

BUILDING A COMPOST BIN



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Smith County Master Gardeners

*The IDEA Garden is a joint project of
Smith County Master Gardeners,
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COMPOSTING STRUCTURES

Although a structure is not required to make compost, to save space, hasten decomposition, and keep the yard looking neat, contain the compost pile in some sort of bin or container. These can consist of a variety of materials and can be made as simple or complex as desired.

TYPES OF STRUCTURES

Use of *plastic garbage bags* is perhaps the simplest way to make compost. They are easy to handle and require minimal maintenance. To make compost using this method:

1. Fill plastic bags (30-40 gal. x 3 ml. Thick) alternately with plant waste, fertilizer and lime. (1tbl. Fertilizer with high nitrogen content and 1 cup hydrated lime per bag.)
2. After filling the bag, add about 1 qt. water.
3. Close bag tightly.
4. Set aside for six months to a year. Set the bags in a basement or heated garage for better decomposition during winter months. You will not have to turn the mixture or add water after closing the bag. Although this process requires little maintenance, it is slow because of limited oxygen.

A *barrel or drum composter* generates compost in a relatively short period of time and provides easy turning. It is an excellent choice for a city dweller with a small yard. Ideally, the compost should be ready in two to four months.

(Figure 1)

1. Use at least a 55 gal. barrel with a secure lid. (Be sure barrel was not used to store toxic chemicals.)
2. Drill 6 to 9 rows of ½" holes over length of barrel.
3. Place the barrel upright on blocks to allow air circulation.
4. Fill it 2/3 full with organic waste material and about 1/4 cup of a high nitrogen fertilizer.
5. If need, apply water until the mixture is moist.
6. Every few days, turn the drum on its side and roll it around

the yard to mix and aerate the compost. The lid can be removed after turning to allow for air penetration.

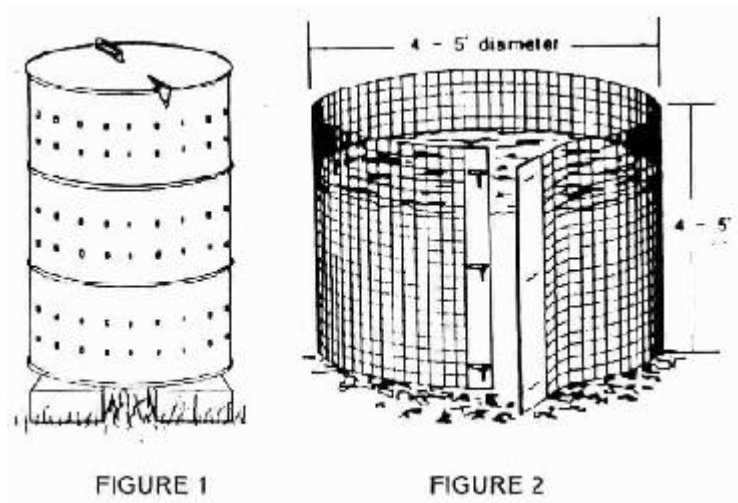


FIGURE 1

FIGURE 2

For larger quantities of organic waste, *bin type structures* are the most practical. A circular bin can be made by using a length of small spaced woven wire fencing held together with chain snaps. (Figure 2) The bin should be about three to five feet in diameter and at least 4 feet high. To maintain the shape of the pile, a stake may be driven in the middle of the bin before adding material. With this design, it is easy to turn the composting material by simply unsnapping the wire, moving the wire cylinder a few feet and turning the compost back into it.

A very efficient and durable structure for fast composting is a *three chambered bin*. (Figure 3) This is like the one used in the IDEA Garden. It holds a considerable amount of compost and allows good air circulation. The three chambered bin works on an assembly line idea, having three batches of compost in varying stages of decomposition. A balanced mixture of compost material is started in the first bin and allowed to heat up for 3 to 5 days. Next, it is turned into the middle bin for another 4 to 7 days, while a new batch of material is started in the first bin. Finally, the material in the middle bin is turned into the last bin as finished or nearly finished compost.

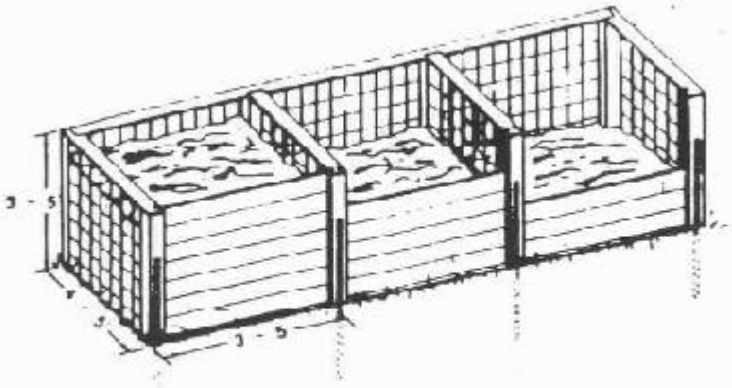


FIGURE 3

To make this structure, it is best to use rot-resistant wood such as redwood, wood treated with a preservative, or a combination of wood and metal posts. Each bin should be about 5' x 3' and about 3' high. Removable slats in the front offer complete access for turning.

There are many other structures for composting and no one structure is best. Invent your own, consult one of the several new books on composting, or contact your Smith County Agriculture Extension Service office for more information. Check the Smith County Master Gardener web site for information, gardening tips and upcoming events.

<http://aggie-horticulture.tamu.edu/county/smith/mg/mg/html>

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