



Composting Systems

Too much food and yard waste ends up in local landfills. This waste stream can easily be diverted and recycled in your own backyard. Compost is a method of recycling organic waste through decomposition. The finished product is a healthy, nutrient-rich soil that is perfect for amending the soil in home gardens.

Regardless of the system employed, a few common factors contribute to successful composting. It is important to keep your compost moist and warm. Make sure your compost pile is in a sunny spot, and water it periodically if it looks too dry. Also, it is important to balance the proper ratio of carbon to nitrogen. Brown materials are high in carbon while green materials are high in nitrogen. A successful compost pile will be 3 parts carbon (browns) to 1 part nitrogen (greens).¹

Build Your Own Compost Bin:

Composting systems can take the form of constructed boxes/bins made from a variety of materials, or they can simply be piles of organic matter (food and yard waste) sitting in the sun.

Most people construct wooden bins; however metal stakes as corner posts with chicken wire as walls works as well. If using wood, DO NOT build a composting bin with treated lumber. Arsenic, copper, and chromium can leach into the compost, corrupting your soil and creating health risks.

Simply fill the bins, turning occasionally, keep moist, and allow nature to do its work. You can build multiple bins if you are producing a lot of waste and need space to hold compost in different stages of decomposition.

Manufactured/Commercial Bins:

Manufactured composting bins are convenient because they are preassembled, however they offer little benefit over homemade bins, and they cost more than the materials needed to construct your own system.

Manufactured bins come in many different forms. The most common receptacles are standard plastic bins that are open to the ground, and tumblers which are suspended above the ground. The tumblers rotate to shift the contents of the container and aerate the matter to accelerate decomposition.

Worm Bins – Vermicomposting:

Worm bins are ventilated plastic bins that house red worms. Place 1-2 pounds of red worms in the bin, provide the worms with a moist bedding (shredded leaves, lawn clippings, or newspaper) and bury food waste in the bedding. The bedding serves as the carbon (brown matter). The worms feed on the bacteria and fungi in the decomposing food, breaking up the ingredients as they move through and eat the bedding. Eventually, the worms ingest the food and bedding, leaving behind worm castings—an excellent finished compost.²

Worm bins are nice because they create less mess; however they require more care because the worms are confined, and they cannot handle larger waste loads.

¹Richard and Trautmann (1996). *C/N Ratio*. Cornell Composting, Science and Engineering. Resource available on-line: http://compost.css.cornell.edu/calc/cn_ratio.html; accessed 17 March 2009.

²Regional Recycling Group (2006). *Regional Recycling Backyard Composting Guide*, pp 24-27.