

### CLARK COUNTY Composter Recyclers



#### CLARKCOUNTYCOMPOSTS.ORG

### Worm Bin Composting

Think of your worms as pets that you get to feed your garbage to. That said, a worm bin is not a garbage disposal and needs to be managed correctly to provide a proper habitat for them to thrive. The worms will churn and turn that garbage into garden gold that is nature's miracle grow for house plants and gardens. Worm bin composting also helps keep food scraps out of the landfill where those nutrients are lost forever.

## Worm Casting Fertilizer

Worms, in addition to other creatures, work together to consume scraps and turn them into worm castings, also called vermicompost. This concentrated rich fertilizer contains the nitrogen, potassium, magnesium, calcium and phosphorous your plants need to grow. A well-maintained worm bin will produce 5–10 gallons of castings each year.

## Worm Bin Decomposers

The worms used for composting aren't just any worm, but a specific type— Eisenia fetida, commonly known as the red worm, or red wrigglers. Red wrigglers are the composting worm of choice because they are efficient at turning scraps into nutrient-rich worm castings. They also have natural habitat requirements that make them well-suited to living in this contained environment. While the worms are very important, mold, bacteria and other invertebrates in the bin all pay a role in creating a food chain that helps to break down food scraps.

### SETTING UP A WORM BIN

You can find instructions for making a wood worm bin, or a low-cost option using plastic totes at ClarkCountyComposts.org. You can also purchase multi-layer worm bins that make it easy to harvest the finished compost.

### FOOD AND BEDDING

Okay to put in your worm bin: Fruits, vegetables, egg shells, coffee grounds and filter, tea bags



**Bedding:** Newspaper strips, shredded paper, leaf mold (aged leaves), torn egg cartons, cut toilet paper rolls



**Do not add to your worm bin:** Dairy products, fats/greasy foods, oils, salty foods, meats and meat products, citrus fruits, large amounts of potatoes, onions, garlic, or spicy peppers



# **Bin Care and Maintenance**

#### FEEDING

Feed 1 time per week. Chop scraps into small pieces before feeding. Feed up to 1 gallon of food scraps to only one half of the bin in a 1–2 inch layer. Cover the food with a layer of bedding. Repeat this process in the other half of the bin the next time you feed. Add bedding when there is not enough to cover food scraps. Continue adding layers in this manner; don't mix the contents of your bin.

#### ENVIRONMENT

Try to keep your bin in a covered, dry area. The worms may need additional bedding to insulate themselves when temperatures are below freezing or over 90.° Do not feed when it is very hot. Worms don't eat as quickly in long periods of cold weather, so you may need to decrease amount or frequency of feedings.

#### WHAT'S WRONG WITH MY WORM BIN?

#### LEACHATE

Leachate is the liquid that will drain into the bottom of your bin. Empty the leachate through the drain hole and dilute with water (ten parts water to one part leachate). Use around shrubs, flowers and non-edible landscape areas. It is a good idea to check your leachate levels or leave your drain hole open with a drip container. Leachate can stain so be careful where you store your bin.

### Harvesting Your Worm Compost

#### WHEN IS WORM COMPOST READY?

It generally takes 3–6 months to complete the composting process. When the bin is nearly full and the material is mostly black and crumbly, your worm bin is ready to harvest.

#### HARVESTING

Scoop out the top 3–6 inches of material where recent food, bedding and most of the worms are. Set this material aside. Empty the remaining vermicompost into a storage container and cover with a blanket of damp newspaper. It can be stored up to three years; be sure not to let it dry out. Return the top 3–6 inches of the bin to re-start your bin again.

Learn more about upcoming Composter Recycler workshops and access additional resources about composting at ClarkCountyComposts.org.



For other formats, contact the Clark County ADA Office: Phone: (564) 397-2322, Relay 711 or (800) 833-6388 Email: ADA@clark.wa.gov

The Composter Recycler program is coordinated by Clark County Public Health. Clark County solid waste planning and programs are a cooperative effort of Clark County, Battle Ground, Camas, La Center, Ridgefield, Washougal, Vancouver, and Yacolt.

PROBLEM	CAUSE	SOLUTION
> The bin stinks	Not enough air circulation	Fluff the bedding
	Too much food	Stop feeding until the smell is gone
	Foods worms won't eat	Remove the foods and avoid in the future
	The food is exposed	Cover the food completely with bedding
	Anaerobic conditions (too wet)	Add dry bedding
<ul> <li>Fruit flies/fungus gnat</li> <li>Go to ClarkCountyComposts.org to see photos of fruit flies, soldier fly larvae and potworms</li> </ul>	The food is exposed	Cover food completely with bedding
	Too much food	Reduce amount and frequency of feeding
	Leachate in the bottom bin	Drain leachate (see instructions)
Soldier fly larvae infestation	Remove larvae if you think they're outcompeting the worms for food	
> Potworm infestation	Bin is too wet	Add dry bedding; leave lid open 1–2"
> Condensation on lid	Bin is too wet	Add dry bedding; leave lid open 1–2"
> Worms together in tight ball	Worms are very stressed	Stop feeding and monitor the bin

### Using Your Compost

Add up to 20% vermicompost by volume to potting soil. Apply  $\frac{1}{4}$ " layer on top of the soil of house plants, work a small amount into the soil before planting, or mix some in around the stems. 1 gallon of vermicompost can fertilize a 4x8' garden bed.