

VERMI-COMPOSTING FOR BEGINNERS

A GUIDE TO GREEN CITY LIVING

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Worm Facts!

- Worms have no bones, eyes, ears, arms or legs.
- Every worm has 5 hearts.
- Worms are cold-blooded creatures: body temperature is determined by their surroundings.
- Worms can eat their weight each day.
- Worms can live up to 10 years.
- Worms breathe through their skin: if their skin dries out they will die.
- Worms break down organic matter and provide worm castings (worm poo!) which are a rich source of nutrients for plants.



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Composting in a worm bin is ideal for those in condos, apartments, or other places where outdoor composters aren't feasible. You can set up your own vermi-composter using readily available materials, and can start harvesting nutrient-rich compost after only 4–6 months.

What You'll Need

- A 12-gallon opaque container with a lid (a medium-sized plastic bin works well)
- Dry bedding material (finely shredded newspaper or coconut coir, or a mixture of dry organic material such as straw or leaves)
- 2–3 cups of organic soil or finished compost (regular soil or potting mix from a local garden supply store will do)
- Spray bottle with water
- Long-handled spoon or fork to move around the food and compost
- Bin supports (bricks, wood, etc.)
- Large tray
- ½–1 lb worms

Where to buy worms? The best worms for composting are red wigglers, available through a number of local online retailers such as Cathy's Crawly Composters and The Worm Factory.

Setting up Your Worm Bin

1. **Ensure good drainage** – Drill ten to fifteen $\frac{3}{16}$ " holes in the bottom of your bin.
2. **Set-up** – Raise the worm bin off the ground to promote air circulation (bricks work well). Place a tray underneath to catch any excess water. Store your worm bin in a cool (not cold), preferably dark place, such as under the sink.
3. **Bedding** – Start with a layer of dry bedding material: use $\frac{1}{3}$ block of soaked coconut coir mixed with shredded newspaper to create a layer that is at least 2–5 inches thick (enough to completely cover the worms and the food).
4. **Mix** – Add water and mix contents until bedding is the consistency of a wet sponge.
5. **Add worms** – Add the worms and sprinkle the soil on top. A small amount of soil will help the worms digest more easily.
6. **Say goodnight!** – Allow the worms to settle into the bedding overnight.
7. **Feeding time** – Start feeding the next day. In general, worms can consume up to $\frac{1}{2}$ their weight each day, but this can vary widely depending on their diet and environment. Don't overfeed the worms – wait until the food from the previous feeding is almost gone before adding more.

Tips and Tricks

- It's best to feed the worms 1–2 times per week rather than daily. Too much uneaten food can attract fruit flies.
- Bury food in a different spot each time, making sure to cover the food with bedding. Sprinkle a handful of crushed eggshells on top of bedding about once a week to counter the acidity in food scraps.
- Add additional dry bedding materials when it is difficult to bury food scraps.
- Composting will be faster if the organic material is chopped into small pieces.
- Freezing food will break the cell walls, speeding up decomposition. Allow frozen food to reach room temperature before feeding to the worms.
- Keep the contents of the bin moist by spraying with water. Watering frequency will depend on the temperature/humidity of the surroundings. Worm bin contents should be moist (but not soaking) at all times.

WORM FOOD	NOT WORM FOOD
Fruit/Veggie Peels	Meat
Tea Bags (no strings)	Dairy
Cooked Pasta/Rice (no sauce)	Oils
Leaves/Grass Clippings	Hot Spices
Crushed Eggshells	Vinegar
Coffee Grounds/Filters	Sauces
Egg Cartons/Coffee Trays	Pet Waste
Plant Cuttings	
Brown Paper Towels	
Breads/Cereals/Grains	
Beans	



Worm Composter

The Harvest!

The "Dump and Sort" Method Under bright lighting, empty bin contents onto a flat surface. Separate into piles and wait 10–15 minutes for the worms to move to the bottom. Remove the top portion of each pile. Repeat this process until only the worms remain. Add the worms to fresh bedding to resume vermi-composting.

The "Side to Side" Method Feed the worms on one side of the bin for a number of weeks, forcing them to move to that side of the bin. Once the worms have moved over to the food source, remove the castings from the vacated side. Replace the castings with fresh bedding. Wait a week or two, then repeat the process in the opposite direction.

FOR MORE INFORMATION

Worm Composting Canada www.wormcomposting.ca

Cathy's Crawly Composters www.cathyscomposters.com

Red Worm Composting www.redwormcomposting.com

Worms Eat My Garbage: How to set up and maintain and worm composting system. Mary Appelhof. Chelsea Green, 2006.

The Worm Book. Loren Nancarrow and Janet Hogan Taylor. Ten Speed Press, 1998.

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Evergreen is a national charity that makes cities more livable. Evergreen's Common Grounds program protects and restores natural and cultural landscapes in urban and urbanizing communities across Canada.

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