

COUNTY OF SANTA CRUZ HOME COMPOSTING PROGRAM

ATTRACTING WORMS TO YOUR GARDEN

by Karin Grobe, also known as the Worm Doctor

People frequently ask me if they should buy worms and add them to the garden. I always advise against it.

If your soil is devoid of earthworms, there's probably a good reason. Worms need certain conditions to be healthy and reproduce. If you add worms to soil that is not hospitable to them, they will leave or die, and the money you spent on worms will be wasted.

The good news is, if you provide the conditions worms need, chances are they will magically appear and will proliferate and populate your garden. You can provide those conditions by incorporating compost into your soil and keeping the surface of the soil covered with a layer of mulch.

My garden started out with a heavy clay soil. It baked hard and cracked in the summer and held puddles of water in the winter. I found very few earthworms and those that I did find looked like they were nearing the end of a very long hunger strike.

Worms like a light airy soil and rely on decaying organic matter for nourishment. My garden needed some serious soil improvement work. I began by tilling to a depth of six inches with a pitchfork, then putting a three-inch layer of compost on top and digging that in. The compost was light and it added air space to the soil as well as decaying organic matter.

After planting seedlings, I added a one-inch layer of compost to the surface of the soil to serve as a mulch. Mulches keep the ground cool and moist and provide worms with food—not only from the organic material itself, but from the fungi, bacteria and other small creatures which it supports. Mulches also discourage weeds and prevent soil compaction caused by overhead watering and driving rain.

I have continued this program for many years and I now have great soil. I also have a healthy earthworm population. There are many worms in each shovel-full of soil.

Nearly all of these worms are endogeic worms, the workhorses of most California soils. They cluster around the root balls of plants and feed on the decaying matter around roots and the fungi, bacteria and nematodes that live in that environment. They are great soil mixers and improve the soil's porosity and water infiltration rates, increase humus levels and leave behind tons of rich castings each year.

They are very different from the worms in my worm bin, which are epigeic earthworms. They live close to the soil surface in areas of abundant organic matter,



The author with sunflower crop. Annual additions of compost can transform a poor clay soil into a soil that supports many earthworms and healthy plants.

reproduce rapidly and thrive in crowded conditions. They do not thrive in a garden environment, but believe it or not, there are worm farmers who will tell you different and will gladly sell you epigeic worms with the promise that they will proliferate and populate your garden. In truth, they may live through the winter but will probably die as the soil surface dries out in summer.

Nightcrawlers, large muscular worms about six-inches long, are also sold for garden improvement. Nightcrawlers are an anecic species. Anecic worms tend to be large, have low reproductive rates, and create deep vertical burrows that become their permanent residence. They feed by pulling dead, decaying organic matter down into their burrows. When released into a suitable environment, nightcrawlers will probably stick around. However, they've also been known to travel up to 60 feet on the soil surface in one night, so make sure your garden is more hospitable than your neighbor's before buying them. In my opinion, you're better off investing in compost for soil improvement.

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