

INTRO TO WORM FARMING

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WHY VERMICULTURE?

The goal is Zero Waste - the City of SD's Climate Action Plan includes a ["Zero Waste" goal](#) to reduce landfill contributions by 75%; we cannot sustain our current levels due to negative effects on air and water quality, let alone a lack of land.

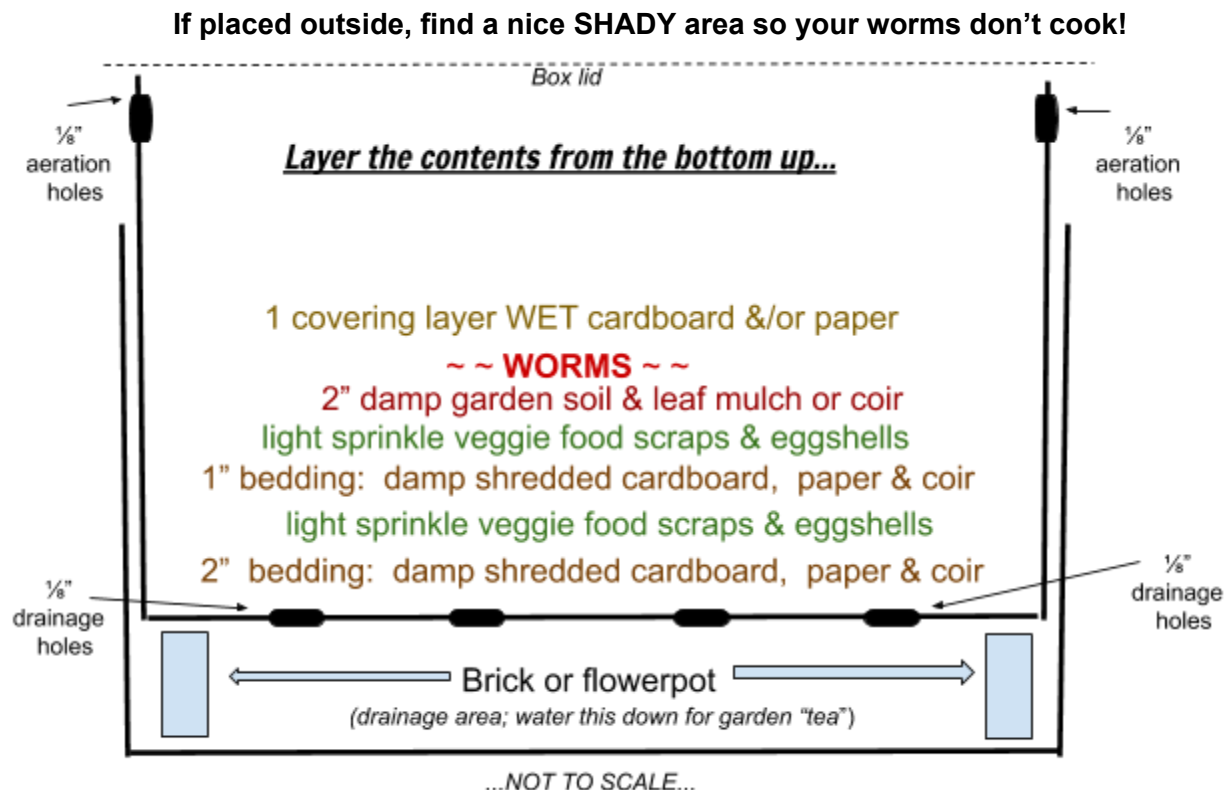
Free healthy compost - worm castings are rich in water-soluble plant nutrients, and contain more than 50% more humus than what is normally found in topsoil. Worm castings will not burn plants. They are packed with minerals essential for plant growth: concentrated nitrates, phosphorus, magnesium, potassium and calcium.

Easy! - the worms do all the work for you. No need to turn or move it like a traditional compost pile.

Inexpensive - you can purchase plastic multi-layer worm farms or find DIY instructions to build your own. However, you can even take an old drawer or any shallow wooden box, drill holes in the bottom for drainage & place it in a shady corner.

HOW DO I GROW WORMS?

There are several methods; using two 10-gallon plastic bins is an easy way to start a worm farm. This method can even be done indoors, since it is a closed environment.



WHERE DO I GET RED WIGGLER WORMS? Closest to Southeastern San Diego is City Farmers nursery, but see the link under “Resources” for several composting suppliers.

WHAT & HOW DO I FEED THEM? Almost all plant, vegetable or fruit scraps. **DO NOT FEED THEM CITRUS, MEAT OR DAIRY.** Also avoid really spicy peppers or seeds. Cut up scraps as small as reasonably possible; unless the worms will be left alone for a few days. Don't put in live weeds, but shredded dead plant leaves are are wonderful! Mix it up, they love variety in their diets. Don't forget the pulverized egg shells for grit; this can be sprinkled at any layer to keep the box at a neutral pH.

To feed, dig a small hole & bury the food. Move the food “hole” around to a new spot each day. As long as the scraps are buried, you should never have a problem with odors or other critters.

HOW MUCH DO I FEED THEM? Start out light, it may take a couple of weeks to acclimate to their new home. Once established, estimate 1 pound of food scraps for 2 pounds of worms. There are about 1000 critters in a pound of worms, and they will reproduce quickly if you feed them well. After the first week or two, feed them every 1-2 days; if you see they're not eating it all, back off a day. If you're going away for a few days, put in bigger pieces of food, they can survive for a couple of weeks (but be kind, don't starve your worms!)

TROUBLESHOOTING: * Keep the box damp, but not sopping; your food usually provides enough moisture.. Check the bottom bin for liquid “worm tea” once a week. This can be watered down for your plants! * If you see a lot of small white worms, don't panic - the box has become acidic from starchy foods those little “pot worms” love, but they're not a danger to the red wigglers. Don't add potatoes or other starchy foods for awhile, and sprinkle egg shells to cut down on the acidity. * As long as you're burying the food, you should never have a problem with varmints. If there is worm tea in the bottom bin & you see flies around it, snug a wet towel between the bins as a barrier.

HOW TO USE YOUR WORM COMPOST: as you add more food to the top, the worms migrate up. Their castings - or the compost you're after - settles to the bottom of the bin. After a month or so of regular feeding, you can move your worms to the side and scoop the black gold from the bottom! Mix it with garden soil, or top dress around your plants so the nutrients wash down when watered.

If the bin gets full (about $\frac{2}{3}$) and you're not ready to use the castings yet, you can start a new bin! Find the same sized bin, and put lots of $\frac{1}{4}$ " holes in its bottom. Prepare it just as you did the “inside” bin above, but this time, the worms will come up from the bottom bin, instead of coming down from the top. They'll come up into the bedding & food, and now you've got an expandable worm farm!

ADDITIONAL RESOURCES:

City of San Diego Climate Action Plan: (<https://www.sandiego.gov/sustainability/climate-action-plan>)

City of San Diego Zero Waste Initiative: ((<https://www.sandiego.gov/sustainability/zero-waste>)

DIY Plans for a “Flow Through” wooden worm bin: (<https://www.ana-white.com/woodworking-projects/worm-compost-bin>)

(or google “*wooden worm farm plans*” for several free options)

Compost supplies (including worms):

https://www.sandiego.gov/sites/default/files/legacy/environmental-services/recycling/pdf/061003_compostsupplies.pdf

Working Worms (good diagrams): <http://working-worms.com/how-to-make-your-own-worm-farm/>

The Library also has several books on worms and composting. Check them out!