COMPOSTING

$0.50

It's fun, easy and a great way to keep your household scraps out of the landfill and turn them into rich soil for growing fresh fruit and vegetables.

Composting is a biological process that happens in every natural ecosystem. In a forest, bird and animal manures mix with leaves and twigs on the microorganism-rich forest floor. Broken branches and dead creatures are broken down relatively quickly in such a rich living system. Good compost can also be made in your 'backyard ecosystem' by mimicking these natural processes.

AROUND 40% OF THE WASTE GOING TO LANDFILL IS ORGANIC MATERIAL THAT COULD BE COMPOSTED!

Compost can increase the water holding capacity of sandy soil, create a looser structure in clay soil and generally improve soil fertility. It recycles natural waste materials at no cost, and because the soil is so 'alive', nutrients are made available to plants by the action of the multitudes of microorganisms, helping the gardener to produce an abundance of healthy plants which may be more capable of handling diseases and pests.

INGREDIENTS

Virtually everything that has once lived will break down in the compost heap. Using the greatest possible variety of materials in the heap will ensure that the compost produced will have a good balance of plant nutrients. You will need a mixture of 'greens' (a source of protein for microorganisms) and 'browns' (a source of carbohydrates).

GREENS - NITROGEN RICH, MOIST

Greens are materials that go soggy and smell if there is too much of them in one place:

- Fresh grass clippings
- Coffee grounds / tea leaves & bags
- Garden weeds
- Fruit and vegetable scraps
- Animal manure (grass eaters only)
- Seaweed

BROWNS - CARBON RICH, DRY

Browns are those that you could burn if left to dry out. Browns also help with aeration and absorption of moisture in the heap. Always start with a layer of coarse browns (like twigs) for aeration:

- Dry leaves
- Torn up newspaper / cardboard / egg cartons
- Bark, untreated sawdust
- Straw / hay
- Twigs and sticks / Shredded tree prunings
- Cotton rags (must be 100% natural)

YOU CAN ALSO INCLUDE

Egg shells (slow to break down but contribute calcium), Rock dust (also slow to break down but can contribute minerals), Wood ash (contributes potassium, but only add a small amount at a time).

BUT DON'T INCLUDE:

Anything artificial (e.g. plastics); Vacuum cleaner dust (likely to include microplastics from carpets and clothes); Dog and cat poo (can contain pathogens harmful to human health); Ashes from coal or treated timber (contain toxic residues like mercury, cadmium and arsenic); Invasive weeds (e.g. couch grass /convolvulus which can spread around your garden); Sprayed weeds (can contain persistent pesticide residues).

COMPOSTING

'HOT' VS 'COLD' COMPOSTING

If your heap is built over a day or two you can get faster decomposition and it can take weeks rather than months to be ready to use. This is called a 'hot' compost. It gets fast results and can kill weed seeds and plant diseases but also takes a lot more work and generates less compost overall than a 'cold' compost.

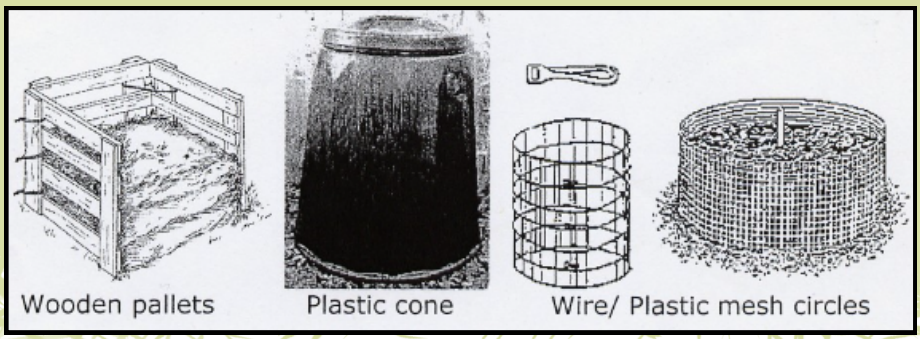
'Cold' compost is made over a longer period of time so won't reach the temperatures of a hot heap. This means that weed seeds and plant diseases can survive, but it also means that there is more compost at the end (because as the microorganisms generate heat they also convert carbon into carbon dioxide, which is lost to the atmosphere). If you don't add diseased plant material or seeded weeds then lack of heat is not an issue.

In a hot compost, initially there will be an explosion of bacterial action, heating the heap to temperatures of up to 60°C. These bacteria feed on readily available nitrogen, mostly contained in green material. As the heap cools down, fungi and actinomycetes predominate, attacking the tougher carbon-rich cellulose material and making it available for use by bacteria, insects, worms and other animals. Turning the compost at this stage introduces more oxygen, thereby allowing the heap to heat up again. At this stage it may also be necessary to add water if the material is dry, and any uncomposted material from the edges can be incorporated back into the heap. For a heap to heat up it must be at least one cubic metre (1m high, wide and deep), ideally a bit more.

Whether you make a hot or cold compost, you need to add roughly the same proportions of ingredients. You can mix everything together and then put it in the bin or layer it up as you go. Shredding or mowing materials will help mix them and they will break down faster. Everytime you add a 5cm layer of greens, cover it with a similar layer of browns. This will ensure you have sufficient of both and will also help reduce odour.

BIN TYPES

There are lots of ways to contain your compost. Free wooden pallets can be tied together; a circle of cardboard-lined metal or plastic netting is another cheap option. Commercial plastic compost bins and traditional three-bay or layered wooden squares also work well but can get more expensive. You can even just make a heap in one corner of your property with an old sack or some straw for a 'roof' (but it will work better if contained).



SOUTH COAST ENVIRONMENT SOCIETY