

Doon Watch Nature Series for Dehradun Live Hindustan Times by Sanjay Sondhi

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Soil Savivors

Over the past couple of weeks, I have observed many earthworms on the road. A few days ago, I counted at least a dozen of them in a drain. Tragically, many of the earthworms on the road had perished, having been run over by vehicles or trampled upon by unconcerned humans.

Seeing the mutilated carcasses of the earthworms, I felt pained, but wondered why they were seen in large numbers in this season? Earthworms live under the ground, emerging largely during the rainy season, when their burrows get flooded or in order to mate.

During the last monsoon, on one occasion, I saw dozens of earthworms emerge after a heavy shower. In a single drain, I counted over a hundred earthworms all rushing (don't get me wrong, rushing in earthworm terms is different from us homosapiens!) in the same direction. The earthworms climbed over each other, all scurrying to get ahead of the other, without actually knowing their destination-very much like us humans, right! Unfortunately for the earthworms, the water drain emptied out into a large, noxious sewer, so the scampering worms were headed for a very smelly swim!

Earthworms are Oligochaetes (*oligo*=few, *chaete*=bristles). They have annular rings or segments on their bodies, which differentiates them from the Brahminy Worm Snake. This snake also lives under the ground and looks superficially like the earthworm, but has scales on its body. Each of the segments of the earthworm have minute bristles, which assist them in locomotion. Watching the earthworms move is fun. They move by contraction of their muscles. First, the front part of the earthworm's body moves forward in slow motion and then the rear part of the repeats the movement. Between each movement, the worm pauses, as though to take a deep breath on account of its stupenduous

effort. Often, even as it moves forward, other worms intertwine with it, and pull it back. As a result of this strenuous and comical effort, the earthworm propels itself forward by no more than an inch!



Photograph caption: Earthworms in a drain

The tubular earthworm is really just that—a tube in a tube! The worm's digestive system is a cylindrical tube, which in turn is surrounded by another tube, its outer slimy body. Earthworms come in different sizes and colours. The most majestic earthworm I have seen was during a visit to Arunachal Pradesh in Northeast India. I spotted a giant earthworm, more than 12 inches in size, that was a glossy, iridescent blue in colour. Each time I would shine my torch on the creature, parts of the worm would shine a bright blue. Awesome!

Earthworms are truly saviors of our soil, sorry I got that wrong—saviors of our soil. They play a very significant role in ensuring the earth's soil is healthy. Firstly, as they largely live underground in burrows, they eat their way through the soil, which passes through their tubular digestive system. After extracting nutrients from the soil, the worms eject the waste as small pellets, which are often seen on the ground, above their burrows. Secondly, they help to decompose dead leaves, thereby adding to the nutrients in the soil. Thirdly, as they burrow their way underground, they help aerate the soil. Without earthworms, the soil on the surface of the earth would not be as fertile,

restricting agricultural output. Maybe I did get it right-as rapacious humans, stripping the earth of its resources at an unsustainable rate, perhaps, the earthworms, are saviors of our souls!

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Making a difference: Do you have a vermiculture pit at home? If not, get some earthworms for yourself from the Uttarakhand Organic Shop at Survey Chowk, segregate your wet waste and decompose it in a small bin in your house. You can use the resultant vermicompost as manure for your garden.