Composting Information Sheet

Composting is a natural process. Harness this process at home and create a rich, safe soil conditioner for use in the garden. You can compost in a compost heap, a compost bin, a compost 'bay' or a tumbling compost bin. Using a compost bin is best for beginners. There is no exact method, but there are some basic principles.

You will also need a tool to turn the compost. You may wish to use a garden fork but a cork-screw type tool can be very useful in aerating compost bins. These tools are available at hardware stores or nurseries.

The ingredients:

- Dry - *dry leaves, shredded twigs and branches, straw, sawdust, sugar cane waste, pine needles and dry shredded paper.*
- Wet - *grass clippings, kitchen scraps, old cut flowers, tea bags, coffee grounds and egg shells.*
- Extra (But not necessary) - *old compost or soil, comfrey leaves, kelp and manure (from herbivores, eg cows, sheep, chickens).*

The smaller/finer the ingredients, the faster they will break down.
Avoid weeds that have flowered, diseased plants, dairy, meat and bones, dog or cat manure.

How to build your compost (Compost bin, bay or heap):

1) Choose a place for your compost. Compost should be built on soil - not concrete or pavers. A place that gets some sunlight is best. There is no sealed base in compost bins so that soil creatures can get to the compost heap.

2) Layer the ingredients.
   a) Collect some twigs and sticks to place at the bottom of the bin.
   This will provide good air circulation and drainage for the heap.

   b) Layer various ingredients into the bin.
   Try to make the layers as thin as possible and as different as possible.

   For example: a layer of grass clippings, then a layer of vegetable scraps, then a layer of leaves, then a sprinkling of old compost or soil, then another layer of grass clippings, etc.

3) Cover the compost with a piece of hessian, old carpet or cardboard.
   Even if you have a compost bin with a lid, this extra cover will help to suppress any food smells and retain moisture in the compost. The layering process will take some time as you generate kitchen scraps and garden waste.

4) Once the bin is full or the compost heap is about a meter high, you will need to maintain the compost by adding water, and turning it over with a garden fork or compost tool.

5) About 8 weeks later, it will have turned into dark, friable, nutrient-rich compost.

Method for a compost tumbler:

A compost tumbling bin can create compost in as little as 2 weeks. It works in a similar way to composting using a compost heap, compost bin or compost bay, however the tumbler is not in contact with the soil.

1) Collect a variety of ingredients for the tumbler bin.
   Try to add as many different ingredients as possible from the garden and kitchen.

2) Add some old soil, or already-made compost (2-3 handfuls will do)
   This will add the natural soil bacteria and soil creatures that will help your compost ingredients break down.

3) The ingredients should be damp, so you may need to add some water to the mix.

4) To maintain the compost, turn the tumbler 5-20 rotations each day.
   Turning the tumbler twice a day will speed up the composting process. The turning adds the air required to decompose the materials.

5) To further speed up the process, place additional handfuls of soil or old compost to the tumbler bin.

6) If the mix is too dry add extra water until it is damp (not soggy).

Using compost

You can use compost to feed almost any plant as it is a natural fertilizer. Place compost around the drip line of the plant (not up against the stem or trunk of the plant) where there are feeding roots. If you mulch over the compost so that it does not dry out and the plants gain maximum benefits from your endeavors.

Compost benefits

- Provides nutrients for your plants
- Prevents soil erosion
- Retains moisture in the soil
- Increases soil aeration
- Increases the number soil creatures in the garden
- Recycles waste into a usable material
- Saves $$$

“A.D.A.M & E.V.E” Principles

By following the "A.D.A.M & E.V.E" principles you can't go wrong:

A - Aliveness
The ingredients in the compost break down because of soil creatures (like worms, ants, millipedes, and slaters) and billions of microscopic bacteria and fungi. These creatures convert the nutrients and minerals from the ingredients into water soluble nutrients in the form of compost.

Once you start composting, soil creatures smell the ingredients and will make their way into you compost. Worms can travel to a compost bin from up to a kilometer away.

D - Diversity
The variety of materials in the compost will affect how fast the materials turns into compost and the nutrient balance in the compost. The more different materials that are used as ingredients, the faster the materials will turn into finished compost. Also, the larger the variety of ingredients, the more different nutrients will be in the finished compost.

Try to put about 5 parts dry ingredients to 2 -3 parts wet ingredients for the fastest results. If you can't- don't worry! The compost will still work. Remember- there is no exact method!

A - Air
The types of soil creatures, bacteria and fungi that we want to make the compost need air. To get air into your compost, make sure you build it on a layer of twigs and sticks, and turn it over with a garden fork or compost tool every week or two.

If there is no air in the compost, it will attract "anaerobic" bacteria which create bad smells.

M - Moisture
The soil creatures, bacteria and fungi need water to survive. Sometimes, if we put alot of wet kitchen scraps into the compost, we do not need to add water. However, you may need to put a bit of water on to keep the heap moist.
Compost should be damp, not soggy.

By practicing ADAM, you get EVE!

E- Energy
Composting saves energy because if you threw all your organic waste into the garbage bin, it is taken by trucks to the landfill where it has to be maintained. Composting saves money and time in having to go to a nursery to purchase fertilizers for your garden.

V- Vitality
Compost brings vitality to your garden. Not only does compost recycle organic matter into fertilizer for your plants, it also increases the number of soil organisms in your garden that increases health of plants and decreases the risks of disease.

E- Environment
Composting helps the environment by returning nutrients back to the soil and not sending valuable organic matter to the tip where it is wasted.

Troubleshooting

Composting is like baking a cake- sometimes the recipe doesn't work, or the cake won't rise. As composting is a natural process, it doesn't take much to work out the problem and take some simple steps to fix it.

Smelly Compost
Your compost can smell if it is too wet or there is not enough air in the heap.

- Mix more dry ingredients into the heap (like leaves or sugar cane mulch)
- Add a handful of wood ash, garden lime or dolomite to neutralise any acidity
- Make sure you have adequate drainage at the base of the heap (is the compost built on a layer of twigs and sticks?)
- Combine any new wet ingredients with shredded newspaper or sawdust.

Unwelcome visitors
Ants, cockroaches, mice or rats can sometimes make your compost their home.

- Always ensure that food layers are covered with dry layers so that the smell of food is suppressed.
- Cover the compost with a piece of hessian, old carpet or cardboard to suppress any smells.
- Do not add dairy, seafood, meat or bone scraps.
- For mice or rat problems, consider using a bin with a lid and placing fine wire mesh at the base of the compost to prevent pests from entering the compost.
- Mice and rats make their homes in dry, warm, still conditions. If your compost is well maintained, that is turned regularly and wetted down regularly, these pests will not move in.

Compost is slow to mature
If your ingredients are not breaking down into compost in around 12 weeks, you can fix it:

- Turn the compost once a week
- Check and adjust the moisture- add moisture if it is too dry and turn more regularly if it is too wet
- Add some old soil or compost and mix it through
- Ensure that there is a good variety of ingredients and that the compost is located on soil (not concrete or pavers)
- Make sure you put a cover of hessian, old carpet or cardboard on your compost to prevent it from drying out