



## COMPOST OPTIONS

**Bins.** Optimal size is 3'x3'x3' (27 cu. ft.) and no larger than 5'x5'x5' to maintain aerobic activity. Use chicken wire, wooden pallets, cinder block, or plastic to contain the pile. Or if space allows, you may want to create an informal heap. Position your bin away from your house on level ground in the shade or in the sun.

**Vermicomposting.** An indoor composting method that uses redworms (*Eisenia foetida*) to transform kitchen scraps and shredded newspaper into compost.

**Sheet composting.** Create a garden bed by layering newspaper (full sheets), leaves, grass clippings and compost into the shape you desire. Water well. This method is typically done in the fall for spring planting.

**Trench composting.** Dig a trench at least 12" deep to bury your kitchen scraps. Cover them with soil.

## HOW TO USE COMPOST

- ✓ Spread finished compost as mulch or top dressing for plants.
- ✓ Turn it into your soil to improve the soil structure.
- ✓ Create compost tea for ornamental and potted plants.

For additional instructions, please see Publication #35, referenced on the back panel, *For More Information*.

## FOR MORE INFORMATION

### Compost Demonstration Sites

Miller Branch Library Garden  
Robinson Nature Center

### Bin Distribution at Community Sites and Events

Alpha Ridge Landfill, GreenFest, Native Plant Sales, Fall Festivals  
*Dates and times available at*  
<http://extension.umd.edu/mg/locations/composting>

### Home & Garden Information Center

<http://extension.umd.edu/hgic>  
Check out the Library for Publication #35  
"Backyard Composting"

**Howard County  
Bureau of Environmental Services**  
<https://www.howardcountymd.gov/Departments/Public-Works/Bureau-Of-Environmental-Services/Recycling/Composting>

**University of Maryland Extension  
Howard County Master Gardeners**  
<https://extension.umd.edu/mg/locations/howard-county-master-gardeners>

Follow us on Facebook   
Updated 03/2019

UNIVERSITY OF  
MARYLAND  
EXTENSION

 COMPOSTING  
A MASTER GARDENER PROGRAM

The University of Maryland Extension programs are open to all and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, or national origin, marital status, genetic information, or political affiliation, or gender identity and expression.

# BACKYARD COMPOSTING



Compost is a dark, crumbly, earthy-smelling material produced by the natural decomposition of leaves, kitchen scraps, and many other organic materials.

UNIVERSITY OF  
MARYLAND  
EXTENSION

 COMPOSTING

A MASTER GARDENER PROGRAM



## BENEFITS OF COMPOST

- **Reduces** waste stream. Yard and food waste that can be composted make up 25% or more of landfills.
- **Improves** soil structure. Compost helps break up clay and attracts earthworms that aerate your soil.
- **Retains** moisture. Slows run-off from rain by holding three times its weight in water. If you incorporate compost in the soil you'll water less often.
- **Reduces** the need for fertilizer. Compost provides nutrients for your plants, trees, lawns and shrubs.
- **Contributes** to healthier landscapes and gardens.

## MEET THE DECOMPOSERS

Bacteria, fungi, and other microbes are the key players in composting. These organisms "feed" on organic matter and use the carbon and nitrogen it contains to grow and reproduce. They are assisted by many larger organisms such as earthworms, slugs, snails, millipedes, sow bugs, springtails, ants and various insect larvae that feed on plant and animal matter in soil. These same organisms are responsible for the decay of forest floor litter.

**Did you know...**even though many organic materials are initially acidic (low pH), the compost process tends to neutralize the pH of the finished product resulting in a pH of around 7.0, or neutral pH.



## COMPOSTING BASICS

### Here's What Goes In:

1. Nitrogen (*greens*)
2. Carbon (*browns*)
3. Water
4. Oxygen

### Examples of Nitrogen and Carbon Sources

#### "Greens"

Yard trimmings  
Kitchen scraps  
(*fruits & vegetables*)  
Coffee grounds, filters  
Tea bags  
Pet hair  
Manure (*from herbivores such as cows, horses, rabbits*)

#### "Browns"

Dried leaves  
Newspaper  
(*shredded*)  
Straw  
Peanut shells  
Cotton fabric  
Pine needles  
Garden debris  
(*dried*)

### Things to AVOID in your compost

Fats and oils	Synthetic fabric
Dairy products	Plastic
Dog and cat manure	Wood ash
Meat products and bones	

*When in doubt, leave it out.*



## HOW-TO TIPS

- Add equal amounts (by weight) of browns and greens.
- Bury food scraps in pile.
- Turn (stir) your pile to add oxygen.
- Keep pile moist (wet as wrung out sponge).
- If material is not decomposing: add water, add greens or turn the pile to add oxygen.
- If there is an ammonia odor: add browns such as leaves, straw or shredded paper.
- Compost is finished when you can no longer recognize the materials you put in the pile.
- Test for finished compost: put a handful in a sealed plastic bag and look for condensation. If none appears, your compost is done!

### Cold (passive) Compost

This method may take from six months to two years for material to break down. Little effort is required. Add materials as you have them and let them rot.

### Hot (active) Compost

Add the proper mixture of browns and greens to fill your bin and moisten the pile. Turn it frequently but do not add more raw materials unless the process is not working properly. Temperature should reach 110-140+ degrees. The pile will cool as decomposition nears completion. Compost is ready to use in about two months.