

Compost Guide



Table of Contents

- 01 Discounted Compost Bins and Worm Farms
- 02 Why is composting important?
- 03 What makes up good compost?
- 05 Compost Bin Guide
- 07 Worm Farm Guide
- 09 Pest or Guest?
- 11 Troubleshooting
- 13 Fridge-friendly Composting Guide
- 14 Notes



GIVE YOUR GARDEN SOME

LOVE

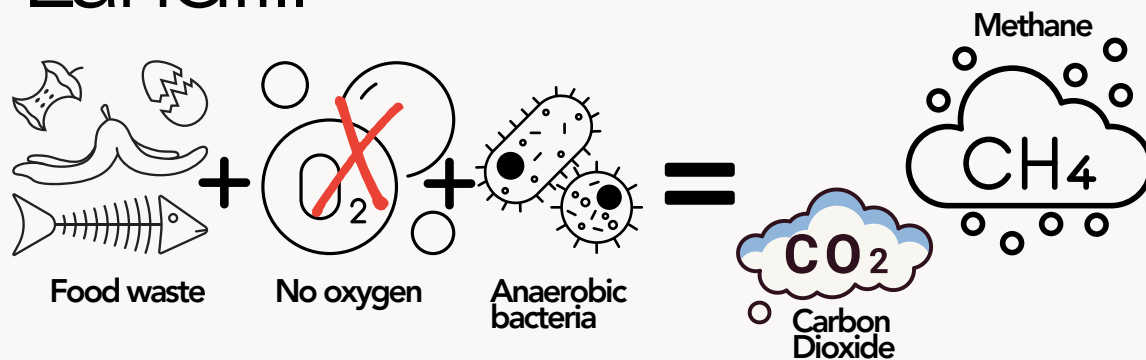
Compost your food scraps and
watch your garden grow!



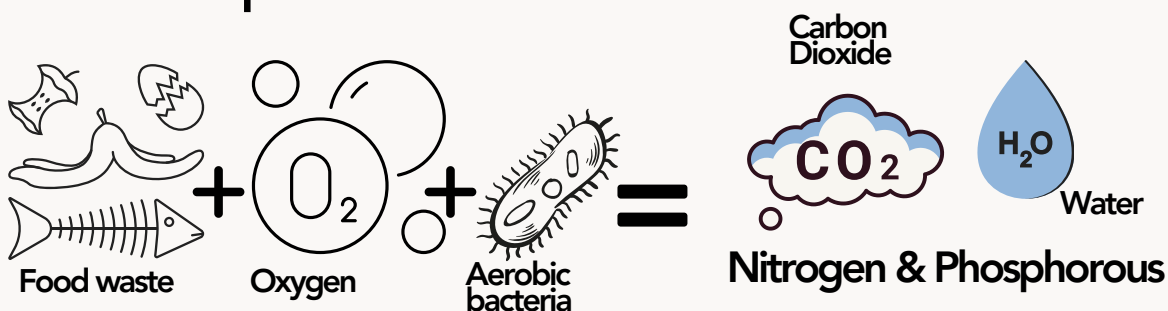
Why is composting important?

The transportation and unfavourable conditions at landfill accounts for 3% of Australia's green house gas emissions. Diverting organic waste from landfill reduces your household carbon footprint, whilst generating a valuable nutrient source for your garden.

Landfill



Compost



What makes up good compost?

For rich, fertile compost, follow the ADAM principles; Aliveness, Diversity, Aeration, Moisture

1. Aliveness

Aliveness refers to the life that is active in compost. This includes the worms breaking down the organics material and the millions of microorganisms breaking down pathogens. Feeding your compost a diverse range of materials will help produce a microbe-rich compost that will help your plants grow and be more productive.

2. Diversity

Diversity of materials is essential for good quality compost. You will need a mix of nitrogen (green) and carbon rich (brown) materials. Balancing these materials in approximately equal ratios will help produce a rich, nutrient dense compost!



3. Aeration

Your compost will not be successful without adequate aeration! Aeration introduces oxygen into the system which is essential for the formation of aerobic (oxygen-dependent) conditions. In these conditions, microorganisms thrive and facilitate efficient decomposition.

4. Moisture

Moisture is what allows the materials to break down. The water content helps facilitate chemical reactions necessary for the decomposition of complex organic compounds into simpler forms. Be careful to ensure the moisture content is the right balance, otherwise the nitrogen-rich material will rot and start to smell. This can easily be balanced with more brown materials.



Compost Guide

Composting can be more forgiving than worm farming. Composting relies on microorganisms, bacteria and the right conditions to transform otherwise wasted products into a nutritious by-product.

Feeding your compost

Compost bins love a balanced diet of a mix on 50% green (nitrogen) and 50% brown (carbon). This ratio doesn't have to be perfect! If you don't produce much garden waste such as dried leaves and sticks, you can substitute with cardboard and newspaper to ensure you are introducing enough carbon.

Compost bins prefer larger feeds rather than regular smaller ones - it's best to collect your scraps for a few days before feeding.

Always cover your scraps with a layer of brown material (carbon) otherwise you might attract vermin.

Handy tip

For beginners, it is best to avoid using animal products such as meat and dairy as the compost will not be safe to use on edible gardens!

Setting up your compost bin



Compost bin

Make sure it's in a sunny spot!

This will help build a good base for drainage and capturing oxygen



Carbon materials (50%)



Nitrogen materials (50%)

Add your nitrogen materials after your carbon base layer. Continue to layer ensuring carbon is the last layer.



Spiral tool or pitch fork to aerate

Aerate every time you feed your compost

Add water every time you feed (twice a day in hotter months!)



Water

Harvesting your compost bin

Ready to harvest compost will let you know when it's ready! The finished compost is at the bottom of the pile and has the following clues:

- Dark and crumbly
- Earthy smell
- Pile has reduced by 50%
- No longer generating warmth
- No visually recognisable food scraps

This can then be added to potting mix directly and covered with mulch to prevent attracting pests. It also acts as a liquid fertiliser using a 1:3 ratio with water.

Remember

Weed seeds and diseased plant material may not be completely broken down and can find their way back into your garden through your compost.



Worm Farm Guide

Start small - let your worms settle in

Your worms need time to get used to their new environment and increase their population. For the first six weeks, start by feeding a handful of chopped food every second day. Gradually increase the volume you are feeding once the existing food has been eaten. Eventually, they will be able to process 3-6kg a week!

Feeding your worms



Worms love a balanced diet of a mix of 50% green (nitrogen) and 50% brown (carbon).



The smaller you chop your food scraps, the quicker they will be converted into castings.



Every time you feed your worms, sprinkle them with crushed eggshells or vacuum cleaner dust (something gritty). This is what the worms use to grind up the food in their gizzards!

Fun Fact

Worms don't have teeth!

They eat the bacteria on the surface of rotting food and process it through their gizzards. Or they use gritty material such as tiny rocks to break food down.

Setting up your worm farm

This will help maintain the moisture and temperature

Add water every time you feed (twice a day in hotter months!)



Worm Farm

Blanket

Bedding

Worms

Water

Make sure it's in a shady spot!

Increases aeration and moisture retention and freedom of movement!

Minimum x 1000

Harvesting your worm farm

As they feed, worms excrete a liquid that is full of nutrients and microbes that are excellent for improving soil quality and helping your plants thrive. Every few days, open the tap and collect the liquid - this should be diluted with water (10:1 ratio).



Add your diluted liquid to a watering can and water over plant leaves and the base of the stem



Add to a spray bottle for your indoor plants

After three to six months, the bottom working tray should have no visible food scraps. You can now harvest the castings (worm manure). The material should be chocolate brown and the consistency of fine mud.



Dry your castings out for a few days until they are a crumbly texture, add the dried castings to potting mix (1:4 ratio)



If you want to use the fresh castings without drying - scoop a few handfuls into a bucket and add water to create a slurry. This can be watered directly onto plants.



Pest or Guest?

**Ants &
Cockroaches**

Pest

Why? This indicates it is too dry.
Introduce more water to ensure it is able to break
down quicker!

**Slugs or
Snails**

Guest

Why? They are here to feed on your scraps.
If their numbers are beginning to overtake your
worms, use paper towel on top of the worm
blanket to attract them and remove the next day.

**Soldier Fly
Larvae**

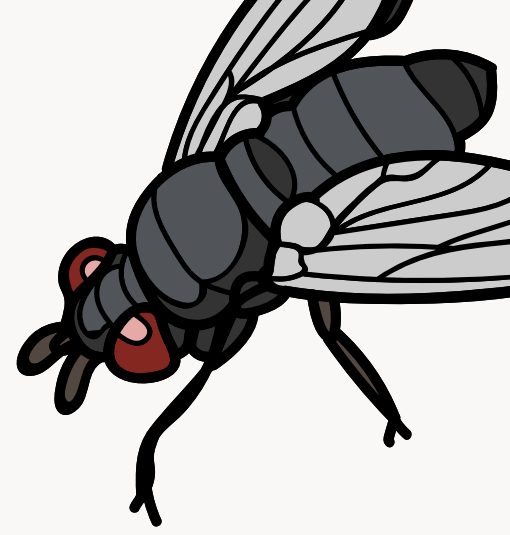
Both

Why? This indicates the conditions are too acidic
and wet.
Whilst they do not harm your compost, they will
likely out-compete your worms.

Fungi

Pest

Why? You have overfed your worm farm or
compost.
This can also indicate that your compost or worm
farm is undisturbed. Remember to mix and aerate
your compost or worm farm every time new food is
added.



Rodents **Pest**

Why? This is likely due to meat, bones or dairy products. Best to avoid composting these materials.

Fruit Flies **Pest**

Why? They are here to feed on your scraps. You have most likely overfed your worm farm or compost bin. Ensure that you aerate every time you introduce more food so it is well hidden!

Spiders **Guest**

Why? They are looking for prey. Whilst they do not harm your worms or compost, depending on the type of spiders (you'll want to avoid funnel webs) best to just leave them be and remember how good they are for the garden!

Millipedes and Centipedes **Guest**

Why? They help break down organic matter. Due to their long, tube-shaped bodies, they are able to create tunnels through which microbes can readily move throughout the pile.

Troubleshooting

Q: Why is there mould in my worm farm or compost bin?

Mould is a normal part of the decomposition process! It will not harm your worms or compost but it is a sign that you are overfeeding. It tends to form in conditions that are undisturbed, so simply mixing / aerating the system will help reduce mould formation.

Q: Why is my waste not breaking down into compost?

It can take 8-12 weeks to develop a compost output in a working system. If you find it is taking longer than this it could be a number of reasons;



- Not enough nitrogen materials.
- The scraps are too big - chop into smaller pieces so they break down faster.
- There isn't enough oxygen to help break it down - make sure you are aerating regularly.

Q: Is it possible to have too many worms in my worm farm?

Nope! Worms regulate their population to the confines of the available space. Your population should reach 5,000 to 10,000 after twelve months!

Q: How do I prevent vermin or other pests?

Meat, bones and dairy products are likely to attract these kinds of pests so best to leave them out of your system. You can rodent-proof your compost bin by covering the earth-end with aviary wire (they can chew through chicken wire). For your worm farm, use a brick or a lock on the lid to keep them out!



Q: What do I do if I'm going on holidays?

Leaving your worm farm or compost bin for 3-4 weeks without adding food is not a problem. Before you leave, add a good slow release food source such as carbon-rich cardboard, dried leaves or newspaper in a thick layer (at least 5cm). Water this layer well with about 2L of water as this will ensure that there is plenty of moisture that will evaporate over time.

Q: My compost is very smelly

This can be caused by too much food, too much moisture or not enough airflow. Give it a good aeration, ensuring all food scraps are mixed in correctly. This can also help with redistributing the moisture. Add some shredded paper or newspaper and hold off feeding for a few days.

Q: Why aren't my worms moving up from the bottom working tray?

This can be caused by adding new food too soon before the worms can finish the previous food. Before adding a new tray, stop feeding worms for at least a week to ensure it can all be eaten.

Fridge friendly

Compost Guide

Yes please



Raw food scraps



Cooked food scraps



Egg shells



Paper, egg cartons, paper towel, napkins, cardboard

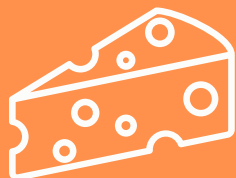


Tea bags, small amount of coffee grounds

Sometimes



Citrus, onion, garlic, spicy food



Dairy and cheese



Oily food

No thanks



Meat, bones, plastic, non-organics

Tips

1. Cut organics into small pieces
2. Keep caddy in fridge or freezer to prevent odour
3. Mix well into compost bin
4. Keep worm cover wet

If you have any further questions, please contact Council's
Waste Education Officer
sustainability@lanecove.nsw.gov.au



Lane Cove Council

Visit www.lanecove.nsw.gov.au/compost to download a digital version of this document.

In the spirit of reconciliation, Lane Cove Council acknowledges the Traditional Custodians of the Land, the Cameraygal people. We pay our respects to Elders past and present and extend that respect to all Aboriginal and Torres Strait Islander peoples today.