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## Problem: Earthworms - Lumbricus terrestris



**Description:** If you have mounds of soil in your lawn that make it hard to mow, nightcrawlers may be the cause. These bumps are randomly spaced rather than a "run" like is seen with moles.

Nightcrawlers are large worms (usually 4 to 8 inches or more). They belong to a group of earthworms known as deepburrowers. The deep-burrowers build large, vertical, permanent burrows that may reach as deep as 5 or 6 feet. Nightcrawlers pull plant material down into their burrows which can be fed on later. The bumps you see on top of the ground are called "middens" and are a mixture of plant residues and castings (worm feces). These middens may be used for protection and food reserves. The burrows can have a significant positive effect on soil by opening up channels for water and air to penetrate. Roots also like these channels due to the ease of root penetration and nutrients found in the casting material lining the burrow.

**Recommendations:** Nightcrawlers actually help the soil but may make it difficult to mow. Getting rid of the middens will be difficult. Rolling the lawn while the middens are soft may help temporarily, but mounds will be rebuilt when nightcrawlers become active again. Also, there is nothing labeled for nightcrawler control.

Some gardeners want to protect the nightcrawlers due to their positive effect on soils. Pesticides that may be used for other pests vary widely in their toxic effects on earthworms. Dylox, commonly used for grub control, appears to have no effect. Malathion may be slightly toxic while products with imidacloprid (many grub preventers) and copper sulfate are toxic. Avoid using the latter group while nightcrawlers are active if you wish to protect them.

## **References:**

- 1. Earthworms and Crop Management, Purdue University Extension Pub AY-279
- 2. Biology of Earthworms by Edwards & Lofty, 2nd ed. Halsted Press

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