



# WASHTENAW COUNTY'S COMPOSTING GUIDE

Composting is nature's elegantly simple process of recycling plant materials back into the soil. Throughout Washtenaw County, thousands of residents are reaping the benefits of composting their garden waste, food scraps, leaves, and grass clippings in their own backyard. This guide explains the benefits of composting and shows you how easy home composting can be.

## WHY COMPOST?

### Reduce Waste

The U.S. Environmental Protection Agency estimates that 17% of all household waste produced is yard waste. Though Michigan law states that yard waste cannot be dumped in landfills, large municipal composting sites are costly to taxpayers and cannot compost kitchen food scraps. You can help reduce waste and save landfill space by composting your yard waste and kitchen food scraps at home.



### Your Garden Will Thank You

Compost is an excellent soil conditioner. When mixed with sandy soil, compost helps to retain water. When mixed with clay soils, compost loosens the soil particles and allows for better drainage.

Compost also helps soils retain essential nutrients and minerals and slowly releases them throughout the growing season.

### Save Money and Protect Resources

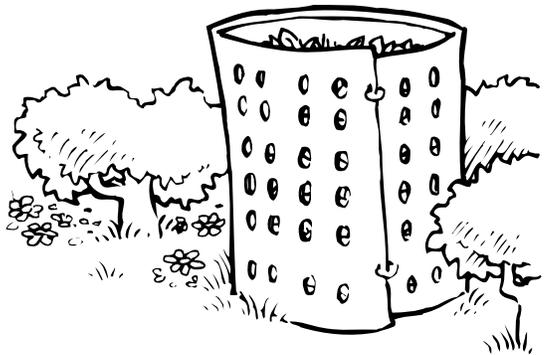
Composting has direct financial benefits. Home composting saves tax dollars needed to collect and process yard waste at municipal compost facilities. Using compost can also reduce or eliminate the need for purchasing commercial fertilizers, which are a major source of pollution to our waterways.



## WHAT IS HOME COMPOSTING?

There are many ways to compost at home, but all of these methods have one thing in common: they create a controlled environment that speeds up the natural process of breaking down plant materials into nutrients for healthy soil and plant growth.

Leaves, grasses, and other yard and food waste are food for bacteria, worms, insects, fungi, and other beneficial organisms. Given adequate moisture, temperature, and air (the same things people need to live!), these tiny recyclers turn our waste into composted organic material.



Also called humus, compost is the part of the soil that provides a nutrient-rich environment for plant growth. Through decomposition, nutrients essential to plant growth are released into the soil and absorbed through living plant roots. When you remove yard waste from the landscape where it was produced you deprive plants of their own natural fertilizing source.

---

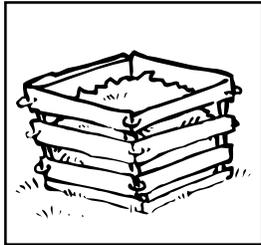
## CHOOSING A BIN STYLE AND LOCATION

---

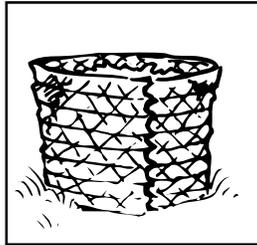
- A good size for a home compost pile is roughly three square feet (one cubic yard). This size is large enough to retain heat but small enough to allow good air circulation.
- Avoid situating your pile in direct contact with wood fencing or walls, which can become discolored or degraded by the pile's heat and moisture.
- Build your pile on a level spot with good drainage and close to a water source and your garden, if you have one.
- Some people prefer to compost in plastic, metal, or wooden containers instead of piles. These bins may be homemade or purchased in stores or catalogs. (Washtenaw County also sells compost bins. Call 994-2398 for details.) Some common bin types are described below:



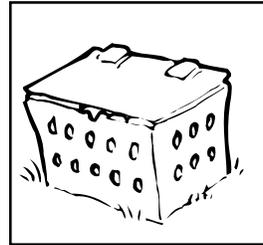
An open pile blends into the landscape of a garden or semi-wooded site, and is easy to maintain.



Four wooden pallets may be tied together to build an affordable and sturdy unit.



Twelve feet or more of chicken wire or fencing can be tied into a corral.



Plastic bins do not decompose over time and may be more attractive, although they tend to be smaller and can fill up quickly.



Multiple bins allow separation of fresh yard waste from actively composting materials in another. A third unit holds mature compost until used.

---

## HOME COMPOSTING RECIPE

---

***“One part green and two parts brown, makes the compost turn to ground. Add some water and some soil, turning is the only toil.”***



**Step 1.** Compost is made by mixing carbon-rich materials, called “browns” (such as dry leaves or straw) with nitrogen-rich materials, called “greens” (such as grass clippings or fruit/vegetable scraps). A good rule of thumb is to mix one part green materials with two parts brown materials. Chop up materials before placing them in the bin or pile: smaller pieces decompose faster and make turning the pile much easier. This is especially important for large, thick items like watermelon rinds, or items that are tough and fibrous, such as woody twigs or plant stems.

**Step 2.** Place the green and brown materials in layers or mix together to ensure proper balancing of materials. Although not necessary, some people also recommend adding a shovel-full of soil (which contains beneficial microorganisms) to “jump start” the decomposition process.



**Step 3.** Keep the pile moist by sprinkling with water as you add materials. Moisture is essential to composting, but too much water can cause compost to rot and stink. Try to keep your pile as moist as a wrung-out sponge.

**Step 4.** Mix or turn periodically with a garden fork. This provides the microorganisms with the oxygen they need for proper decomposition. More frequent turning will help your pile break down quicker. Keep pile moist by sprinkling with water during dry weather.



**Step 5.** Depending on how closely you follow the recipe, your compost pile can be ready for harvesting anywhere between a few weeks to several months. The organisms in compost are most active in warm months, although some activity still occurs during winter. Many people who practice less intensive composting find it convenient to stop adding to the pile during winter, and then harvest the pile yearly at the beginning of the growing season.

# WHAT CAN BE COMPOSTED?

## Greens:

	Grass clippings
	Weeds*
	Non-woody (non-fibrous) garden prunings
	Raw vegetable and fruit scraps
	Coffee grounds (including paper filter) and tea bags
	Crushed, rinsed eggshells

## Browns:

	Autumn leaves
	Woodchips, pine needles, pine cones (in small amounts)
	Dead garden or potted plants (non-diseased)
	Hay or sawdust
	Shredded or torn paper (in small amounts)

# WHAT SHOULD NOT BE COMPOSTED?

	Meat scraps of any kind
	Bones
	Cooked foods
	Dairy products of any kind
	Oils or sauces
	Bread
	Pet manure
	Plastics, metals, and ceramics
	Highly fibrous or woody materials (large sticks or branches)
	<b>*A note about weeds:</b> Most weeds are fine for composting. However, extremely invasive weeds (such as quackgrass) or seeds of noxious weeds (such as Canadian thistle) should not be added, as they may grow in your compost pile or germinate in finished compost.

# TROUBLE-SHOOTING GUIDE

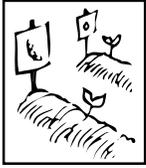
Problem	Cause	Solution
Compost not breaking down	<ul style="list-style-type: none"> <li>* Too many brown materials</li> <li>* Pile too dry</li> </ul>	<ul style="list-style-type: none"> <li>* Add more green materials</li> <li>* Add water</li> </ul>
Rotten or ammonia odor	<ul style="list-style-type: none"> <li>* Too many green materials</li> <li>* Pile too wet</li> <li>* Pile compacted</li> </ul>	<ul style="list-style-type: none"> <li>* Add brown materials</li> <li>* Mix/turn pile to aerate</li> </ul>
Flies, fruit flies	<ul style="list-style-type: none"> <li>* Exposed food scraps</li> </ul>	<ul style="list-style-type: none"> <li>* Bury food waste under a layer of brown materials</li> </ul>
Rodents and raccoons	<ul style="list-style-type: none"> <li>* Meat/fatty foods in pile</li> </ul>	<ul style="list-style-type: none"> <li>* Avoid these materials!</li> <li>* Use bin with a cover/lid</li> </ul>

---

# USES OF FINISHED COMPOST

---

Finished compost will be loose and “crumbly” resembling dark soil, and is an excellent soil conditioner and fertilizer. Some tough or large pieces may remain un-decomposed in finished compost. These items may be removed by sifting compost through a 1/2 inch mesh screen. While screening is not necessary, it may be desirable, especially for use with potted plants or as a grass fertilizer.



## Compost in the Garden:

Work up to three inches of compost into the top two inches of soil in the garden each spring or fall. Compost may also be added to trenches and furrows when planting, and in the holes of transplanted seedlings.



## Compost as a Mulch:

Spread compost around garden plants, under bushes, and around trees. For young plants, a two to three inch layer of compost works well. Compost may also be liberally broadcast over the lawn at any time. Mulching helps retain moisture, reduces weeds, and gradually feeds organic matter to the soil and plant roots.



## Compost as Potting Soil:

Compost mixed with equal parts of either garden or potting soil is excellent for potted plants and container gardening.

---

## FOR MORE INFORMATION:

---

### Books:

*In addition to the books listed below, your local library is an excellent source of composting information.*

- **Backyard Composting**, by Harmonious Technologies. (Harmonious Press, Ojai, California, 1992.)
- **The Rodale Book of Composting**, edited by Deborah L. Martin and Grace Gershuny. (Rodale Press, Emmaus, Pennsylvania, 1992).
- **Let It Rot**, by Stu Campbell. (Storey Communications, Inc., Pownal, Vermont, 1990.)

### Websites:

- **RotWeb**, [http://net.indra.com/~topsoil/Compost\\_Menu.html](http://net.indra.com/~topsoil/Compost_Menu.html)
- **Compost Resource Page**, <http://www.oldgrowth.org/compost/>
- **Cornell Composting**, <http://www.cfe.cornell.edu/compost/>
- **Master Composter**, <http://www.mastercomposter.com/>
- **WormDigest**, <http://www.wormdigest.org/>
- **Wormwoman Mary Appelhof**, <http://www.wormwoman.com>



### Contact us:



Washtenaw County Solid Waste Program  
P.O. Box 8645, Ann Arbor, MI 48107-8645  
Phone: (734) 994-2398  
Fax: (734) 994-2459  
[www.co.washtenaw.mi.us/DEPTS/eis.htm](http://www.co.washtenaw.mi.us/DEPTS/eis.htm)