

Sources

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The Society Promoting Environmental Conservation—Here's the Dirt: Worm Composting, <http://www.spec.bc.ca/Resources/Documents/Waste/MV%20Worm%20Composting.pdf>, Accessed September 6, 2013.

Sharon & Ken Lane—Grandpa's Dream Worm Farm: All Natural Composting, <http://www.gotyoulooking.com/files/files/brochure.pdf>, Accessed September 6, 2013.

For more information:

Contact Clean North at info@cleannorth.org or phone 705-945-1573.

Worm Composting



Use worms to . . .

Reduce Garbage

Help the Environment

Produce Your Own Natural Fertilizer

Five great reasons to Compost with worms

Reduce your garbage

Worms eat one-half weight in food waste every day. Kitchen scraps and garden waste can make up to 30% of your household garbage that is being sent to the landfill.

It's easy to do

Composting indoors with worms takes very little space, is odour free and easy to maintain. By composting everyone in your home can feel that they are making a difference to help our environment.

Help the environment

Less garbage going to the landfill means less trucks on the road, less methane gas generated in the landfill and your helping to improve the nutrients back into the earth.

Improve your garden

Your compost will help your garden soil retain important nutrients and moisture .

Reduce the use of chemical fertilizers

Using the beautiful black fertilizer (worm castings) produced in your composter will reduce chemical loading in our waterways from urban runoff and groundwater threats.

Composting is nature's way of breaking down vegetation and returning it to its purest form.

Contrary to popular belief, worms do not eat vegetative matter. Composting worms eat the bacteria that break down the vegetative matter. With that in mind, worms will compost materials faster if they are broken down into smaller pieces.

A pre-compost bin is another way to make food items more usable to composting worms. Drill some holes in a plastic bucket with a lid. Place the bin outside in case it develops an odor. Add kitchen scraps as they become available. Dig out the bottom layers of decomposing food and feed you worms.

Worm Reproduction

A worm is both male and female, but they still need another worm to meet and have a family with. Mating worms produce a cocoon, which may have up to 10 fertilized eggs. From the cocoons, usually only a few young worms emerge. A worm matures in 8 to 10 weeks and can deposit two or three cocoons per week for six months to a year.

Location of your Worm Composter

Store your worm composter in a cool, dark place. Worms can live in 5°C - 30°C temperature, **DO not allow worms to freeze**. Your worm composter can sit in any location that is at about, or slightly below, room temperature. Some people keep them in the basement while apartment dwellers can keep one in a closet or even in the corner of the kitchen.

Harvest Time

Worms work very hard and very fast. In three to six months, there will be little bedding left in the bin. You will want to remove the finished compost when the contents look like brown fine dirt.

Hands on

If you want to take all your finished compost out at once, you need to separate the compost from the worms by hand. Most children will love to help.

To begin dump the contents of your composter onto a large plastic sheet or tarp in the sun or under a bright light. Move the contents into several mounds on the sheet. The worms are very photosensitive so wait 5-10 minutes, the worms will move to the bottom of the mounds. Take away the top part of each mound until only the worms and the tiny cocoons are left. Mix a little of the finished compost in with new bedding in the composter and return the worms and cocoons. Mix the nutrient rich castings into your garden or houseplants.

Hands off

If you don't want to handle the worms push the contents of the composter over to one side. In the empty space created, place new bedding, and food scraps. Over a number of weeks the worms will gradually move to where the new scraps are leaving behind the finished compost on the other side. The compost can be removed and used as needed.

Why compost with worms?

Composting with worms or *vermicomposting* to get rid of biodegradable waste materials without it ending up in the landfill.

Since composting with worms can be carried out indoors all year long you will always have a ready supply of natural fertilizer. The worm castings (worm poop) that worms produce can be used in your garden in spring and summer and to help plants get extra nutrients without any danger of using chemicals. Worm castings from your indoor composter also produces "worm tea". This worm tea is the excess liquid that drips into the bottom tray from your composter. The worm tea can be sprayed on leaves or poured around the base of a growing plant to give them an extra boost.

And now a few words about fruit flies

Those new to worm composting can often develop a problem with fruit flies; this is easy to avoid.

Fruit flies (eggs, larvae, pupae) initially come from food waste. If the waste sits in a collection container too long, adult flies will eventually be present.

In the worm composter it is important to always bury new food waste, cover it with old material and leave it undisturbed for several days; that way any live fruit fly material (eggs, larvae, pupae) will perish below the surface and never get the opportunity to become adult flies, mating and laying eggs in the composter. If you end up with a breeding fruit fly population inside the composter, to get rid of it, cover the surface with a layer (equivalent to 10 cm) of fresh sterile bedding and then leave the lid off the box for about a week. That should kill off the breeding population and you can then resume feeding as before.

At Clean North we add food waste to our worm composter twice a week, alternating ends each time; first digging a trench, then adding the food waste and mixing it a bit with the bedding, followed by filling/covering the trench with older material. We leave a mound over the trench so that next time we lift the lid, we know to dig the trench on the other (lower side).

In order to keep worm food on hand and avoid odours and fruit flies, place it in a bag in the freezer and add it to your worm bin twice a week.

Worm Food

Acceptable Food

Kitchen scraps (vegetable peelings, rotting fruit cut into small pieces for faster composting.)

Plant trimmings (leaves, old flowers, end of season greenery)

Coffee grounds and tea bags

Eggshells (rinse and crush before adding)

Unacceptable Food

Grease, cooked food like rice and pasta, deep fried food

Fish, meat, bones

Dairy

By not adding these foods to your composter you will avoid pest and odour problems. Never compost meat, dairy oily foods or grains.

Worm Composting Kits are available from Clean North

Clean North is constructing and selling worm composting kits for \$75 each. The kit includes an aerated container, coir bedding, a wheeled base with drip tray and a garden hand fork to mix and bury the food waste. The required "red wiggler" composting worms are NOT included.

Red wiggler worms can be obtained in a number of ways:

Purchase them mail order from

**Cathy's Crawly
Composters**

1-888-775-9495

www.cathyscomposters.com

**The Friendly Worm Guy
(Massey, ON)**

www.friendlywormguy.com

Get them from a friend

Ask someone who has a worm composter and is willing to share part of their population; worms multiply fairly quickly when food and space are abundant so most people who have a worm composter can afford to give some worms away. If you do not know someone with a worm composter consider posting a "worms wanted" message on a free we classified service.

Trap or collect them

Worms can be found in an outdoor compost or manure pile. You can also try burying a nylon mesh bag baited with fruit scraps for a few days and worms will move into the bag/trap. This method will likely introduce companion populations of other very small soil creature into your worm composter; this shouldn't be a problem to the functioning of the composter but if you are looking for "clean" worms then you are best to purchase them from a reputable supplier.

Compost Worm Bedding

Composting worms will need bedding to which their food is added. Worm bedding is any natural material which is high in carbon. Suitable worm bedding materials include:

- Shredded newspaper
- Shredded cardboard
- Straw
- Leaves
- Cardboard egg cartons
- Peat moss
- Coir fiber