



Composting and Worm Farming



Healthy soil is the foundation of a productive garden full of healthy plants that are less prone to disease. Adding organic matter to your soil in the form of compost or vermicast is one of the best things you can do. When you improve your soil with compost it just keeps getting better and better - it becomes more alive with beneficial worms and microorganisms. The other bonus is that you reduce your waste by recycling your food scraps and plant materials into compost.

Composting or Worm Farm – which is best for me?

Worms?

If you don't have much space a worm farm is a great option: A worm farm doesn't smell if looked after properly and can fit on a balcony, garage or even inside.

The benefits of worm farms include they:

- ✓ Produce liquid and solid castings, both of which can be mixed with water to produce a liquid fertilizer
- ✓ Take up very little space
- ✓ Are great for using food scraps and kitchen waste

The limitations can be they:

- ☼ Can process a limited amount of waste which may not be enough for large families
- ☼ Are better for vegetable scraps and soft vegetation, are not so good for garden waste

Composting?

Most composting requires more space than worm farming, although rotating compost tumblers can also be used in relatively small spaces on any surface. Preferably set up composting on bare earth.

Benefits of Composting Include:

- ☘ A larger variety & volume of materials can be used including garden waste
- ☘ If you have enough 'waste' go for both compost and worms!
- ☘ If you have enough space consider getting chickens as well, as they can be an even faster converter of food waste - they also give you healthy, home-grown, organic, free range eggs.



Compost basics

Composting is the aerobic (using oxygen) breakdown of organic matter by beneficial micro-organisms like bacteria and fungi.

What can we use to make compost? The rule of thumb is 'Anything that once lived can turn into compost'



Use the **A.D.A.M** Principles while composting

A - aliveness – compost is a 'living organism' full of worms & healthy microbes

D - diversity – mix in a variety of ingredients: eg food scraps, dry leaves, fine wood, mulch, grass, hair, herbs etc.

A - aeration - aerate your compost regularly, with a spiral mixing tool

M- moisture - keep compost moist at all times

Setting up the bin/heap

- ☞ Position the bin in a well drained place (sun or shade is OK)
- ☞ Put a layer in the base of the bin, about 200-300mm (4"-6") deep, of high carbon material, i.e. finely chopped woody mulch, leafy twiggy materials or 'forest fines.'
- ☞ Water this layer well
- ☞ Add 2 or 3 shovel-fulls of rich compost, or lovely black, alive soil from your garden. This 'seeds' your compost with the aliveness that does all the work

- ☞ Mix with a spiral tool and check that the entire heap is moist
- ☞ Food scraps must not be left exposed on the surface. Always cover surface with a thin layer of 'forest fines' or chopped small woody twigs and leaves, this reduces flies. Then cover the surface with a 'blanket' (eg hessian sack) to keep the heap moist & dark
- ☞ Add other ingredients regularly eg manures, vacuum contents, hair, herbs, weeds, grass, soil
- ☞ Add a teaspoon of dolomite (Worm Farm & Compost Conditioner) weekly, to balance acidity
- ☞ When your bin is full it needs to mature for 6-8 weeks. Keep this maturing bin moist & mix it and add a little dolomite and pelletised manure, weekly
- ☞ You can start a new bin for your continuing supply of fresh food scraps once your old one is full.

Using Compost

- ☞ Compost is ready to use when it is dark & smells earthy (there is no sharp ammonia smell)



Step by step success

- ☞ For every addition of food scraps, add the same amount of 'forest fines' or chopped small woody twigs and leaves, ie 1 bucket of food scraps to 1 bucket of mulch
- ☞ Place the compost around the DRIP-LINE of plants
- ☞ Keep the compost away from the stems of plants



Supported by



Permaculture Northern Beaches meets monthly at the Narrabeen Tramshed Pittwater Rd Narrabeen.

For information call 0414 385 644 or email us at

info@permaculturenorthernbeaches.com.au

You can also check out our web page:

www.permaculturenorthernbeaches.com.au

You can also like us on our face book page:

<http://www.facebook.com/PermacultureNorthernBeaches>

Further information:

www.permaculturenorth.org.au

The Australian Compost and Worm Book, Peter W. Rutherford & Mary Lou Lamonda

Resurrection in a bucket, Margaret Simons

Kimbriki Resource Recovery Centre

www.kimbriki.com.au

www.ecohouseandgarden.com.au

Composting and Worm Farming

Compost problem solver

Below are three of the most common problems people have with their compost:

Problem 1 SMELLY

Remedy

Increase AERATION

- ☞ Add more coarse material
- ☞ Mix the heap much more regularly with a spiral mixing tool
- ☞ Add a handful of dolomite, (Worm Farm & Compost Conditioner)

Problem 2 NOT HEATING UP

Remedy

- ☞ Add more NITROGEN material - eg manures, young grass clippings, blood & bone etc
- ☞ Check the MOISTURE level - (dry heaps don't heat up!) add more water when mixing
- ☞ Mix the heap more regularly with spiral mixing tool
- ☞ Add a handful of dolomite, (Worm Farm & Compost Conditioner)

Problem 3 ATTRACTING VERMIN

Remedy

- ☞ Put small mesh chicken wire on the ground under compost bin and fold up the sides and tie, or place a piece of flat gal metal sheet on ground (drill 50 or more drainage holes) and place bin on top of metal sheet.
- ☞ Always cover the surface of the heap with a hessian sack or something similar & keep the lid on
- ☞ Mix the heap more regularly with a spiral mixing tool to increase aeration (vermin do not like a disturbance!)
- ☞ Keep the heap moist (vermin do not like a damp environment!)
- ☞ Add a handful of dolomite (Worm Farm & Compost Conditioner)
- ☞ Reduce the amount of cooked meat and bread being added to the heap

Happy Composting!!