

The mighty earthworm: encouraging a diversity of earthworms in your garden.

An earthworm is a tube-shaped, segmented worm found in the phylum *Annelida*. They are commonly found living in soil, feeding on live and dead organic matter. An earthworm's digestive system runs through the length of its body.



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Earthworms work as biological "pistons," forcing air through the tunnels as they move. Thus, earthworm activity aerates and mixes the soil, and is conducive to mineralization of nutrients and their uptake by vegetation. Certain species of earthworms come to the surface and graze on the higher concentrations of organic matter present there, mixing it with the mineral soil. Because a high level of organic matter mixing is associated with soil fertility, an abundance of earthworms is generally considered beneficial by farmers and gardeners. In fact, as long ago as 1881, **Charles Darwin** wrote: "It may be doubted whether there are many other animals which have played so important a part in the history of the world, as have these lowly organized creatures."

Some species are great composters, breaking down garden waste; some act as mini-diggers and aerators of soil; while others pull dead leaves down for the surface, locking it into the soil and helping to release its nutrients. **A soil teeming with earthworms is easier to work, supports more productive, healthier plants, and is more resilient against drought and waterlogging. Gardening in ways that are sympathetic for worms is well worthwhile.**

What to expect of your soil type

More earthworms -- especially the soil-feeding ones -

- tend to be found in clay soils than in sandy ones. This is thought to be due to clay soils staying wetter than lighter soils, and also because such soils contain higher nutrient and organic matter levels. But even light soils can be improved as habitats for worms.



Pile on the muck

All species of earthworms feed on decaying organic matter, so take every opportunity to work green-waste compost, manure or leaf mold into your soil. As an added bonus, making your own compost supports species that specialize in composting, such as brandling worms.

Enriched vegetable beds seem particularly to the liking of many worms. Unless slugs are a menace, *try mulching ornamental beds every couple of years.*

By allowing some leaves to fall onto the soil and letting plants die down naturally in winter, flower beds will favor high numbers of surface-feeding (epigeic) worms. And there is no harm in letting a little leaf litter collect in hedge bases or under shrub plantings; deep-burrowing (anecic) worms will draw the leaves down into the soil.





Trumpet Vine

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Modern mulching mowers that recycle chopped-up grass clippings directly back into the lawn are great for keeping worms busy.

Use a soft touch

Since worms need moist soil and plant waste to work their magic, gardens with minimal hard landscaping

and those with real grass and not artificial turf are best. Common sense suggests digging is not great for earthworms; but provided the soil is improved with organic matter, their numbers remain high in dug soils despite any disturbance.

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