

WHAT IS COMPOSTING?

Composting is a natural process that occurs when plant material dies. Bacteria, fungi, worms and other organisms living in the soil and air transform dead plants, leaves, etc into a rich dark material called humus or compost.

WHY COMPOST?

Compostable materials, such as yard and kitchen wastes make up more than 30% of household wastes. Composting these materials is a cost effective and efficient waste reduction option. Every home has the potential to divert 200 - 300 kg of organic material from regional landfills annually.

Goals aside; why send to the dump material that can enrich the soil and save you money? Finished compost can replace expensive chemical fertilizers and give you healthier shrubs, vegetables, flowers and grass.

PROFILE OF THE TYPICAL GARBAGE CAN

Yard & Kitchen Waste: **32%**

Paper: **32%**
(including newspaper)

Other: **18%**

Plastic: **7%**

Glass: **6%**

Metal: **5%**



NORTHERN CONCERNS

Bears!

If you do not follow the rules of good composting then your compost may attract bears. This is why it is so important to know how to compost well. In the spring bears are attracted by the smell of rotting kitchen waste as residents start their composters working. In the fall it is the smell of rotting fruit that brings them.

To keep the bears away:

- Cover kitchen waste each time you add it. A little lime helps to control the smell, but don't add too much.
- Do not add large amounts of fruit waste in the fall unless it is mixed with other compostables and well covered.
- Keep your compost pile well aerated so that it does not smell.

Composting In Winter

The composting process may stop in the depths of winter when the pile is frozen but those kitchen scraps can still be added. Just keep them covered and the freezing and thawing will prepare them for fast decomposition in the spring.



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Guide to

BACKYARD COMPOSTING





HOW TO COMPOST

Four Essential Ingredients: Nitrogen, Carbon, Water & Oxygen

Anything that was once a living plant can be composted, but to make your compost work well you need a balance of nitrogen and carbon rich materials. All plants contain nitrogen and carbon but the ratio varies. Green materials such as grass clippings are high in nitrogen whereas brown materials such as leaves are high in carbon. If you use equal amounts of green and brown materials, i.e. one bucket of grass clippings and one bucket of leaves, you should obtain a good balance. The materials can be layered or mixed together. Mixing will start the compost working more quickly.

Balancing the supply of water and oxygen is essential for good composting. The decomposers need moisture to do their work. If the pile is too dry nothing much will happen. If the pile is too wet it will smell and it eliminates the essential oxygen that the decomposers need. The pile should be as moist as a wrung-out sponge. Even with the right amount of moisture the pile tends to pack down and squeeze out the oxygen. To counter this problem the pile should be aerated about once a week. Use a compost turner, poke holes with a crowbar or broom handle or turn the pile with a garden fork. A lid can be helpful for retaining or repelling water.

Nitrogen-rich materials

- Fresh grass clippings
- Kitchen scraps
- Plant trimmings
- Manure

Carbon-rich materials

- Dry leaves
- Sawdust
- Straw and hay
- Newspaper

BUILDING THE PILE

Whether using a purchased or handbuilt container, always start with a layer of twigs or coarse material such as straw to allow for good air circulation. Materials can then be added in layers no more than 10 cm thick. Alternate the kinds of materials used or mix them together. The smaller the materials are chopped or shredded the faster the composting process will work. The pile should be at least one cubic metre in size but no larger than 3.5 cubic metres.

MATERIALS TO AVOID

- **Barbecue ashes:** Contains sulfur oxides
- **Diseased plants:** Pathogens only killed by very hot compost
- **Dishwashing water:** May contain perfumes, greases, sodium
- **Dog, cat feces/litter:** Can contain disease organisms
- **Fish scraps:** Attracts animals - bury in trench
- **Grease, milk products:** Attracts animals, large amounts slow composting
- **Meat scraps:** Attracts animals
- **Quackgrass:** Unless thoroughly dried before adding it will grow again

COMPOST PROBLEMS

Compost has unpleasant smell

Too wet, not enough oxygen: add dry material and aerate.

Compost smells of ammonia

Too much nitrogen: add carbon material and mix.

Compost not working

Too dry: add water.

Not enough nitrogen: add nitrogen rich material and mix.

Too many flies

Kitchen waste exposed: cover with dirt, leaves, etc.

Ants in the pile building a nest

Too dry: add water and mix.

Pale green mould in pile

Too wet: add dry material.

USING COMPOST

- Finished compost can be dug directly into the garden where flowers or vegetables are to grow.
- When screened it can be used as a mulch or a top dressing for a lawn. Aerate the lawn first.
- Equal amounts of screened compost, soil and vermiculite or perlite make a good planter mix.
- Water your plants with compost tea made from a bag of compost in a bucket of water.



COMPOSTING ALTERNATIVES

Mulching

Yard waste such as grass clippings and leaves can be used as a mulch around plants. The mulch will keep the soil moist, prevent the growth of weeds, prevent soil compaction and gradually break down into compost.

Trenching

Kitchen waste can be composted in a trench. The trench should be about 45cm deep. A layer of kitchen waste 15cm deep can be placed in the bottom and covered with soil. The following year this will be a good place to plant.

Vermicomposting

Composting with worms is a good way for apartment dwellers to dispose of their kitchen waste. The worms are kept indoors in a wood or plastic container filled with damp shredded newspaper or other bedding. Chopped kitchen waste is buried in the bedding and turned into worm castings. For more information contact the compost hotline.