

# Composting Fact Sheet

## What Is Composting?

Composting is the rotting or breaking down of organic matter into small particles of fertile soil. Composting occurs naturally anywhere there is dead organic matter. The process can be sped up by mixing ingredients together and putting them in the right conditions. The benefits of finished compost include adding organic matter and nutrients to the soil and increasing the water holding capacity of Perth's generally poor sandy soils.

Good compost has a pleasant earthy smell, has few recognisable pieces of the original organic material and is a fairly uniform dark brown or black colour. The finished product can be dug into garden beds for vegetables or flowers, spread as a mulch around shrubs and trees (keep 40 to 50cm away from the trunks of trees) or sieved and used as a top dressing for lawns.

Roughly half your household garbage can be composted. Garden waste and kitchen scraps make excellent compost. Not all organic waste can be easily composted.

## Materials that should not be composted

Material	Why?
Meat, bones or dairy products, salad dressing or cooking oil	May attract pests
Animal faeces and pet litter	May contain disease
Grass runners and weeds	May have set seed and spread when you put the compost on your garden
Diseased plants	May spread infection
Plants which have been sprayed with pesticides or herbicides	Pesticides and herbicides may affect the composting process, killing the creatures that break down the compost.
Plastics, large branches, disposable nappies	Won't break down effectively
Plant seeds	May seed in your garden

## How to make your own compost

By following the suggestions on this website composting can be quite rewarding. Many people choose to compost in a compost bin or tumbler. You should contact your local council about an approved bin or tumbler, which should be both fly and vermin-proof. There are a number of commercially available compost bins. Commercially available tumblers compared to compost bins are relatively expensive.

## Aerobic Composting

Aerobic composting allows oxygen into the decomposing matter to speed up the process. Tumblers are a simple and easy way to make compost. The compost material is loaded into the side of the tumbler, and is turned every couple of days with the handle on the side. There are blades inside that tumble the compost. This process can take as little as two weeks to make good compost under ideal conditions. Tumblers are enclosed and prevent flies, rats and mice from getting in and odours from escaping. They should be placed in a warm sunny spot with a northern aspect.

A 44 gallon drum can be a cheap way of making a compost tumbler. A door with a catch in the side of the drum with some air holes to make the compost break down quicker. The compost ingredients are placed inside the drum and the drum can be rolled along the ground every couple of days to mix it all up. In other types of compost bin, aeration can be achieved by turning the material with a fork or shovel.

All organic material is largely made up of different proportions of carbon and nitrogen. To speed up composting a ratio of carbon to nitrogen is required: About 25-30 parts by weight of carbon to each part of nitrogen. A rule of thumb is to mix four parts of soft nitrogenous 'green' material such as grass clippings, weeds, fruit and vegetable peelings and wastes with one part of 'brown' material such as sawdust, shredded prunings, newspaper or dry leaves.

To keep the compost damp, not soggy, with the moisture content of a lightly squeezed sponge it may be necessary to add a little water, especially in summer. Too much water will reduce airflow and cause foul odours. Aeration and correct water content are necessary to ensure that the compost will reach temperatures necessary to destroy pathogens, parasites and weed seeds.

In the right conditions a compost pile naturally develops heat in breaking down materials with temperatures reaching between 40 degrees C and 60 degrees C, at which disease-causing bacteria, parasites and weed seeds are normally destroyed. If the temperatures aren't high enough then the weeds and seeds may grow when the compost is put on to the garden.

### Anaerobic composting

Anaerobic composting occurs without oxygen it is low maintenance but takes a long time to break down. In sealed compost bins the process is anaerobic, it takes a long time and may smell. It is easy to use if you have 2 bins. One can be full of compost almost ready to use and the other can be filled with new material. To speed up the process the contents can be emptied out and remixed, making the process aerobic. Bins that have an open bottom should be sited in a warm sunny area and in direct contact with loose soil to allow drainage, airflow and entry of earthworms and microorganisms.

### Composting Troubleshooting

Too wet	Improve the drainage or add some dry material like newspaper or sawdust
Too dry	Water it or add compost scraps like vegetables etc.
Pests	Cover with a lid and /or a thick layer of dirt. Don't put in meat bread or dairy products that attract animals
Takes too long to break down	Check it has all the things it needs - moisture right mix of green and brown material and air.
Smells	Too much water or airless so it's not breaking down properly. Ensure no meat or dairy products are in there. They smell as they rot.
Insects	Insects are attracted to compost; they help in the process of breaking down the material. Wear shoes and gloves where possible. Adding garden lime to compost will discourage the breeding of flies. Always wash your hands when you've finished gardening and try to avoid breathing in dry compost dust.

To speed up decomposition:

- To maximise effective composting the pile should be at least one cubic metre;
- Chop or shred all your kitchen and garden waste;
- Include some nutrient-rich material such as finished compost, sheep or cow manure, blood and bone or a commercial compost starter (available from garden centres); and
- Tumble or stir the contents (about every three days) to aerate the compost.

**For more information on composting, contact the Waste Wise Program on 9278 0300 or on [wastewise@environ.wa.gov.au](mailto:wastewise@environ.wa.gov.au).**

*\*Information provided courtesy of the Waste Wise Program, Department of Environment.*