

Vermicomposting 101

Constructing your vermicompost bin:

Materials:

- 2-Rubbermaid tubs the same size (The bin size depends on the amount of food produced by your household. The general rule of thumb is one square foot of surface area for each pound of garbage generated per week.)
- Drill with 1/4in drill bit

Procedure:

Take on the Rubbermaid tubs and drill three to four holes on the bottom for drainage. Drill approximately 15 holes for ventilation on one of the lids (you will not need the other lid). Now, stack the bin with the holes on top of the other tub and place the lid with holes on top.

Obtaining Red Wigglers:

You can buy red wigglers at many online stores and local pet stores.

For smaller vermicompost bins like a 5 gallon Rubbermaid tub you need as little as 30 worms. The bigger the tub the more worms you will need. This also goes with the amount of food you put in it. If you put a lot of food in the bin you need a lot of worm. Do not over feed your worms!

Setting up your vermicompost bin:

1. Provide bedding

Bedding is any light organic material that's high in carbon. It helps to keep moisture in the bin, and protects the worms from drying out. It's there as additional food, for those times when their humans go on vacations, as well!

Possible beddings:

- shredded (ground-up) cardboard
- shredded office paper
- shredded paper towels
- coir (shredded coconut husk fiber)

2. Add Water to Bedding

Wet down your bedding (don't let it get compacted) until it's as damp as a wrung-out sponge. That's it! Use dechlorinated water. You can dechlorinate water by leaving it out overnight or you can use well- or rain-water. OK, your bedding's in there. Now you're ready to add the worms! Take your little reds and set them down on top of the bedding and watch them move downward. In about ten minutes they should have all moved down below the surface of the bedding.

Feeding Your Little Waste Managers!

Do Feed Worms:

- Vegetable scraps
- Fruit scraps and peels (mold/rot is fine)
- Bread and grains
- Teabags
- Non-greasy leftovers
- Coffee grounds (and filters)
- Crushed egg shells
- Napkins, paper towels

Don't Feed

- Don't overfeed citrus—should be no more than 1/5 of worm food
- Meats, fish
- Greasy foods
- Dairy products
- Twigs and branches
- Dog/cat feces, cat litter

Feeding in a Pattern

The method goes like this. Imagine the surface of the worm bin divided into sections. It doesn't matter how many; let's say seven sections. Call them section one, section two, and so on. On day one, you'll bury food in section one at least 4-6" down, and cover it again with bedding. The next day, you feed in section two, and so on. With seven sections, you can also name the sections for the days of the week. If the bin only has four sections, no problem, just rotate feeding in those four areas. You may want to place some kind of a marker in the bedding to show where you last fed.

Neither Over- or Underfeed Your Worms

Your worms, and the worm bin ecosystem, will remain healthiest when you provide enough food for red worms to keep consuming, but not too much food. How do you tell? Here's a simple guide:

If food waste that was buried one week ago does not appeal to a moderate number of worms, you are probably overfeeding.

Harvesting your vermicompost

When to harvest

Generally, a worm bin will have produced a significant amount of good vermicompost at between two and three months along in the process. If you wait even longer, like 4-6 months, you'll have more finished looking vermicompost (it will look more like soil and have more plant-ready nutrients in it).

Harvesting methods

There are several common ways to separate worms from the vermicompost in your bin.

1. Dump and Sort

It's just like it sounds! Dump the entire contents of your worm bin down onto a table (you may want to protect the table with a sheet of plastic first.) Put a light bulb above the table (or use natural light.) Now remove any very fresh-looking bedding, and toss it back into the worm bin for the next go-round.

Then, make many small mounds of vermicompost. Watch and you'll see the worms move downward, away from light, and bury themselves in the bedding. After a few minutes, you can remove the outer layer of this mound, and put it in your vermicompost bucket. Again the worms will move downward. Just continue like this until you have many little piles of worms.

2. Worms Sort Themselves

A very simple method indeed. You move all the vermicompost in the bin over to one side, and add fresh bedding to, and begin feeding on, the opposite side. Then, just give the worms time to finish up all the nutrition on the first side (give them a couple of months) and wiggle on over to the fresher bedding and food. The advantage is that it's really easy; the disadvantage is how long it takes, and that for a period of time, you're only feeding one half of the bin.

3. Divide and Dump

This is simplicity itself! Just harvest two-thirds of the worm bin, leaving one-third for the next batch. Yes, you'll be harvesting worms with the vermicompost you remove, but that's ok. When you feed your plants, these worms brought along will, eventually, turn into extra nutrients. The worms left behind will repopulate the bin in a few months' time. Be aware that your worm bin will process less material while the population of worms is diminished.

Using Your Vermicompost

Your worms have taken your food waste and produced an excellent, all-natural fertilizer. Add vermicompost whenever you plant seeds or move starts outdoors. Simply mix a small amount of it into the planting hole. A quarter cup per small plant will give them a significant boost.

With older plants and houseplants, top dress with vermicompost twice a year. Scratch the surface of the soil to mix it in.