### What is compost?

Compost is a dark, crumbly and earthy smelling form of decomposing organic matter that can be used to enhance everything you grow.

### Why should I compost?

Composting is a practical and convenient way to handle your yard waste. It is easier and cheaper than bagging yard waste and it improves your soil and plants. If you have a garden, lawn, trees, shrubs or planter boxes, you have use for compost.

By using compost, you return organic matter to the soil in usable form. Soil with compost added holds more nutrients and water, improves soil structure and drainage and enhances plant growth.

### What can I compost?

Yard waste, such as fallen leaves, grass clippings, weeds and the remains of garden plants, makes excellent compost. Woody yard wastes can be clipped and sawed down to a size useful for wood stoves or fireplaces or run through a shredder for mulch-making.

Kitchen wastes, such as salad greens, vegetable and fruit peelings and coffee grinds, may be added by burying them several inches deep into your compost pile. Avoid meat scraps, bones, dressings, oils and fatty foods. Put those in your garbage.



For more information on lawn care, grasscycling, gardening and compost bin construction, contact: Cornell Cooperative Extension of Westchester County 26 Legion Drive, Valhalla, NY 10595 914-285-4640

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For recycling information, contact the Westchester County Recycling HelpLine 914-813-5420 or westchestergov.com



Cornell University Cooperative Extension Westchester County

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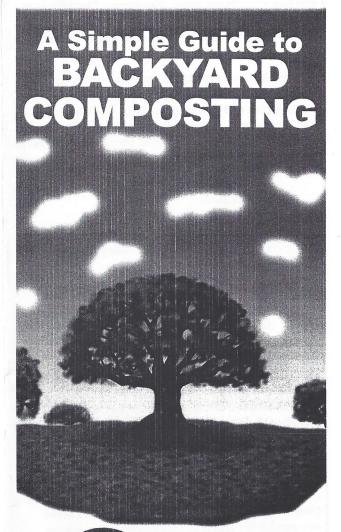
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Andrew J. Spano, Westchester County Executive County Board of Legislators





## **Composting Basics**

**Biology:** Many organisms that cause decomposition live in compost piles. Numerous bacteria start the process and are soon joined by fungi, protozoans, centipedes, millipedes, beetles and earthworms.

**Materials:** Compostable wastes contain carbon and nitrogen. The decomposing organisms need both carbon and nitrogen to work. The amount of carbon and nitrogen is called the "C: N Ratio." A mix of materials composed of 30 to 50 parts of carbon to one part nitrogen works best. Below is the C:N ratio for various materials:

Sawdust	50 <b>0</b> :1
Paper Leaves	170:1
	40:1 to 80:1
Rotted Manure	20:1
Non-woody Weeds	20:1
Grass Clippings	19:1
Kitchen Wastes	15:1

**Surface Area:** The more surface area the decomposing organisms have to work on, the faster waste becomes compost. Chopping waste with a shovel, sickle, shredding machine or lawn mower will speed the composting process.

**Volume:** Heat is generated by the decomposing organisms as they work. Piles smaller than 3'x3'x3' (27 cu. ft.) will have trouble holding this heat, while piles larger than 5'x5'x5' (125 cu. ft.) don't allow enough air to reach the organisms at the center. These proportions are of importance only if your goal is to compost quickly.

Moisture & Aeration: The decomposing organisms function best when the compost materials are about as moist as a wrung-out sponge and have many air passages. Extremes of sun or rain can adversely affect this moisture balance.

# **Composting Methods**

Holding bins and piles

Yard waste can easily compost in piles or holding bins which are simple wood, plastic or wire containers used to store garden waste in an organized way until these materials break down.

A variety of easy-to-use enclosed bins, such as the one pictured below, are also readily available at hardware and garden centers.

Which wastes? Non-woody yard waste is the most appropriate.

How? Drop various yard wastes into the bin as they are collected. Chopping or shredding wastes, alternating high carbon and high nitrogen materials and providing sufficient moisture and aeration will speed the process (see "Composting Basics" in this brochure). Be

sure to mix up the contents so that the pile gets oxygen and can break down effectively. Don't let the compost completely dry out. A compost pile needs moisture to keep the composting process active. It can take from six months to two years, so you need to be patient.

### Mulching

Mulch is a layer of yard waste placed on the soil surface to conserve moisture and restrict weed growth.

Which wastes? Woody yard wastes, leaves and grass clippings.

**How?** Spread leaves, grass clippings or wood chips beneath plantings. For woody materials up to 1" in diameter, rent or purchase a chipper/shredder. Tree services often deliver wood chips free. All yard wastes will work first as a mulch and then, as decomposition proceeds, as a soil enrichment.

### **Barrel Composters**

The barrel composter tumbles the waste for aeration by simply spinning the drum -- solving the issue of keeping the compost turned. Some barrel composters also collect liquid at

the base of the composter so you can produce "compost tea" in addition to compost. Compost tea can be used to perk up your vegetables, flowers or house plants.

#### Which wastes?

Non-woody yard waste and kitchen wastes without meat, bones or fatty foods can be added to the pile:

**How?** The barrel composter makes recycyling easy, simply add wastes as they accumulate and turn the barrel.

### **Turning Bins**

Turning bins are typically a series of holding bins used for building and turning active compost piles. They are most appropriate for large volumes of yard waste and produce a high quality compost.

Which wastes? Non-woody yard waste and kitchen wastes without meat, bones or fatty foods can be added to the pile.

How? Alternate the layering of high-carbon and high-nitrogen materials to approximately a 30:1 ratio (see "Composting Basics" in this brochure). Keep materials as moist. Check the pile temperature regularly. Dampen the materials if they are not moist and add more high-nitrogen material if heat is not occurring. When the heat decreases substantially, turn the pile into the next bin. Then make a new pile in the original bin. Repeat the process each time the first bin cools. After two weeks in the third bin, the compost should be ready for garden use. Depending on the moisture, aeration and volume of the pile and the materials used, produces a high-quality compost in as little as six weeks.