



BACKYARD COMPOSTING MANUAL



Backyard composting

Composting is nature's way of recycling organic materials back into the soil in order for the cycle of life to continue and human-controlled composting optimizes the conditions needed for the natural decomposition process.

Backyard composting is inexpensive and easy.

Benefits of Composting

- It is earth-friendly.
- It reduces greenhouse gas air emissions
- It benefits your yard.
- Reduces use of chemical fertilizers.
- Improves soil's water retention capacity.
- It's easy.
- It saves money.



Food scraps and yard waste make up to 50-60% of the waste stream. Making compost keeps these materials out of landfills. Organic waste that ends up in landfill will decompose without oxygen and will release methane, a greenhouse gas that is 23x more potent than carbon dioxide emissions in the atmosphere.

How do we make compost?

1. Bin or pile?

- You can start with a pile. A pile works great for just leaves and grass clippings.
- If you want to incorporate food waste then it's better to use a bin. Bins have the advantage of being neat, keeping animals out and preserving heat.
- Bins can be purchased at the **Eco Centre in Cochrane** or from retail stores
- If you decide to buy bins please consider:
 - ✓ **Air Flow:** fresh air kills odour.
 - ✓ **Accessibility:** It makes it easy to turn the compost by choosing a bin with removable front.
 - ✓ **Size:** 300-400L is ideal for beginners.
 - ✓ **Colour:** Black bins will heat up faster hence fast decomposition.

How to choose your composter:

- **Enclosed Bins:** Neat appearance, low cost and low maintenance. Downside for this composter is that low maintenance means slower composting process.
- **Rolling Composter:** best for homeowners and others with sufficient space. Downsides for this composter is that when is fully loaded it can become heavy and difficult to roll.
- **Tumbler:** best for homeowners with limited space. Neat appearance and quick composting times. Downside for this composter is that once these units are full and the composting process begins, you have to wait before adding additional materials.



2. Choose Your Composter Location

You should choose a location which is flat, well-drained and sunny. Most importantly you should find a convenient location. Place your bin on concrete or soil, not on wood or vinyl. Leave some space around the bin to store extra material.

Alternate Layers

Start with a layer of course materials (like twigs, leaves or straws) to allow for drainage and aeration. Cover this layer with leaves. Then simply alternate between layers of greens materials and browns.

Brown material provides carbon (source of energy):

- ✓ Dry leaves, grass, and plant stalks
- ✓ Shredded newsprint (non-toxics only) or brown paper (e.g. paper bags)
- ✓ Cut up cardboards
- ✓ Other paper (unbleached paper towels, napkins, etc. wet is ok but not greasy).

Green material provides nitrogen (building blocks)

- ✓ Vegetable peelings
- ✓ Rotten fruit
- ✓ Coffee grounds
- ✓ Tea leaves

3. Mix bin contents and regulate moisture

- Mix bin contents every 1-2 weeks.
- Mixing adds air and distributes moisture and heat which helps speed up composting.
- As the materials breakdown, the pile will get warm.
- Bin contents should be like a wrung-out sponge, or when you hard squeeze a handful in your fist, 1 drop of water and no more should come out.

4. Using finished compost

Finished compost will be dark, crumbly and smell like earth. Composting process usually takes 3 months - 1 year.

Remove the door or lid and use a shovel to remove compost.

Use your compost!

- Apply around 2 inches on top and will work in as you work.

- Sprinkle your lawn a few times a year.
- Use your compost as top dressing for flower beds and at the base of trees and shrubs.



Tips!

- Chop larger materials into smaller pieces.
- If fruit flies are a problem, store food scraps in the freezer and use as needed.
- You can add rinsed crushed eggshells.
- Add dryer lint as one of your browns. Make sure to use biodegradable lint instead of synthetic ones.
- Collect dry leaves and grass in a separate dry container so that you can use them year-round.
- A tight fitting lid will keep fruit flies out.

Don't add!

- Oils and fats, bread products, rice and pasta, sauces, dairy products, nuts, fish and meat, or bones. These will cause odour problems and attract pests!!
- Dog or cat feces, kitty litter, and human waste. May carry diseases, and may contain chemicals!!
- Weeds with mature seeds. When you spread the compost, you'll spread the weeds too!!
- Treated wood products. These may contain harmful chemicals!!

COMMON PROBLEMS AND SOLUTIONS TO TURN YOUR ORGANICS INTO RICH COMPOST

Problem	Cause	Solution
Pile is dry	Not enough water. Too much woody material.	Turn and moisten materials. Add fresh waste. Cover pile to reduce evaporation
Odours in the bin	Insufficient air or too much moisture	Turn pile and incorporate coarse browns (sawdust and leaves).
Ammonia Smell	Too much nitrogen-green material	Incorporate coarse browns (sawdust, leaves) and turn the pile
Material is damp and sweet smelling but not heating up	Lack of nitrogen-green materials	Mix in a nitrogen-rich (green) material such as fresh grass clippings.
Compost material is damp and warm only in the middle	Not enough material in the bin	Collect more materials and mix the new ingredients into the old
Pile doesn't heat up and decomposes slowly	Pile is too small	Add more organic matter
	Insufficient moisture	Turn pile and add water
	Lack of nitrogen	Incorporate food waste, grass clippings
	Not enough air	Turn pile

	Cold weather	Increase pile size or insulate with straw or tarp
	The pieces of organics may be too big, the centre may be dried out, or too much air is passing through	Cut waste materials into smaller pieces; mix in a bit of topsoil with the materials.
Pests around bin (dogs, rodents, insects)	Improper food added and insufficient coverage.	Avoid adding meats, fats, bones or animal waste. Use a rodent resistant bin.
Fruit flies	Food scraps are exposed	Put food scraps at the centre of the pile and cover greens with browns