

GYPSY MOTH

A MAJOR PEST OF TREES

Gypsy Moth Caterpillar (Larva)

**CALIFORNIA DEPARTMENT
OF FOOD AND AGRICULTURE**

**1220 N Street
Sacramento, CA 95814**

What is the gypsy moth?

It is a serious insect pest of trees and shrubs. It does its damage during the caterpillar (larval) stage when it can eat as much as a square foot of leaves daily. When there are many caterpillars, they defoliate trees, weakening and sometimes killing them. And a defoliated watershed increases both fire and erosion potential.

How did it get to the U.S.?

This pest was brought to New England in 1869 by a naturalist looking for a way to develop a disease-resistant silkworm. To achieve this, he intended to cross the silkworm with the gypsy moth. A windstorm

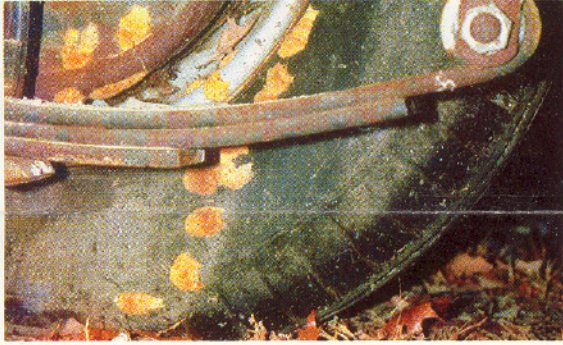


Photo Courtesy of U.S.D.A.

Gypsy Moth Egg Mass Found Under Car

turned his project into a nightmare for the New England states. The cage in which they were housed was blown open and the caterpillars escaped, spreading mostly by airborne currents through the local countryside and then to adjacent states.

How did it come to California?

The gypsy moth is a notorious hitchhiker. The female lays her eggs during the late summer months on just about anything—trees, outdoor furniture, automobiles, trailers, campers, etc. If eggs are placed on something that is relocated, a gypsy moth can be transplanted just about anywhere. Egg masses are not always easy to find. For example, the female can place them underneath a vehicle in places nobody would ever suspect.

Why did it survive?

Without its natural enemies, gypsy moths can flourish in a new environment. In Europe, natural enemies help keep populations in check. Here, gypsy moths have plenty to eat and nothing to stop them from expanding their numbers. Attempts to utilize natural enemies have had limited effect.

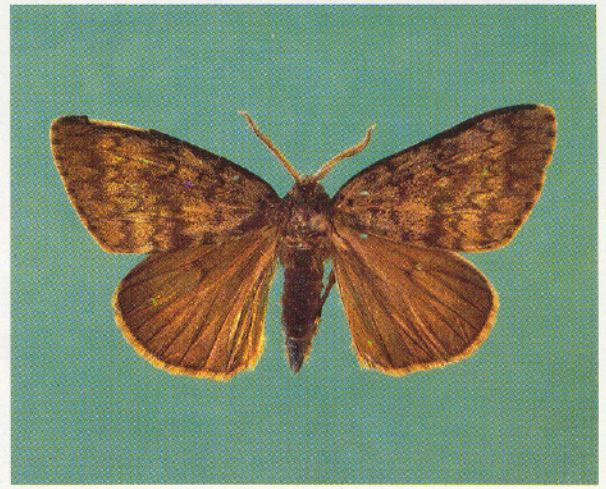


Photo Courtesy of C. S. Papp

Gypsy Moth Adult Male *Lymantria dispar*

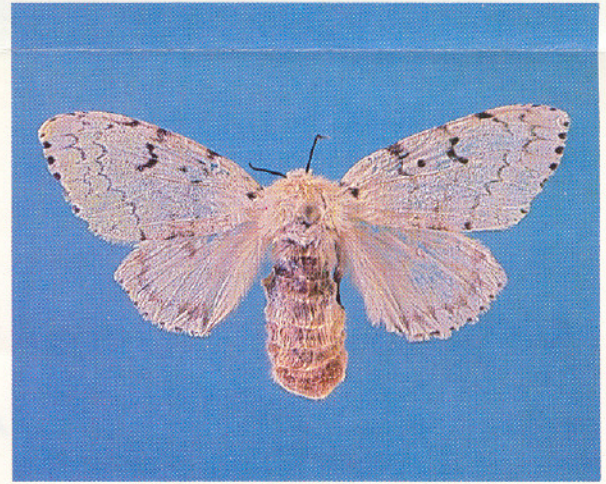


Photo Courtesy of C. S. Papp

Gypsy Moth Adult Female *Lymantria dispar*



Photo Courtesy of H. Kaya

Gypsy Moth Egg Masses and Adult Females on Tree Trunk



Photo Courtesy of C. S. Papp

Gypsy Moth Egg Mass on Birch Wood



Photo Courtesy of M. Pendrak

Adult Male and Female Gypsy Moth

Life Cycle

The gypsy moth goes through four stages of development—egg, larva (caterpillar), pupa (cocoon), and moth. It has one generation a year, overwintering in egg masses attached to trees, stones, walls, logs, and other outdoor objects. Each gypsy moth egg mass contains up to 1,000 eggs and is covered with buff or yellowish hairs from the abdomen of the female. The velvety egg masses average about 1½ inches long and about ¾ of an inch wide.

On the east coast of the U.S., eggs begin hatching in late April or early May. The brownish, hairy caterpillars are easy to identify when about half-grown by pairs of red and blue dots on their backs. Mature caterpillars are from 1½ to 2½ inches long.

Caterpillars enter the pupal or “cocoon” stage late in June or early in July, emerging from their dark-brown pupal cases in 10 to 14 days as moths. Males have dark-brown forewings and a 1½-inch wingspread. Female

moths are white with a wingspread of about 2 inches.

The pests do not feed in the moth stage, but only mate and lay eggs. Depending on weather and location, eggs are laid between July and September.

Hosts

1. Preferred hosts of the gypsy moth are oak, apple, alder, aspen, basswood, hawthorn, willow, and birch. The insects also attack beech, cherry, black gum, hemlock, hickory, hornbeam, larch, maple, pine, sassafras, and spruce.

2. Feeding studies indicate that the following also can be hosts: REDWOOD, APRICOT, MANZANITA, PHOTINA, MONTEREY PINE, CALIFORNIA OAKS, PYRACANTHA, DOUGLAS FIR, INDIA HAWTHORN, SUGAR BUSH, AND WESTERN RED CEDAR.

3. Species not favored by the gypsy moth include ash, balsam fir, butternut, black walnut, catalpa, red cedar, dogwood, holly locust, sycamore, and tulip poplar.

If You Notice:

1. Extensive defoliation of your trees;
2. Caterpillars (larvae) with blue and red dots on the branches or leaves;
3. Egg masses.

PLEASE NOTIFY:

Agricultural Commissioner's Office

or

Gypsy Moth Project Office