

# RETHINK WASTE: Worm Bin Composting

Composting at home is good for your garden and good for the earth. Approximately 35% of all household garbage in the US is organic waste that can be composted in your backyard. By composting your food scraps you can prevent waste and greenhouse gas emissions, have healthier plants, conserve water and use fewer chemicals in your yard and garden.



## Why Compost with Worms?

Worms are natural composting machines. Worm composting, also known as vermicomposting, uses “red wiggler” worms to turn leftover food into a dark, rich soil amendment. Composting with worms doesn’t take up much space and can be done inside or outside.

Worm compost is an excellent soil amendment. It can be used directly in the garden, either dug into the soil or used as mulch. The compost can also be mixed with potting soil and used for houseplants and container gardening. If screened down to fine particles, it can be added to potting mixes for seedlings or finely sprinkled on a lawn as a conditioner.

## Worm Bin Ecology

A worm bin contains more than just worms! They work most efficiently when there is a diverse web of organisms working together to decompose the organic material. In addition to worms, you may discover other creatures such as potato bugs, mites, millipedes, tiny white worms, and springtails.

## Containers and Bedding

Your worms can live in a homemade wooden bin, a store bought plastic bin, or a special stackable bin. If you use a plastic bin, be sure to wash it and let it air dry before starting.

Buy or make a loose fitting lid for your bin. For aeration and drainage, drill 8 to 10 holes in the bottom of the bin. Place a plastic tray or sheeting under the bin to collect any excess moisture.

The size of the bin depends on how much food you think you will put in it each week. For every pound of food scraps generated per week, you should have a square foot of area in the bin. A typical family of four would suffice with a 3 foot by 4 foot bin. The bin should be shallow - no deeper than 18 inches.

Bedding provides material in which the worms can burrow and provides cover for burying the food scraps. Bedding really can be any kind of moistened organic material such as shredded paper (no glossy paper), straw, decayed leaves, or peat moss.

Learn more options for reducing waste in Deschutes County at:

[RETHINKWASTEPROJECT.ORG](http://RETHINKWASTEPROJECT.ORG)

## Location

Worms prefer a dark, cool, damp environment. Ideally, your worm bin should be in a moderate temperature environment (between 50 and 75 degrees). A basement, garage, or utility room are all good places for a worm bin. A larger bin may withstand cold outside temperatures, but it is best to insulate the outside of the bin with foam blocks or other insulating materials in the cold winter months.

## Helpful Hints

To discourage fruit flies, bury the food scraps under some dry bedding. You may also try putting a layer of plastic on top of the bedding. Bad odor can be the result of several things:

- Make sure you are putting the right type of foods in the bin.
- Check the air holes to make sure they are clear for proper aeration. Fluff up the materials to aerate the bin.
- You may be overfeeding the worms. Stop feeding for a few days and see if the odor stops.

## Worms

It is important to get the right type of worms for composting. Only “red wigglers” or “red worms” should be used for composting. Nightcrawlers or other worms dug up from the garden will typically not work.

## Easy Bedding Recipe:

1 part shredded paper  
1 part peat moss  
Water

Combine peat moss and paper and soak until very moist. The peat moss will retain a lot of water.



**DO** feed your worms:

Any fruit or vegetables  
Eggshells  
Tea bags  
Coffee grounds  
Paper coffee filters  
Shredded paper

**DO NOT** feed your worms:

Meat, poultry or fish  
Bones  
Dairy products  
Greasy or oily foods  
Fat  
Pet or human manure

feeding

## Harvesting Your Compost

As time progresses, you will notice less bedding and more dark, crumbly soil in your bin. This is the time to harvest, when there is mostly compost, and very little bedding or food. There are two good methods for harvesting your compost.

### Migration Method

Slow down on feeding your worms for a week. Push all of the contents of the bin to one side of the bin, and add fresh, damp bedding to the other side. When you resume feeding, place food only on the “new” side.

Within the next few weeks, the worms will sense the food and migrate, leaving the finished compost on the other side. You can then remove the compost, and fill the empty space with bedding.

### Dump, Divide and Sort Method

Dump the contents of your bin on a tarp under a bright light or sunlight. Mound the material into small coneshaped piles and wait 20-30 minutes. The worms will move down into the material, away from the light. Take the fresh compost off the top of the piles, and continue down, until you have mostly worms in each pile. Create new bedding and put the worms back in the bin to continue composting.



## Additional Resources

### Where To Buy Worms

#### Local:

Wonder Worman, Bend  
[www.wonderworman.com](http://www.wonderworman.com), 541-390-7610

Rockton Ranch, Redmond  
Toni Stephan and Rocky Bessette, 541-548-0789

#### State:

Three Tree Farms, Cottage Grove, OR  
[www.redwiggler.com](http://www.redwiggler.com), 541-942-9033

## Helpful Websites

[www.wonderworman.com](http://www.wonderworman.com)  
[www.acmewormfarm.com](http://www.acmewormfarm.com)  
[www.cityfarmer.org/wormcomp61.html](http://www.cityfarmer.org/wormcomp61.html)  
[www.wormwoman.com](http://www.wormwoman.com) [www.howtocompost.org](http://www.howtocompost.org)

## Books

*Worms Eat My Garbage* Mary Applehof  
Flower Press, Kalamazoo, MI, 1999

*The Worm Book* Loren Nancarrow and Janet Hogan  
Taylor, Ten Speed Press, Berkeley, CA, 1998

*Recycle with Earthworms: The Red Wiggler Connection*  
Shelley Grossman and Toby Weitzel, Shields Publications,  
Eagle River, WI, 1997

The Rethink Waste Project provides tools and resources to help you reduce waste – and rethink the way you think about waste. From learning easy ways to reduce waste at home, such as composting and simple non-toxic alternatives, to purchasing greener products and understanding what it means to buy local, we can all take steps towards the same goal: reduce, reuse, recycle and rethink. Visit [RethinkWasteProject.org](http://RethinkWasteProject.org) to learn more.

Rethink Waste is a program of The Environmental Center. We translate sustainability into practical local action to create a healthy future for people and the planet.

16 NW Kansas Ave, Bend OR 97701  
541.385.6908  
[www.envirocenter.org](http://www.envirocenter.org).

