



# Worm Composting



Worm Composting, also known as Vermicomposting, is a clean odourless way to turn your food waste into rich fertilizer. Not only is it a great thing to do but it is really simple as well.

Put **RED** Worms into a plastic or wood bin with moist shredded newspaper, peat moss, brown leaves, or straw. This is their bedding. The worms live on food scraps such as apple cores, vegetable peelings, and coffee grounds. Simply bury the food in the bedding and the worms will eat the scraps and produce compost that is safe to put on any of your indoor or outdoor plants.



**RED** Worms, not common brown earthworms, are used. The red worms are smaller and more reddish in colour. Their ideal living conditions are between 15-25 degrees so they should be kept indoors all year long or at least in the winter and fall as they will not survive in temperatures below 0 degrees. One pound of worms eat  $\frac{1}{2}$  pound of food waste a day.

## The Bin

You can use either a plastic or wooden bin to keep the worms in. The easiest way is to purchase an opaque plastic storage bin – they have lids and are moisture proof and come in several sizes. Your container – whatever kind you choose – should have air holes in the top or sides (your parents can do this with a large drill bit). It should also be no more than 12-18 inches deep.

The size of the bin depends on the amount of waste food being produced. A worm bin should have about one square foot of surface area for each pound of food waste added each week. A 2' x 4' box, for example, is large enough for eight pounds of kitchen scraps a week.



## The Bedding

Proper bedding for your worms is very important. It gives them a damp place to live, a balanced diet and helps prevent odours and fruit flies.

Shredded newspaper, potting soil (with no chemical additives), garden soil, peat moss, fall leaves, straw or a combination or any of these can be used. Fill the bin almost to the top with loose bedding. Sprinkle the bedding with water until it is as wet as a



wrung out sponge.

## Feeding the Worms

Worms are fed when you bury food scraps in the bedding. To ensure flies and odours are not a problem, always cover the scraps with a few inches of bedding or compost. Rotate the place where you bury the food so that it is evenly spread throughout the bin. For example divide the bin into 6 areas and bury the food in a clockwise rotation. You can mark the next area with a small twig so everyone in the family is aware where the food should be buried next. Try to give your worms a variety of food - the greater the variety the better the compost. Limit the amount of citrus foods as they are acidic and affect the pH. The smaller you cut up your food scraps the faster they will disappear.



### Yummy

Coffee grounds and filters  
Fruit rind and peels  
Vegetable scraps  
Tea Bags  
Grains  
Breads  
Eggshells (dried and crushed)

### Yucky

Animal products  
Oily foods  
Cheese  
Butter  
Meat  
Fish  
Garlic

## Harvesting the Castings

Getting the compost out is really easy. You will notice that the worms don't like bright light – they will wriggle down into their bedding whenever you take the lid off the bin. Every few months when the castings outweigh the bedding that remains – place the open bin under a very bright light or outside in the sunlight and give the worms ten minutes to get well away from the surface. Then start removing the top layer of compost. When you start to see the worms again, stop and let them wriggle deeper into the bin again. Keep repeating this until the harvest is complete. Then fill the bin with fresh bedding and start again.



## Odours

If the worm bin smells bad it probably has too much food waste in it, it is too wet or there are improper food products such as meat or cheese. To eliminate the odours remove excess or inappropriate wastes and add fresh bedding.



## Using the Compost

1. Mix the compost with potting soil in a 1:3 ratio (one part compost to 3 parts of potting soil).
2. To use it as a top dressing just sprinkle  $\frac{1}{4}$  inch of castings on houseplants, every  $1\frac{1}{2}$  – 2 months.
3. Or you can use it when you are planting seeds by sprinkling castings along the bottom of seed row.



## Local Worm Suppliers

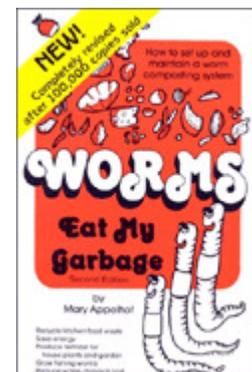
Unfortunately there are no worm suppliers in Alberta north of Edmonton. You can find worms at a number of locations in Edmonton including:

Dirt Willie Ecology and Bait Farm (will ship to other parts of the province)	(780) 922-6080	53116 R.R. 210 - Ardrossan)
Earth's General Store	(780) 439-8725	Whyte Ave and 109 St
Environment Shop	(780) 489-8809	156 St. and 110 Ave

There is also a great list of Canadian Suppliers on the internet at [www.cityfarmer.org](http://www.cityfarmer.org)

## Additional Information

An excellent book on worm composting is *Worms Eat My Garbage* by Mary Appelhof. It is usually available where red worms are sold or at local bookstores. If you can't find it at your local bookstore or at your worm supplier it is available at Chapters.ca for \$19.95 (January 2001).



If you have any further questions please don't hesitate to contact Christine from Northern CARE by phone: 1-866-CARE(2273) or [e-mail](mailto:christine@northerncare.org).