

NATURE ACTIVITIES

WORM COMPOSTING BIN

Learn how to make a simple DIY worm composting bin that you can keep in your house or in your backyard! This is a convenient way of keeping food scraps out of a landfill and you can use the compost in your garden or planters after the worms have done their magic! Learn vermaculture

PART ONE - PREPARE THE BIN

Gather your materials and find a space to start preparing the worm bin!

Resources/materials needed: Lidded Rectangular bin at least 7"-8" deep, scratch awl or screwdriver, newspapers, bowl of water, soil, red wigglers, kitchen scraps-vegetable peels

Skills: Cognitive, Motor Skills, Hand-Eye Coordination, Technical Skills

DIRECTIONS:

Step 1: Get your bin ready. Make sure it is at least 7" deep in a rectangular shape and clean. You should have a fitting lid as well.

Step 2: About 1" from the lip of the top of the container, start poking holes with a scratch awl or screwdriver in a line the whole way around the top of the container. Keep them spread out about an inch apart from one another as well. These will be ventilation holes for the worms.

Step 3: Rip your newspaper into narrow strips an inch or less wide. Dip the newspaper in water and wipe it down so it resembles a wet sponge. Keep ripping enough to fill the tub at least 3/4 full. Fluff the newspaper as you place it in the container. Note this level of moisture and you should continuously spray the bin to maintain this moisture level. The newspaper is the bedding for the worms and provides carbon for the worm bin.

Step 4: Add 2 or 3 handfuls of moist soil to the tub. The soil helps the worms digest food and more places to move about and hide.



Photo Credit: DIY Network



Photo Credit: DIY Network



Photo Credit: Queen Bee Coupons

Step 5: Get your worms ready. Red Wigglers are preferred since they do well in an enclosed environment in comparison to night crawlers. You can purchase worms at a bait shop or online. The preferred ratio of worms to square footage is at most 1 lb of worms per square foot. If you are just starting out with your first worm bin, it is a good idea to keep it to 1/2 lb of worms per square foot. After you start out at this, you can step it up to 1 lb of red wigglers per square foot.

Add worms and close the lid and leave them undisturbed for 2 full days so they can adjust to their new environment.

Step 6: After the 2 days are up you can start feeding them! A good rule of thumb is to avoid salty or acidic foods, onions, citrus, oils, spicy or foods with preservatives. No meat, dairy products should be added to the bin because it would attract flies and develop a strong odor.

Include fruit and vegetable scraps, egg shells, bread products, dead plant matter, tea bags (remove staple), coffee grounds and filters. These are referred to as greens and provide nitrogen.

You can also include paper egg cartons, cardboard, dry leaves, paper, newspaper and junk mail (make sure the paper is not glossy, only matte). These are referred to as browns due to their Carbon and high carbohydrate content.

Browns and greens are nicknames for different types of organic matter that have different Carbon to Nitrogen ratios.

Step 6: After several weeks worms will start producing castings. Once this happens you can take it out and put it in your garden or potted plants! This will continue to feed and provide nutrients to plants! Continue to feed your worms and moisten the environment every few days or when you have compostable items to add to the mix. Mix up the items and put fresh food scraps on the bottom bringing in new oxygen levels as well. Make sure to tear up large chunks of material.

Reflection: Talk about your experience. How are your worms doing? What did you like most about the process? Do your plants seem to be growing well with the worm castings?

Resources:

<https://naturesfootprint.com/community/articles/what-to-feed-worms/>
<https://urbanwormcompany.com/how-many-worms-need-compost-bin/>
<https://www.diynetwork.com/how-to/outdoors/gardening/compost-barrels>

<https://www.epa.gov/recycle/how-create-and-maintain-indoor-worm-composting-bin>
<https://thriveyard.com/where-to-keep-worm-bin/>
<https://www.buckeyeorganics.net/blogs/news/how-many-worms-to-start-a-bin>



Photo Credit: Atlas and Boots



Photo Credit: Nature's Foot Print



Photo Credit: Nature's Foot Print



Photo Credit: Urban Worm Company