



# VARMANT GUARD®

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SERVICES INC.



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Common Name: **Millipedes**  
Scientific Name: **Class Diplopoda**

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## MILLIPEDES

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**Introduction.** Millipedes are sometimes called “thousand-leggers,” but they usually have 30 to 90+ pairs of legs. They are widely distributed throughout the United States and most of the world, with about 1,000 species occurring in the U.S.

**Recognition.** Ohio Millipedes measure about 1/16 to 4 1/2 inches long and are usually cylindrical and wormlike but some slightly flattened. They are usually blackish or brownish but some are red, orange, or with mottled patterns. Millipedes have 1 pair of short antennae and have a cluster of simple eyes (ocelli) on each side of the head. Most body segments bear 2 pairs of legs, except for the first 3 or 4 segments and the last 1 to 3 segments, which have 1 pair or no legs.

First instar (hatchling) millipedes usually have no more than 7 body segments and 3 pairs of legs. Additional segments and pairs of legs are added with each molt.

**Similar Groups.** (1) Centipedes (class Chilopoda) have a more flattened body and have 1 pair of legs per body segment; also, most centipedes are predators. (2) Pillbugs and sowbugs (order Isopoda) have 7 pairs of legs

**Biology.** Millipedes overwinter as adults or young. Adult females lay 20 to 300 eggs, either in soil cavities or among decaying organic matter during the summer; however they can breed year round under warm conditions. Eggs hatch after several weeks. In most species, there are from 7 to 10 molts. In many species



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sexual maturity is not reached until the second year, others require 4 to 5 years. They eat their molted skins to restore lost supplies of calcium. Adults often live for several years.

Members of several millipede groups give off an ill-smelling, repugnant fluid through openings along the sides of the body. In some species, this fluid contains hydrocyanic acid, iodine, and quinone, which is toxic to some arthropods and small animals. It can cause vesicular dermatitis (small blisters) in humans.

**Habits.** Millipedes have high moisture needs, like pillbugs and sowbugs. They are typically found in areas of high moisture and decaying vegetation such as under trash, piles of grass clippings, flower bed mulches, leaf litter, etc. Millipedes are mostly active at night. Sometimes, usually in the spring or autumn, millipedes will migrate in great numbers. This is thought to be the result of: (1) natural hibernation movement, (2) heavy rains and a rising water table forcing them out of their natural abodes, (3) warm temperatures for the season, (4) their apparent habit of crawling up such things as trees and walls for mating purposes, and/or (5) extremely high populations building up under very favorable conditions, followed by drought. This can involve several hundred individuals to hundreds of thousands (and sometimes millions) of millipedes. They usually do not survive indoors for more than a few days unless there are high moisture conditions and a food supply present.

Millipedes are primarily scavengers and feed on decaying organic matter, usually plant material but occasionally on dead insects, earthworms and snails. They may attack living plants, especially roots, during dry periods in order to obtain needed moisture and nutrients.

**Cultural Control & Preventative Measures.** The key to controlling millipedes is to reduce or eliminate the moist areas, which make their survival possible. Outdoors four things should be done: (1) Avoid thick deposits of mulch close to the foundation; work old mulch into soil annually before adding new mulch. (2) Dethatch the lawn because dense thatch just above the soil surface holds moisture. (3) Mow the lawn closely and edge it because this promotes quicker drying. (4) Remove debris such as accumulations of leaves and wood debris, rocks, heavy mulch, and stored firewood from the ground near the foundation. (5) Provide adequate ventilation in basements and crawl spaces to reduce sheltered, damp hiding places. Strategic placement and operation of fans and dehumidifiers in humid areas of the house are a critical part of this process. (6) Water lawns in the early morning to allow the grass to dry during the day.

Indoors, millipedes are easily removed using a shop vacuum cleaner or household vacuum cleaner fitted with a hose attachment.



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**Professional Control.** Exterior perimeter barrier treatments with water-based and granular residual insecticide formulations are effective in markedly reducing millipede invasion if applications penetrate deep into activity zones in the mulch and soil next to the foundation. A Varmet Guard technician will also target the exterior foundation wall and treat beneath any siding at the sillplate level using a residual liquid insecticide. Strategically-placed residual granular or grain-based insecticide baits may also be used to help control millipedes in landscaping (flower and ornamental plant) beds near structures. A quarterly pest management service program may be required in cases where large populations of millipedes are present and where landscaping conditions and locality are conducive to their propagation.

**Note:** During mass migrations of millipedes, residual pesticide deposits will have little or no immediate effect because of the short exposure time to them. If the major population can be found, such as in outlying grassy or wooded areas, these can be treated with an appropriately labeled contact insecticide.