

Think outside the blue box

How worms may just be a secret weapon in the war on garbage

By Erin Haggett

Hundreds of red wiggler worms are hard at work inside a small plastic bin that's tucked into the corner of a Toronto kitchen. Each day, these worms eat half their weight in kitchen scraps such as vegetables, eggshells, and coffee grounds. Working their way through the waste, these shy creatures can handily convert a large portion of a family's garbage into rich organic material, or "black gold," according to Cathy Nesbitt, owner of Cathy's Crawly Composters.

While the thought of worms munching away on our leftovers might not appeal to some, vermicomposting is quickly growing in popularity as one of the easiest and most sustainable ways to get rid of common household waste.

"I thought at first I wouldn't want to touch the worms. I thought it would be gross. But I actually love them," says Kathy Leeder, who has ordered two deluxe "worm chalet" kits from Nesbitt since July. "We're kind of like the espresso-latte people and touching worms is not really what we do. But we do now!"

For the uninitiated, vermicomposting, also known as worm composting, is a relatively simple concept. Similar to backyard composting, organic kitchen scraps are placed into a bin, where they are broken down into that thick, black soil. The main difference between the two types of composting, according to Nesbitt, is that while backyard composting relies on heat and heat-loving microbes to break down food in a thermophilic process, vermicomposting is a mesophilic process that harnesses the power of worms and microbes without producing additional heat. The beauty of the system is that the worms do nearly all the work themselves, leaving very little up to their human counterparts.

"It was a lot easier than I actually thought it would be," says Leeder. "Nothing's really bad about it. There's no smell. It's not dirty. It's good for the environment. It gives you something to do with your vegetable scraps. There's really no downside."

Worm composting starter kits can be purchased through Nesbitt's website (www.cathyscomposters.com) or locally at Grassroots (372 Danforth Avenue); they can also be homemade. Nesbitt explains that a plastic storage container or blue box works best, and that the chosen bin should be fitted with a lid and air/drainage holes.

“When you first start a bin, you need to let the worms get established,” says Nesbitt. This involves adding bedding to the bin—shredded newspaper mixed with a little bit of soil works well—then giving it all a good watering to create a moist environment. Then come the worms.

Red wigglers, a relative of the night crawlers that show up post-rainfall, are the preferred variety. According to experts such as Nesbitt, this type of worm is ideal for composting because it feeds just 6”-12” below ground, as opposed to night crawlers, who prefer their meals quite a bit deeper.

“A pound of worms and their descendants can transform a tonne of organic waste in a year, and the average Canadian family produces a tonne of organic waste in a year,” says Nesbitt. She goes on to outline the types of organic waste that can be fed to worms including fruit, vegetables, grains, used tea bags and coffee grounds, and egg shells. Meat and dairy products, and anything oily or leftover post-meal should be left out of the bin. Pulling back the bedding and placing scraps in a different spot each time helps to prevent smells and fruit flies, and also helps the worms break down food faster. Just be careful not to feed them too often. “The worms are a bit shy,” adds Nesbitt. “If you feed them two to three times per week, it’s better than feeding them every day.”

Once a bin is established and fed regularly, the worms do most of the work. Two to three times per year, however, they need to be separated from the castings, a process Nesbitt outlines in detail on her website. This generally involves either dumping the bin onto a plastic tarp and separating everything by hand, or using food to lure the worms to one side of the bin, then removing the castings from the other side.

Castings can be used in everything from backyard gardens to houseplants—Leeder even plans to give it away (in recycled milk cartons, nonetheless) to family and friends as holiday gifts.

“Basically, it’s the best fertilizer you can buy,” says Grassroots owner Rob Grand. “All natural and no chemicals.”

Those hundreds of squirming worms inside each bin are also versatile little critters. They can be kept anywhere from a closet to the kitchen to the back porch (though they’ll need to be moved inside during the winter). They’re also particularly adept at fitting in somewhere typically underserved by conventional organic waste programs—apartment buildings.

“People in apartments don’t usually have access to the green bin,” says Grand. “Worm composting is a great way for them to reduce their organic waste.”

Adds Nesbitt, “Right now there’s about five million people in the GTA. About half are not being served by the green bin program.”

Even for those people currently using a green bin, proponents maintain that worm composting can be an eco-friendly addition to the mix. “The big difference for me, is that if you do worm composting on an individual or family level, you’re being responsible for your own waste,” says Nesbitt. “If we all got worms and we were all composting, it would be a big burden off the system...It’s not garbage, it’s a resource. It’s still something we can use and turn into food for something else.”

“I like the concept. The fact that the worms eat stuff and turn it into soil. I think it’s great,” says Leeder. “We can give back something...I don’t know why more people don’t have [worm bins]. I suppose it’s just getting used to it.”

When both Nesbitt and Leeder were asked what they might say to people who were considering vermicomposting for their own households, their advice was the same:

“Just do it.”