

GYPSY MOTH

A Public Service of the Churchill Area Environmental Council
2300 Wm. Penn Highway, Pittsburgh, PA 15235 1994

Following a population explosion in the spring of 1990, the gypsy moth (*Lymantria dispar*) is currently in a low part of its normal boom-bust pattern. That cycle will turn around periodically and property owners should remain alert to gypsy moth advisories from the County.

This European tussock moth was accidentally released from a research project in Medford, Massachusetts in 1869. It has been moving steadily westward with few natural enemies to control it. Gypsy moths are partial to oaks (particularly White, Red and Black Oaks - with Pin Oaks somewhat less desirable, but still vulnerable.) The caterpillars are voracious eating machines and can defoliate whole trees in a matter of days. Weakened by the leaf loss, the tree may put out a second flush of foliage, but it will remain stressed and may succumb to bacterial, fungal, viral and other infections. The young caterpillars spread to new areas when the silk threads they spin are blown in the wind - thus the name "gypsy."

Property owners who want to protect individual specimen trees should take the following steps:

- 1) **Keep trees well watered.** In early spring feed trees with a good fertilizer (pelletized lawn food or a liquid concentrate are fine.) Read the package label carefully. Divide the recommended dose by four and apply in four equal installments at two week intervals. This is better than applying the entire amount at one time (unless you are using a slow-release fertilizer) and will reduce fertilizer loss from heavy rain washouts. Tree fertilizer amounts are related to trunk diameter so estimate the correct size of your trees. Or, have a professional arborist do the feeding. Healthy trees are less attractive to pests and have a better chance of survival if attacked.
- 2) **Destroy gypsy moth egg masses over the winter** (before late April hatching.) The masses look like patches of tan felt, fuzzy to the touch and about two to three inches long by one inch wide. They lie flat on tree trunks and branches, under picnic tables, patio furniture, ledges and the like. Use a spoon to scrape them into a jar of liquid bleach or strong detergent and let them soak for 48 hours to kill the silvery eggs inside the fuzzy mass. Then put the jar out with the trash. An exhibit showing samples of each stage of the gypsy moth life cycle is available at the Churchill Borough Building during business hours.
- 3) **In early June band oak trees** (and other susceptible species like apples, willows and basswood) with burlap. Take an 18 inch wide strip of burlap and encircle the tree trunk with it about five feet above the ground. Tie the strip at its middle with string and fold the top half of the burlap down over the string making a double flap about nine inches long. The moth caterpillars eat at night and hide during the day. They will crawl under the burlap and use it as a hiding place. Check the flaps every day before 6:00 P.M. until late June and brush the caterpillars (they have pairs of red and blue dots and very hairy bodies) into a container of soapy water to drown them. Alternatively, purchase "sticky bands" at a hardware store or garden shop and wrap them around tree and shrub stems, but never apply sticky chemicals directly to the plant bark. These strong chemicals soak into the living tissue and may kill the plant. Collect and kill caterpillars as described above.

These measures will help to lower the gypsy moth populations to non-damaging levels and help our trees to survive until parasitic flies, wasps (non-stinging types,) fungi and viral enemies of the moths can reach effective "natural" control levels. If you have a landscaper who advises spraying, make sure you **spray only with "Bt"** (sold as Thuricide, Di-Pel, Foray or Biotrol) - a bacterium which kills caterpillars but is not harmful to other organisms. For up to 95% effectiveness, spray during mid-May when the caterpillars are small. NOTE: For severe infestations one application of "Bt" may not be effective. In these cases, either use multiple applications of "Bt" or have professional spray a single application of Dimilin (an insect growth regulator.) Spraying with broad-spectrum insecticides like Sevin or Orthene should be avoided because these materials kill honeybees and other beneficial insects.

For additional information call the Allegheny County Insect Control Office (355-4046.)
A supply of burlap may be available from your municipal office or it can be purchased at most hardware or fabric stores.

A diagram of the major stages in the life cycle of the gypsy moth is pictured below to assist in identification.

Life Cycle of the Gypsy Moth

