



## RESIDENTIAL RECYCLING INITIATIVE

You can make a difference!

In April 2014, Governor Rick Snyder called Michigan to action to double residential recycling. While Michiganders are great at recycling returnable beverage containers, returnables only make up 2% of all waste. Michigan's recycling rate averages around 15%, lower than every other Great Lakes state, and one of the lowest in the country. We can do better! Are you doing your part?

### What is my part in the recycling initiative?

The average American generates over four pounds of recyclables, organics and waste every day. That amounts to almost 1,600 pounds per year for a single individual! The U.S. Environmental Protection Agency estimates that approximately 75% of our waste is not waste at all, but is in fact valuable recyclable materials that can be re-purposed into new products. It is estimated that \$435 million worth of recyclables are landfilled each year in Michigan.



Do your part! Learn more at:  
[www.michigan.gov/mirecycles](http://www.michigan.gov/mirecycles)

What's in your garbage can?



MI Recycles!

## RESIDENTIAL RECYCLING INITIATIVE



### What difference can one person *really* make?

The items that you threw away five years ago still sit in a landfill today. The aluminum can you just recycled could be back on the shelf as a new aluminum can in only 60 days. Just think, one person's increased recycling efforts can help Michigan reach its 30% recycling goal and divert over 450 pounds of material from landfills each year! What if everyone in your household did the same? Everyone in your neighborhood? Your community? **Working together, we can make a difference!**

### How else can I make an impact?

We are all consumers, and we all hold the power and responsibility to make educated decisions about the products we buy. Was the packaging of your milk carton designed to be recycled? Is there an opportunity to purchase products made from recycled materials? Purchasing products that can be recycled or are made from recycled materials will help Michigan "close the loop." Small changes in your behavior can make a big impact on Michigan's environment, economy, and future!

### Recycling saves energy and resources

Recycling one ton of:

- Aluminum** saves 95% energy usage and 40 barrels of oil
- Glass** saves 50% energy usage and 5 gallons of oil
- Paper** saves 60% energy usage, 7,000 gallons of water, 17 trees, and nine barrels of oil
- Plastic** saves over 60% of energy usage and 16 barrels of oil



MI Recycles!



## Troubleshooting

Symptoms	Problems	Solutions
Bad odor.	Not enough air, or too much green material.	Mix the pile, or add in more brown material.
Composts too slowly.	Not enough water.	Moisten and mix the pile.
Pile is damp and warm only in center.	Pile is too small.	Collect more material and mix it into the pile.
Pile is damp and sweet-smelling but no heat.	Lack of green material.	Mix in more green material like fresh grass clippings, yard trimmings, and weeds.

## Other Resources

For more information on composting or Michigan yard waste regulations, contact your local municipal recycling staff, a county extension agent, or an MDEQ composting specialist.

Michigan Department of Environmental Quality  
Office of Waste Management  
and Radiological Protection  
P.O. Box 30241  
Lansing, MI 48933

Special thanks to the Alameda County Home Composting Education Program for providing material used in this brochure. Illustrations: Joal Morris

The Michigan Department of Environmental Quality (MDEQ) will not discriminate against any individual or group on the basis of race, sex, religion, age, national origin, color, marital status, disability, or political beliefs. Questions or concerns should be directed to the MDEQ Office of Personnel Services, PO Box 30473, Lansing, Michigan 48909.

Michigan Department of Environmental Quality  
[www.michigan.gov/deq](http://www.michigan.gov/deq)

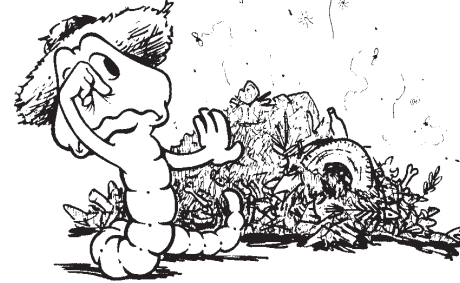
# Home Composting

## Reap a Heap of Benefits



## Michigan's Composting Law

Prior to the 1995 law banning yard clippings from Michigan's landfills and incinerators, leaves and grass comprised over 30% of all household solid waste generated. Not only is that a lot of space being filled by a clean resource, but yard clippings in landfills may contribute to methane gas and leachate production which pollute the air and local water supplies. The moisture in yard waste causes it to burn poorly in incinerators, raising pollution levels, and operating costs. Because of the many problems caused by yard clippings in landfills, starting in 1995, yard clippings were banned from Michigan



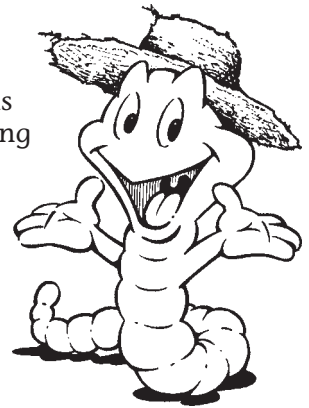
landfills. Yard clippings are defined as leaves, grass clippings, vegetable or other garden debris, shrubbery, or brush or tree trimmings, less than 4 feet in length and 2 inches in diameter, that can be converted to compost humus.

## A Burning Issue

Another popular method of leaf and brush disposal—backyard burning—pollutes the air, creates a fire hazard, and is a nuisance to neighbors. Since 1995, Michigan's solid waste regulations have prohibited the open burning of grass clippings and leaves in municipalities having a population of 7,500 or more, unless the local governing body has specifically enacted an ordinance authorizing it. For a cleaner, safer alternative to burning your yard waste, try composting!

## Why Compost?

The best method for getting rid of yard waste is also the easiest. Composting is nature's way of turning your yard "waste" into a valuable soil conditioner.



### Composting:

**Saves you money** by reducing the need for expensive bags and commercial soil additives.

**Helps your garden and lawn** by improving the fertility and health of your soil.

**Saves water** by helping the soil hold moisture and reducing water runoff.

**Benefits the environment** by recycling valuable organic resources and extending the lives of our landfills.

## What Can You Compost?

### Do Compost

- grass clippings
- leaves
- weeds & garden debris
- small brush, twigs
- clean wood ash
- sawdust & wood chips
- egg shells
- coffee grounds

### Do Not Compost

- whole branches, logs
- pet or human waste
- charcoal briquette ash
- sawdust from treated wood

Contact your local community recycling staff for additional information about backyard composting and to find out about what can and cannot be composted in your community.

## Composting Made Simple

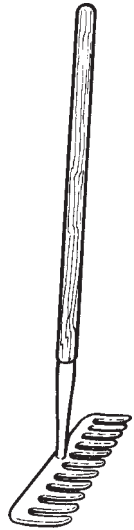


Composting is a lot easier than you may think.

Organic material breaks down around us in nature all the time. Composting is just a method of speeding up the process!

Most compost bin designs are so simple they can be built in a few hours. Once you gather your yard waste and form it into a pile, the only time you'll spend is for occasional maintenance. Then sit back and let nature do the rest!

## Composting Equipment



### Tools

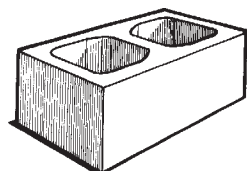
All you need are some basic gardening tools, like a pitchfork, a rake, and a shovel.

### Materials

Compost bins can be built with inexpensive materials like snow fencing, woven wire, or used cinder blocks and lumber.

### Soil

You don't need store-bought "soil activators" or potting soil to compost. One inch of soil from your yard or garden has all the ingredients needed to start the composting process.

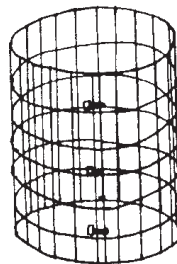
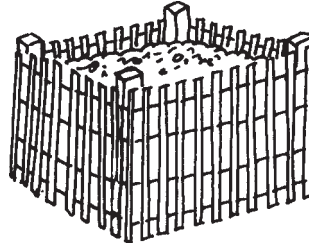


## Composting Bins

Here are three simple ways to make compost bins:

### Snow Fence Bin

Buy a length of prefabricated snow fence and fasten two - by - fours to each corner to form a square. (For a 4'x4'x4' compost pile, purchase 16 feet of snow fencing.)

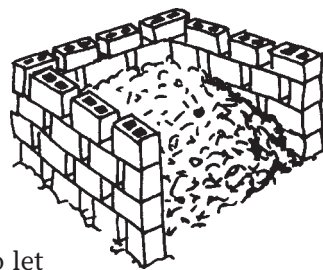


### Woven Wire Bin

Purchase a length of woven wire and fasten the ends with several small chain snaps (available at any hardware store) to make a circle. To calculate the length of wire needed, lay a piece of string around the outside of the pile and measure it. (For a 4'x4'x4' compost pile, purchase 16 feet of woven wire.)

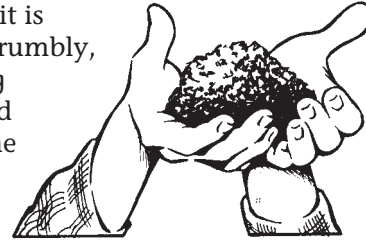
### Block or Brick Bin

Pile up bricks, cement blocks, or rocks to form three sides of a square container. Lay the blocks without mortar, leaving spaces between to let air circulate.



## Uses For Finished Compost

Compost is ready to harvest when it is reduced to a crumbly, sweet smelling material called humus. If some pieces are not decomposed, you can sift those out and use them to start a new batch.



Compost improves soil structure, holds in moisture and plant nutrients, and promotes strong, healthy root systems for plant growth. Here are the most common ways to use compost:

### Mix It Into Soil



- Mix 3 - 6 inches of compost into lawn soil before seeding for grass.
- Mix 3 - 6 inches of compost into garden soil before planting.

### Use It As A Mulch

Add compost as a mulch around flowers, shrubs, and trees to discourage weeds, help soil retain moisture, and protect roots from alternate freezing and thawing during winter months.



## Composting Recipes

### Shopping List:

*Green yard waste:* grass clippings, green yard trimmings, and weeds.  
*Brown yard waste:* leaves, small brush and twigs (1/2" diameter or less), woody plant prunings, sawdust.

### Lazy Person's Compost

#### Ingredients:

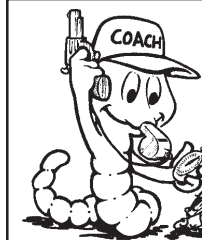
Green and brown yard waste, water as needed.

#### Directions:

- In a heap or bin, layer your yard waste as it accumulates. For faster composting, chop it up first with a hoe or lawn mower.
- Water so compost is kept as moist as a wrung-out sponge.
- In a year to 18 months, the material at the bottom and center of the pile will be dark, crumbly compost. Sift, and use the uncomposted material to start a new batch.



### Fast Compost



#### Ingredients:

Green and brown yard waste, water as needed.

#### Directions:

- Mix one part green yard waste with two parts brown to form a pile (an average size is 4'x4'x4'). For fast composting, chop it up first with a hoe or lawn mower.
- Mix in one inch of soil.
- Keep the pile as moist as a wrung-out sponge.
- Turn the pile every week to let air in.
- Finished compost will take between four weeks and one year, depending on how often you turn it and how well you maintain the moisture of the pile.