

COMPOSTING

By Jennifer MacDonald

This article is about composting. Now that composting has become “politically correct” we are being deluged with articles and paraphernalia concerning composting. Many readers may feel that another item on composting is as interesting as watching paint dry. Hang in there readers. I intend to tell you why you should be composting and how to compost even those immortal brown oak leaves. It will give you a brief look at sheet and trench composting. It will show you how to use compost as an unsurpassed planting medium for house plants. Those of you who are already composting will, hopefully, find some ideas to produce more nutritional compost.

Gardeners already know the value of compost. Compost in bags sells for between \$1.00 and \$2.00 at local discount and garden stores. Compost provides nitrogen, potassium, phosphorous and trace minerals to soils. Organic amendments such as compost do not leach from the soil as fast as chemical fertilizers. I ration our valuable homemade compost for transplants and side dressing. The few potted plants I have grow in compost. Regular addition of compost will give local soils a nitrogen boost and improve structure, allowing water and nutrients to be retained or drained as well as reducing compaction problems.

The easiest way to build a compost pile is to throw leaves, lawn clippings and garden refuse into a pile and let it rot. Composting more efficiently requires that the pile be of sufficient mass to generate heat. By using a bin 3 feet wide by 3 feet deep by 3 feet high composting is not only neater but it permits the organic material to become compost before all the nutrients are leached away. You can buy a compost bin locally for under \$15.00 or make one yourself. To make your bin use 9 feet of 3 foot wide welded wire, two- or four-inch mesh. Create a cylinder with the wire by fastening the ends together.

To start composting, place your bin in a well drained spot. Preferably a shady one that is not too far from the house or garden. Start adding material in layers approximately 5-inches thick. The compost pile that works best is approximately 50% green material (green leaves, fresh clippings, and food scraps) and 50% brown material (brown leaves, sawdust, dry grass). If you have an ample supply of green and brown material, alternate your layers, if not don't worry it will still work.

The longer a compost pile sits the more nutrients leach away. It is important that the pile heat up quickly and begin the decomposition process. To speed things up sprinkle each layer with a protein-rich activator. My favorite activator is alfalfa meal (the kind without molasses) sold locally for around \$7.00 per 50 lb. bag. Other good activators are manure, blood meal, bone meal, cottonseed meal, and good rich garden soil.

After each layer moisten the pile to about the level of wrung out sponge. In warm dry weather you may have to water the pile every 3 to 4 days. Do not compact the center of

the pile. In order for the organisms that break down the material to do their job they need oxygen as well as organic material and water.

If the pile is made correctly it should heat up to 140 degrees to 150 degrees in two or three days. After a week or so of heating and decomposing the pile is ready to be turned. To turn the pile lift off the collector and set it beside the pile. Then fork the material back into it. The heating and decomposing process will start up again. The compost is ready when it is crumbly and dark brown, one to six months depending on the weather and how industriously you tend the pile.

What can you put in your compost pile?

Outdoor material:

Straw

Sawdust

Salt hay

Corn cobs (chopped to 1/4")

Leaves (chop dry leaves with a lawnmower)

Grass clippings (do not use clippings that have been sprayed with a weed

killer)

Shredded twigs (out to 1/4")

Shredded bark

Pine needles

Hedge Trimmings (cut to 1/4")

Wood shavings

Old sod

Weeds (there is some debate over the use of weeds however, composter temperatures of 140 to 160 degrees are likely to kill most weed

seeds)

Rejected garden produce

Indoor material:

Coffee grounds with filters

Tea leaves with bags

Bread

Crushed egg shells

Vegetable and fruit trimmings/peels

Do not compost:

Material thicker than 1/4"

Diseased or pest-laden materials

Meat, bones, or grease (these will slow down composition, will make the smell, and are likely to attract rodents)

pile

Dairy products (these things smell and attract pests)

Oily foods such as peanut butter, salad dressing, and vegetable

oil)

Dog and cat feces (may contain parasites harmful to humans)

Aquatic weeds

Manures added to the compost pile add nitrogen to the finished product and speed up the composting process. Remember, you cannot add fresh (hot) manure to your garden without endangering tender plants. In the composting process manure loses much of its nitrogen. For example chicken manure starts at 4.6% nitrogen and falls to 1.7% after composting.

Many people are concerned that compost pile will smell or attract pests. In fact a well built and maintained compost pile does not smell offensive. Pests and rodents can be avoided by (1) keep meat, bones, dairy products, oily, or sugary food out of the pile (2) bury food waste 6" deep in the center of the pile. Composting is a biologic process and your compost pile will be filled with micro-organisms (such as bacteria) and macro-organisms (such as earthworms). These organisms are working like mad turning your leavings into a multi-vitamin for your soil

You can use finished compost as a soil amendment, mulch or fertilizer. To use compost as a potting medium for indoor plants first pasteurize it. Pasteurizing compost smells very bad so I suggest you do it outside over a charcoal barbeque grill. After you light the grill place the compost in an old shallow pan and heat to 180 degrees (check temperature with a meat thermometer). After 30 minutes at 180 degrees any unwanted organisms and weed seeds will be eliminated. For potting soil mix 50% compost with sand.

My more desirable nitrogen fixing plants such as peas and beans never make it to the composter at all. After harvesting they are roto-tilled directly into the soil where they grew. This sheet composting can also be done with leaves and grass clippings if you have a good roto-tiller.

Trench composting is ideal for kitchen garbage. First dig a trench across your garden. When you have compostable kitchen waste dump it in a section of the trench and rake soil over it. When the trench is filled, till the composted garbage thoroughly into the soil. I don't recommend you immediately plant root crops over the trench because undesirable organisms may have been present in the garbage. It should be safe to plant leafy or cole crops.

You can start a compost pile any time of year but the decomposition process will go a lot faster in warm weather. If you are an experienced hand at composting I hope this article has given you some ideas on how to compost more effectively. If you haven't tried composting yet I hope this will give you the impetus to try it.

Questions on composting - or other gardening issues - can be answered by calling Amador County Master Gardeners at 223-6482.

Jennifer MacDonald lives in Pine Grove and is an Amador County Master Gardener.