

Has The Worm Turned?

For turning kitchen scraps into valuable compost, worm bins have been installed in kitchens countrywide! Vermiculture has become a new 'good thing', as you will notice from the prevalence of supplies for this project in the gardening magazines and catalogs. The appreciation of worm castings to improve soil is not new. Charles Darwin wrote an entire book about worms: "The Formation of Vegetable Mould, Through the Actions of Worms, With Observations on Their Habits" was published in 1881.

I do not know how many readers got past the title and read the entire treatise, but perhaps, because his name was so firmly attached to evolutionary matters, little notice was taken of his devotion to worms. True, these lowly creatures do build valuable ecosystems and we all are pleased when our plant hole excavations turn up a few wigglers. We take that as a sign that our soil is alive and healthy.

In fact, so many gardeners have welcomed bins of worms into their kitchens as on-the-spot compost makers, that there are vermiculture organizations that have been holding conferences for over a decade. Like so many splendid things, worms too have a down side, a negative impact. Less than positive thinking about these critters has appeared in publications over the past few years. Worms, too, can be an environmental disaster.

According to forest biologists earthworms are damaging forests from the Great Smokies to the Great Lakes. When earthworms are credited with burrowing through compact soils, digesting vegetable matter and processing it into nutrients for healthy gardening, how could this activity be damaging? The problem is with their being in the wrong place, and a forest is the wrong place for worms.

Cornell University natural resources professor, Timothy Fahey, has been quoted as saying that earthworms in North American forests are "more of a curse than a blessing". This conclusion is based on the fact that of the 200 different taxa of earthworms found in Canada and the US, almost one-third are invasive species. This figure is actually worse when only the temperate and temperate-coniferous forests are studied.

This invasion dates back to the 17th Century when sailing ships dumped their ballasts of foreign soil and rock on American shores. It is thought what helped disperse invasive worm populations was the habit of fishermen dumping their bait as well as the movement of soil.

Early in our history a cabin was built from timber found on the place, sited on soil that was there. As large suburbs were created, the area was often cleared to the sub-soil and when the houses were completed, soil from other places hauled in for landscaping. The worms came along for the ride. Over centuries the fungi and bacteria in our native forests took care of turning the fallen leaves and dying trees into a beneficial ecosystem. Once invaded by rapidly reproducing earthworms, decades of slowly-built humus can be wiped out in a few years.

In her book, "The Earth Moved: on the remarkable achievements of earthworms" Amy Stewart recounts her trip to a Minnesota forest where invasive earthworms can consume the entire leaf fall of a forest in a single year. With a bare forest floor, small wildflowers and plants disappear and there is no habitat for replacement tree seedlings to take root.

There seems to be little hope of undoing the damage done: to prevent further damage, those bait worms should not be dumped into the water (they do not drown!) but returned home to one's own compost pile.

more buzz about bees: Have you seen the petitions out there asking Lowe's and Home Depot to stop selling the neonicotinoid pesticides that kill bees? Customers are asked to read labels and

watch for seeds and plants pretreated with those pesticides. With a third of our food depending on bees for pollination, we need to pay attention. Curiously, chemicals do not have to be proved safe before being introduced. They must be proved to be dangerous to be taken off the market. If you remember how long it took for a warning to appear on cigarette packages, you understand how the system works.

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