

How to Compost

Why Compost?

First, composting decreases waste, reducing the problems associated with landfills. It is estimated that 40% of what we throw away *can be composted!* Second, proper composting transforms these wastes into a free soil amendment that adds nutrients, enzymes, and beneficial soil microorganisms, and improves soil texture, permeability, water retention, nutrient retention, and aeration. Finally, backyard composting is fun, and teaches children and adults about the process of decomposition and the creation of soil.

Backyard Composting Basics

Compost happens! No matter what we do or don't do, plant matter *will* decompose into one of the basic components of soil – organic matter. However, to produce the healthiest, most nutrient-rich and beneficial compost in the shortest amount of time, here are some guidelines. The basic ingredients of a healthy compost pile are **plant matter, water, air, and beneficial microorganisms**. The most successful compost is simply a nursery for microorganisms, where we create the perfect environment in which beneficial decomposing organisms proliferate and do their work. In fact, it is the activity of the microbes that can make a proper compost reach temperatures up to 140 to 160 degrees Fahrenheit!

1. Location: Most importantly, locate the compost where it is convenient for you to use. Make it close to the kitchen, for example, if kitchen scraps are one of the most frequently added ingredients. In our Texas climate, it is best not to situate the compost in a full sun area; especially avoid late afternoon sun.

2. Structure: A compost pile can be as simple as a pile of leaves, or as complex as a three-bin system. You may build your own structure from new or recycled materials. Some materials that can be used are chicken wire or other woven wire, old wooden pallets, or cinder blocks. Avoid railroad ties or other toxic materials. You may want to purchase a compost bin. Most compost bins are designed to keep out rodents and pets, to look attractive, and some can be easily rotated in place for aeration. If you live within the City of Austin, look into getting a rebate for your composter purchase: <http://austintexas.gov/composting>.

3. Ingredients: Whatever system is used, the next step is to combine ingredients in the best ratio.

a. Ratio: Ideally, your compost should be built with a 3:1 ratio of brown to green, also known as the carbon to nitrogen ratio. In other words, mix a large amount of brown, dry (carbonaceous) material with a small amount of green or moist (nitrogenous) material. Don't worry too much about the *exact* ratio. Experiment and have fun!

(1). Brown (Carbon): dried leaves, dried grass clippings, mulch, paper, dryer lint, dust bunnies

(2). Green (Nitrogen): kitchen scraps, coffee grounds, tea bags, green grass clippings, pasta, wine, beer

b. Recommended: Vegetative kitchen scraps such as potato scrapings and apple cores; eggshells; coffee grounds; tea bags; hair; grass clippings; leaves; manure; young non-aggressive weeds; organic hay; small amounts of garden soil; shredded black and white newspaper; paper towels, pizza boxes, and more.

c. Not recommended: Aggressive weeds, such as Bermuda grass, Johnson grass, or nut grass; contaminated wastes, such as sawdust from treated lumber; anything with pesticide residue, such as most hay; glossy or colored paper; human, dog, or cat feces; meat scraps; or excessive fatty materials or dairy.

4. Moisture: The compost pile should be moist. In dry spells, in the summer heat, or if you see a white mold, the pile may need to be watered more often. If the compost gets too soggy, add more dry, brown stuff and turn it. In general, water the pile about once a week.

5. Aeration: The most beneficial microorganisms for gardening are bred in the presence of oxygen. In addition, *anaerobic* organisms (the ones that live *without* oxygen) are associated with foul odors. Therefore, it is a good idea to keep a compost pile well aerated. In simple compost piles and open bins a pitchfork is the best tool for turning. In completely closed bins, a compost-aerating tool is needed. For best results, aerate the compost pile about once a week.

6. Harvesting: Some bins are structured with a door near the bottom for accessing the finished compost. In other bins, you will want to make or get a compost sifter to sift out finished compost.

7. Further Information: There are several good books on composting. Try *The Rodale Book of Composting*; *The Complete Compost Gardening Guide* by Pleasant and Martin; or *How to Make and Use Compost* by Nicky Scott. Now, for something completely different, try *Worms Eat My Garbage* by Mary Appelhof.

Also, visit http://www.austintexas.gov/sites/default/files/files/Trash_and_Recycling/CompostingFactSheet.pdf

Have fun composting!