

## Let me introduce myself-

I am a Red Worm (*Eisenia fetida*). I am the worm of choice for your worm bin. Other garden worms such as earthworms and nightcrawlers eat more dirt than kitchen scraps and their preferred habitat is deeper in the soil where the temperature is more stable.

You will need a large handful or two of worms to get started. You can find us under manure piles or fallen leaves.



Red worms are often available at no charge and plans for building a wooden worm bin are available from the WSU Waste Wise Program. For more information about vermiculture and help in finding worms and worm bins, contact the Island County/WSU Waste Wise program.

Call or email for a free consultation, troubleshooting advice or to locate a worm composting presentation near you.

(360) 678-7974

(360) 321-5111 Ext. 7974  
South Whidbey

(360) 629-4522 Ext. 7974  
Camano Island

Website: [www.wastewise.wsu.edu](http://www.wastewise.wsu.edu)

Email: [ic.wastewise@wsu.edu](mailto:ic.wastewise@wsu.edu)



## WORM CUISINE

Worms like fruits and vegetables. Squash, pumpkins and melon rinds are favorites. Salad, pasta, coffee grounds, tea bags, along with paper filters, eggshells, rice, cereal and bread products are also eaten by worms. If pieces are small, worms can break down the food faster.

Worm Composting, or Vermiculture, is a process that uses worms to break down organic waste.

The Island County/WSU Waste Wise Program is supported and funded by Washington State University & Island County Public Works and is administered through WSU Island County Extension.



WSU Extension programs and employment are available to all without discrimination. Evidence of noncompliance may be reported through your local WSU Extension office.

# Worm COMPOSTING BASICS



LET ME TURN  
YOUR FOOD WASTE  
INTO WONDERFUL  
COMPOST

# THE WORM BIN

A wooden bin makes an ideal home for me but you can use bins made of plastic, metal, or other materials. Your worm bin should be between 12 and 24 inches deep and have a tight fitting lid to discourage rodents. To determine the size of your bin, you must first estimate the amount of waste your family generates in a week. Plan to provide one square foot of surface area for each pound of waste produced per week. Providing enough surface area will help keep your worm bin odor-free.

For example:

**5 to 6 pounds of food waste per week will require**

**5 to 6 square feet of surface area in the worm bin**

Drill holes in the bottom of your bin for drainage. Plastic bins require a few extra holes since they retain more moisture.

We worms are most active when temperatures are between 55-77 degrees F.

# HARVESTING

After three to six months, it's time to harvest the compost.

There are two ways to accomplish this:

**1** Remove or open top from the worm bin and pile contents of bin onto a tarp to expose composted bedding to light. As the worms dive towards darkness, scrape off the layer that the worms vacate. When you start getting to a layer where there are worms, stop and let the worms retreat to the dark (about an hour or so), then take off the next layer, and so on until you have a very concentrated lump of worms. At this point you can add new bedding and food to the bin and off you go. You could also divide them and give some away to your friends. As you remove usable compost you can return any large un-composted food or bedding to the bin.

**2** Move all composted bedding to one side of the bin, and then add fresh bedding to the other side. Place food for worms only in the new bedding. The worms will eventually migrate to the new bedding. This method is slow and somewhat inefficient, as some worms won't migrate to the new bedding.

# BEDDING

Bedding provides a healthy habitat for your worms. The bedding is also a food source and an odor barrier. Brown leaves, straw, or aged horse manure are ideal. Shredded newspaper or cardboard will also work and are readily available. A mixture of two or three of the above ingredients works well. Fill your bin  $\frac{3}{4}$  full of moist, but not dripping, bedding. Moisten bedding by submerging or soaking in water, then draining out excess moisture. Worms absorb oxygen through their skin, which must be moist for the exchange of gases to take place. Worm bedding should be no wetter than a wrung out sponge. Too much moisture will drown your worms, or worse, a malodorous odor will encompass your bin (phew!). Add a couple of handfuls of soil to provide grit for the worms, aiding in food digestion, place a whole sheet of newspaper, cardboard or black plastic on top of all bedding and you're ready to go!

When adding food scraps, bury them completely under the bedding in a different spot each time. **Do not put meat, fish, dairy products, oils or grease in your worm bin.** These will attract rodents and cause odor. Replenish bedding when necessary.

# TROUBLESHOOTING

## Too wet

- Try adding more dry bedding
- Open lid to dry bedding.
- Not enough drainage holes?

## Too dry

- Add moisture

## Odor

- Make sure you haven't added too much food
- Reduce moisture

## Fruit Flies

- Be sure to bury scraps deep and keep a thick layer of bedding on top.
- Place a whole sheet of damp newspaper, cardboard or black plastic on top of all bedding.

## Other insects

- Worm bins support many forms of life other than worms! Other insects/organisms in your worm bins can be beneficial to the vermicomposting process.

## Worm migration

- This happens every now and then.

