

Corte Madera Women's Improvement Club

WORM BOX WORKSHOP • April 24, 2012



Worms will turn your kitchen waste into worm castings or “vermicompost”, which is rich in nutrients and can benefit your soil by improving its structure and porosity. Worms are easy to keep, don't need daily walks, are very quiet, and are understanding about vacations.

This is not rocket science! Worms have simple needs:

- Darkness: keep the bin covered, this also keeps out hungry critters like rats, raccoons, mice & possums
- Reasonable temperatures: 55-75°F
- Food: kitchen waste, leaves, paper, anything compostable
- Dampness: the soil/bedding should be damp without being too wet. Drainage is important!

The bin we will be making is just a box to keep the worms happy and provide them with their simple needs. Eventually, you may want a “tower” (see reverse) but this will get you started.

MAKING THE BIN:

1. **Drill ¼ holes in the bottom of the bin.** The number of holes needn't be excessive (6 inches apart, evenly spaced), just enough to drain excess fluid and allow worms to escape when you want to harvest the castings.
2. **Drill holes along the top for ventilation.** Since these boxes are so well sealed, you'll need to provide the worms with fresh air. Maybe every 4 inches or so near the top. If you have a loose-fitting top, you might not need to do this.
3. **Shred paper for bedding.** You'll want enough to cover the bottom of the box to a depth of 3-4 inches.
4. **Mist the paper** so that it is thoroughly damp, but not soggy. If it's too wet, add some more!
5. **Add some dirt.** You will probably want to add more when you get home, but it gets heavy!
6. **Add some worms.** They will burrow down into the dirt and paper.
7. Mist again if it seems dry.

AT HOME:

1. Place the bin on something that raises it slightly from the ground (bricks, cups, boards, etc). This improves drainage, and helps to prevent worms from escaping, although they will anyway.
2. **Feed regularly**, whenever you accumulate enough in your compost bucket: Make a hole in the worm bin, dump in the compost, and cover up the compost with the removed dirt/bedding.
Covering the compost is important, because if you don't cover it, it will attract flies.
NOTE: for faster digestion, chop woody compost like broccoli stems into smaller pieces, or freeze (helps to break down the cells). This is not necessary, however, as worms do seem to prefer some larger pieces, like eggshells and avocado skins.
3. **Mark the spot** with fresh bedding, leaves, or something that tells you where your last burying spot was, so you don't dig into it the next week by mistake!
4. **Rotate the feeding holes** and the worms will migrate to where the food is.
5. If the substrate seems dry, add a little water.

FEEDING:

You're supposed to avoid (however, I've added most of these with seemingly no ill effects):

- Citrus
- Meat
- Dairy products
- Garlic & onions
- Spicy foods



HARVESTING CASTINGS:

Eventually you'll want to harvest your castings. The elegant way to do this is to make a second box, just like the first. Place the new box — complete with bedding, dirt and new kitchen waste — **DIRECTLY on top** of the dirt in the old box. The surfaces must be touching (worms can't navigate through air)! The worms will migrate upwards toward the food, leaving mostly worm-free vermicompost in the lower bin, a process that takes 2-8 weeks. *(Some sources advise the reverse: putting the new box on the bottom, and letting the worms migrate downwards. I'm not sure that it makes that much difference!)*

Personally, I have a worm-release program, where I just scoop out worms and soil and put them in the garden!

WORM FACTS:

- There are roughly 500 worms in one pound. If you start out with less than one pound, don't worry they multiply very quickly. Just adjust the amount that you feed them for your worm population.
- The population of worms will double every 2 to 3 months.
- There are 2-20 baby worms in a cocoon.
- An earthworm can consume about ½ of its weight each day.
- Worms are supposed to live 3-4 years.
- There is a professional food called "Purina Worm Chow."

RESOURCES:

Scholarly: <http://www.rodaleinstitute.org/20040801/Grube>

Pretty complete: <http://www.wikihow.com/Make-Your-Own-Worm-Compost-System>

Lots of worm facts: <http://vermicomposting.com/>

Vermiculture forum: <http://forums.gardenweb.com/forums/verm/>

Order more worms: <http://www.orderworms.com/main.sc>