My Favorite Worm Bin

Teresa Matteson

Materials:

- 1 sheet plywood—cut in half to make top and bottom
- 16 ft of 2" x 12" lumber for 4'x4' frame
- Brackets for four corners or 2"x2" lumber to make corner reinforcements

Other supplies:

- Bedding: High carbon materials, such as shredded newsprint (not the shiny section), shredded cardboard, leaves, livestock manure with bedding
- Hose with nozzle, water faucet
- 32 gallon garbage can or similar container for soaking paper
- Red worms
- Food waste

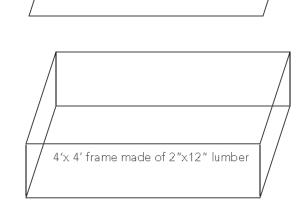
YES: fruit, vegetables, tea, coffee grounds with filters, paper towels or napkins without soap, oil or chemicals

NO: meat, dairy, oils. Some guidelines say no wheat products.

Directions:

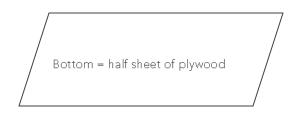
Set the bottom on the ground. Set the frame on the bottom. Fill frame full to the top with soaked bedding. Bury and cover the food waste in bedding. Add worms. Cover with top half of plywood.

Adding more food waste: Dig into the bedding. Add the food waste. Cover with bedding. Always put additional food in a new spot so the worms will move throughout the bedding.



Top = half sheet of plywood

Reinforce corners of frame with brackets or 2" \times 2" boards



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Worm Bin FAQs



Picture from <u>www.metro-</u> region.org/article.cfm?articleid=554





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Worm Box: Food Waste Recycling System

The Box: A worm box should sit on the ground so water can drain out. The container should be shallow, 8"-12" for two reasons: 1) redworms tend to live close to the surface, 2) deep bedding can pack down and smell bad.

Worms like darkness so keep the lid on when not feeding. The best location for a worm box is out of the direct sun but not where it will freeze. Worms like temperatures between 32 and 85 F.

Bedding: Worms need a place to live while they recycle food waste. The bedding can be made from



newspaper, shredded paper (including paper towels), shredded cardboard, peat and leaves. Do not use shiny paper.

Soak the bedding materials with water so the paper is wetter than a wrung out sponge. Place the drained materials into the worm box 3/4 to all the way full.

The Worms: Layer the worms in with the paper. These special worms like to eat food waste. They have many different names including: red worms, manure worms, red wigglers and fishing worms.

You need 2 lb of worms for each pound of garbage for each day. Your container size should provide one square foot for each pound of garbage per week.

If you have fifteen pounds of garbage per week, that would be an average of three pounds of garbage per day for five days. For this amount of garbage, use six pounds of worms initially in a container with about 15 sq ft of surface area.

Worm Facts



 A worm grows old enough to make eggs in 6-12 weeks.

 The thick, light-colored part of the worm is where the egg capsule is made.
A healthy worm can

make an egg every 7-10 days.

- 4. A worm egg hatches in about 3-4 weeks.
- 5. If you start with 8 worms, in 6 months you will have 1500 worms.
- 6. If you cut a worm in half, one end will die.
- 7. Each worm produces its body weight in castings every 24 hours.
- 8. Worms can live 4-5 years.

Food: Worms can compost all kitchen wastes except meat and dairy. Bury the waste in different spots each day. Dig a hole in the bedding, place the food in and cover it with bedding. This will keep fruit flies down. Placing several layers of wet newspaper over the top of the bedding will help keep it moist and control flies.

Other Critters: Many other bugs will live in the worm bin like bacteria, fungi, actinomycetes, nematodes, protozoa, mites, beetles, pseudoscorpions, springtails, centipedes...They all do different jobs in food waste recycling.

Harvesting: After 3-4 months the worm box will be filled with worm castings. This is no longer a good home for the worms. It is time to harvest the castings. Below are three harvesting methods:

- Method 1: Dump and Sort- Dump the castings onto a plastic sheet. By hand, pick out the worms and put them into the worm bucket. Put the worm castings into the compost bucket. Place the new bedding into the box. Add the worms. Start feeding like before.
- Method II: Worm Sort—move all the castings to one side of the box. Fill the other side of the box with new bedding. Add food waste only to the new bedding. In 2-3 months the worms will finish eating in the old material and will move to the new bedding where the food is. Shovel out the castings, add more new bedding and feed like before.
- Method III: Divide and Dump—remove 2/3 of the castings from the box. Mix the remaining 1/3 with new bedding and begin to feed like before.

Use of Worm Castings: Mix into the soil of garden beds, use as a side dressing by placing

the castings around plants or use to make potting soil by mixing equal parts castings, peat, perlite and garden soil.



Read More: Check out these great books: "Worms Eat My Garbage" and "Worms Eat Our Garbage," both by Mary Appelhof.