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Choosing a Compost System

There are a number of reasonably simple composting systems that can be used to recycle yard and garden wastes. Which is best will depend on the materials to be decomposed and how much energy and space you have available.

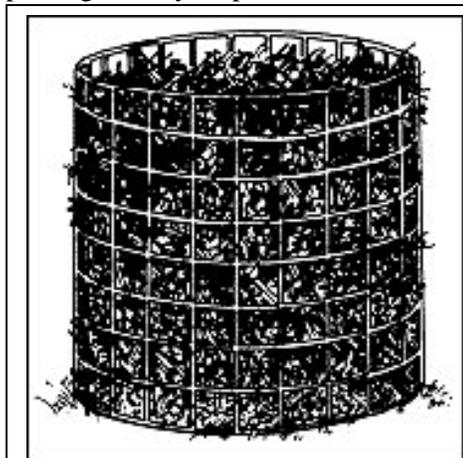
The process of composting can be as simple as placing a mulch of wood chips or lawn clippings on pathways in the garden or making a heap of yard wastes and allowing it to rot. On the other hand, the ads in many garden magazines might lead a gardener to believe that the use of costly chippers, measuring probes and rotating drums are necessary. Most gardeners find that they can use a combination of techniques and approaches somewhere within these extremes that will allow them to get the job done efficiently.

The choice of your composting system will affect how well you are able to maintain the environmental conditions necessary for the many organisms responsible for composting. A system that provides uniform moisture and temperature for a high population of active decomposer creatures will greatly hasten decay.

Before choosing a composting system, consider what type and volume of materials you will have to compost. Leaves will normally be one of the most available materials and are usually the easiest to manage. Stacked on a pile, they will eventually rot into usable humus without much attention.

If you are in no particular rush to have finished compost and can tolerate looking at the drab mound, this approach will work fine.

Though stacking leaves on a pile requires little management, problems can sometimes arise. For many gardeners, space is often at a premium and the leaves of one fall season may need to be used up to clear the space for the next. Stacking the pile higher may help but there comes a point when air will no longer flow to the inner section of the mound. When this

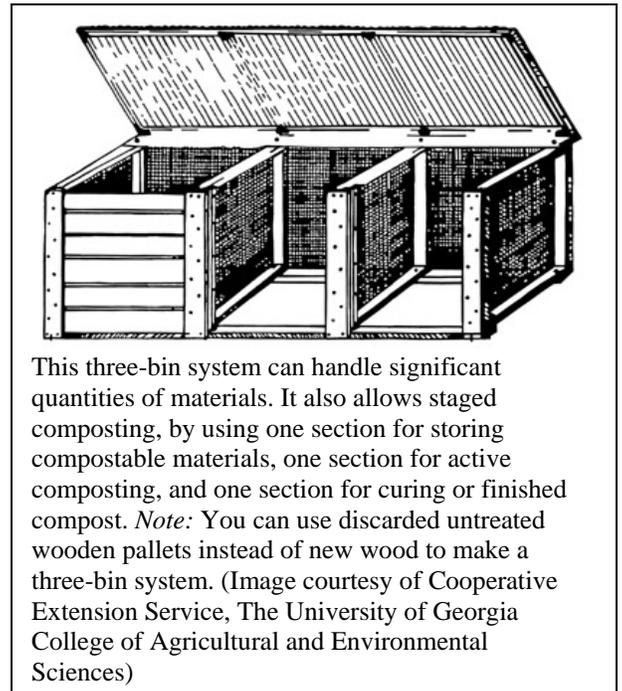


A circle of wire fencing is a simple and inexpensive holding bin for composting.

happens, the composting process will become anaerobic and decomposition will slow. In addition to slowing the process, the anaerobic activity will often result in a rotten odor when the pile is opened. While you may be willing to accept the smell as part of the earthy process of composting, your neighbors may not!

Providing an enclosure to hold materials that are being composted offers several advantages over placing waste on a stack. In addition to appearing less unkept, it provides more efficient use of space. Where rodents or neighborhood pets might become a problem, a top and bottom can be added to completely close the system.

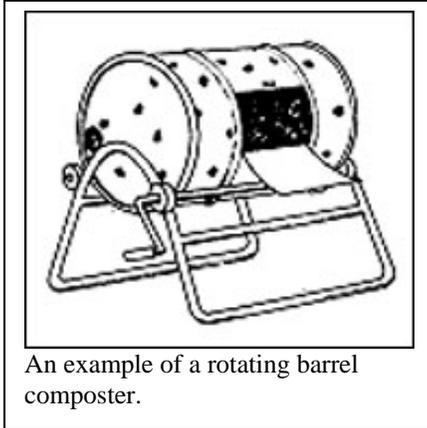
Holding bins are often made of lightweight materials so that they can be taken apart and moved. Possible materials include circles of wire fencing or hardware cloth, old wooden pallets wired or tied together, snow fencing or wire framed in wood. More permanent holding units can be made by stacking landscape timbers or concrete block. In either case, the unit should be constructed to allow air transfer through the sides and back.



This three-bin system can handle significant quantities of materials. It also allows staged composting, by using one section for storing compostable materials, one section for active composting, and one section for curing or finished compost. *Note:* You can use discarded untreated wooden pallets instead of new wood to make a three-bin system. (Image courtesy of Cooperative Extension Service, The University of Georgia College of Agricultural and Environmental Sciences)

Material such as garden crop wastes, weeds, leaves and grass clippings can be added to the holding unit at any time. No turning is required but decomposition can take from six months to two years. Generally, the woodier the material, the longer it will take to decompose. The decay process can be hastened by chopping or shredding the wastes and by keeping the pile moist during dry spells. Mixing woody materials with high nitrogen wastes such as lawn clippings will also hasten the decay process.

Since yard and garden wastes can be added to the holding unit continuously, the stage of decomposition will vary from the top to the bottom of the pile. Generally the more finished compost will be found near the bottom of the pile, and partially decomposed materials near the top. Finished compost from the bottom of the pile can be removed and used at any time.



An example of a rotating barrel composter.

Gardeners who wish to handle larger volumes of waste or reduce the amount of time necessary to finish the composting process should consider an arrangement that will allow efficient turning of the material being composted. Frequent turning will speed decomposition by providing bacteria with the oxygen they need to break materials down. A series of bins or a rotating container or drum can be used to facilitate the turning process.

Materials to be composted should be added to the turning bins or drums in stockpiled batches, rather than small amounts over time. Materials should be stockpiled to fill a minimum bin area of 3 feet x 3 feet x 3 feet or a barrel composter to the prescribed level. Prior to composting, food wastes should be stockpiled in a pest proof container, such as a plastic, five gallon bucket. Layers of sawdust can be added to the waste to reduce odor.

There may be times that composting food wastes in piles or a bin is not possible or convenient. An alternative requiring little more investment than a spade is to bury wastes in fallow areas of the garden. It is the simplest method for composting nonfat food wastes. Most food scraps will break down within six months to provide nutrients and humus for future plantings.

When burying food wastes, it is important to dig a hole large enough to allow all wastes to be covered under at least 8 inches of soil. Burying to this depth discourages animals from digging up the waste. Incorporation of meat, bones or other fatty food wastes may attract animal pests.

Recycling yard and kitchen wastes can be accomplished in a number of reasonably simple ways. Which technique or combination of techniques you select will depend on your garden space, what material you have to compost and the amount of time and energy that can be devoted to gardening and composting. Whatever technique you choose, your garden and local landfill will benefit!

Reprinted from "Choosing A Compost System", Bob Kozlowski Senior Extension Associate, Cornell University *Long Island Gardening*. May/June 1994



Burying wastes at least 8" deep is one of the simplest methods of composting