

Backyard Composting

Harvesting Your Compost

It will take 3 to 6 months for your pile to turn into compost. During this time, you can continue to add more material to the pile, just be aware that the material added later will not be ready at the same time as the first material you added.



You can tell that the material in your pile has turned to compost when you can no longer recognize it. After about 3 months, the material will undergo a transformation, and instead of looking like the materials you incorporated into your backyard compost container, the materials will take on a soil or humus-like appearance.

You can use a seed-planting tray to screen out the unfinished bits from the finished compost. The screened material can go into a wheelbarrow, and the larger pieces can be tossed back into the pile for additional composting.

Once you have removed the compost, spread it out and leave it exposed to the sun. Drying out the material will cure the compost, and help to kill any remaining plant pathogens. It will also make this material easier to spread. Once the compost has been cured in the sun, it can be added to your garden—a home-made, natural fertilizer!

Troubleshooting Guide

- Pile not heating up.
 - Not enough water—add water.
 - The compost pile is too small—build the pile to at least 3'X3'X3'.
 - Lack of nitrogen-rich materials—mix in grass clippings, kitchen scraps, or fresh manure.
 - The materials in the pile are too big—chop or grind the materials.
- Pile smells bad.
 - Not enough oxygen—aerate; turn the pile.
 - Too wet—add sawdust, dry leaves, etc.
 - If odor smells like ammonia, too much

green material present—turn the pile and add dry-woody materials

- Rodents in pile
 - Non-compostable material present. Do not include dairy products, meat, or bones.
 - Food scraps not covered—cover food scraps with dry materials.
 - Too many food scraps, fruits or vegetable scraps added to the pile—stop adding these materials, add more dry materials and turn the pile.

Common Ways to Use Compost

Soil Amendment—As much as six inches of compost can be added to your soil each year. When used as a soil amendment, compost reacts with soil to slowly release both plant nutrients and essential trace elements.

Mulching—Compost is not mulch, yet it can be applied in the same ways that mulches are used. Compost is a stable product that will not deprive your soil of nitrogen. Spread compost two to six inches thick around plants, trees, shrubs, and exposed slopes. This will deter weeds, prevent crusting, curtail erosion, attract earthworms, and conserve water.

Potting Mix—Finished compost can be combined with equal parts of sand and soil to create an excellent potting mix.



For more information about composting, see DavisRecycling.org, or contact the City of Davis Recycling Program at 757-5686.



Turn over an old leaf...compost!



City of Davis
Public Works Department
Recycling Program
1717 5th Street
Davis, CA 95616
(530) 757-5686
DavisRecycling.org

Why Compost?

Composting is a means of using natural decomposing processes to turn kitchen and yard wastes into a nutrient-rich soil supplement for your yard or garden. Returning organic matter to the land perpetuates natural biological cycles and is an ecologically sensible means of using organic wastes. It also has the potential to divert a significant amount of waste from our landfill. If proper composting techniques are followed, composting can require very little work and be odor and rodent free.

What Can I Compost?

- houseplants
- flowers
- weeds
- grass clippings
- plants
- flowers
- chopped twigs
- leaves
- prunings
- hay/straw
- sawdust/wood chips
- fruit wastes
- vegetable wastes
- coffee grounds
- coffee filters
- paper towels
- tea bags
- egg and nut shells
- bread
- grains
- pasta
- legumes

Do not add meat, fish, bones, dairy products, grease, fat, oil, invasive weeds or badly diseased plants to your compost pile.

Backyard composting should NOT be used to compost ONLY fruits, vegetables and food scraps or you will attract rodents and other pests. If you want to compost fruits, vegetables and food scraps, be sure that you bury them deep in your compost pile and cover them up with dried grass, leaves and other yard materials. The material in your compost bin should never be comprised of more than 10% fruits, vegetables and food scraps or you may attract rodents.

Always bury fruits, vegetables and food scraps deep in your compost pile to discourage rodents.

Essentials of Composting

There are two primary types of composting: anaerobic and aerobic composting. In this

brochure, we will be discussing aerobic or "oxygenated" composting methods. There are four essential factors for maintaining a healthy microbial population:

1. Aeration: A compost pile should be turned once a week so that it remains aerobic. If you do not turn your pile regularly it will become anaerobic (lacking oxygen) and will begin to emit foul-smelling odors as well as slow down decomposition. Chop materials into small pieces to enhance air flow and increase surface area.



2. Temperature: The higher the temperature of the pile, the more rapid the decomposition rates. A proper "hot" pile will reach 120-180 degrees Fahrenheit. Maintaining heat in your pile will kill weed seeds and plant pathogens.



3. Moisture Content: The pile should be kept moist but not soggy. If the pile is too wet, water will fill up the air spaces and the pile will become anaerobic. If your pile is usually uncovered, you should cover it with some type of lid during heavy rains to prevent over saturation. Material in your pile should clump in your hand when you squeeze it and leave a drop or two of moisture on your fingers.



4. Carbon-Nitrogen Balance: Wet or "green" materials such as fresh grass clippings and food wastes tend to be high in nitrogen, while dry or



"brown" materials such as leaves and dried yard waste are high in carbon. You should try to maintain a balance of 50% dry carbon-rich materials, 35% nitrogen-rich materials, and 15% soil or finished compost.

5. Size: Both the size of the pile and the size of the materials in the pile is important in composting. Piles should be at least 3'x3'x3' to retain a high temperature. To speed decomposition, material should be chopped up before being added to the pile.

Building Your Pile

Compost bins can be constructed from any combination of wood, wire, and concrete. The piles and bins listed here represent just a few of the most basic designs. Choose a design and materials to suit your needs, taste, and pocketbook. If you do not want to build your own bin, a wide variety of commercial compost bins are also available.

1. Loose Pile—The loose pile is easier to turn but takes up more space than a bin.

2. Hoop Bin—This is one of the simplest and least expensive kinds of bins. You will need about 10 feet of chicken wire, hardware cloth, or similar material. The ends should be fastened together with wire or hooks.



3. Wooden Pallet Bin—You can nail a few pallets together to get a easy to turn



compost bin. To make composting even easier, if you have room, you might want to consider having two or three open wooden compost bins, so that you can easily turn the compost from one bin to another.