

Compost safety

Compost and soil contain living organisms that can cause illness such as legionellosis and allergies in humans. For this reason, it is important to take the following precautions:

- keep dust and spores down by water gardens and composts using a low pressure hose
- wear gloves when handling compost or soil
- wear a dust mask
- if you are working in a greenhouse or potting shed keep it well ventilated
- wash your hands immediately after handling soil or compost.

Refer to www.worksafe.govt.nz for further information.

Bokashi composting

This system ferments kitchen waste in an airtight double bucket. The top bucket has a tight fitting lid and holes in its base to allow drainage of liquids into the lower bucket.

- Compost-Zing, a bran-based material rich in natural EM (effective micro-organisms), ferments the contents of the bucket.
- Store Compost-Zing and Bokashi bucket in a warm, dry place out of direct sunlight.
- Foods it can compost: fresh fruit, vegetables, prepared foods, uncooked/cooked meat and fish, cheese, eggs, coffee grounds, tea bags, wilted flowers. Avoid liquids e.g. milk, orange juice.
- Two double buckets will allow you to continue using the Bokashi system while the full bucket ferments for 7–10 days.
- Dilute liquid from the lower bucket and apply to soil or pour into kitchen and bathroom drains to help prevent algae build up and prevent odours.
- When buried in ground, the fermented food will decompose in 3–4 weeks.
- For more information see: www.zingbokashi.co.nz



Compost tips

- chop or shred coarse materials to speed up the compost process
- mix coarse and fine materials together
- air is essential for odour free composting. If necessary, push a crowbar through the heap to create aeration vents
- dampen your heap regularly in summer for a squeezed out sponge consistency. It must be moist, not soggy
- decomposing is faster in the warm, summer months
- compost is mature when it is darkened, looks unlike its original structure and is a crumbly soil-like material of pleasant odour. If used too soon, it will limit the nitrogen available to growing plants
- turn your compost heap immediately if ammonia or offensive odours like hydrogen sulphide ('rotten eggs') are produced. It needs more air
- compost heaps need to be large enough to insulate and maintain heat for microbiological activity. A cubic metre is ideal.

**KEEP COMPOST IN THE GARDEN
AND OUT OF THE WASTE STREAM
HELP REDUCE GREENHOUSE GASES**

For further information contact:
Waste and Environmental Solutions
Dunedin City Council
Phone 03 477 4000

www.dunedin.govt.nz/composting
www.sustainableliving.org.nz

A guide to Home Compost



03 477 4000
www.dunedin.govt.nz

Why compost?

- compost replenishes soil with organic matter (humus) which improves texture, nutrient content, moisture retention and encourages micro-organism activity and plant growth
- compost is good for the environment. It is a simple, cost-effective and natural way of recycling organic kitchen and garden waste
- a valuable resource is conserved.

Materials you can compost

There are two types of organic material you can include in a compost heap – greens and browns.

Green materials have lots of nitrogen and include:

- grass clippings (but not sprayed with weedkiller)
- leaves, green garden matter
- weeds (but not invasive weeds such as oxalis, onion grass and convolvulus – these won't break down in lower temperature piles so you need to use a 'liquid manure' system or send them to a composting plant instead)
- kitchen scraps, including vegetable and fruit scraps, coffee grounds and tea bags/leaves (but not meat or dairy products unless your compost system is designed for pest resistance).

Brown materials have lots of carbon and include:

- sawdust (but not from treated wood)
- dried garden matter, twigs
- paper/cardboard e.g. cereal boxes (best in small pieces and soaked before adding)
- dry leaves
- shredded paper
- straw
- vacuum cleaner dust.



The heap is constructed of alternating layers of garden/kitchen waste and activator material built on a coarse open twiggy layer, which allows the entry of air into the base of the compost heap.

Compost making

Locate your compost bin in a sheltered, level area of the garden that has good drainage and access. The site should be within reach of a garden hose, sit directly on the soil, and preferably not in full sun.

1. Fork over the soil on the site in order to aid drainage and encourage earthworms into the heap
2. Ensure adequate aeration is provided at the bottom of the heap. This may be in the form of ventilation openings or by raising the bin on a few bricks
3. Start the heap by placing a 100–150mm layer of coarse open twiggy materials (or partly decomposed materials from a previous heap) at the bottom of the bin to ensure good drainage and entry of air
4. Top this with a 150–200mm layer of moist, well-mixed kitchen and garden waste e.g. fruit and vegetable matter, lawn and garden clippings or weeds. Use as wide a variety of organic material as possible. Lightly compress with a fork and moisten materials if dry
5. Next add a 50mm activator layer of poultry litter or other animal manure. Cover with a 25mm layer of soil or mature compost if manure smells unpleasant. Other activators include seaweed, soil or your own mature compost, a few handfuls of either blood and bone, or compost starters available at most garden shops
6. Compost organisms don't like an acid environment so give a light sprinkling of dolomite or lime every few layers

This is the start of the composting process:

 - always keep compost covered to retain heat and exclude flies and excessive rain
 - keep the bin covered when full and leave it to mature
 - turning the compost heap will speed up the process taking 3 to 4 months. If not turned, allow 9 to 12 months for the heap to mature
 - keep turning once a month to aerate the heap and remix the decomposer organisms through the waste material.
7. If you don't already compost – try it!

Compost methods

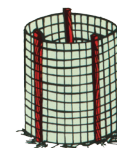
- **Compost heap** – a pile of material, covered with carpet or polythene
- **Compost bin** – buy a plastic bin or make your own from timber or concrete blocks. For large gardens use several bins at once
- **Rotating drum** – turn regularly to mix the composting material and provide oxygen
- **Trenching** – for big gardens, bury kitchen rubbish (not meat or dairy products) in trenches in your garden, cover with a good amount of soil and plant on top
- **Bokashi** – (see over) great for small garden owners and/or apartment dwellers who have access to a garden
- **Worm farm** – worms help the composting process (see Dunedin City Council website for more information).



Each frame should be made from 150mm, 200mm or 250mm x 25mm planking with heavier wood in the corners to secure the frames together. Remember to have holes for air and easy access from the front.



Commercially made composting units are also available.



Netting frame wrapped around wooden stakes and lined with cardboard or newspaper to retain heat.

Compost use

- spread mature compost over soil to a depth of 25mm. Fork it into the top few centimetres of a vegetable garden or flower bed before or after planting. Remove any stalky or coarse material and add it to your next compost heap
- mature screened compost mixed with two parts top soil and one part sharp sand makes an excellent seed raising and potting mix.