



**Baltimore Woods  
Nature Center**  
*Nature in your hands*

# Compost Critters

Although not often thought of as “alive,” soil and compost are teeming with life. Billions, perhaps even trillions, of micro-organisms interact with macro-organisms. Micro-organisms such as bacteria, fungus, and protozoa are living things that are too small to be seen with the naked eye. Macro-organisms, such as earthworms and millipedes, are living things that can be seen with the naked eye. Micro and macro-organisms work alongside one another in compost to transform ordinary kitchen scraps into extraordinary garden fertilizer. In the soil, micro and macro work together to help maintain soil health.

[Click here](#) to take a closer look at macro-organisms and to better understand their roles in making soil and compost truly extraordinary!

Are you interested in making your own compost? It’s pretty easy to do so! Check out the graphic below to start a compost pile in your backyard. [Click here](#) to read up on how to start composting in spaces both large and small. There are also several local composting resources. [Click here](#) to learn about composting courtesy of Syracuse University. The New York State Association for Reduction, Reuse and Recycling also has some great information on composting. Read up on it by [clicking here](#).

If you’re interested in doing a little macro-investigation in your own compost, go outside and turn it a couple of times with a shovel. Stoop down and check out the insects you can find! Cornell University has a helpful guide for identifying some of the critters you may find. Simply [click here](#).

# HOW TO COMPOST

Composting is the combining and managing of specific waste materials so that they decompose. Once the materials are mixed together, microbes in the soil will start to breakdown the waste and turn it into the nutrient-rich material that helps plants grow. By composting, you are not only creating something that helps keep plants healthy, but you are keeping compostable waste products like food scraps and yard waste out of landfills.

## WHAT YOU WILL NEED

### Brown material to produce carbon:

Dead leaves, branches and twigs, sawdust or wood chips, coffee filters, cotton and wool rags, shredded pieces of paper, cardboard or newspaper and shredded nut shells.



### Green material to produce nitrogen:

Grass clippings and leaves, fruit and vegetable scraps, hair, lint, tea and coffee grounds



### Water



- 1 Select a dry, shady spot near a water source.**  
Ideal size for your compost area is 3 feet wide by 3 feet deep by 3 feet tall (1 cubic yard). You can buy a bin, use chicken wire, or just isolate an area of ground for your compost heap.



- 2 Add brown and green material in alternate layers.**  
Try and keep the ratio roughly 3 parts browns to 1 part greens. Make sure larger pieces of material are chopped or shredded.



- 3 Keep the compost moist [but not too wet].**  
Moisture helps with the breakdown of organic matter.



- 4 Occasionally turn your compost mixture to provide aeration.**  
This helps speed up the composting process and keeps things airy, which cuts the risk of things getting smelly.



- 5 As materials breakdown, the pile will get warm.**  
There might even be steam. Don't be alarmed. That means it's working. Now you just have to wait.



- 6 All done!**  
When material is dark with no remnants of food or waste, your compost is ready. Add it to lawns and gardens or anywhere that could benefit from some good soil.

## WHAT NOT TO COMPOST

Metal, glass, and other products that do not easily breakdown, coal or charcoal ash, diseased or insect-ridden plants, black walnut tree leaves and twigs, pet waste, bones, meat, fats, oils dairy products and eggs (egg shells are OK), and yard trimmings treated with chemical pesticides.



### What's vermicomposting?

Vermicomposting is a type of composting that uses red wiggler earthworms (*Eisenia fetida*) to break down organic material. Place worms in a container 8-16 inches deep, layered with dirt, newspaper, and leaves. Make sure the bin has small holes at the bottom (a quarter inch or smaller) to allow for ventilation and drainage. Fruit and vegetable waste will eventually be replaced with nutrient-rich excrement. This method requires far less space, so it's a good alternative for people who don't have enough room or the ideal conditions for a large compost pile.