



Gypsy Moth

The gypsy moth (*Lymantria dispar* L.) was introduced into the United States from Europe by a French scientist who attempted to breed this insect with the silkworm in an effort to provide a hardy silk producer. The gypsy moth escaped captivity near Boston, MA in 1869 and quickly became established in the Boston area. In an environment with few natural enemies, this insect gradually spread throughout the Northeast. Today it is present from Canada to Virginia and west into the Northern Midwest states. Isolated outbreaks occur outside this range. The gypsy moth is continuing its spread westward and southward. Gypsy moths feed on a wide variety of tree and shrub species. Favored food plants include oak, birch, apple and willow.



IMPACT: Gypsy moths are voracious feeders. A fully-grown larva can consume as much as one square foot of foliage in a day. When infestations are heavy, entire trees may be stripped in just a few days. Healthy deciduous trees can usually tolerate a single defoliation, however, the loss of foliage will reduce growth and vigor significantly. Two to three consecutive years of heavy defoliation will result in death of most hardwoods, especially oaks. Deciduous trees that have been stripped usually produce a second crop of foliage within a few weeks. These leaves are smaller and sparser than normal which imparts a thinned appearance to the crown.



Figure 1. Fully-grown larva

DESCRIPTION: Gypsy moth larvae are approximately two inches long when fully grown. The body is brown to dark grey and hairy. The dorsal surface is marked with 5 pairs of blue and 6 pairs of red tubercles (raised spots). Adult moths are stout bodies with a wingspan of approximately two inches. Females are off white with black markings on the wings and the abdomen is covered with yellowish hairs. Male moths are brown and slightly smaller. Eggs are oval, approximately one inch long and covered with yellowish hairs from the female's abdomen.

POPULATIONS FLUCTUATIONS: Like many insect pests, gypsy moth populations fluctuate greatly. In most years, populations are present at very low levels. However, the insect has the potential to increase from insignificant numbers causing very light defoliation to massive numbers causing complete defoliation in just one year. Heavy outbreaks usually last two to three years before the population collapses. Weather conditions, parasite and predator populations, natural diseases and availability of suitable food are among the principle factors that influence the population cycles.

Management : Gypsy moth is now a permanent resident of the Northeast and Midwest and will never be completely eliminated. Several options are available to help minimize the spread of this pest and to help protect trees against serious defoliation. Treatments include the application of natural based or synthetic insecticides when larvae are actively feeding and bark banding to reduce migrating caterpillars. Trees defoliated by gypsy can be fertilized, mulched and irrigated during dry periods to aid recovery.