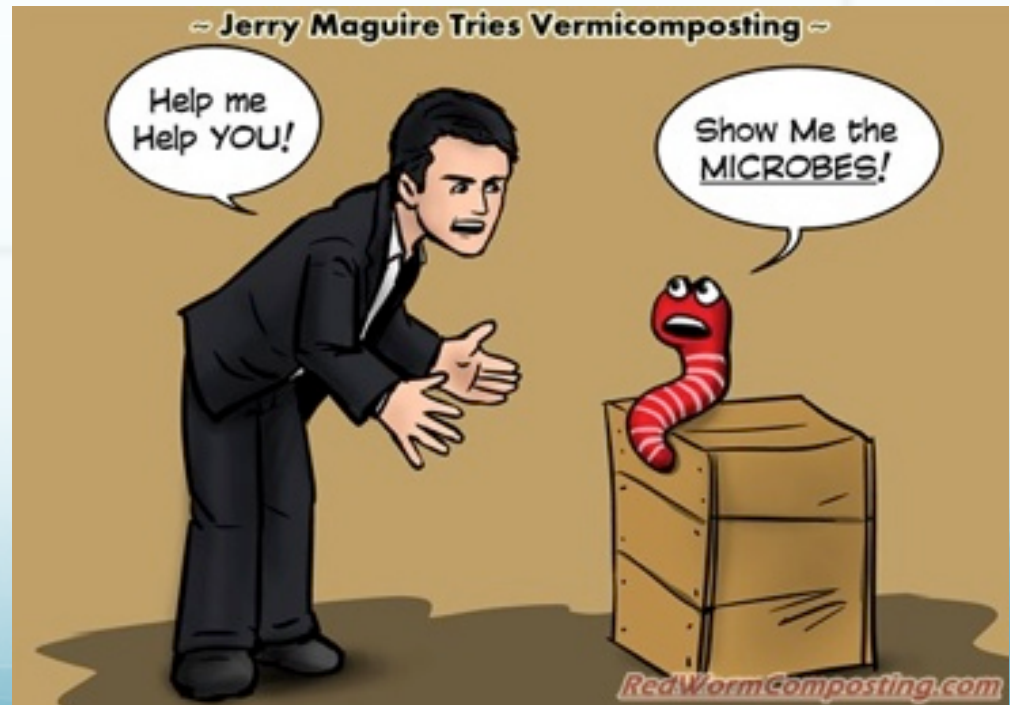


SSN presents:

Easy Worm Composting at Home



UC San Diego
STAFF SUSTAINABILITY
NETWORK

What is vermicomposting?

Utilizing worms and microorganisms to convert organic waste into a nutrient rich humus like material known as vermicompost (worm castings)



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Why do it?

- Produce your own compost, save \$\$
- Divert waste from landfill
- Cool diy project for all (especially kids)
- Easier, faster, and takes less space than regular composting



What do you need to get started?

- Bin
- Bedding
- Location
- Worms
- Food



Bin

- Shelter, darkness and air
- Making v buying?- Consider \$, convenience, harvesting



Sasha's bin



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Bedding

- Provides habitat and food
- Fill up bin 1/3 to 3/4 full, fluff it up
- shredded newspaper and cardboard, toilet paper rolls, tissue boxes, shredded fall leaves, chopped up straw and other dead plants, seaweed, sawdust, compost
- A few handfuls of something gritty like soil, fine sand, or ground egg shells.
- Moisten like a wrung out sponge



Location

- Inside or outside
- Can live in 40 to 80°F, generally prefer 55 to 77 degree range
- Avoid direct sun, heavy rain, loud noises or vibration



Worms

- Type- Red Wiggler
- Where to get them?
- How many to get?



- 1 lb/day of food waste= 2lb or 2,000 worms



Food

- YES- produce scraps, tea bags, coffee grounds & filters, paper towels, dead plant matter, halloween pumpkins, eggshells, (pasta, grains, citrus, onions, garlic, pineapple)
- NO- meats, bones, oils, dairy, salty foods, grass clippings, human/ pet waste
- Frequency?
- Technique?



Harvesting your compost!

- When to do it?
- How to do it?
- What to do with it?





Worm Your Way Into Composting

Don't think you have room for composting? (small yard, apartment or condo dweller?) How about a worm bin? Now, don't make that face. Worm bins are easy, don't smell, are a great way to recycle food, are lots of fun (kids love them) and you end up with a great soil amendment/fertilizer for your plants (including houseplants). You can buy a commercial worm bin but it's cheap and easy to make your own.

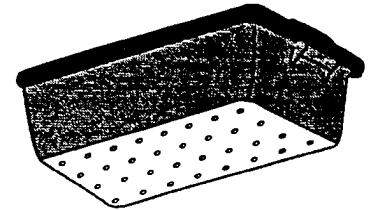
Plans for a "Self Harvesting" Worm Bin

Materials Needed:

- Two 8-10 gallon plastic storage boxes (you know those Rubbermaid, Sterilite things, Cost: about \$6 each)
- Drill (with $\frac{1}{4}$ " bit) for making drainage holes.
- Newspaper
- One handful of garden soil (not compost or potting soil)
- About one pound of redworms

Step 1

Drill about twenty evenly spaced $\frac{1}{4}$ inch holes in the bottom of each bin. These holes will provide drainage and allow the worms to crawl into the second bin when you are ready to harvest the castings.



Step 2

Prepare bedding for the worms by shredding newspaper into 1-inch strips. Worms need bedding that is moist but not soggy. Moisten the newspaper by soaking it in water and then squeezing out the excess water. Cover the bottom of the bin with 4-6 inches of moist newspaper. Sprinkle garden soil on the bedding. The soil helps the worms digest their food.

Step 3

Add your worms to the bedding. Redworms will eat half their weight in food a day. One pound of redworms will process 3-4 pounds of food scraps per week. 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. You also want to add a handful of soil to the bin to provide the worms with grit to help them digest their food.

Step 4

Place your bin in a well-ventilated area such as a laundry room, garage, balcony, under the kitchen sink, or outside in the shade. Place the bin on top of two wooden blocks or bricks to allow for drainage. You can use the lid of the second bin as a tray to catch any moisture that may drain from the bin. This "worm tea" is a great liquid fertilizer.

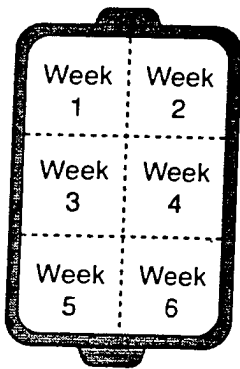
What should go into your worm bin?

Yes!

Bread, Cereal,
Coffee grounds & filter
Fruits, Grains, Pasta,
Tea bags, Vegetables

No!

Dairy Products,
Fats, Meat, Oils,
Twigs & Sticks, Feces



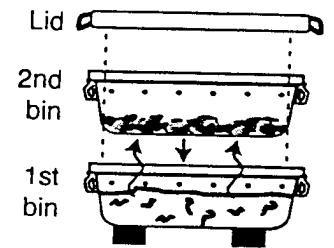
Step 5

Feed your worms slowly at first. As the worms multiply, you can begin to add more food. Bury the food in a different section of the bin each week. The worms will follow the food scraps around the bin. Burying the food scraps will keep fruit flies away.

What do worms like to eat? Your worms will be happier on a vegetarian diet. Most things that would normally go down the garbage disposal can go into your worm bin (see the list below). You will notice that some foods will be eaten faster than others. Worms have their preferences just like us. They seem to love watermelon and coffee grounds. Worms need calcium to reproduce so add eggshells every once in a while or, if you don't eat eggs, grind up a Tums and throw it into the bin.

Step 6

Harvest the finished compost when the first bin is full and there are no recognizable food scraps. Place new bedding material in the second bin and place the bin directly on the compost surface of the first bin. Bury your food scraps to the bedding of the second bin. In one to two months, most of the worms will have moved to the second bin in search of food. Now the first bin will contain (virtually) worm free vermicompost.



The worms will crawl up through the holes into the new bedding

Troubleshooting

| Problem | Probable Cause | Solution |
|---------------------------------|--|--|
| Worms dying or trying to escape | Too wet Too dry Bedding is used up | Add more bedding Moisten bedding Harvest your bin |
| Bin smells bad | Not enough air Too much food Too wet | Leave lid off or drill more ventilation holes Do not feed for 1-2 weeks Add more bedding |
| Fruit Flies | Exposed food | Bury food in bedding |

For more information about vermicomposting, check out ...

Worms Eat My Garbage, by Mary Applehoff

For more information about composting and gardening in Southern California, visit

www.Digitalseed.com



Funding for the distribution of this flyer provided the City of San Diego.

Worm bin design courtesy of Digitalseed, Copyright © 1997-2000 by Digitalseed

Worm Composting Resources

Provided by Sasha Doppelt on behalf of [The Staff Sustainability Network](#)



[City Farmer in Vancouver](#)

Step by step how-to photos and videos for the more visually inclined.

[How to build your own worm bin](#)

This is an example of the bin I told you about where the worms would crawl up into the 2nd bin to allow you to harvest your compost. You can read about another similar example in the "Worm Composting Flier."

[Worm food preferences](#)

Greater detail on what worms like to eat with a few explanations

[Troubleshooting common vermicomposting mistakes](#)

Maximize your worm happiness and productivity with these troubleshooting tips

[Worms eat my garbage](#)

You can probably get all the information you need to get started from these handouts and the internet, but in case you're a bookworm (no pun intended ;), this is an often-cited, affordable book on the subject.

Enjoy!