

# Composting Fact Sheet



## What is compost?

Composting is the transformation of organic matter into a soil-like material called 'compost' it is nature's recycling system. The process occurs when organisms such as worms, bacteria, fungi, microbes and other living creatures eat through decomposing organic matter to produce a valuable, nutrient-rich food for your garden.

## Why compost?

- Composting at home is inexpensive and easy. Its benefits include:
- A reduced amount of waste sent to landfill (approximately 40 to 60% of household waste is compostable);
- Reduced production of methane, a powerful greenhouse gas;
- Improved soil health, structure and ability to hold water;
- Increased disease resistance in plants;
- Reduced dependence on artificial fertilisers and pesticides;

It can save you money!

## Methods of Composting

### Commercial Composting bins

Tumble Bins "Jelly Mould" bins and other various bins on sale.



### Homemade Composting bins

It is not necessary to purchase a compost bin before creating. While doing so provides benefits and ease of use, for many people it may not be economically feasible.

Building a compost bin from items around the house or farm is quite easy.

### Build your own compost bin

It is not necessary to purchase a compost bin before creating. While doing so provides benefits and ease of use, for many people it may not be economically feasible. Building a compost bin from items around the house or farm is quite easy. If you're looking for a more pleasing look for your homemade compost bin, and you're a handyman with building, then view the plans below for the construction of a wooden compost bin.

### Wire Bin

Use an 11-foot length of 2-inch x 4-inch x 36-inch welded, medium-gauge fence wire from your local hardware or building supply store. Tie the ends together to form your hoop. A bin this size holds just over one cubic yard of material. Snow fencing can be used in a similar fashion. Another option is our **Wire Bin Composter**, which holds 20 cubic feet. In addition, it can be expanded to form a **three-bin unit**.

### Trash Can Bin

To convert a plastic trash can into a composter, cut off the bottom with a saw. Drill about 24 quarter-inch holes in the sides of the can for good aeration. Bury the bottom of the can from several inches to a foot or more below the soil surface and press the loosened soil around the sides to secure it. Partially burying the composter will make it easier for microorganisms to enter the pile.

### Block or Brick or Stone Bin

Lay the blocks, with or without mortar, leaving spaces between each block to permit aeration. Form three sides of a 3-to 4-foot square, roughly 3 to 4 feet high.

### Wood Pallet Bin

Discarded wooden pallets from factories or stores can be stood upright to form a bin. Attach the corners with rope, wire, or chain. A fourth pallet can be used as a floor to increase air flow. A used carpet or tarp can be placed over the top of the pile to reduce moisture loss or keep out rain or snow.

### Two or Three-Bay Wood Bin

Having several bins allows you to use one section for storing materials, one for active composting, and one for curing or storing finished compost. Each bin should be approximately 36 x 36 x 36 inches. Be sure to allow air spaces between the sidewall slats, and make the front walls removable (lift out slats) for easy access. Lift-up lids are nice. You can extend the life of your wood bin by treating it with a non-toxic weatherproofing substance such as Thompson's Water Seal.

- There are methods to keep your compost aerated, without the hassle of turning:

- Build your pile on a raised wood platform, such as a wood pallet, or on a pile of branches.
- Make sure there are plenty of air vents in the sides of your compost bin.
- Place a couple of perforated 4" PVC pipes in the centre of your compost pile.

### Putting your Compost Together

- After you decide whether you want to use a bin or build an enclosure or heap. Place the bin or build the heap on the soil in the garden, in a well drained sunny position.
- Put a combined layer of broken up sticks, twigs, prunings, leaves and shredded newspaper at the bottom of the heap. This layer should be 8 - 12cm deep.
- Add layers of materials alternating between rich materials (high in nitrogen) e.g. fresh grass clippings or fruit and vegetable scraps and poor materials (high in carbon) eg. tree prunings or shredded newspaper.
- The secret to successful composting is to vary the 'ingredients', both in the layers and materials and to always add water to dry layers. When you have finished adding materials, cover the compost with a piece of carpet under-felting to keep the moisture in and keep flies out.
- If you want fast compost, turn the heap every week or so especially if it is too wet (smelly) or too dry. Turning will dry out a wet heap and allow water to penetrate into a dry heap.

### What you **can** compost

Materials that can be composted include:

#### Nitrogen-rich kitchen wastes

- Fruit scraps, vegetable peelings,
- House plant cuttings, coffee grounds,
- Rice and pasta, egg shells, tea bags,
- Vacuum dust and hair.
- Carbon-rich kitchen wastes
- Coffee filters, bread, paper napkins and towels, clothes dryer lint, hair,
- Egg cartons and torn up pizza boxes.

#### Nitrogen-rich garden wastes

- Flowers, vegetables, plant trimmings,
- hedge clippings, grass clippings,
- horse and chicken or cow manure.
- Carbon-rich garden wastes
- Leaves, straw or hay, small twigs,
- mulch, dried grass and weed

### What you **can't** compost

It is recommended that you do not compost animal products. Although these

items can be composted they can cause problems if not composted correctly. Materials that should not be composted include:

- Meat, fish or bones
- Dairy Product
- Oils or fats
- Chemicals
- Dog, cat or human faeces
- Diseased plants
- Mature weeds with seeds

### Troubleshooting

Solutions to common compost problems

- **Smelly** - compost smells nasty if it is too wet or doesn't have enough air. Add some dry leaves if it is too wet or turn the heap to aerate it. Add 2-3 handfuls of lime, dolomite or wood ash.
- **Rats and mice** - are attracted to meat, bread and dairy products in the compost. Don't put too much of these in the compost, turn the heap regularly and lay fine mesh under the bin or heap so that they cannot get in.
- **Cockroaches** - are attracted to acidic and anaerobic heaps. Add some lime and turn the heap to help get rid of them.
- **Maggots** - flies are attracted to meat, seafood, fats or faeces in the compost. Remove these materials and add lime over the maggots then turn the heap the next day. Make sure the compost is covered to stop flies laying more eggs in it.
- **Too slow** - it should only take 8 - 12 weeks for a good, aerobic compost. If your compost is slow it might mean:

There are not enough nutrients....so, add 2-3 handfuls of blood and bone or chicken manure

- **There is not enough air**.....so, turn the heap more often and use more coarse material in the heap.
- **There is not enough water**.....so, water the heap!

### Harvesting your compost (with commercial bin)

- Your compost is ready to use when it is a rich dark colour and has a mild earthy smell (with no ammonia smell). Carefully lift the compost bin up and off the pile.
- Remove any unfinished compost and set aside.
- Use the finished compost as desired.
- Replace the compost bin in its original footprint.
- Start building a new pile using the unfinished compost.

### Good Reads for Information on compost

**Organic Guide to Composting** – Jack Allan

Rodale book of Composting –

**Recycle your Garden** – ABC Gardening Australia books

**Soil Food** – Jackie French

**The Composting Book** - David and Yvonne Taylor