

# MAKING GOOD COMPOST

The secret of successful composting is to choose an approach and technique that suits your needs and lifestyle. These notes are designed to help you understand the processes so you can make that choice.

The variety of methods can be seen in the Flow Chart (over page). The most popular methods are those which are AEROBIC (need oxygen)

## REQUIREMENTS FOR AEROBIC COMPOSTING

- **CARBON:NITROGEN RATIO (C:N RATIO)**

The ratio of carbon to nitrogen should be about 30 parts C to 1 part N (30C:1N). This is not easy to measure but as a “rule of thumb” mixing equal volumes of “**green**” and “**brown**” material is satisfactory.

“**Green**” material” is plant matter that is fresh - fruit and vegetable wastes, uncompacted grass clippings, green prunings, soft stems, fresh weeds (best if they don’t have seeds) etc.

“**Brown**” material is plant matter that has dried out - dead fallen leaves, dried grass, straw, chipped woody prunings, sawdust (not from treated timber), shredded paper (in moderation) and torn up cardboard.

- **FINELY DIVIDED MATERIAL**

The material for composting should be as “finely divided” as possible to provide a large surface area on which the microorganisms can “work”. Chop/cut up the material or put it through a mulcher or shredder. Optimum size range of particles should be between 2cm— 4cm

- **CORRECT MOISTURE CONTENT**

This should be about 50% - when squeezed it should feel like a lightly wrung out sponge. Less than 50% is too dry and greater than 50% means there will not be enough air spaces.

- **ENOUGH OXYGEN**

Aerobic conditions can be achieved by frequent turning - either in a “tumbler” type composting

drum or by using a fork or a compost “corkscrew!! Aeration can also be improved by inserting “pipes with holes” into the decomposing material.

- **ADDITIVES**

**Manure:**

Should be well rotted and only from herbivore animals - poultry, sheep, horse, cow etc. Can also use commercial pelletized manure. Use in moderation

**Dolomite lime:**

Usually added to reduce acidity. Use sparingly if you can smell ammonia (a sign that the ratio of nitrogen to carbon is too high ie: the heap has too much protein).

**Compost starter:**

Can “inoculate” the heap with micro-organisms. Use already matured compost, organic rich soil or commercial compost starter products.

## WHAT GOES ON IN A COMPOST HEAP

In a well made “batched” compost heap, within 2- 4 days, the internal temperature of the heap may rise to over 60°C. This is due to the activity of thermophilic (heat loving) micro-organisms. The heat can be enough to kill weed seeds and some pathogens. To keep heat in, the **optimum size of a heap should be about 1 cubic metre**. If the heap is turned a couple of times, it will remain hot for about 10 days - this is the stage of rapid decomposition.

As the heap cools to below 40°C, a different group of micro-organisms take over, and conditions are also right for the invasion of numerous soil invertebrates - worms, slaters, earwigs etc.

The more often the heap is aerated, the more rapidly decomposition will occur.