Backyard Composting
Basic Recipe

AIR + WATER + BROWN STUFF + GREEN STUFF = COMPOST
(Carbon) (Nitrogen)

BROWN STUFF

Dry Leaves
Dried Grass Clippings
Straw or Hay
Sawdust

GREEN STUFF

Fresh Grass Clippings
Spent Garden Plants
Vegetative Kitchen Scraps
Manure

OTHER ADDITIVES

Egg Shells Coffee Grounds and Filters Wood Ashes
Shredded Paper Dryer Lint Hair

AVOID ADDING

Coal, Charcoal or Charcoal Ashes
Animal Products (meat and bones)
Fats and Oils
Dairy Products
Colored Paper – Magazine Slicks
Diseased Plants
Weeds That Have Gone to Seed
Cat Litter, Cat or Dog Feces
Toxic Chemicals, Poisons, Pesticides

Compost Bins

Compost bins are for the benefit of the human. The microbes will do their thing regardless. A bin helps to contain the materials and maintain the optimum volume. It can also discourage unwanted guests such as opossums, raccoons, and neighborhood pets. A lid may be placed on top to further insure that the composting materials will not be disturbed.

Compost bins may be made of just about any material that is not harmful to living systems. There are commercially produced plastic, wire, metal, and wooden bins. Some people make their own using concrete blocks, kennel wire, bricks, or wood. A key element in construction is to always make sure there are plenty of openings for aeration. Also, the bin should not have a bottom.

Building the Pile

After gathering all of the materials together, you are ready to start building the compost pile. To make a hot pile, 20-25 bags of material will be required in the proper brown to green ratio. For example, 3-4 bags of dried brown material to each partial bag of fresh vegetative material.

Begin by placing an eight to ten inch layer of brown material in the bottom of the bin. Stir in water to make sure it is dampened. Then throw in the green stuff and mix it together. If you want to add a boost of microbes, throw in a handful of healthy soil or finished compost. This step is not necessary though, as the material in the bin already has microbes on it and too much soil will be heavy enough to compact the material creating anaerobic conditions. This is your first layer.

Next add another layer of brown stuff, stirring in the water. Mix in the green stuff. This is your second layer. Continue in this manner until the bin is full. It is not necessary to drag material from the bottom to the top to mix it because each layer has the correct mix.

After a few days, the volume will shrink, allowing you to add another layer. When the pile no longer shrinks at the same rate, it's time to completely turn the material over, adding whatever ingredient might be missing.

Maintenance

The three most commonly asked questions about maintenance of a compost bin are: 1) Is it okay to add more material? 2) How often do I turn the pile? 3) Do I water it?

More material can be added to the pile at any time. If you are adding vegetative kitchen scraps, they must be buried at least ten inches deep. If you are adding more grass clippings and leaves, add them to the bin as if you were building another layer.

Some people follow a regular schedule of turning the compost pile every few days, some every few months, and some never turn the pile! Whatever you feel comfortable with is fine. However, there is a way to tell when the pile is ready to be turned. When we have finished building our pile, all ingredients are in the proper ratios. The microorganisms quickly grow, reproduce, and release "body heat" that raises the temperature of the compost pile. When the ingredients start to get out of balance, the microbial activity begins to decline. This decline in activity is evidenced by a decrease in the temperature. Monitor the temperature of your compost pile. As long as the temperature is rising or remaining stable, leave it alone. When the temperature begins to fall, turn the pile. As you turn and mix, add any of the ingredients that seem in short supply. The ingredients most often needed are water and/or nitrogen.

Water is added when you build the pile or when it is turned over. Watering the top of the pile has little effect on the interior conditions because most, if not all, of the water runs off. The material that acts as insulation to retain moisture and heat in the center of the pile also acts to keep outside factors out.

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