

Composting

Tool & Material Checklist

Long-handled pitch fork	Pre-made compost bin
Wire staples	Corner and T-braces
Compost aerating tool	Treated lumber
Power stapler	Hand or circular saw
Compost thermometer	Rope or chain
Nails	Drill and drill bits hammer
Compost starter	Bone meal
Nuts and bolts	Tin snips
2"x4"x36" wire fencing	Leaf blower/vac
Hardware cloth	Tape measure
Trash can	Chipper/shredder
Zinc-plated hinges	Safety glasses
Screwdriver	Lawn cart

It was once something those overzealous, health conscious, everything–natural hippies did. But now it's something even mainstream America might be doing. It's called composting.

An ever-increasing number of local governments are banning the disposal of yard wastes–grass clipping and leaves–in landfills. Most localities have forbidden leaf burning for years.

So where are the grass clippings and leaves to go? Into your compost heap, of course.

Whether you begin composting out of necessity or a sincere desire to improve the environment, it is extremely easy to do.



Your Backyard Compost Pile

Composting is considered by the U.S. Environmental Protection Agency to be a part of recycling. It *reduces* the amount of trash generated. It can be *reused* in your yard and it *recycles* nutrients back into the soil and plant life.

Composting experts will argue the merits of an open-air system versus a closed-air system, the merits of layering the compost material versus mixing it together, or even whether to turn the pile.

But if all you are interested in is getting rid of your yard waste, you can rest assured that there is very little that can go wrong with composting.

Whether you choose an open or closed system, carefully layer the materials or mix the ingredients. Let it sit or turn every few days and it will become compost within a certain period of time.

Where to Locate

The ideal location for your compost pile is under a tree. The partial shade will keep the pile from drying out too fast. However, it should not be a tree that is highly acidic such as pine, black walnut, juniper, eucalyptus or cypress.

A location near the kitchen is helpful, but more important is a location that has good drainage. It also is useful to have an area near the pile to store materials that will be added to the pile later.

To Contain or Not Contain

The simplest and least expensive way to begin composting is to start a compost heap. The pile should be at least 6' x 6' and about 5' to 6' high in the middle. Anything smaller will maintain low temperatures and will take longer to decompose. As the pile deteriorates, it will tend to sprawl and shrink. Compost heaps can be untidy and displeasing to look at, especially in urban areas. Compost heaps are what sometimes give composting its bad reputation.

Containers keep the compost materials neat and tidy. They can be inexpensively built from discarded shipping pallets, fencing or chicken wire or leftover treated lumber from another building project.

Four shipping pallets tied together with rope, wire or chain with an optional fifth pallet at the bottom for increased air circulation will make an adequate container for your composting materials.

A wire bin can be made by tying together 2"x4"x36" wire fencing into a hoop shape.

An elaborate three-bin system can be built from purchased materials. With the three-bin system, each bin is approximately 36" square and shares a common lid and internal sides. In a three-bin composting system, one bin is the active compost pile, one is left empty to make turning easier, and the third is used as a holding bin for materials to be composted.

Composting can also be done in a plastic trash can which has had the bottom cut off and 24 to 48 holes drilled into the sides to increase air flow.

Many different types of composting bins are also available for purchase. There are wooden open-air bins, plastic open-air bins, plastic closed-air bins and rotating drums. The rotating drums are the most expensive but are convenient because they make turning the compost easy.

Other Tools of the Trade

Accessory tools for composting could include a long-handled pitch fork for easy turning, a special aerating tool to keep the pile aerated and a compost thermometer, which has a long probe to accurately determine the internal temperature of the pile.

The Compost Recipe

Like any good recipe, the compost recipe is subject to variation by the cook. The more greens/nitrogen (fresh grass clippings, food scraps) in the pile, the "hotter" the mixture and the faster it will decompose. The brown ingredients (dry leaves, dry grass, wood shavings) add carbon to the mixture and help keep the pile cool.

An ideal mixture would be 50% greens and 50% brown, but this can vary from one-quarter to one-half green and one-half to three-quarters brown.

Other items that can be added to the pile to help the "brew" but are not necessary include:

- garden soil (1/2 shovelful)
- finished compost (1/2 shovelful)
- bonemeal (1/2 shovelful)
- bloodmeal (1/2 shovelful)
- fireplace ashes (shovelfuls)
- crushed fertilizer rock dust (shovelfuls)
- compost starter (see manufacturer directions)

Your Yard Waste

Just about any of the yard waste that you would bag up and set out on the curb for the trash haulers to carry away can be used in your compost heap. Here are a few pointers to keep in mind:

- Wet grass clipping should be mixed thoroughly to prevent odors.
- Any woody material larger than 1/4" in diameter should be cut and bruised to provide more surface area for it to break down.
- Weeds must go into a "hot" pile (140 degrees to 150 degrees) to destroy the seeds.
- To keep more consistent weeds, such as Bermuda grass, from coming back after the compost is harvested, place them in a black plastic bag in direct sunlight for several weeks, then chop them up and place them in the compost bin.
- Plants infected with insect eggs should not be added because even a "hot" pile may not kill the eggs and the insects could re-infest your yard when the compost is harvested.
- Highly acidic or poisonous plants should be added in very small quantities or nor at all.
- Ivy and succulent plants should be chopped or shredded before adding to the compost pile because they may regrow when the compost is harvested or may even begin growing in the compost pile.

Other Ingredients

- Food wastes such as vegetable and fruit scraps, breads, pastas, coffee grounds, egg shells, and tea bags are all acceptable nitrogen sources for your compost bin.
- Do not put meats or fats in your compost pile. These food wastes will attract animals and rodents to your bin.
- Manures from cows, horses, chickens and any non-meat eating animals are excellent nitrogen sources for starting the decomposition process.
- Paper towels, toilet paper tubes and other shredded paper products can also be added to your compost bin.

Potential Problems

Some people have concerns about compost heaps fearing they will attract insects, rodents and other pests as well as produce undesirable odors. Most of these worries are unfounded, especially with a properly maintained pile.

A good, healthy pile should present no problems. As a general rule of thumb, if it smells like soil, then everything is working like it should.

- Odors in your compost bin are usually caused by too many greens or a proper amount of greens not adequately stirred into the mixture. If odor problems start, try mixing in more brown materials such as dried leaves, straw, compost or garden soil.
- Flies should not be attracted to your compost pile if food scraps are buried 6" to 12" in the center of the pile. Just dumping food waste on the top of the pile is what causes flies to seek out your compost bin.
- Rodents should not be attracted to your compost pile if you do not add meats or fatty foods. Should rodents become a problem, try turning the pile and purchasing rodent repellent at your hardware store or home center.
- Moisture, too much or not enough, can also be a problem. If it is too wet, the pile will rot rather than decompose. If it is too dry, nothing will happen. A cover will help keep it from getting too wet during rainy seasons. A garden hose can be used to add any necessary moisture. The pile should have the wetness of a squeezed-out sponge.
- Cold, winter weather will slow down the decomposition process. Make the pile larger and/or cover it, and it will maintain its heat and do a slow simmer during the colder months.

MORE INFORMATION

There are a number of books that have been written on composting. In addition, most state and county extension agencies can provide information on composting and other recycling questions. State environmental agencies may also have literature on the subject.

Just remember there is very little you can do wrong with composting. The only question is how involved you want to get with the process.

Check your state and local codes before starting any project. Follow all safety precautions. Information in this document has been furnished by the National Retail Hardware Association (NRHA) and associated contributors. Every effort has been made to ensure accuracy and safety. Neither NRHA, any contributor nor the retailer can be held responsible for damages or injuries resulting from the use of the information in this document.