

CONTAINER GARDENS



Above ground gardens



Do you live on a block unsuited to growing some of the food you eat? Maybe you want to grow food on your house deck. Maybe you live in an apartment? You can still grow herbs, vegetables and small fruit trees.

The choice is between:

- ☼ a container garden
- ☼ a balcony garden
- ☼ the nearest community food garden.

It's not just apartment dwellers who benefit from container gardening. If garden space is limited to a small, paved courtyard or you want to grow on your house deck, you can make use of container cultivation to supplement your food purchases with freshly grown produce.

Design

Now we're ready to start turning our balcony or courtyard from a bland space into an inviting

place by using our imagination

to obtain the greatest yield from the limited area available to us.

The first thing we do is to ask ourselves how we want to use the space. We include this in the design. We might start by putting out a seat and a small table so that we can eat out there.

Think about the sun

Vegetables, culinary herbs and fruit require a minimum four to six hours direct exposure to sunlight. In Australia, this means a balcony or courtyard with exposure to the east, north or west works best.

West-facing spaces are exposed to the afternoon sun at the hottest time of the day. Containers are likely to dry out quickly. Plants may suffer heat stress on hot summer afternoons. In these conditions, consider using shade cloth to shelter your plants.

East-facing balconies will receive direct sunlight before the day warms up. Even though morning sunlight is cooler than late-afternoon summer sunlight it's still important to keep the water up to your plants.

If your apartment or courtyard is south facing it might be a challenge to get enough light to your plants. In Tasmania, the south to west quadrant is where we get our prevailing, strong winds from. They are cold in winter.

If your space is really shady, then consider growing mushrooms, shade-loving herbs like the mints and ornamentals like ferns. They might not yield much by way of food, however they create an inviting environment in which to sit.



PERMACULTURE TASMANIA

SETTING UP A WICKING POT GARDEN



1. A self-watering container garden is started by placing a pond liner and about 10 centimetres of gravel that will act as the water reservoir. Overflow runs down the side of the pond liner and out the hole at the base of the pot.



2. Insert a filling tube into the gravel and lay geotextile fabric over it. The filling tube is used to top-up the reservoir.



3. Organic potting mix is added to the container.

6. After the tree is planted, water well and add mulch to reduce water loss. Avoid putting the mulch too close to the stem to prevent collar rot. >>>

**Landscape architect and permaculture educator
Steve Batley with a bay tree that will supply
flavourful leaves for cooking.**



4. A fruit or, in this case, a bay tree is extracted from the pot it came in from the nursery. The roots are gently teased out so they can easily grow into the potting mix.



5. The tree is placed so that soil does not cover the stem deeper than it was in its original pot.



Think about strength

Although balconies are built to support a lot of weight we should think about minimising the load we place on them.

Remember that a litre of water weighs a kilogram. Add to the saturated soil in your containers the weight of the container and the plants in it. It soon adds up.

To reduce the load we place on our above-ground balconies:

- ⌘ **buy a lightweight potting mix** or make your own lightweight mix with equal parts of perlite or vermiculite, coco-fibre and compost
- ⌘ **use lightweight pots** — while terracotta pots look nice, plastic is lighter and that could be important if you plan to have a lot of vegetation on your balcony; for aesthetics, wrap your plastic pots in hessian to give them a more rustic appearance; this also helps cool the pots during hot weather and reduces drying-out
- ⌘ **ensure your planting mix is quick draining;** avoid irrigation runoff dripping onto the balcony below.

Choose your container

Depth

Nurseries sell a wide range of containers and pots. For vegetables, you will need containers to around 20-30cm deep — no less. If you want to grow larger root vegetables such as carrots you will need something deeper. Dwarf fruit trees need a large pot of the half-wine barrel size.

Colour and material

Terracotta pots keep roots cool via evaporation. Your plants will need more watering. Black plastic pots absorb heat that can damage plant roots in hot weather.

Self watering pots — wicking beds

Self-watering containers with a reservoir of water that wicks into the growing mix and reduces the need for frequent watering are suited to balcony and courtyard use.

Vertical gardens

Other options are trellises or vertical gardens attached to the walls for climbing plants. These can be made as a DIY project or durable vertical gardens can be bought.

A self-watering container garden showing the water filling opening at the UTAS community garden

The plants

The potential for growing root crops in container gardens is limited. Carrots, however, can be grown in sections of drainage pipe or deep containers. Choose the dwarf varieties.

Leafy greens, tomatoes, capsicum and culinary herbs are the most common type of food crops grown on balconies. Other balcony crops include eggplant, bush beans, cucumber and climbing beans and peas on trellises placed against the walls. The small varieties of tomato yield a rich harvest.

There are the shrub fruits too, such as blueberries and others according to your climate. They are grown in a larger container. And don't forget flowers as they assist in the control of insect pests and attract pollinators such as bees.

Dwarf fruit trees can be grown in large pots and produce full sized fruit from a small tree.

Nurseries and mail order suppliers stock a range including orange, mandarin, grapefruit, lemon, lime and stone fruits. Kumquat is another suitable citrus.

Potting mix

Don't produce enough compost to make your own potting mix? Then buy a mix that carries the Australian Standards logo. These mixes drain well, are easy to re-wet after drying, contain trace elements, have a pH of about 5.3-6.5 and enough nutrients to start with.





A self-watering container garden with a mesh screen to protect plants from insect pests and birds.

Watering

Plants in containers dry out faster than those in the garden. If you have access to a tap you could consider a drip irrigation system. This conserves water and avoids the deluge that comes from careless watering with a hose. If you do use a hose, equip it with a shrub spray trigger nozzle.

Many balcony gardeners use the traditional watering can. This delivers water directly where we want it to go. It is not a time consuming burden as most balconies or courtyards are small. Why not fill the watering can with the first flush of cold water from the shower.

Fertilising

Container gardens need fertilising more frequently than plants grown in the garden because pots contain only a limited supply of nutrients. Nutrients are lost with overwatering, so only water when the plant needs a top-up. Stop when the water starts coming out the drainage holes.

Compost-making is not an option for apartment dwellers although it is for courtyard gardeners. Vermicompost (worm compost) becomes a viable means of recycling kitchen wastes to feed your plants. On the balcony the worm farm should be sheltered from sun and cold winds. The liquid compost produced as runoff and the worm castings, the solid material, provide high-nutrition fertiliser for your container garden.

A vertical garden with a wild growth of vegetables and herbs makes use of limited space. Ensure your vertical garden has access to sunlight and a drip irrigation system connected to a watering timer.



You might also occasionally buy straw to use as a mulch on your container garden. Mulch reduces heat stress in plants, reduces loss of soil moisture by evaporation and, over time, breaks down into plant nutrients that become incorporated into your growing mix.

Organic slow-release fertilisers that can be added every three to six months include manures, rock phosphate, blood and bone, compost and vermicompost.

Organic fast-release or soluble fertilisers that can be added weekly to monthly include fish emulsion, liquid seaweed and liquid from your wormfarm diluted to the colour of weak tea.

Stay healthy

Wear gloves to protect your hands. If you have breathing difficulties, wear a mask to avoid breathing dust and bacteria. Wash hands before and after potting-up.

Clean tools and pots before use to reduce the risk of plant pathogens.

Seeds & sources

- ✿ <https://www.southernharvest.com.au>
- ✿ <https://www.gathererforager.com/collections/seeds>
- ✿ <https://tassieseeds.com.au>
- ✿ <https://www.davesseed.com>
- ✿ <https://www.provenancegrowers.com.au>
- ✿ <https://rangeviewseeds.au>
- ✿ <https://www.thelostseed.com.au>

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