

Composting Basics

What is composting?

Composting is: The purposeful decomposition of organic materials, to create humus.

Why compost?

Compost added to soil can help anything grow. Compost also:

- Reduces water consumption (can lower water bill by about 20%)
- Acts as a natural pesticide
- Improves soil condition
- Diverts contents from landfills
- Reduces methane gas

Building the compost pile:

- Gather carbon and nitrogen materials first. The ratio should be 2/3 carbon, 1/3 nitrogen by volume. Ideally, a pile should be 3'x3'x3'.
- Carbon (browns) include: newspaper, cardboard (not shiny), paper towel and toilet paper rolls, wool, cotton, vacuum cleaner sweepings, dryer lint, coffee filters, stalks from perennial plants, end of season annual plants, branches, dry leaves, egg cartons made from paper, paper (not shiny).
- Nitrogen (greens) include: fruit or vegetable peels and cores (no need to remove seeds), coffee grounds, all non-meat food scraps, pet or human hair, manure from herbivores (plant-eaters only please), seasonal thinnings from the vegetable or flower garden.
- Never put bones, dairy, meat, fat, or any plants treated with pesticide in a compost pile.
- Scrape back about 1" of topsoil. Add a 4-6" layer of chopped, mixed carbon. Then add a 2-3" layer of chopped nitrogen. Add one handful of garden soil. Mix carbon and nitrogen layers with a garden fork and water until pile feels as wet as a wrung-out sponge. Continue adding layers of carbon and nitrogen material, watering and mixing as described above, until the pile reaches at least 3' in height, and cover pile with a sheet of black plastic, held down with rocks.
- Commercially made compost bins are available, and act as a container for the pile. They require all the same components, conditions and attention as an open pile.

Maintain the pile:

- The compost pile should be turned once a week, rotating materials from top to bottom. This is a guideline, not a strict rule.

- Add water if the pile doesn't feel like a wrung-out sponge.
- Add chopped food scraps to the middle of the pile, covering them with some of the carbon material.
- Assess the pile each week; tweak levels of ingredients, water and air.

Troubleshooting:

- Smelly- The pile is too wet or has too much in the way of nitrogenous materials. Pull it apart for a while or add carbon items like cardboard/paper, dry leaves or mowed straw.
- Not decomposting- The pile is not wet enough. Add water. Activators such as fish emulsion and seaweed can also be added.
- Attracting animals- Bury food scraps and turn pile more often.
- Consider adding worms to the mix.

Maturing the compost:

The compost is finished when:

- It looks like a dark brown potting soil
- The contents are not recognizable
- Pile is reduced to about half its original size.

Let it sit untouched, under plastic for two months before using. If your goal is to continue composting all of your kitchen and yard scraps, you will now begin composting in another location.

How to use compost:

When ready to use, dig a couple handfuls of mature compost into the top 4" of soil for plants. Compost can also be applied lightly as a top-dressing several times a season around all actively growing plants. Compost is extremely rich in nutrients and should only compose 25% of potting soil.

Notes:

Remember that composting happens naturally, and we are just aiding the process to speed it up. Don't stress about getting it exactly right. There are only five ingredients in compost- carbon, nitrogen, water, air and time. Sort of like making a cake, if you use the right ingredients you can mess it up a little and still get a cake. You will learn as you go what works best for your pile. Have fun, know you're doing the earth a great favor, and get ready for a beautiful, healthy garden!

This resource was prepared by *Stacy Feeney, Denver Urban Gardens Master Composter*