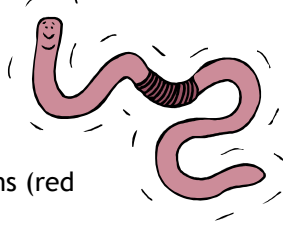


Building a Worm Bin

Composting is nature's way of recycling. Using worms to compost is a fun and easy way to turn your kitchen scraps into a wonderful natural fertilizer. Here's a simple and inexpensive way to make your own worm bin at home:

What you will need

- ✓ Two 8-10 gallon plastic storage bins, such as Rubbermaid (dark colored, not the clear-type)
- ✓ Drill with 1/4-inch and 1/16-inch drill bits
- ✓ Newspaper
- ✓ Cardboard
- ✓ About one pound of redworms (red wigglers)



Building your worm bin

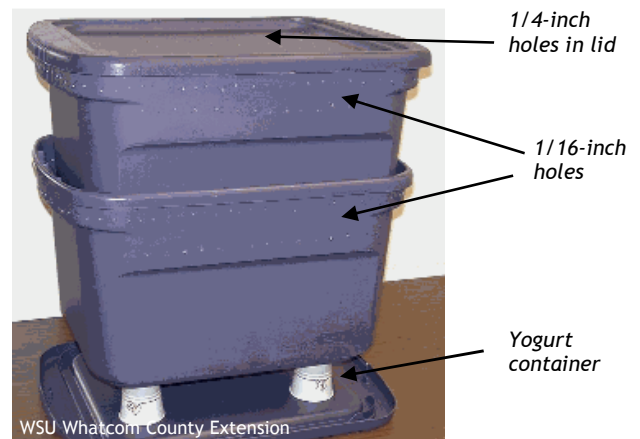
1. Turn the two storage bins upside down and drill about twenty evenly-spaced 1/4-inch holes in the bottom of each bin. These holes will provide **drainage** to keep your compost from becoming too wet. Worms need some moisture to survive, but too much can be harmful and can cause your bin to become moldy and smelly.
2. To provide **ventilation**, drill 1/16-inch holes, approximately one inch apart, around the top edge (just under the rim) of each of the bins. Drill a second row of holes about two inches below the first row along the long sides of each bin. Also drill about thirty 1/16-inch holes in the top of one of the lids.
3. Tear some newspaper into strips about one inch wide. Soak the newspaper strips in a bucket of water and then squeeze them out. They should be moist, but not soggy. Place about 4 inches of the shredded newspaper into the bottom of one of the bins. Be sure not to pack it in too tight - air must be able to circulate. This **bedding** provides your worms a nice place to hide and also gives you a place to bury their food. At this point you can also throw in a small handful of dirt for the worms to use as "grit," which helps them digest their food.
4. Add **worms** to the bin! You can gather some yourself by putting a piece of wet cardboard on your lawn or garden at night. Worms love

cardboard and will come up to feed on it. In the morning, turn the cardboard over and carefully gather up the worms. You can also purchase worms - contact the WSU Whatcom County Extension office at (360) 676-6736 to get a list of suppliers near you.

5. Cut a piece of cardboard to fit snugly inside the bin. Get the cardboard wet and then place it in the bin on top of the bedding and worms. The cardboard will help keep it **moist and dark** inside the bin. The worms will break down the cardboard over time, so be sure to replace it every couple of months.
6. Place your worm bin in a **well-ventilated area** such as a basement, garage, or kitchen. If you put it outside, be sure to bring it indoors in the winter so that the worms don't get too cold. Use some bricks, wooden blocks, or small plastic containers (like yogurt containers) to lift the bin up off the ground. Cover the bin with one of the lids and use the second lid as a drainage tray to catch any liquid that may drip out. The liquid, or "compost tea," that drains out makes a wonderful fertilizer for plants. Set aside the second bin for now - you will use it later.

Putting it all together

Your completed worm bin will look something like this:



Feeding your worms

About once a week, lift up the cardboard and bury your **food** scraps in the bedding - bury it in a different spot each time - the worms will follow the food around the bin. Burying the food helps keep away pesky fruit flies. Don't feed the worms too much at first. As the worms multiply, you will be able to give them more food.

What's on the menu?:

Yes, please	No way!
✓ Fruit & vegetable scraps	✓ Meat & fish
✓ Egg shells	✓ Dairy products (yogurt, butter, etc.)
✓ Coffee grounds & filters	✓ Fat & cooking oil
✓ Tea leaves & bags	✓ Pet waste
✓ Small amounts of bread (no butter or mayonnaise)	✓ Greasy or oily foods (french fries, doughnuts, etc.)

Using your compost

You're ready to collect the finished compost when the first bin is full and no recognizable food scraps remain. Make new bedding and put it in the second bin. Place the second bin inside the first bin, directly on top of the compost. Now begin to bury your food scraps in the bedding of the second bin (the one on top). In one or two months, most of the worms will have moved up to the second bin in search of food, and you can harvest the finished compost from the first bin.



Sprinkle the compost around your houseplants and garden, and watch them grow!

Maintaining your worm bin

Keeping a worm bin is simple and rewarding, but sometimes things go wrong. If your bin seems unusually smelly or the worms look unhealthy, you may need to make some adjustments. Over time you will learn just what your worms need to stay healthy and happy.

Some common problems & solutions:

Problem	Cause	Solution
Yuck, my bin is smelly!	Not enough air circulation, too much food, too wet	Drill more ventilation holes, don't feed as much, add more bedding
Help, my worms are dying!	The bin may be too wet, too dry, or all of the bedding may be used up	Add more bedding, moisten the bedding, harvest the compost
My bin is buzzing with fruit flies!	Too much food or food not buried properly	Feed less food and be sure to bury the food in the bedding. If there's not enough bedding to cover the food, add some more.

Learn more

Washington State University, Whatcom County Extension web site

<http://whatcom.wsu.edu/ag/compost>

The Adventures of Herman

A website all about worms

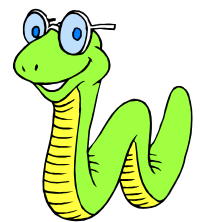
<http://www.urbanext.uiuc.edu/worms/index.html>

Worm Digest

Lots of information about earthworms
www.wormdigest.org

Worms Eat My Garbage

By Mary Appelhof, Flower Press, 1997



** Adapted from WSU Whatcom County Extension web site:
<http://whatcom.wsu.edu/ag/compost/easywormbin.htm>