

VERMICOMPOSTING - Composting with Worms

- * Produces a high quality soil amendment
- * Requires little space, labor & maintenance
- * Reproduces new worms for continuous composting



The Basics:

- Keep worms dark & between 40—80 degrees
- Ensure shredded paper stays moist
- Feed about once a week or less - banana peels, melon rinds, coffee grounds, vegetable peels (no meats or dairy)
- Harvest worm castings and related compost when dark & crumbly

Using Your Vermicompost:

- Lawns - 20 lbs. per 1000 square feet
- Gardens - a handful in each hole
- Potted Plants - 20% or less of potting mixture

RESOURCES

- Composting at Home: the Green and Brown Alternative - <http://cwmi.css.cornell.edu/compostingathome.pdf>
- Composting: Wastes to Resources - <http://cwmi.css.cornell.edu/compostingwastestoresources.pdf>
- Vermicomposting: A Living Soil Amendment - <http://cwmi.css.cornell.edu/vermicompost.htm>

Cornell Cooperative Extension in Dutchess County offers equal program and employment opportunities.

TROUBLE SHOOTING

- ⇒ **Damp &/or warm only in middle**
 - *Pile could be too small or weather cold*
 - * Pile should be at least 3 cubic feet
- ⇒ **Nothing is happening**
 - *Not enough nitrogen, oxygen &/or water*
 - * Add greens, aerate &/or add water
 - *Cold weather*
 - * Wait until Spring
 - *Compost is finished*
 - * You're done!
- ⇒ **Matted leaves/grass clippings are not breaking down**
 - *Poor aeration or lack of moisture*
 - * Break up &/or shred the layers and turn the pile
- ⇒ **Smells like rotten eggs**
 - *Not enough oxygen*
 - * aerate the pile
 - *Pile is too wet &/or compacted*
 - * Add dry materials
- ⇒ **Smells like ammonia**
 - *Not enough brown/carbon*
 - * Add brown/carbon materials
- ⇒ **Attracts rodents or other animals**
 - *Inappropriate materials*
 - * Bury kitchen scraps near the center
 - *Kitchen scraps too close to surface*
 - * Switch to a rodent-proof closed bin
- ⇒ **Attracts insects**
 - *Normal composting*
 - * Not a problem
- ⇒ **Attracts lots of fire ants**
 - *Pile too dry &/or not hot enough*
 - * Ensure right material mix & moisture

ORGANIC RECYCLING STARTS with HOME COMPOSTING



Cornell University
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Dutchess County



Cornell Waste Management Institute

www.ccedutchess.org

WHAT IS COMPOST?

Compost is a dark, crumbly and earthy smelling form of decomposing organic matter.

DID YOU KNOW?

- Organics such as food scraps, food preparation residuals, food soiled paper products, leaves, grass clippings, brush and tree trimmings comprise over 60% of our waste stream and are completely recyclable. That's where composting comes in.
- Composting helps create a healthier, more sustainable environment.
- Anyone, anywhere can home compost. It's fun and easy!

WHAT CAN I COMPOST?

Anything that was once alive can be composted. Yard wastes, such as fallen leaves, grass clippings, weeds and the remains of garden plants, make excellent compost. Woody yard wastes can be clipped and sawed down to a size useful for the wood stove or fireplace or they can be run through a shredder for mulching and path making. Used as a mulch or for paths, they will eventually decompose and become compost.

Care must be taken when composting kitchen scraps. Meats, bones, and fatty foods (such as cheese, salad dressing and leftover cooking oil) should be put in the garbage since they can attract nuisance animals.

HOW CAN I USE COMPOST?

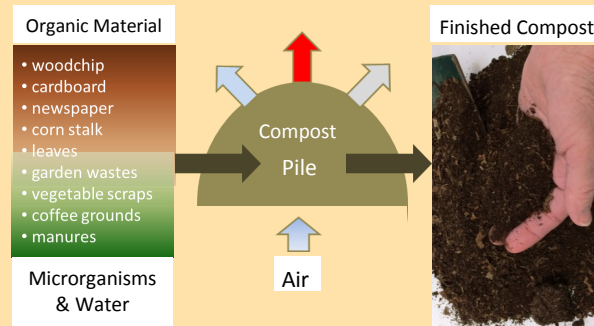
Compost can be used to enrich a flower and vegetable garden, to improve the soil around trees and shrubs, as a soil amendment for houseplants and planter boxes and, when screened, as part of a seed-starting mix or lawn top-dressing.

COMPOSTING BASIC

4 Simple ingredients.....

Food, Water, Air, Shelter

To compost effectively, you need the right proportions of materials, space, air and water.



The best way to describe the organic materials is by color: **Browns** are high in carbon; **Greens** are high in nitrogen. **Greens** provide the nitrogen source, are colorful and wet. They provide nutrients and moisture for the compost workforce. **Browns** provide the carbon source, energy and are also used for absorbing excess moisture and giving structural strength to your pile. They help keep the pile porous, facilitate air-flow and prevent compaction.

To achieve the perfect carbon to nitrogen ratio (30:1) mix: 1 part **Green** to 2-3 parts **Brown**.

Making a compost pile is like making lasagna. Start with a layer of coarse 'browns' in contact with the soil. Make a well or depression in this layer and put the 'greens' into the well. Keep the food scraps away from the outside edges of the pile. Cover your 'greens' with a generous layer of 'browns' so that no food is showing. Keep adding layers of greens and browns until the mass reaches a height of 3' - 4'.

MICRO & MACRO ORGANISMS DO ALL THE WORK

CONTAINERS

Types of Containers:

- On the Ground - these units sit directly on the ground so that worms and other decomposers can come up from the soil to assist in the composting process. They can be bought or simply made from wood and wire, a can with the bottom cut out or even a trench in the ground.
- Above the Ground - these consist of rotating drum units, counter top models, barrel, or any other design that does not come in direct contact with the ground.



SOME THINGS TO CONSIDER

- What type of organic material do you want to compost?
- How much organic material do you have to compost?
- Do you have enough carbon and a place to store it?
- Where are you going to put the bin?
- What is the compost bin made of and how will it look in its space?
- How fast can organic materials be turned into compost?

Funding for compost information is provided by Dutchess County.