



Vermicomposting!

HOW TO MAKE IT

1. Using the 1/4-inch bit, drill about 2 dozen drainage holes in the bottom of the bin. Then, switch to the 1/16-inch bit and drill a row of ventilation holes in the sides of the bin, spacing them about 1 1/2 inches apart and an inch or two from the top. Drill several dozen ventilation holes in one of the lids, as well.



2.

3. Shred the newspaper into inch-wide strips. Soak the strips in water, and then squeeze them so that the paper is damp but not dripping. Add the paper to the bin, along with the leaves (if you have them) and the compost, mixing and fluffing them up until the bin is about three-quarters full. The newspaper and leaves will act as bedding for your worms, and the soil will supply grit to help them digest their food.
4. Add the worms to the bin. Dampen the cardboard and set it gently on top of the worms and the bedding. Cover the bin with the drilled lid (worms don't like light).
5. Place your bin indoors in a spot that is sheltered from direct sun and in a well-ventilated area. Set the undrilled bin lid, upside down, on the bricks or stones to serve as a catch tray (the runoff, or "worm tea," makes great fertilizer for house and outdoor plants), and then set the bin on it.

6. Start feeding the worms your table scraps. It takes about two weeks for the food to break down into a form that worms can digest. Serve them vegetarian kitchen castoffs, including fruits and vegetables (with the exception of citrus, which can make the bin too acidic, and onions, which worms dislike); bread, cereal, pasta, and grains; and coffee grounds, coffee filters, loose tea, and tea bags.
 - a. Don't feed them meats, fats, oil, or dairy products. Bury the food in the bedding (where it is less likely to attract fruit flies), choosing a new spot each time. The first few weeks, give the worms about 1/4 pound (or roughly a cup) of castoffs a day, then increase the amount gradually to match how much the worms seem to be eating daily.
7. Periodically empty any liquid (the worm tea) that drains into the tray. Monitor the worm bin daily at first and then at least several times a week to make sure that everything is in order. It shouldn't have a strong smell; if it does, there may be too much food or moisture, or too little air. Try drilling additional holes for ventilation, cutting back on food for a week or two, or adding more bedding. If you see a large number of dead worms, the bin may be too dry or too wet, or there may not be enough bedding.
8. In 8 to 12 weeks, you'll notice that your bin is filling up with material that looks like dark, crumbly soil. This is worm manure, otherwise known as vermicompost, and it's surprisingly clean smelling. It's also a terrific garden fertilizer. Just scoop it out of your bin, worms included, and sprinkle up to an inch-deep layer at the base of your plants.
9. To harvest worm-free compost for indoor plants, wait until almost all the bedding in the bin is gone (about 12 to 16 weeks) and stop feeding the worms for a week. Don't worry; they've got plenty of stored-up energy. Remove any large scraps of food, and push everything that's left to one side of the bin. Then, add fresh bedding and food to the other side of the bin. In a couple of weeks, most of the worms will have migrated to the side containing the food, leaving behind a nice pile of compost to mix in with your potting soil. A good ratio is one part compost to four parts soil.

Worms are also excellent at reproducing. You'll find evidence of this right in the bin. After 40 days or so, you should have two to three times as many worms as you started with, and the population should keep on growing. In time, you may want to divide the population between two bins. Worms can live for up to two years. In healthy bins, you probably won't spot many dead worms because their bodies are 75 to 90 percent water and they tend to disappear quickly. You might, though, notice some eggs: yellowish pellets about the size of a match head that each contains four or so tiny worms.



Tips:

1. Try to keep a ratio of 70% brown matter (paper, wood, dried and dead plants) to 30% green matter (food scraps, young plants and wet leaves).
2. Chop your food scraps into 1- to 2-inch pieces and shred paper and cloth before adding it to the bin. This will help the worms eat through it faster.
3. To reduce the chances of fruit flies (eggs are often laid in items like banana peels) freeze scraps for 24 hours before adding them to your bin. I keep 1 or 2 freezer bags going and dump the contents into my bin about once a week.
4. Give them air! Every other week or so, move the compost around to aerate it.
5. Don't overwhelm your worms. If you notice smells beginning to form you might be feeding them too much! Reduce the amount you feed them and add a little paper to absorb smells until they can catch up.

Items you CAN compost with your worms:

- food scraps (including things like melon rinds, roots, stems, leaves, cores, husks, seeds, skins, peels, etc)
- egg shells (not the egg protein), seaweed and rinsed seashells (like oyster shells; not shrimp peels)
- old natural fiber clothing (old t-shirts, socks, boxers, etc)
- natural yarn, twine and string
- non-glossy paper products (cardboard boxes, newspapers, magazine inserts, most junk mail, envelopes, etc)
- tea leaves and bags, coffee grinds and filters
- dead plants, grass clippings, pine needles and leaves
- natural non-treated wood and byproducts like wood ash, sawdust and shavings (no coal ash)
- feathers and hair (human, cat, dog, etc.) - dryer lint
- produce that is wilted or browned and slightly rotten (not to the point of moldy)

Items you CANNOT compost with your worms:

- meat, fats, grease, bones or oils (no butter, lard, stocks, soups, etc)
- plastics and plastic coated paper (like glossy magazines)
- stickers, including veggie stickers (remove stamps from envelopes)
- bread or yeast products (no crackers or cakes)
- salt, pepper, and other spices (or only in VERY limited amounts)
- milk, dairy, or dairy products
- cat or dog droppings
- lemon, lime, orange or other citrus peels and juice (in excess this will make the soil too acidic)
- onions and garlic (a good rule of thumb is if it makes you smell, it makes your worm bin smell)
- diseased or infested plants
- treated wood products