

## **ENVIRONMENT BULLETIN**

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## **Gypsy Moth Infestation**

If you were strolling through the woods over the last ten days or so, you would have heard what sounded like very light rain falling on leafy trees. But the sun was shining and there were no clouds in sight! What you were hearing were not the sounds of thousands of caterpillars chewing on tree leaves, but of a gentle 'rain' of gypsy moth larvae droppings finding their way to the forest floor, your deck, or car. These droppings are called frass by entomologists.

The gypsy moth is an invasive species native to Europe and Asia, and introduced to North America in the 1860's. Since that time, they have spread from the Boston area and now are common in southern Canada. They were first detected in Ontario in 1969 with major defoliation events occurring starting in 1981.

Gypsy moths have a varied menu and thrive on a number of tree species including oak, birch, aspen, sugar maple, American beech, white pine and blue spruce. Although they prefer oak trees, these moths will eat over three hundred species of trees and shrubs.

Gypsy moth outbreaks occur every 7 to ten years. The larvae chew holes in leaves and can completely defoliate its host tree. During severe outbreaks, trees and shrubs are completely defoliated. Trees are capable of producing a new crop of leaves, but tree growth is limited and weak or stressed trees may not survive.



Gypsy moth caterpillars hatch in the spring and find their way to nearby food sources by finding a tree trunk or branch to climb. Mature caterpillars are 50 mm long, dark coloured, hairy, with a double row of five pairs of blue spots, followed by a double row of six pairs of red spots, down the back. Feeding is completed in July at which time the caterpillars search for protected areas to pupate. This could be the underside of a piece of bark, under your deck, soffits, or even the wheel wells of your car parked behind the cottage.



The moths emerge from the pupae in mid-to late July. Male moths (left below) are light brown and slender-bodied, while females are white and heavy-bodied.



Curiously, the females have wings, but do not fly. The males fly up and down vertical objects in search of females. After fertilization, the female will lay about 500 eggs in a spongy mass which are covered with a peach-like fuzz. (see below)



Once laid, the eggs enter what is called 'diapause' and become dormant. The eggs will overwinter for eight to nine months before emerging once temperatures reach about ten degrees Celsius.

Control of this pest is difficult because during an infestation, caterpillars are numerous and their distribution is extensive. When caterpillars are within reach, it is practical to gather these and drop them into a jar containing some isopropyl (rubbing) alcohol. The moths can also be collected and disposed of in a similar manner. Finally, any egg mats found on any surface can be scraped off into the same jar to join its predecessors. Caution: There are reports that the furry egg mats can cause skin irritation for some individuals.

The next opportunity to control gypsy moths comes in the Spring. Vulnerable trees near your cottage can be treated with a sticky natural resin called tanglefoot. This substance, which resembles caramel in colour and texture, can be spread on a layer of gauze, duct tape, etc. girding the tree as shown below.



When young caterpillars leave the egg mass, they search for trees to climb, and they become stuck onto the sticky layer of tanglefoot. This will not eliminate all of the caterpillars reaching the crown of your trees, but could very well reduce the quantity of frass in your morning coffee as you sit on your deck to welcome a new day!

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