

### Gypsy moth

Gypsy moth, *Porthetria dispar*, introduced from Europe into Massachusetts in 1869, has spread through the hardwood forests of the Eastern States from Maine to North Carolina and Alabama with infestations also found in Quebec and the Lake States. In 1970 it was found in one location in California; in 1973 spot infestations were found in Santa Clara, Ventura, Butte and San Mateo Counties...

The gypsy moth feeds on most hardwoods and some intermixed conifers; hosts acceptable to all larval stages include oaks, willows, poplars, most birches, larch, linden and apple. Dry sites and open stands are most susceptible to gypsy moth build-up and damage. "In spring, eggs hatch about the time the oak leaves unfold and the tiny larvae crawl about in search of foliage, often spinning down on silk threads ... Newly hatched larvae feed first on leaf bases, and then on leaf surfaces. Older larvae feed usually from the edges of leaves, and mostly at night. When trees are stripped, larvae migrate considerable distances in search of food...

"The pupal stage lasts 10 to 14 days ... Adults appear in late July and August. The females crawl a short distance from their pupal cases and are mated by the strong-flying, searching males. Females lay their egg masses on tree parts, stumps, stones, buildings, or other objects, and the eggs overwinter.

## **GYPSY MOTH IN OREGON**

### **The gypsy moth problem**

The gypsy moth is a very serious pest of trees and shrubs in the northeastern United States. The states most heavily infested are Pennsylvania, New York, New Jersey, Rhode Island, New Hampshire, Vermont, Massachusetts, Connecticut and Maine. Persons moving from any of these states to the Pacific Northwest are potential carriers of this insect and appear to be the main threat for infesting Oregon. Eggs and pupae are often attached to motor vehicles, picnic tables, swing sets, sandbox toys, etc., and can be transported very easily to new locations when people move. The pest can be transported also on campers of vacationers, rail cars, trucks and other types of vehicles which visit infested areas.

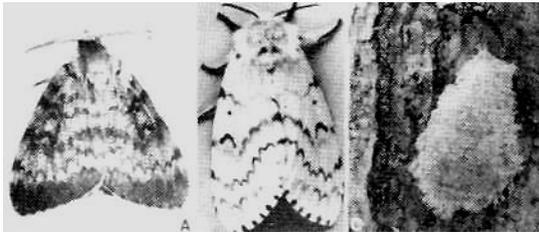
### **Gypsy moths in Oregon**

The first gypsy moths found in Oregon were trapped by the Oregon Department of Agriculture in the summer of 1979. One male was taken in a trap in Lake Oswego and one in Milwaukie. In 1980 a few males were trapped in Lake Oswego, Tigard, Happy Valley and south Salem. The trap used contained pheromone (sex lure) similar to that of the female moth.

### **Educating the public**

During the winter months of 1980-1981 attempts were made by the Department of Agriculture to determine the initial source of the moths captured in the traps the previous two summers. The following approaches were used:

## Gypsy Moth, (continued)



Despite natural control and intensive chemical control and eradication programs, the gypsy moth continues to be a serious problem in Eastern States and now directly threatens western forests.

**"Letter to Residents"** - In October and November, 1980, a "letter to residents" was sent home with 12,000 students of the 36 elementary schools in the communities where male moths were trapped. The letter explained the potential gypsy moth problem and requested that persons who've moved to Oregon from the heavily infested states call the Department of Agriculture. Arrangements were made then for an inspection of their property to be done in search of evidence of the gypsy moth. 45 inspections have resulted so far. Evidence of the gypsy moth (either eggs, empty larval skins or empty pupal skins) has been found in 5 instances.

As a result of inspections done in response to the "letter to residents" two localized infestations of gypsy moths were found this past winter. In one instance 25 egg masses were found on the underside of a camper which was hauled to Oregon in a moving van coming from Connecticut in October 1980. These egg masses were removed from the camper and the camper and the surrounding area was treated with pesticide. In the second situation, located in south Salem, the residents moved to Oregon from New Jersey in November, 1979. Gypsy moth egg masses were transported with them on their

sandbox toys and swing set. These eggs hatched here last spring and infested trees in their backyard. In April the trees on this residence, and on the 25 adjacent properties, were treated with two applications of Orthene 75S pesticide.

**School "Caterpillar Search" Program** – A gypsy moth 'caterpillar search' school mini-course was prepared by an Oregon Department of Agriculture Entomologist. This mini-course was designed to be used by teachers and students in elementary schools. After studying about the gypsy moth and doing worksheets about it, students are to search for the caterpillars this spring in their home communities. The 10 schools located nearest the positive trap sites were selected to pilot the program. Faculty training meetings were held in all 10 schools in March 1981. Schools are now (mid-May and early June) in the process of implementing the mini-course project. It is hoped that the 4000 students in these 10 schools will be able to locate the source(s) of the moths trapped in their communities in 1979 and 1980. So other approaches used for locating the gypsy moth - 1) PTA Meeting; 2) Master Gardener Workshops; 3) Distribution of educational literature by Welcome Wagon, Newcomer Services and other such organizations; 4) Meetings with Home Owner Associations and similar groups; 5) TV and newspaper coverage; and 6) help from County Extension Agents through newsletters, meetings and radio programs.

### Plans for this year

This summer the Oregon Department of Agriculture will seek out any new gypsy moth sites by implementing a very extensive trapping program. Using a grid system, sex lure traps will be

placed in communities along the coast, throughout the Willamette Valley and southern Oregon, central Oregon and in certain urban areas in eastern Oregon. Since the caterpillars began hatching here much earlier than anticipated, emergence began on April 11, it will be necessary to put out the adult male sex lure traps in early rather than late June. Our normal distribution of traps will be 1/3 sq. mi. but in target areas the trap count will range from 65/1 sq. mi. to 3/1 acre.

Educational programs that were initiated during the winter months and the gypsy moth inspections program will continue throughout the summer while new approaches to finding the moths will be explored.

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