Garden wastes contributed a tremendous volume to the waste stream that went to landfills. It is now illegal in many areas to put organic debris into the garbage. You can opt for separate pick-up, make trips to a transfer station or compost. The first two choices cost money; the third saves money, because the compost is a valuable soil amendment.

Recycling the organic waste products of your garden into dark, rich organic matter is very easy. Descriptions of the process often make it sound complicated, but it’s not. In fact, it’s hard to prevent garden wastes from composting. Instructions just help you do it safely and efficiently.

**COMPOST AND ALTERNATIVES** Compost is earthy-smelling, decomposed organic matter. It has an almost magical power to improve soil structure. It makes sandy soil hold water and nutrients better. Clay soil becomes more porous and workable. Compost contains nutrients, but additional fertilizer usually is needed for best plant growth. Compost is mainly an organic matter amendment, not a fertilizer. Other common organic matter sources are manure, green manure and peat.

To avoid diseases, such as *E. coli*, it’s best to compost manure before adding it to your garden. Adding raw manure to the soil in the fall gives it time to decompose before spring, but winter rains leach out nutrients.

Green manures or cover crops are plants we grow just to till under to provide soil organic matter. Once forked into the soil, it takes at least a few days to breakdown sufficiently to allow planting. To avoid this delay, many gardeners simply use the green manure to feed their compost pile. Then the soil is prepared using finished compost from a previous batch and planted immediately.

Peat is being used less now by ecologically aware gardeners. It is a mined product -- a resource that develops very slowly, measured against the rate at which it is being consumed. Reserve its use for those applications where it excels, such as rooting cuttings. Comparing it to compost as a soil amendment, it comes up short. It is costly, is hard to wet when it dries, provides negligible nutrients and causes our already acidic soil to become more so.

**WHAT CAN BE COMPOSTED?** Almost all organic wastes can be composted including grass clippings, leaves, weeds, non-food parts of crops (pea vines, corn stalks, carrot tops, etc.), spent flowers, straw, manure, sawdust and shredded newspaper. Wood ashes can be added, but do not overdo it. (Sod is best composted by piling moist sod chunks upside down in a separate pile and covering the whole thing with black plastic. It will break down in about two years.)

As the microorganisms decompose the material in your pile, the center will heat up to 140-160°. This may kill some weeds, weed seeds and disease organisms, but many make it through the process. Avoid composting diseased plant parts and perennial weeds that reproduce vegetatively (such as morning glory) or weeds that have gone to seed.

Thoroughly compost lawn clippings that may contain herbicide residue. Allow several months “curing” before using them in the garden. Dog and cat wastes should not be added to the pile. Kitchen waste can be
composted in worm bins along with bedding such as shredded paper or leaves. It should not be added to your regular compost or it may attract rodents or flies. Purchased compost starters or activators are unnecessary. Soil is also unnecessary and makes the compost heavier.

ENCLOSURE  Compost can be made by stacking the material in a loose pile. It is usually more efficient and nicer esthetically to use an enclosure. Almost any material can be used to build the bin. It should be at least 3 feet in width, depth and height. Any smaller volume may not compost properly.

The ideal compost area would be easily accessible from the garden, but screened from view from house windows and outdoor living areas. If it is a shady area, your bin should be open enough to allow air circulation through the pile.

MAKING THE PILE  Start with a layer of coarse material. Undecomposed sticks from a previous pile work well, as do heavy stalks. Most instructions tell you to layer various materials in certain depths and order. In practice, you will add what you have, as it is available. For the best, fast, hot compost follow these four laws of composting.

1. **Particle Size.** Chop up the materials before you add them to the pile. Smaller particles decompose faster. A shredder can really speed things up. No shredder? Rotary lawn mowers do a good job on piles of large leaves. Machetes quickly reduce tough stalks to more easily composted chunks.

2. **Air/Moisture Balance.** Add water as you build your pile so the material is moist but not soggy. Firm down each layer, but allow it to be loose enough that air can pass through it. A dry pile will compost very slowly; a too wet or too compact one will get smelly.

3. **Carbon/Nitrogen Ratio.** All organic wastes have a ratio of carbon to nitrogen (C:N). Grass clippings and fresh manure are about 20:1; sawdust is at the opposite extreme at 500:1. Fall leaves run about 60:1. Generally, dead, brown ingredients have less nitrogen than green ones. The ideal ratio for compost microbes is 30:1. Since many available materials are heavy on the carbon side, gardeners often add a sprinkle of nitrogen fertilizer like blood meal, cottonseed meal or ammonium nitrate over each high-carbon layer. Remember that 30:1 is a goal, not a necessity. Composting may be slower, but it will work with wide deviations from this ideal.

4. **Mixing.** Compost microbes are most active at the center of the pile. Periodically turning edge materials into the center creates finished compost more quickly. Although the material can be mixed within a bin, it is easiest to have two bins and to mix while shifting compost between them.

Turning allows you to add moisture or nitrogen, if needed, and keeps the pile loose and aerated. The compost can be turned as soon as the pile cools down after each rebuilding. Turn immediately, if offensive odors are noticed.

WHEN IS IT DONE? If you work at it, you can make usable compost in just a few weeks in the summer. If you are a little more haphazard or lazy, six months is more realistic. Even if you break all the rules, the center of your pile will probably be beautiful compost within a year! Finished compost is crumbly and smells earthy. You should not be able to identify most of the parent material. The pile will have shrunk to less than half of its original volume.

USING COMPOST  Flower and vegetable beds should get 1-3" of compost annually in the spring or fall. Spade or till it into the soil. Add a bucket of compost to renew the soil between plantings of successive crops. Compost can be used as a top-dressing in and around already-planted vegetables, flowers and woody plants.