

# Compost Bins: A How-To Guide to a Healthy Yard



UNIVERSITY OF SASKATCHEWAN

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**Saskatoon**

**Making use of food scraps and yard waste at home is easy and rewarding. These organic materials can make up approximately a third to half of your annual household waste. When composted, these materials add organic matter and nutrients to your soil.**

Mature compost looks dark, feels crumbly, and smells earthy. Simply add a one to two inch layer of compost to your lawn, garden, and plant pots every year to:

- increase your soil's ability to hold water,
- provide a low-level, slow-release fertilizer,
- improve soil structure and reduce compaction, and
- boosts the number of good microbes in your soil.

## Choosing a Compost Bin

Using a bin is a tidy, space-saving way to make compost. Bins come in many sizes and shapes and can be purchased or built. When choosing a bin, consider

- **Ease of use:** Can you easily add, turn, and remove materials?
- **Size:** Will your bin hold and process the amount of material you have?
- **Assembly:** Does your bin require special skills, materials or tools to assemble?
- **Aeration:** Does your bin allow some air in to reach the materials?
- **Moisture:** Does your bin help your compost pile retain moisture?
- **Animals:** Will your bin prevent animals from getting at its contents?

Do not make or buy bins made from treated lumber, as it will contaminate your compost.



# Building Your Compost

**1. What goes in the bin?** Add materials at a ratio of approximately three parts Brown to two parts Green.

## **Browns (Carbon)**

- Dry, brown plant material: leaves, grass, dead plants, straw
- Wood products: twigs, untreated wood chips, sawdust
- Paper: strips of newsprint can be used when nothing else is available

*Hint: store leaves and other high-carbon materials in a separate pile so that you can conveniently add Browns at the same time you add Greens.*

## **Greens (Nitrogen)**

- Food waste: raw or cooked fruit and vegetable scraps (including peels, pits and seeds), coffee grounds, paper coffee filters, paper tea bags, egg shells, bread, pasta.
- Green plant material: green grass clippings, plant trimmings, flowers, weeds without mature seeds

*Hint: use a small pail with a lid to collect kitchen scraps and add them to your outdoor compost pile every day or two.*

**2. Add water.** Compost piles need to be kept as moist as a damp sponge. In Saskatchewan, this means that you will have to add water regularly. Rain water is ideal.

**3. Stir the top layers** to ensure your pile receives enough oxygen (air). When bacteria have access to oxygen (as well as moisture and a balanced diet), they break down bad smells. You can speed up the composting process by turning your pile frequently (once or twice a week).

**4. Add soil.** Small amounts of topsoil or finished compost help absorb odours and add more microorganisms to your pile.



## Items to Avoid in Your Compost

- meat, bones & dairy products
- fat & oils
- treated wood (including sawdust or wood chips from treated wood)
- diseased plants
- weeds with mature seeds & persistent weeds
- pet feces
- materials that have been treated with pesticides

Have questions about what can and cannot go into your backyard compost bin? Use our Waste Wizard tool at [saskatoon.ca/wastewizard](http://saskatoon.ca/wastewizard).

## How to Start

Composting speeds up the natural process of decomposition; simply combine food and yard waste in close-to-equal proportions, and ensure the materials have access to oxygen and moisture.

- It is easiest to start composting when there are lots of materials available, such as during spring or fall cleanup.
- Place your bin in a convenient and relatively shady location so it does not dry out quickly.
- Start by adding a six inch layer of coarse material, like plant stems, that are sturdy enough to create some air spaces at the bottom of the pile or bin.
- On top of this layer, add four inches of Greens and a shovel full of soil.
- Cover with a six to eight inch layer of Browns.
- Add water until all materials are damp, then mix the Green and Brown layers together with a garden fork.
- Continue to add Greens and Browns throughout the season. *See the Building Your Compost section for tips.*



## Other Considerations

- **Particle size.** Bacteria work faster if their food is in smaller pieces. Take time to break up items as you add them. Woody materials will only compost well if they are shredded.
- **Pile size.** Compost piles work better if they are at least one cubic meter in size (approximately 3' x 3' x 3'). If you don't have enough materials at the start, no problem. Materials can be added gradually.
- **Order prevents odour.** To avoid odour and insect problems, cover Greens with Browns or a layer of soil.
- **Materials shrink.** One of the biggest surprises to new composters is how much their pile shrinks. Finished compost has only a quarter to half of the volume of the starting mix.
- **Winter.** Small compost piles will freeze over the winter, which is no problem. As soon as the pile thaws in the spring, the composting process picks up where it left off. You can keep adding materials, such as food scraps, throughout the winter. Simply add Browns in the spring to ensure your pile has an adequate amount of carbon and then give it a stir!



## Troubleshooting

- **Smelly.** Turn compost materials with a garden fork and add some high carbon materials (like dried leaves and straw) and soil.
- **Animals.**
  - Set mouse traps
  - Do not put materials into your compost bin that are listed under the *Items to Avoid in Your Compost* section
  - Consider using a more animal-resistant compost bin
  - Switch to a different method of composting (e.g. vermicomposting)

The City of Saskatoon offers a rebate on your rain barrel and compost bin purchases.

The rebate form is available online at:

[www.saskwastereduction.ca/rebate-form](http://www.saskwastereduction.ca/rebate-form)

### Gardening at the U of S

For gardening classes for the beginner through to certification, go to [gardening.usask.ca](http://gardening.usask.ca). Take a class, join a free horticultural tour, or enrol in our Gardening 101 series to walk you through your first year.

### City of Saskatoon

Having a healthy yard and garden benefits you and your community. For tips on water conservation, backyard composting, pesticide reduction, and more, visit [saskatoon.ca/healthyyards](http://saskatoon.ca/healthyyards).

### Questions?

Visit the Saskatchewan Waste Reduction Council at [saskwastereduction.ca](http://saskwastereduction.ca) for detailed information about home composting or contact a Compost Coach for assistance at [compost@saskwastereduction.ca](mailto:compost@saskwastereduction.ca) or **306.931.3249**.

Community gardening can be an excellent option for every type of gardener, particularly those with limited garden space. To join an existing community garden, or to start one yourself, visit: [chep.org/en/programs/community-gardening](http://chep.org/en/programs/community-gardening).

## Grow a Greener Saskatoon