

## Worms: Earth's amazing decomposer

We could all learn a thing or two about recycling from the squiggly, wiggly worm. The slimy creatures break down organic matter such as dead plants, manure, dead animals and create valuable nutrients that make rich and fertile soil. Without the help of worms, every plant and animal that died and fell to the ground would stay right where it fell. Trees, leaves, fruit, nuts and dead stuff would just keep piling up. So even though we may say yuck when we observe these creatures, we really need to thank them for what they do.

Worms have been on earth for about 120 million years. They were crawling around underground when the Egyptian Pharaohs ruled. Cleopatra proclaimed the creatures sacred. Aristotle called worms "the intestines" of the soil. Charles Darwin said of the worm, "It may be doubted whether there are many other animals in the world which have played so important a part in the history of the world."

Worms are basically underground farmers. They aerate the soil as they work their way through it. Millions of worms are underground eating tons of leaves, stems, roots and waste as well as turning over tons of soil. And when they excrete waste, which is called castings, they actually fertilize the soil that they inhabit.

The castings have been used in a process called vermicomposting, which is basically composting with worms. It is said that "worm poop is the best compost." It is full of beneficial microbes and nutrients, and is a great plant fertilizer. Since worms eat their weight in food every day, they make a lot of castings. Just two pounds of earthworms will recycle one pound of organic waste in 24 hours.

The great thing about vermicomposting is that it is so easy. All you need are some bins (usually a 12 gallon will suffice- 21"x15"x 12" high), newspaper, water and worms. Once your bin is made up, all you have to do is place your organic waste inside and the worms will do the rest. The result is worm tea – the liquid that will be in the bottom of the lowest bin. It is a cheap, easy way to have lush, green beautiful plants.

Worms don't have teeth; they have a gizzard, similar to birds, that helps them grind small bits of food. So it helps them if you add ground-up egg shells, oyster shell flour, or some gritty soil to the bin. Worms in a standard bin can eat up to about a pound of food a day.

Earthworms multiply faster than rabbits. In optimum conditions, one field worm can produce 600 offspring in a year, so you shouldn't have to replenish your supply. They will do that on their own. When two earthworms come together, they both get pregnant. The worm is perfectly evolved so that even if you put several species together, they will not cross breed. When worms are sexually mature they breed every week.

Vermicomposting is a win-win way to reduce waste, naturally fertilize your plants and help the environment. It doesn't take much space; only takes minutes of your time per day and is actually a lot of fun. Kids love worms and it is a great way to educate them about the environment and get them to turn your garbage into something useful.

If you are interested in getting started with worms, but you want to know more, give us a call at (863) 402-6545 and we'll provide you with some great literature and websites.

Interesting worm facts:

- Earthworms are strong enough to push aside stones 60 times their own weight.
- As much as a 1 inch thick layer of subsoil may be brought to the surface per year by the burrowing earthworms.
- Earthworms improve water infiltration by creating tunnels which increases the soil ability to absorb water.
- An earthworm has eyespots on its body and can only sense light and dark.
- As they burrow through the soil, earthworms ingest the soil through their mouth. Soil is not very nutritious, but within the soil particles there are various microorganisms, bacteria and detritus that the earthworms are able to digest.