Brassica* spp.													30	70+	10	Alliaceae and Fabaceae family
Kale *Brassica oleracea*													50	60+	8-30	Alliaceae and Fabaceae family
Kohlrabi *Brassica oleracea*													50	55+	8-30	Alliaceae and Fabaceae family
Radish *Raphanus sativa*													20	35+	5-20	Alliaceae and Fabaceae family
Rocket *Eruca sativa*													25	50+	5-25	Alliaceae and Fabaceae family

VEGETABLES

Vegetable (Family)	Best Planting Time ( ) Harvesting ( ) MONTH OF THE YEAR												Plant Space (cm)	Time to Yield (days)	Sow Temp (°C)	Companions
CURCUBITACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Cucumber *Cucumis sativus*													50	60+	20-35	corn, sunflower, Apiaceae family
Pumpkin *Cucurbita* spp.													200+	110+	17-32	corn, sunflower, Apiaceae family
Squash *Cucurbita* spp.													100	60+	17-32	corn, sunflower, Apiaceae family
Zucchini *Cucurbita pepo*													100	60+	20-32	corn, sunflower, Apiaceae family
FABACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Bean, Broad *Vicia faba*													30	120+	6-24	Solanaceae, Apiaceae, Brassicaceae families
Bean, Green *Phaseolus vulgaris*													20	70+	13-30	Solanaceae, Apiaceae, Brassicaceae families
Pea *Pisum sativum*													10	75+	10-25	Solanaceae, Apiaceae, Brassicaceae families
SOLANACEAE	J	F	M	A	M	J	J	A	S	O	N	D				
Capsicum *Capsicum annuum*													40	100+	21-35	basil, leafy greens
Chilli *Capsicum* spp.													40	100+	18-35	basil, leafy greens
Eggplant *Solanum melongena*													50	90+	21-32	basil, leafy greens
Potato *Solanum tuberosum*													40	110+	16-22	basil, leafy greens
Tomato *Solanum lycopersicum*													50	60+	16-35	basil, leafy greens
OTHER	J	F	M	A	M	J	J	A	S	O	N	D				
Asparagus *Asparagus officinalis*													30	365+	n/a	
Corn *Zea mays*													30	70+	13-35	sunflowers, Fabaceae & Curcubitaceae families
Lettuce *Lactuca sativa*													25	50+	5-25	carrots, beets, brassicas
Sweet potato *Ipomoea batatas*													50	120+	n/a	
Warrigal Greens *Tetragonia tetragonioides*													60+	60+	18-35	

Vegetable (Family)	Best Planting Time ( ) Harvesting ( ) MONTH OF THE YEAR												Plant Space (cm)	Time to Yield (days)	Sow Temp (°C)	Companions
ANNUAL	J	F	M	A	M	J	J	A	S	O	N	D				
Basil *Ocimum* spp.													30	60+	>20	tomatoes
Coriander *Coriandrum sativum*													30	60+	16-25	most plants - leave to flower
Dill *Anethum graveolens*													30	60+	16-30	brassicas
Parsley *Petroselinum crispum*													20	90+	16-30	tomatoes, asparagus
PERENNIAL	J	F	M	A	M	J	J	A	S	O	N	D				
Chives *Allium schoenoprasum*													25	perennial	n/a	most plants except fabaceae family
Ginger *Zingiber officinale*													30	perennial	n/a	
Mint *Mentha* spp.													50	perennial	20-25	Brassicaceae family, tomato, beans
Lemongrass *Cymbopogon citratus*													60	perennial	n/a	
Oregano *Origanum vulgare*													40	perennial	>15	most plants
Rosemary *Rosmarinus officinalis*													60	perennial	n/a	Brassicaceae family, carrots
Sage *Salvia officinalis*													60	perennial	n/a	Brassicaceae family
Thyme *Thymus serpyllum*													50	perennial	n/a	Brassicaceae family


Garlic


Chilli


Coriander


Rosemary

HERBS

Ideas for Further Inspiration and Information

Council Sustainability Workshops

Subject to funding, priorities and demand Kiama, Shellharbour and Wollongong Councils offer practical workshops for residents on topics such as composting, worm farming, veggie gardening, permaculture, backyard chook keeping and preserving garden produce. Contact your local Council to see what's coming up.

Wollongong City Council
www.wollongong.nsw.gov.au

Shellharbour City Council
www.shellharbour.nsw.gov.au

Kiama Municipal Council
www.kiama.nsw.gov.au

Web Resources

Happy Earth
Follow the story of a Wollongong family as they embark on an adventure in sustainability and grow their own food on a suburban block.
www.happyearth.com.au

Green Change
Documents a Kiama family's journey towards a sustainable lifestyle and food production on small acreage.
http://green-change.com

Food Fairness Illawarra
A local alliance that is passionate about good food for all.
www.foodfairnessillawarra.org.au

ABC Gardening Australia
The website of the popular ABC TV series has a wealth of information for food gardeners. You'll also find here information on the excellent Organic Gardener magazine, available online or at newsagents.
www.abc.net.au/gardening

Seed Savers Network
Learn more about growing, harvesting and saving locally adapted seed, and find a local seed network.
http://www.seedsavers.net

Illawarra Community Gardens

There are a number of community gardens in our region. They're great places to volunteer or visit to learn more about growing food locally. Many gardens operate with little or no funding support, but achieve amazing things with passionate and enthusiastic volunteers. To find a local garden contact your Council, or check the Food Fairness Illawarra website.

Fabulous Food Gardening Books

Look out for these titles in your local library!

Discovering Fruit and Nuts
Susanna Lyle, 2006

Earth Users Guide to Permaculture
Rosemary Morrow, 2006

How Can I use Herbs in my Daily Life?
Isabell Shipard, 2003

Organic Vegetable Gardening
Annette McFarlane, 2010

Organic Fruit Growing:
How to Produce Beautiful Fruit Year Round
Annette McFarlane, 2011

Smart Permaculture Design
Jenny Allen, 2002

The Permaculture Home Garden
Linda Woodrow, 1996

The Seed Savers Handbook
Michel and Jude Fanton, 1993

How you can Turn Lawns into Lunches or Grow a Fruit Forest

Ever thought about growing some of your own food? It's great fun, and a simple and delicious way to a healthier, more sustainable future.

Look inside for:

- Ideas and inspiration for growing food in the Illawarra
- How to design your veggie patch
- How to start your own 'food forest'
- Inspiration from local gardeners
- Tips on building soil
- Advice on what grows well, when, where and how!

Inspired?! This booklet has a companion - check out the GROW LOCAL: Illawarra Native Garden Guide, also available through Kiama, Shellharbour and Wollongong Councils