

methods of composting at home

There are many reasons to compost at home!

- Reduces amount of trash your family produces
- Turns waste into a resource
- Unlike conventional fertilizers, compost feeds the soil which in turn improves growing conditions for plants and grasses! It also provides additional nutrients, improves soil structure, and has great water holding capacity which means you won't need to water the garden and lawn as often.
- Convenience of having compost on hand
 - no driving to the store and spending \$10
 - \$20 for one 10 pound bag of compost

All of this makes composting at home both economically and environmentally smart.

[a tip for successful composting]

1 PART

green material

[grass clippings
food scraps
garden waste]

3 PARTS
brown material

[dry leaves
pine needles
corn stalks]

It can be done simply and can even be accomplished in limited space. To get started, a five-gallon bucket under your sink or a kitchen counter compost container will provide the receptacle you need to capture food scraps that would otherwise end up in the garbage. Vegetables, fruits, egg shells and coffee grounds are some common items that make great compost. Plus, add in your yard leaves, paper napkins and mowed grass!

[choosing the best method]

With so many options available, choosing the best method of home composting depends on a few factors. Consider each home composting option with these factors in mind:

- Cost
- Labor involved
- Available time
- Available space
- Aesthetics
- Equipment necessary
- Use of compost

The Iowa Waste Reduction Center and the University of Northern Iowa are equal opportunity providers and employers.

[holding units]

Composting in a holding unit is easy and care-free.

Holding units are stationary bins that don't require turning or aeration. Simply toss compost material in the holding unit and keep there until the composting process is finished. Holding units are inexpensive to build at home out of old pallets or chicken wire. They are also the most inexpensive option when buying a commercially available unit, averaging around \$40 to \$60. Composting in a holding unit is a slow process though and can take anywhere from six months up to two years.



[turning units and tumblers]

A turning unit is like a holding unit, except spinning or rotating the unit allows for aeration and mixing of the compost. This method results in higher temperatures and more uniform mixing when turned a couple times per week. In addition, the aeration process that results in higher temperatures will help cure the compost faster. With the correct mix of materials [carbon to nitrogen and moisture] and consistent turning, compost can be finished in as little as two months. Turning units are more expensive than holding units with retail costs between \$100 and \$200.



[heaps or piles]

Just like it sounds, compost can be heaped into a backyard pile. A heap or pile requires no containment structure and aeration is achieved by mixing and turning the compost with a pitchfork. Although more labor intensive than composting in a tumbler or holding unit, this method is very inexpensive. Some people might find the heap or pile method to look messy or may not have the space.



[pit or trench composting]



Pit or trench composting is basically the process of burying compostable material and covering it with

a layer of dirt. This simple method requires the initial labor of digging a pit or trench, but does not need maintenance and is virtually invisible and odor free. The pit or trench should be about 12' deep to accommodate 4-6" of compostable material then filled in with heaping dirt. Available nutrients from the finished compost will be available to root systems anywhere from one month to one year later depending on the types of material being composted.

[sheet composting or sheet mulching]

Sheet composting, also referred to as sheet mulching, is the process of spreading a thin [2-4"] layer of shredded compost material over soil, then tilling or hoeing into the soil. Sheet composting works best when applied in the fall so that decomposition will have occurred by spring. Although sheet composting requires initial labor to till in the material and is relatively inexpensive, the resulting compost remains where it was initially applied. Sheet composting also takes six months or longer to fully cure.



The in-vessel composting system requires the purchase of a commercial cylindrical drum or tub which has a turning mechanism for aeration

[in-vessel composting]



and mixing. In-vessel systems can process 100 pounds or more of organic material per day depending on the size of system purchased. In-vessel systems are larger than other composting systems and will need accommodating space and shelter from adverse weather. Small in-vessel systems are about 5' tall and 7' in diameter. Although these systems compost much faster than any other method, regular maintenance is required and they are expensive,

starting at about \$10,000. Leachate is not a concern with in-vessel systems because they are enclosed and will prevent stormwater run-on and run-off from the compost.

[vermicomposting]

Vermicomposting is beneficial for composting all year long in the home by using worms to decompose food waste and other compostable material. An initial purchase of 1,000 red wiggler worms will cost about \$30 and a commercially available bin will average between \$80 and \$100. Bins can also be easily made from a regular tote for about \$20. It can take up to six months for the worms to digest organic material and leave behind castings or manure that are used as compost. Taking care of the worms can be a chore in that the correct moisture level, aeration, temperature and amount of organic material are essential to a successful operation. If the bin has an offensive odor, there is an imbalance in the needs of the worms and this must be corrected to keep the worms alive and well. Harvesting the castings requires the worms to be separated from the castings which is rewarding but also time consuming.

