

BACK YARD COMPOSTING

Revised 9/05

Composting is the natural breakdown of dead plant and animal tissues into soil. Soil organisms have been doing it without human help for millions of years. Although it takes a few seasons to go from fall leaves to soil you can speed it up considerably to deal with your large leaf pile.



First, you'll need an enclosure - the easiest one to make is from 36" tall, 2" by 4" welded wire fencing, available at your local hardware store. A 4' wide enclosure requires about 12 1/2 ft. (you can get 4 enclosures out of a 50' roll, preventing waste). When the fencing is cut leave the wires "long" on one end. You'll form the fencing into a circle and the long wires can be bent to hook onto the other end of the fencing, holding it all together.

COMPOST RECIPE

After you make your enclosure, you'll need some ingredients to start the pile. Add them layer by layer, mixing as you can. Here's what you'll need:

1. **Brown material (leaves, hay, dry matter)** - this cellulose material is the carbohydrate or "energy" food for the compost micro-organisms, who digest it to get the energy for their work. Most of the brown material leaves the pile as carbon dioxide. Use a mower or a shredder to grind the brown material into smaller pieces - this will increase their surface area and speed of the decomposition. Because wood chips and sticks take a long time to decay, they might be better used as mulch or composted separately.
2. **Green material (grass, vegetable waste, manure, fertilizer)** - this material contains nitrogen compounds that are important in the growth of the micro-organisms. The green material can produce odors in compost piles if allowed to clump together, so layer the ingredients and mix with your fork. Lacking fresh grass or manure, mix in 1/2 of a 50 lb. bag of ground alfalfa fertilizer to each bin of fall leaves.
3. **Soil or old compost** - is full of micro-organisms that act similar to yeast in the making bread or yogurt - just a little bacteria to kick off the process! Although composting will work without the addition of soil or old compost it helps the process go faster.
4. **Water (to a damp sponge consistency)**. It's very important to have adequate moisture inside the compost pile - many piles suffer from being too dry. Water and stir the pile as you build it. Leaves are like shingles and prevent water from reaching all the material. To keep the pile moist you can line the wire bin with black plastic. This speeds up the process a lot and will help you keep up if you have a lot of trees. Bear in mind that piles can get too wet - you might need to cover the compost during rainy periods.
5. **Air**. Oxygen is required for the "slow fire" called composting. Without air, any biological activity will be severely limited and a shift to unhealthy bacteria may occur. Putrefication can also occur when too much fresh green matter is added and not mixed well with the other materials.

Mix all these ingredients and turn as you can - a hay fork (the fork with thin tines) is a good tool to do this. If the pile is cool but hasn't turned to humus yet, it needs to be turned. A well built compost pile can get quite hot, killing weed seeds and pathogens in manure. To turn the pile, unhook the wires holding it together. Reform the wire circle next to the existing pile which should hold its shape. Use the fork to move the pile into the newly formed space adding new material as you like. Moisten with the hose if needed.

HEARTLAND ALL SPECIES PROJECT

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