Earth-Friendly Gardening & Landscaping

Composting with Pallets

Wooden shipping pallets are easily recycled into large, heavy-duty compost bins. Pallets are available for free from many area businesses, assemble in minutes, and with them you can produce humus-rich mulch and compost year after year. Here's how!

Assembly Instructions

Simple Pallet Bin

Obtain five pallets with narrow spaces between slats (1/2" - 1") and of uniform size. Many pallets measure 40" by 48" and will form a 48 cubic foot capacity bin. Pick up pallets from loading docks, freight companies, hardware stores, central post offices, print shops, wholesalers, nuseries and garden centers. There are always plenty around for free.



Place one pallet (slat-side up) on level ground. This pallet is the bottom of your bin and will allow for good drainage and aeration by keeping yard trimmings above the ground. Properly drained and aerated compost decomposes quickly and without odors.



Arrange the remaining pallets upright around each side of the base to form a box, short (40") sides up. Use spare wire, coathangers, or nylon rope to fasten the pallets together. Join pallets at each corner, lashing both the top and bottom. You can gain access to your compost pile by unfastening one side of a pallet and swinging it out like a hinged door.



Multi-Bin Units

Large properties and institutions like schools and churches may require a larger compost bin system to accommodate their materials. In addition, gardeners looking for quick compost may prefer a multi-bin system to make turning materials easier.

First, construct a single bin as described above. Then expand your compost system by setting another pallet to the right of the base of your existing bin, and adjoining it. Form another box with three additional pallets to form the door and sides of the new bin. The two bins will share one side. Additional "bins" can be added-on using just four pallets at a time.

Two-bin systems allow easy turning of materials by transferring decomposing trimmings from one side to the other. Three-bin systems are favored by aggressive composters, with one bin used for newer materials, which are "turned" or transferred into the second bin after several weeks (or months), and later into the final "curing" bin for several weeks or months, prior to use. Churches and schools frequently construct three, four, or more bin systems to handle materials.

Lifespan and Maintenance

Pallet bin sides generally last from four to six years, depending on the level of active use. Bases last one to two years and need to be replaced. Just drop another fresh pallet over the old base after removing any compost still in the bin — keep the new base as level as possible. The decomposing pallet will eventually turn to compost. Check corner lashing periodically and replace every several years, or as needed.

Piles and Pallets and Bins

Some composters prefer to use a free standing pile or "heap." Even this simple method of composting can be enhanced by using pallets to improve drainage and aeration. Use a pallet as the base of your compost "heap," rather than the layer of twigs or brush that are traditionally recommended. This smooth, even base will permit materials to be turned much more easily.

First, select a pallet with narrow 1/2" spaces between slats. If a pallet with narrow spaces is not available, try stapling or tacking a layer of hardware cloth to the top of the pallet to keep material from falling through the spaces. Two adjacent pallets on the ground create a handy work area for easy turning.

Homeowners with one of the commercially manufactured bins can also improve drainage and aeration by setting their open-base bin atop a pallet. A layer of brush is now no longer required, thereby expanding your prefabricated unit's capacity.

Composting Basics

Composting is a simple, natural process. There is no need to purchase special activators or fertilizers to make the materials in your composter break down. Compost just happens!

Slow, Sure and Simple

 Build your compost pile anytime of year.
Locate on level, well-drained ground in either sun or shade — stay away from wooden fences and buildings. Do not set up your bin over shallow tree roots.

3. Use leaves by themselves — or mix in grass and other "green" garden trimmings for quicker compost. When adding new materials to an existing pile, be sure to mix them in thoroughly. Do not create layers.

4. Do not build your pile with grass alone. Always mix in dry leaves, straw or wood chips to avoid odors.

5. Moisten materials as you add them and leave a concave depression at the top of the pile to capture rain. You can leave your bin uncovered during most, if not all, of the year.



 Keep materials moist — but not wet! throughout the year. A dry pile will not compost. The single most common cause for a slow-working compost pile is dry materials.
Never add meat, bones, fat, oils, dairy products or processed foods to avoid odors and pests. Never add diseased plants, weeds with seeds, or cat or dog wastes.

8. Try to turn, fluff, or aerate the materials with at least some frequency, whether every week, every month or just once or twice a season, from spring through fall.

9. Compost is ready to use when it is dark brown or black, crumbly, and sweet-smelling. Depending on materials, moisture, and turning frequency, your compost may be ready in six to ten months, on average.

Active Composting (Fast and Hot!)

1. Use a two- or three-bin system.

Try to obtain a mixture of two parts (by volume) high nitrogen materials like grass and fresh-pulled weeds and one-part high-carbon materials like dried leaves and woodchips.
Try to shred leaves (use lawnmower or mechanical shredder) and, especially, woody materials. Keep particle sizes small.

4. Mix materials thoroughly together.

6. Keep moisture level at 50 percent, or the consistency of a wrung-out sponge.

 Turn or "aerate" pile by moving materials from bin to bin (back and forth for 2-bin system, serially for 3-bin system) every 2-4 weeks.
Compost should be ready in 6-12 weeks.

Using Compost

You don't need large flower beds or a vegetable garden to use compost. Here are some of the most common applications: **Mulch**. Apply compost up to 3" deep around trees and shrubs and in planting areas to suppress weed growth, provide a long-term supply of nutrients, conserve moisture, prevent soil erosion and compaction, and moderate soil temperature changes. Especially effective in fall and spring.

Topdressing. Spread compost 1/8"-1/4" deep on top of existing lawns with a spreader or rake. Finished compost should be sifted or "screened" to remove clumps and twigs. Build a simple, inexpensive sifter using hardware cloth and a frame of two-by-four lumber. **Sidedressing**. A 1"-2" layer of compost can be spread around vegetables, shrubs and flowers during the active growing season to replace nutrients and protect root systems.



Soil Amendment. Mix 2"-3" of compost into the top 6"-8" of heavy clay or sandy soil with a mechanical tiller, garden spade, or shovel. Compost will improve drainage and moisture retention, prevent compaction, supply nutrients and make existing nutrients more available to plants.

Potting Media. Age compost for one to three months, sift throroughly, and mix as one-third part to a commercial potting mix, or combine with a mix of potting soil and vermiculite or perlite to create a superior, nutrient-rich potting medium.



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