

Turn Fall Yard Waste Into Valuable Compost

Leaves and other materials that clutter yards in the fall can be gathered and turned into high quality soil amendment for next year's garden. Compost improves the structure and moisture retention capability of most garden soils. Ingredients in your compost pile can include leaves, grass clippings, straw and non-woody plant trimmings. Branches, logs and twigs larger than one-fourth inch in diameter can be included, but they must first be shredded or cut up into smaller pieces. Kitchen wastes such as vegetable scraps, coffee grounds and eggshells are other potential ingredients.

However, some organic materials that could cause a health threat or attract unwanted wildlife should be avoided. Such materials include pet feces, meat, bones, grease, whole eggs and dairy products.

Compost piles should be large enough to hold heat and small enough to admit air to the center. Generally, a pile must be at least 3 feet tall, 3 feet wide and 3 feet long to hold heat. Its height and width must be no more than 5 feet to allow air to the center of the pile.

Before building a compost pile, put 4 to 6 inches of chopped brush or other coarse material over the soil, which will allow air to circulate underneath the pile. After creating a base layer, put on a layer of low carbon (green) organic material, such as grass clippings, 3 to 4 inches thick. Follow that with a 4- to 6-inch layer of high carbon (brown) organic material, such as leaves or garden waste. Both layers should be damp to the touch, so if necessary add water to each layer with a hose. The material should be damp enough that a drop or two of liquid is released from a handful of it when squeezed. Finish with a 1-inch layer of garden soil or finished compost, which will introduce the microorganisms needed to break down the organic matter.

Mix these layers, except for the base layer, before adding more material to the pile. This ensures quick and even composting of the organic matter. Repeat the layering process to create the desired size of compost pile.

The compost pile can then be left alone, termed a 'passive pile', or can be maintained by turning or mixing the pile and adding water to keep the conditions prime for compost formation. Actively turned piles will break down plant debris and form finished compost much more quickly than a passive pile.

For active compost piles, rotate the compost about once a week using a pitchfork and be sure to incorporate new debris with the old. Excessive turning will cool the pile down and will take longer for compost to develop. Most plant disease organisms and weed seeds are destroyed during the composting process when temperatures in the center of the pile reach 140° to 150°F, which can be measured using a soil thermometer. However, in most compost piles it is impossible to mix efficiently enough to bring all wastes to the center. Consequently, incorporating large amounts of weeds with seeds or diseased plants into your compost pile may create problems.

Finished compost is dark brown, crumbly and earthy smelling. Small pieces of leaves or other ingredients may be visible. Stable compost can be blended into soil mixes and is suitable for most outdoor planting projects. While mixing ratios vary, 10 percent compost is considered the minimum, 30 percent optimum and 50 percent maximum.