

Gypsy Moth

Lymantria dispar

SYMPTOMS: Trees may be partially or completely defoliated by large numbers of dark, hairy caterpillars. The caterpillars hatch from beige-colored egg masses in early April to late May and begin feeding on new tree leaves that are emerging at the same time. When the population is high, the caterpillars are a nuisance in residential areas and parks as they crawl on buildings, outdoor furniture, cars, and lawns. Their excrement seemingly "rains" out of trees, and sounds of their feeding can be heard as they rapidly devour leaves.

CAUSE: The gypsy moth is one of the most destructive insects in the United States. In 1981, 12.9 million acres of forests were defoliated. Infestations are primarily in the northeastern states, but it is spreading southward and westward.



Female Gypsy Moth with egg mass.

Oaks, especially white and chestnut oak, are the preferred food source of gypsy moth caterpillars. Other preferred species include: alder, aspen, basswood, birch, hawthorn, and willow. Least preferred species include: American holly, ash, black locust, flowering dogwood, sycamore, and tulip tree.

Young caterpillars spin down from treetops on silken threads and are easily spread by the wind. Fully-grown caterpillars can be identified from other caterpillar species by the five pairs of blue spots followed by six pairs of red spots on their back. The caterpillars are ravenous feeders. It is estimated that a single caterpillar consumes about 10.8 sq. ft. of foliage during its development. Defoliation weakens trees and complete defoliation can kill stressed conifers and hardwoods in one year. A tree weakened by gypsy moth feeding is more susceptible to injury from insects and diseases. Sunscald, dieback, and overall decline of trees are often associated with defoliation.

Adult moths begin to emerge in July after the caterpillars have pupated. A female moth lays from 75 to 100 eggs, which can be found on trees, rocks, walls, firewood, even the underside of vehicles. In fact, accidental transportation of egg masses has accounted for the spread of the gypsy moth from state to state.

SOLUTION: Because of the long hatch periods, two or three foliar treatments may be necessary to control gypsy moth caterpillars. The bacterial pathogen, B.t., will control gypsy moth, but it is most effective while the larvae are young.

In addition, trees should be fertilized to improve their ability to recover from gypsy moth damage.