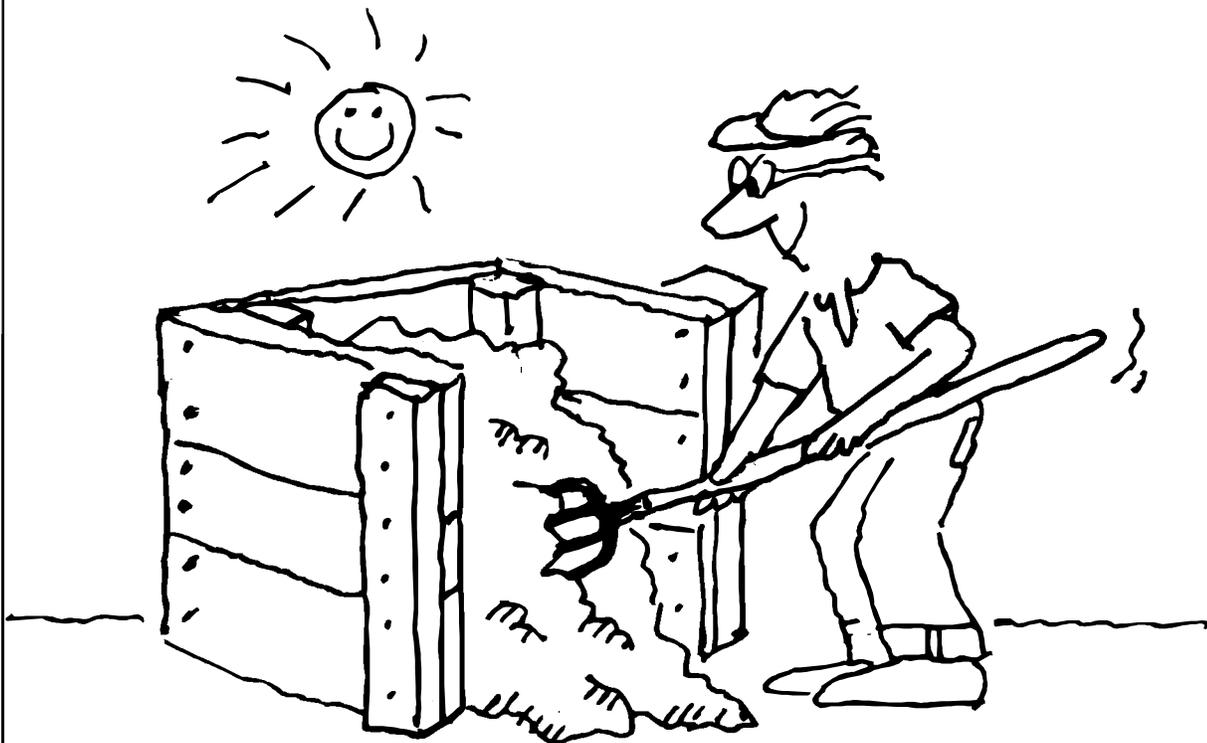


New York State Department Of Environmental Conservation

EVERYTHING YOU HAVE ALWAYS WANTED TO KNOW ABOUT HOME COMPOSTING

But were afraid to ask!



George E. Pataki, Governor
Erin M. Crotty, Commissioner

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What Is Compost?

Compost is a dark, crumbly, earthy-smelling mixture that consists mostly of decayed organic matter. Composting is a simple, natural process, nature's way of recycling nutrients and returning them to the soil to be used again. **By taking advantage of this natural recycling process, you can help lighten the load of waste that would otherwise go to a landfill.** Compost is used for fertilizing and conditioning soil. It can be made from materials that most households throw out.

What Can I Compost?

- Yard wastes, such as fallen leaves, grass clippings, weeds and the remains of garden plants.
- Kitchen scraps EXCEPT FOR meat, fish, bones and fatty foods (such as cheese, salad dressing and leftover cooking oil).
- Woody yard wastes, chipped or shredded, can be used as a mulch or for paths, where they will eventually decompose and become compost.



How Do I Build A Compost Pile?

It's easy! Follow these simple steps, and in just a few hours, you'll be in business.

Compost Mound - This is one of the cheapest and easiest ways to compost. Yard wastes can be composted without a bin if you do not mind the appearance of an uncontrolled compost mound in your yard.



What To Do - Find a good location and loosen the soil where your pile will be. Pile your yard waste in a mound about 3 feet by 3 feet by 3 feet. Alternate wet and dry materials. Add wastes as they become available. Remember, if you turn your compost pile it

speeds up the process.

What You Need - All you need is a pitchfork or shovel and work gloves.

Compost Can - Another cheap and easy way to compost small amounts of yard and food waste.

What to Do - Drill holes 4 to 6 inches apart all around your garbage can. You also need to drill holes into the bottom. (This allows for air movement and for excess water to drain off.)



It is best to put 2 to 3 inches of straw or wood chips in the bottom to help it drain.

Turn the compost with a shovel or pitch fork. Keep the garbage can cover on, it helps keep out the critters. You may need to add water since it is covered.

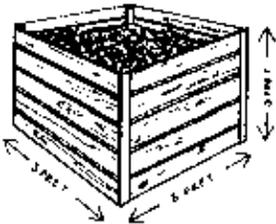
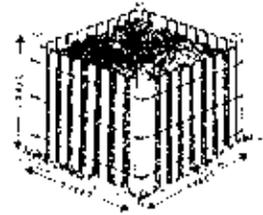
What You Need - A garbage can with cover, straw or wood chips and a drill for making the holes.

Compost Bins - Can be made out of many types of materials - blocks or bricks, snow fence, used pallets, wire mesh, etc.



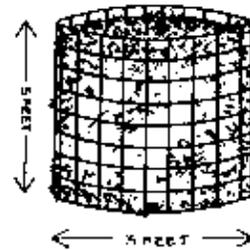
Blocks or Bricks - Just lay out the blocks or bricks without mortar. Leave spaces between the blocks or bricks to permit air to circulate. The best size is approximately 5 to 8 feet square and 3 to 4 feet high.

Snow Fence - Used snow fence is a simple way to build a bin. Just drive four corner posts into the ground and attach the snow fence.



Used Pallets - Find four clean pallets and fasten the corners together, and start filling. You may want to keep one corner loose, so the bin can be opened for turning and removing compost.

Small-Mesh Wire Fencing - Buy or find wire mesh, form into a circle or square and add your compost materials.



Bins do not have to be square, they can be rectangular or a circular structure, it's your choice. Remember, for a typical home garden, a bin 3-to-4 feet in height and 5-to-8 feet square will do.

Locate it away from buildings and combustible materials.



Store Bought Bins - There are a variety of commercial bins that can be bought at your local hardware or garden store.

How Do I Start My Compost Pile?

Begin by collecting your yard wastes and throwing them in your pile or bin. You can then add yard and food wastes anytime but it is best to bury the food waste in your pile (it helps keep out the critters). Chopping or mowing your wastes makes the process go faster. Just remember if you want a finished compost, you will need to start a new pile and let the first pile completely compost.

FOR YOUR INFORMATION:

Yard wastes make up approximately 15 - 20% of your waste stream or about 230 pounds per person per year.

Food wastes make up approximately 9% of the waste stream or about 100 pounds per person per year.

That's All There Is To It!

Kitchen scraps (minus meat, fish, bones and fatty foods) should be added to the center of the waste layers where heat will be the greatest. This also reduces unwanted critters coming to your compost pile.

Pile waste material loosely in the bin. Too much compaction inhibits the flow of air through the pile.

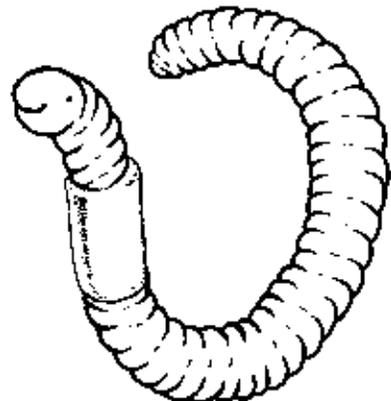
It helps to make the top layer slant toward the center where it will catch rainfall. **Water is the key to successful composting.** A compost pile should be kept damp - but not soggy - especially during dry spells.

Be patient! It will take six months to a year before the compost is ready for use.

How Does Composting Work?



Many organisms are involved in the composting process. They include bacteria, fungi, protozoans and centipedes, millipedes, beetles, ants and the most famous - earthworms!



Compostable materials contain carbon and nitrogen. We refer to them as greens and browns. Greens are fruit and vegetable wastes, coffee grounds, grass clippings, manure. Browns are leaves, straw, wood chips, sawdust.

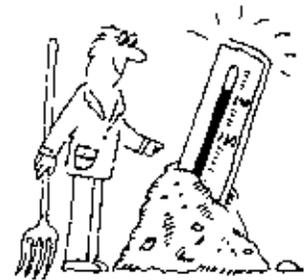
The microorganisms use the carbon in leaves as an energy source. The nitrogen supplies the microbes with proteins to grow and multiply. The decomposing organisms need both carbon and nitrogen to work. This is called the carbon - nitrogen ratio (C:N Ratio). The following is the C:N Ratio for various materials.

Kitchen Wastes	15:1
Grass Clippings	19:1
Leaves	40-50:1
Paper	170:1
Sawdust	500:1

A mix of materials composed of 30 - 50:1 works the best.

Composting is an aerobic process. This means it needs oxygen to work. Also, if you chop or mow your compost materials, the composting process works faster. The more surface area the better.

For optimum composting, the compost temperature should be around 90° to 140°. The pile will be hot initially after adding materials and will then cool down. Here in New York State, unless you have a big pile, composting will shut down for the winter. This is not a problem, because the composting process will start up again when the weather gets warmer.



So, you mix your greens and browns, keep moist and aerated and, low and behold, in 6 to 12 months you have “**Black Gold.**”

Why Should I Make Compost?

- ✓ Composting is an easy, practical way to recycle your organic yard and kitchen waste.
- ✓ Compost is an excellent soil conditioner for even the smallest yard and garden - it's safe to use and it costs practically nothing to make.
- ✓ Compost grows healthy plants and healthy plants improve the air by removing carbon dioxide and making fresh oxygen.
- ✓ For serious gardeners, compost is an inexpensive alternative to peat and other soil enhancements.

Uses for Compost

Gardens - improves moisture retention and soil texture. Use it around garden beds, trees or shrubs.

Lawns - It can also be sprinkled on your lawn. You will need to finely screen the compost first.



House Plants - use $\frac{1}{2}$ to $\frac{2}{3}$ of your container volume instead of soil.



Composting Do's And Don'ts

DO add lime, small amounts of wood ashes or crushed eggshells to the compost pile to neutralize acids which may form and cause an odor problem.

DO mix grass clippings with other wastes to loosen them up. They have a tendency to compact.

DO keep the compost pile damp, especially during dry spells.



DON'T use unfinished compost. It will rob your plants of nitrogen instead of acting as a fertilizer.

DON'T compost weeds that are heavily laden with seeds. Some seeds will not be killed during the heating process.

DON'T add diseased vegetable plants to the pile if the compost will be used on a vegetable garden. The disease organisms may reappear the following year.

DON'T add meat, fish, bones or fatty food scraps to the compost mixture. They will attract animals (dogs, cats, rats, etc.) and they do not decompose readily.



Composting Summary

Composting is simple and easy! Now that you read this booklet, you can be a composting expert! Just remember your compost pile needs:

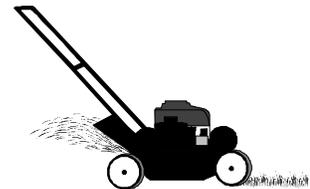
- ✿ Microorganism, beetles, earthworms.
- ✿ A good C:N Ratio (greens and browns).
- ✿ A large enough pile to keep itself warm if you want compost in six months.
- ✿ Enough moisture (but not too wet).
- ✿ Air.
- ✿ Time.

Put it all together and the microorganisms and bugs will do the rest!

Yard Waste Management Besides Composting

Mulching - Yard waste can be used for weed control and water retention. Use woody yard wastes, leaves and grass. Just spread the materials around your plants. Woody wastes may need to be chipped first.

Leave It On The Lawn - If you don't want to compost your grass clippings, just leave them on the lawn. For more information on this, see our "Leave It On The Lawn" pamphlet.



Troubleshooting Your Compost Pile

SYMPTOM	PROBLEM	SOLUTION
Rotten odor.	Not enough air Too much water	Turn the mixture. Add dry materials.
Low pile temperature.	Pile too dry Pile too small Lack of air	Moisten materials while turning the pile. Make pile larger. Turn the pile.
Compost too hot.	Pile too big.	Make the pile smaller - start another pile.
The compost is damp & warm in the middle, but nowhere else.	Too small	Add more materials and turn.
The compost is damp and sweet smelling but will not heat up.	Lack of nitrogen	Add grass clippings, manure or ammonium sulfate

For More Information

If you want to know more about composting and ways to make good compost, consult books or gardening magazines at your local library - or call your county **Cooperative Extension** office, listed in the telephone directory.

Or call or write to:

NYS Department of Environmental Conservation
Division of Solid & Hazardous Materials
Bureau of Waste Reduction & Recycling
625 Broadway
Albany, NY 12233-7253
(518) 402-8704

