

Slug: Ask the Master Gardener  
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One of the most beneficial creatures you can have in your garden is the lowly earthworm. It belongs to a group called *Annelida*, which includes some six thousand species of segmented worms, worldwide. Rather than importing strains from far away, gardeners are better served by developing a sense of stewardship toward their own homegrown earthworms.

Earthworms enrich the soil they occupy. They convert dead and decaying matter in the soil into “castings”, worm manure rich in nutrients that are more readily available for plants to take in. In their search for food, they travel up and down through the soil, often coming to the surface to feed at night, then tunnel back down in the daytime to avoid being eaten by birds. All this traveling around in the soil allows air and water to penetrate, and improves draining and tilth.

Earthworms tolerate a variety of soil pH, from 4.5 to 8.2, but they cannot stand rapid changes. Temperatures about 85 degrees and below freezing are harmful to worms. Their bodies are made up of 75 percent water.

In the 1800s gardeners believed that earthworms are injurious to their plants and many gardening books of that time recommended destroying earthworms. Thanks to Charles Darwin’s research, we now know the true value of this little creature. Darwin said, “All the fertile areas of this planet have at least once passed through the bodies of earthworms.”

Each type of earthworm has its own niche to fill and its own way of working in the soil. Nightcrawlers like to feed on dead plant litter lying on the ground. They drag this organic matter into their deep, vertical burrows that can reach 8 feet or more beneath the surface. They also construct middens, covering of castings and plant residues, over the mouths of their tunnels. Other species are shallow dwellers, burrowing horizontally through the soil. They like to hide under piles of partially decayed plant matter, manure piles and compost heaps. Some gardeners like to keep earthworms in specially made boxes. Vermiculture is a way to use up vegetable and fruit scraps from the kitchen and have a ready supply of castings to use as plant fertilizer. The type of worm used in these boxes are red worms, sometimes called red-wigglers. Nightcrawlers will not live in a worm box.

Instead of transporting foreign earthworms to your garden it would be better to invite them in by making the environment more hospitable. Nightcrawlers are the only earthworms that adapt to being seeded to a new location, and they usually need to have some special attention to get settled-in. Some of the ways to make living in your yard more comfortable for earthworms are to eliminate or reduce the use of pesticides. Just as other beneficial organisms are killed along with pests, earthworms suffer from chemical use.

Use lots of organic mulch. All earthworms eat organic matter. Leaf litter or compost on the surface of the soil gives them a good source of food. Dehydration is a hazard for earthworms. They need plenty of damp soil to stay healthy.

Finally, reduce the number of times you till the soil. Nightcrawlers are especially sensitive to having the soil disturbed. Tilling destroys their permanent burrows.

If you make your site irresistible to worms by doing these things, they will come to live in your garden. Welcome them and teach your children about this valuable friend.

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This column is written by Washington State University/Skagit County certified Master Gardeners. Questions may be submitted to WSU/Skagit County Extension, 306 S. First Street, Mount Vernon, WA 98273-3805.