



UNIVERSITY OF MINNESOTA
EXTENSION

MASTER GARDENER PROGRAM

Composting

- Adding compost to light, sandy soil helps it hold moisture and nutrients.
- Adding it to heavy soil improves drainage.
- Contain your compost in some type of structure 3 to 5 feet wide.
- Put your compost pile close to where you will use it.
 - Away from drying winds, but in partial sunlight to help heat the pile.
- Do not compost pet feces, meat, bones, grease, whole eggs and dairy products.
- Do not compost diseased or insect-infested plants and weeds.

Composting is a process that allows naturally occurring microbes to convert yard waste, such as leaves and grass clippings, to a useful organic soil amendment or mulch.

Gardeners have used compost for centuries to improve their soil and help plant growth. Incorporating compost into light, sandy soil helps it hold both moisture and nutrients, while adding it to heavy soil improves drainage.

Different yard waste conditions affect how well you compost. The microorganisms responsible for decomposition need oxygen, water and nitrogen.

Particle size also affects efficiency. The smaller the plant pieces, the more rapidly they will break down. Use a shredder or power mower to chop up leaves and small twigs before adding them to the pile.

Compostable Materials:

Many organic materials are compostable besides grass and leaves:

- Coffee grounds
- Eggshells
- Faded flowers
- Fruit and vegetable scraps
- Lake plants
- Leftover plants at the end of the gardening season
- Nonwoody shrub trimmings or twigs less than one-fourth inch in diameter
- Shredded newspaper (black and white print)
- Small amounts of wood ash and sawdust
- Straw
- Weeds

Sawdust requires the addition of extra nitrogen. Wood ash raises compost alkalinity and may result in nitrogen loss from the pile.

There should be little need to compost grass, since it is safe to leave clippings on the lawn if you mow regularly and remove only one-third of the blade length each time. If you do compost grass, mix it with other yard waste. Grass clippings pack down and restrict airflow. This limits the availability of oxygen needed by microorganisms for decomposition. There are things that you should not compost. Pet can transmit diseases. Meat, bones, grease, whole eggs and dairy products attract rodents and other animals. Badly diseased or insect-infested plants and weeds containing seed may not heat up enough for decontamination.

Preparing Your Compost Pile

- Build your compost pile in layers. Begin with eight to ten inches of leaves, grass or plant trimmings.
- Water it to the point of being moist, but not soggy.
- Add a nitrogen source, such as ammonium nitrate, ammonium sulfate or an inexpensive high nitrogen lawn fertilizer without herbicide.
 - Sprinkle the pile with one-third to one-half cup of fertilizer per 25 square feet of surface area (a 5' x 5' bin).
 - If you live in a rural area and have access to livestock manure, you can use a two-inch layer of manure as your nitrogen source.
- You may choose to add a one-inch layer of soil or completed compost over the nitrogen to increase the number of decomposing microbes in the pile. Most leaves and plant scraps have enough microorganisms to get the job done without the addition of soil or compost.
- Repeat these layers until the pile reaches a height of five feet, watering each time you add new layers.

Maintaining Your Compost Pile

- An active compost pile will heat to somewhere between 130° and 160° Fahrenheit.
- As the center cools, turn the pile to help speed decomposition and reduce any foul odors. Do this once or twice a month.
- Continue to water your compost pile periodically to keep it moist but not soggy.
- You can add a little fresh material when you turn the pile, but generally, you are better off beginning a new pile.
- A well-managed compost pile will be ready in two to four months in the warm season, whereas an untended pile will take a year or more to decompose.
- When completed, your compost pile will be about half its original height, and will have a pleasant, earthy smell.