



CLINTON COUNTY WASTE MANAGEMENT

FACT SHEET

COMPOSTING WITH RED WORMS

When food scraps are discarded with household waste, a valuable resource is turned into a liability. At significant financial and environmental costs, waste must be collected, transported and managed by a disposal facility. Worm composting (also referred to as vermicomposting) provides an excellent alternative to manage kitchen waste. It diverts valuable resources from landfills, and at the same time creates a rich soil-like product called compost, a beneficial amendment for soil and plants.

Some Benefits from Worm Composting:

- ◆ Saves on disposal costs and reduces household wastes
- ◆ Produces a high quality compost - use as a soil amendment or fertilizer
- ◆ Recycles organics back to the earth
- ◆ Demonstrates two of the most important natural processes: biodegradation and soil production



Red Worm Facts:

- ◆ *Eisenia Fetida*, commonly called “red worms” live up to 4.5 years in a compost bin (compared to 1 year in the wild), and will grow to a length of up to 3 inches.
- ◆ Each day, red worms eat over half their weight in food.
- ◆ Red worms can live in a wide range of temperatures. They’re happiest from 55-70 degrees, but can handle 45-80 degrees.
- ◆ Red worms are hermaphrodites — they have both male and female sexual organs — and reproduce quickly in confinement. Their population may double or triple in 1 year.

Red Worms Favorite Foods:

Apples/peels, baked beans, banana peels, biscuits or stale bread, cabbage, celery, turnip leaves, cereal of any kind, coffee grinds/paper filters, tea leaves/bags, watermelon, cucumber, egg shells, cantaloupe, pizza crust, popcorn, potatoes, tomatoes, carrots and other vegetable peels & leaves — the list is long.



Red Worms Least Favorite Foods:

Milk, oil, eggs, meat, fat, bones dog or cat feces. (Avoid these items in order to prevent odors, and to keep rodents or other vectors from inhabiting the worm bin.)

Odors and Bugs:

When properly constructed and maintained, worm bins should not give off an offensive odor. Avoiding spoiled foods and meat scraps will prevent unwanted odors. Leave the worms in the bedding and turn the contents about once a week. Worms need air to work at capacity. Be sure all food placed in bin is covered by bedding or compost. Burying or covering food waste completely will prevent fruit flies from being attracted to the bin.

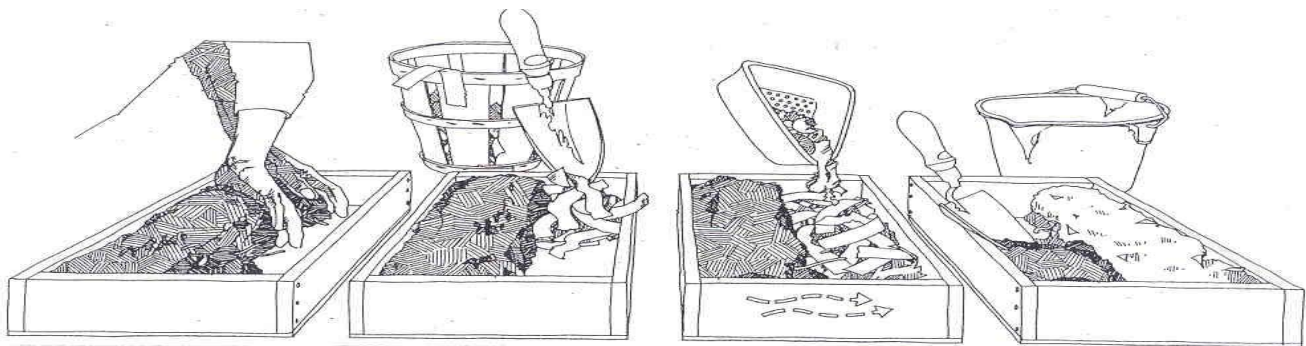
Red Worm Supplier:

The Department of Waste Management can make a limited amount available to residents for free by calling 989-224-5187 or emailing waste@clinton-county.org. There are also many distributors listed on the internet, such as Flowerfield Enterprises, 10332 Shaver Road, Kalamazoo, MI 49024, 269.327.0108 or www.wormwoman.com

Steps to Worm Composting:

1. Make a dark house for the worms to live in. Worms bins can be made from old drawers, file cabinet drawers, plastic storage tubs, old kids' wading pools, etc. A lid is a must to keep vectors out of the bin. Sufficient air holes are necessary as well, these can be in the lid or close to the top, on the sides of the container.
2. Recommended size for 2-3 people is 24" x 21" x 14".
3. For bedding use old newspapers, (avoid colored inks) or boxes. Tear or cut into as fine a strip as possible. Spray, soak or moisten with water to the dampness of a rung out sponge. Mix in a small amount of peat moss or soil to add beneficial microorganisms. Fluff bedding so it is not in hard clumps which will allow worms to move around better.
4. At least one pound of worms is needed for a small box. First fill the box with the moistened bedding, then add the worms.
5. Begin adding kitchen produce scraps right away. Each time a deposit is made, place the food just under the surface in a new part of the box. Placing several egg shells in container will create good conditions for worm reproduction.
6. To maintain the system, simply rotate the placement of food waste throughout the bin. Keep the food buried deep in the bedding to cut down on fruit fly hatchings.

HARVESTING WORM-PRODUCED COMPOST



1. After about 2-3 months, push the finished "earthy" contents of the box over to one side.

2. Add a batch of new bedding to the vacant side.

3. Bury garbage in new bedding *only*. The worms will move over to the new bedding in search of the food.

4. After a few weeks, remove the old finished compost and add some fresh bedding to the box until it is completely filled again. Repeat the harvesting process in a couple months.