



Government
of South Australia

Composting and mulching

Zero Waste SA

How much of the rubbish we put in the bin, and that then goes to landfill, could be put to good use in the garden?

Almost half. Yes, about 48% of our waste could be made into compost and mulch to:

- help us create healthy gardens
- reduce the germination of annual weeds
- reduce water loss through evaporation
- lower extreme soil temperatures in summer and thus alleviate plant stress
- reduce soil erosion
- enrich South Australia's poor soils
- reduce the waste that goes to landfill, thus reducing greenhouse emissions.

What is composting?

Composting is the process by which waste organic matter is broken down over a period of weeks or months. It converts organic materials into a rich dark-coloured product, mainly humus, which can then be spread on or dug into the garden to act as a soil conditioner and slow release fertiliser.

Micro-organisms, including bacteria and fungi, break down the materials, recycling them and their nutrients back into the environment. This activity generates heat, which destroys weeds and seeds, pests and diseases. The heat dissipates as the process is completed.





Composting needs:

- air
- moisture
- nitrogen and carbon (woody material).

What can I put in my compost?

- Vegetable and fruit scraps
- Fallen leaves and fruit
- Tea leaves and tea bags
- Coffee grounds
- Vacuum cleaner dust
- Dead flowers
- Soft stems of plants
- Egg shells
- Old newspapers (shredded)
- Lawn clippings
- Sawdust, and small amounts of wood ash or lime
- Tissues

What can't I put in my compost?

- Meat, fish and dairy products (they attract rats and vermin and can smell)
- Large branches (they won't break down)
- Timber products treated with chemicals
- Magazines
- Diseased plants*
- Weeds with bulbs or underground storage parts (active compost will destroy most weed seeds)*
- Large amounts of bread or cake (they also attract vermin)
- Plastics
- Bones

*These should only be added to an active compost where heat is being generated otherwise the problem plants and pests and diseases will just be transferred with the mulch compost

Which method is best?

Choose a shady area of the garden so the sun won't dry out the compost. Put the materials all in together

or layer them: grass clippings, leaves, food scraps, shredded newspaper. The best place to compost is in:

- a pile on the ground
- an enclosure made of wood or mesh
- a large metal drum with no base and holes drilled in the sides to let air in
- a commercial compost bin
- a rotating compost barrel.

Each has disadvantages and advantages, for example:

- some bin designs make it hard to get the compost out
- compost heaps may attract unwanted animals and vermin.

How can I help the process?

Help the material to break down quickly by:

- mixing/turning it over regularly to allow air in
- making sure it is moist
- keeping it well drained
- breaking up materials into small pieces before adding them

Note that adding compost worms to speed up the process may not be successful (compost heaps that generate very high temperatures will kill the worms).

If the material to be composted is very woody (i.e. lacking nitrogen) add a small amount of manure. If it is dry add water or materials high in moisture; if it is too wet add straw, wood chips or other dry organic materials (i.e. not soil).

Zero Waste SA The goal of Zero Waste SA is to eliminate waste or its disposal in landfill by encouraging South Australians to:

- reduce their consumption of resources
- reuse and recycle materials.
- Visit Zero Waste SA's website at www.zerowaste.sa.gov.au