

Youth Impact: Worms and Waste

Worms can do wonders for the garden: they aerate the soil and their castings are an excellent fertilizer. Worms can be an invaluable friend when trying to divert food waste from the landfill as well. Want to start your own worm composter?



Necessary Materials:

- a bin (plastic storage box or box built from untreated wood)
- shredded black and white newspaper for bedding
- a couple handfuls of soil
- food scraps
- worms!

Setup Instructions:

1. To set up the vermicomposter, (aka worm composter) you need a **cool** (not cold) **dark area**. Keep it away from heaters, and **out of direct sunlight**. If you are placing your composter in the basement, don't put it directly on the concrete floor; raise it on old slats of wood or blocks. Also, worms don't like high traffic areas with loud noises.

2. **Drill holes** in the lid of the box, and in the sides near the top. If you would rather not monitor the moisture content of the compost, you can drill holes in the bottom and set up a drain tray to catch the "compost tea".

3. **Shred newspaper** (beware, colour ink can be toxic) for bedding. **Soak the shreds**, but only to the point where you can't wring any water out of them. You should have enough to fill between a third and a half of the composter.

4. Place your worms on the top of the bedding, and leave the composter open with the light on for about ten minutes. This allows them to work their way into the bedding.

5. The worms will eat the food as it rots, and process it through their digestive tract, and create what you might call "vermi-manure".

Worms are voracious eaters. Once the worms are settled in and growing, give them a good supply of suitable food.

Worms like:

- soaked and ripped pizza boxes
- shredded and soaked cardboard
- paper
- fruit and vegetables (except onions and citrus!)
- leaves
- dirt
- hair
- egg shells.

Worms will eat meat but it can lead to smells and maggots in the worm farm.

Worms need a small amount of sand (mixed with garden soil) added to the food for their digestion system.

Plants from the onion family (including garlic and shallots) and citrus fruits contain volatile oils. If any of these are included in the food scraps the worms will climb out of their bin to get away from the smell.

School and Worms

Because worms are living creatures, they need to be treated with care. One suggestion to avoid overfeeding and misfeeding the worms is to put a collection bucket next to the garbage for worm-friendly foods. At the end of the day, a student or teacher volunteer can be responsible for adding new food to the composter.

In schools, it is sometimes hard to find appropriate places to put the composter. Some suggestions are the garbage storage room (talk to your custodial staff about this!) Another suggestion is under workbenches in an earth sciences lab. There are even some teachers who put a small composter under their desks or in an unused corner.

Worm Farm 'Produce'

Vermi-manure, or castings can go straight onto the garden or pot plants. If they are covered with mulch their moisture and nutrient content will be conserved.

An excellent liquid fertilizer can be made from the castings by adding water until the mixture looks like weak tea. African violets and other plants that like being fed from the roots, just love this mixture.

Moisture drained from the worm farm's bottom crate is also a good liquid fertilizer, but it too should be diluted.

Excess worms can be put in the compost heap where they will help speed up the composting process.

Hints for Happy Worms

Light

Worms usually live underground so they thrive in an environment that is cool, dark and moist.

Moisture

Worms like moisture and should not be allowed to dry out. A light spray of fresh water when the worm farm is first constructed will generally provide sufficient moisture for the farm, but sometimes more spraying is required during the farm operation. But, if you add too much extra water or allow rainwater to get into the bins, the worms may drown.

Think this will work at your school? Ready to order your worms?

Unfortunately, you can't just use regular earthworms. The ideal worm is the Red Wiggler. Unless you can get some from a friend that already vermicomposts, the easiest way to is to order them from a distributor:

Jolly Farmer Products

www.jollyfarmer.com, info@jollyfarmer.com
1-800-695-8300

56 Crabbe Road, Northampton, NB, E7N 1R6
contact: Greg Cox

Credit to: <http://www.woodwormfarms.com/worms-manual.html> and
<http://www.pr.uoguelph.ca/sustain/vermicompost.htm>

