

HOWARD COUNTY

Home Composting Guide



PRODUCED BY

Howard County Department of Environmental Services

IN COOPERATION WITH

**The University of Maryland Cooperative Extension
Master Gardener Program**

What is Compost?

Compost is a dark, soil-like material that results from the decomposition of plants and other natural materials. Adding compost to lawns and flower beds will make for happier plants and healthier soils.



Did You Know That Compost Can...

1. Increase the moisture holding capacity of soil.
2. Suppress plant diseases and pests.
3. Balance the pH level of soils.
4. Stimulate root growth which can reduce soil erosion
5. Reduce or eliminate the need for chemical fertilizers.
6. Clean contaminated soil and water.

How is Compost Made?

Compost is created by layering green vegetative material (grass) and “brown” material (sawdust, hay, leaves) into piles, rows or in a bin. Green materials provide nitrogen and brown materials provide carbon; both essential compost elements.



Decomposition of these materials is carried out with the assistance of microbes and small soil organisms, moisture, heat and air.

Why is home composting important to Howard County?

- We can reduce the amount of fertilizer or pesticide products that are needed which helps to protect the health of the Chesapeake Bay and its tributaries.
- We can reduce the amount of yard trim and food scraps collected from homes.
- Composting in your backyard reduces the carbon footprint of disposal.

Let’s Get Started

You can take advantage of this natural process at home to easily produce compost at very little cost! While a bin is not needed to compost successfully at home, Howard County residents can obtain a FREE bin similar to the black plastic bins that are depicted in this guide. Please call 410-313-6444 for details.

Before you begin composting at home, you will need to pick the best location.



Sun or Shade: Your Choice

Sun or Shade?	Pros and Cons	Special Considerations
PARTIAL SHADE	Best choice, keeps the compost from drying out too quickly or overheating.	None.
FULL SHADE	Good choice, might need additional monitoring to make sure that the compost doesn’t get too cold, which would kill soil organisms.	Add extra greens or manure when necessary to increase the heat of the pile. Bags of leaves, straw or shredded paper piled around the outside of the bin can also help to keep the pile warm.
FULL SUN	Good choice, might need additional monitoring to make sure that the compost doesn’t completely dry out.	May need to be watered.



Whether in sun or shade, pick a spot that drains well so the pile doesn’t develop odor problems due to too much standing moisture.

Build Your Pile

Once the spot has been identified and the bin has been set up, you can begin to build your layers. Ideally, your alternating layers of green and brown material should be around 3" thick. Once you have a few layers, add a small shovel full of garden soil to provide organisms and microbes. Organisms, such as worms and millipedes, and microbes, such as bacteria and fungi, will improve the decomposition process.

Exposed food scraps and excess standing water are the two most common sources of odors in home composting. Remember to always bury food scraps to reduce odors and prevent wildlife from foraging in your bin.



What to Compost

YES

- Cardboard egg cartons
- Coffee grounds and filters
- Eggshells
- Fireplace ashes
- Fruits and vegetables
- Grass clippings
- Hair and fur
- Hay and straw
- Houseplants
- Leaves
- Livestock manure
- Nut shells
- Pine needles
- Sawdust
- Shredded newspaper
- Tea bags
- Weeds
- Wood chips

Citrus peels, corn cobs and banana peels can also go in the compost bin. However, these items will take longer to decompose.

NO

- Dairy products
- Fats, oil, grease
- Meat or fish (including bones)
- Charcoal ash – May contain substances harmful to plants.
- Pet waste – May contain parasites, bacteria and viruses harmful to humans
- Plants infected by disease or insects – Diseases could be transferred to other plants by finished compost. Note: Disease and insects do not survive commercial compost facilities due to higher pile temperatures.
- Treated grass clippings or plants – Chemical pesticides might kill beneficial soil organisms and slow the rate of decomposition.
- Poison Ivy, Oak and Sumac – Even though these plants will decompose easily, the oil that causes rashes can take many years to completely degrade.

Active vs. Passive Composting

Now that you have created your pile, composting can be either “active” or “passive”. Active piles are turned regularly; passive piles are turned occasionally or sometimes not at all. This is a personal choice. Compost will happen eventually regardless of which method is chosen.

Active Piles

Active piles should be turned at least once a week. Simply lift up the compost bin (it should slide up the pile), place the bin a few feet from the pile and use a shovel or a pitchfork to move the material into the relocated bin. This will add air into the layers which is a vital part of the decomposition process. The pile can also be stirred with a special tool called a compost aerator. These can be bought through gardening catalogs or online stores. Active composting will produce finished material in 2 to 3 months.



Passive Piles

Passive piles will take longer to fully compost. This is mainly due to less material being exposed to the air. To improve air circulation, add a layer of branches to the middle of the pile which will create an air pocket.

When is the Compost Ready?

Finished compost should be dark brown in color and resemble soil. The material on the outer edges of the pile takes longer to compost, so pull aside the top inch of material before making this determination. If you remove the top inch of material and can still identify the material underneath as leaves, pine needles, grass, food, etc, then the compost needs more time to decompose. At this point, the compost should be watered and/or turned if necessary and allowed more time to “cook”.



Troubleshooting Your Compost Pile

The number one reason for slow decomposition is insufficient water. Make sure that your pile stays moist to the touch (never wringing wet) and that it isn't too hot or too cold. A pile that is too hot/cold or too wet/dry will drive off or kill the organisms needed to make compost. See below for common problems and recommended solutions.

Problem	Possible Cause	Solution
AMMONIA ODOR	Too much green material (grass or other vegetation)	Add brown material (leaves, straw, wood chips, etc)
ROTTEN ODOR	Pile too wet	Turn pile; add coarse, dry material such as sawdust or woodchips
	Exposed food scraps	Bury food scraps
LOW PILE TEMPERATURE (pile feels cold to touch)	Pile too small	Make pile larger
	Pile too dry	Add water while turning the pile
	Poor aeration	Turn pile
	Insufficient green material	Add grass clippings, vegetation or food scraps
	Cold air temperature	Increase pile size or insulate pile with an extra layer of material (straw or leaves make good insulators)
HIGH PILE TEMPERATURE (pile feels hotter than your hand)	Pile too large	Reduce pile size
	Poor aeration	Turn pile
MATERIAL NOT BREAKING DOWN	Pile too small	Make pile bigger or insulate sides
	Insufficient green material	Add grass clippings, vegetation or food scraps
	Pile too dry	Add water while turning pile

Using Finished Compost – There are many uses!



1. Use 1/2" as a top dressing on your lawn.
2. Add 1" to the soil around the base of established plants.
3. Add a 2" layer to potted plants.
4. Add a 3" layer at the base of new trees, bulbs or other plants.
5. Add a 4" layer when tilling soil in a garden bed.
6. Remember to save some finished compost to add soil organisms into your new pile.

Rake and Take Program

If your yard does not supply enough green or brown material, call the Howard County Master Gardeners (410-313-2707) and ask about the Rake and Take program. This program coordinates homeowners who are willing to rake and bag excessive amounts of yard trim (Rakers) with those who need it for home composting (Takers).



Grasscycling

Grasscycling is an easy, environmentally responsible lawn care practice. Just remember to *"Mow it high and let it lie"*. Keep your mower blades sharp and stick to the one-third rule. Never remove more than one-third of the height of the grass in one mowing.

Grass clippings will return nitrogen to your lawn and make your lawn more drought resistant. By following the one-third rule, your grass will maintain deeper roots and require less water. Grass clippings don't cause thatch, which can occur from using too much store-bought fertilizer. Grasscycling saves you time (you don't have to bag clippings) and money (you don't have to buy bags or commercial fertilizer)!

Howard County Master Gardeners

The University of Maryland, Cooperative Extension Service coordinates the Master Gardener Program. The mission of the Master Gardeners is to educate

UNIVERSITY OF
MARYLAND
EXTENSION

MASTER
GARDENER 

Maryland residents about safe, effective and sustainable horticultural practices that build healthy gardens, landscapes and communities. Their services are free of charge to all Howard County residents and community groups. They are available to help with:

Composting

Plant diseases and insects

Rake and Take program

Wildlife issues

Soil testing

Gardens and Lawn Management

Please visit www.mastergardener.umd.edu or call 410-313-2707.

Want More?

Search online or at your local library for additional books and resources about composting. Here are some ideas: "The Rodale Book of Composting" by Mary Gershuny; "Let it Rot: The Gardeners Guide to Composting" by Stu Campbell; "The Urban/Suburban Composter: The Complete Guide to Backyard, Balcony and Apartment Composting" by Mark Cullen.



Howard County Bureau of Environmental Services
9801 Broken Land Parkway
Columbia, Maryland 21046
410-313-6444

HowardCountyRecycles.org
help@HowardCountyRecycles.org