

# Better people.

## **IF-8 Composting at Home**

### **Key Points**

- The benefits and uses for compost are many and vary from soil conditioner to mulch.
- The location site for a compost pile should include sun, water proximity, raw materials and be out of neighbors' views.
- Both brown leaves and green plant by-products are required. Dog and cat manure, meat scraps fatty or
  grease materials, and diseased plant residues should not be composted.
- Monitor the pile for temperature and water content, turning the pile every two weeks.

### **Benefits of Composting**

Composting is the natural reduction of organic wastes into humus. Decomposition (the decaying process) is facilitated by millions of bacteria in organic matter. Making your own compost is easy and good for our Nevada soil which is almost devoid of natural organic materials. Compost can be used as a mulch to help prevent weeds, cool our soils and retain moisture. Compost can also be used as a soil conditioner to keep tight clay soil loose after being broken up, help retain moisture in clay and sandy type soils and provide a loose root environment for root growth, water and air infiltration. Our soil needs large amounts of organic matter worked into it.

#### **Site Location**

A compost heap can be built anywhere except up against a structure such as a wooden shed or fence because they will become part of your compost. Pavement or earth underneath compost is fine; both have advantages. The following should be provided for successful composting:

- Be at least two feet away from a structure
- Be easily accessible
- · Be close to sources of raw materials, i.e., leaves and grass
- Have easy access to a water source
- Be level and well drained
- Be a minimum size of three by three feet. The area should be no bigger than five by five feet
- Receive six hours of sunlight and be out of the wind
- Be hidden from view of the neighbors

#### **Compost Bin or Not**

A bin is unnecessary. You can build your heap on the ground. However, bins are useful for keeping your pile neater, retaining heat and moisture, keeping animals out of the compost, avoiding the effects of wind and weather, and hiding the pile from view. There is a wide selection of composters available in a variety of sizes and styles. Or, you can build a bin out of wood, concrete blocks or even fencing. Commercial bins can have several advantages depending on the degree of complexity.

#### **Required Materials**

As a general rule, a ratio of 1 part green material (high in nitrogen) to 2 parts brown material (high in carbon) will give the proper carbon: nitrogen ratio for composting and will generate the most heat. Green materials include fresh grass clippings and weeds, yard waste, vegetable peelings, fruit, tea and coffee grounds, rinsed eggshells and horse/chicken manure. Brown materials include dead leaves and flowers, old grass clippings, twigs, shredded newspaper and sawdust. Do not use meat scraps or fat, dairy products, dog/cat manure or diseased plant material.

Chip, chop, shred or grind both green and brown materials to allow them to break down more quickly. Materials of only one size tend to mat together, which prevents the flow of air and water through the pile. A shovel full of soil added to each layer will add microbial activity. Additional nitrogen may need to be added.

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### **Building and Monitoring the Pile**

As you build your compost pile, be sure to keep air, moisture, carbon and nitrogen material, mass and time all in mind. The methods used are the "batch" and "add as you go." The batch process will process and build the entire pile at the same time and as a unit. The factors for composting can be managed with a batch method easier than when you are constantly adding materials all the time, or "as you go."

- Wet the soil under the pile to prevent the ground from soaking up the moisture from the pile and to attract earthworms to your pile.
- Lay twigs or coarse material in a four to six inch layer on the ground to promote air circulation at the base.
- Layer the rest of your materials, alternating carbon (brown) materials and nitrogen (green) materials and add water. Layers should be four to six inches thick. Remember 2 parts brown to 1 part green. Add a shovel full of soil between layers. Continue layering green and brown materials until your pile is three feet high. The top layer should be brown material and water.
- Monitor the pile. By watching heat and water levels, you can produce compost faster. A properly built pile
  can reach 150° to 160°F within a few days. Check with a thermometer; a temperature of 150° to 160°F for
  two days will kill most weed seeds. If the temperature doesn't reach 120° to 160°F, add more green
  material or compost activator. Monitor moisture; a handful of material should feel like a damp sponge and
  not drip when you hold it.
- Turn the pile every two weeks by stirring it up with a shovel or garden fork to cause a more even
  composting throughout the entire pile. If the pile is not turned, only the center will compost. Seeing steam
  when you turn compost is a good indication of heating and decomposing. Turn the pile and bring all the
  outside material to the inside and vice versa. By keeping it moist, the center turns into a black, crumbly
  mass that will be ready to add to your garden.

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