From the Forester: Understanding Gypsy Moths

Camp No-Be-Bo-Sco

for Fish & Wildlife Management, Forestry, and Insect Study merit badges

Gypsy moths were introduced into the United States during the early part of the 20th century. Beginning in the mid-20th century, massive defoliations occurred, as the gypsy moth caterpillar eats oak and white pine leaves and needles, particularly chestnut oak and white oak. During mild or moderate infestations, some oaks will be completely defoliated, some oaks will be partially defoliated, and others may not be affected. During severe infestations, almost all oaks in the forest canopy, especially those at higher elevations, will be completely defoliated.

Severe gypsy moth infestations have occurred in this region during the mid-to late-1970's and during the late 1980's. A moderate gypsy moth infestation occurred at the camp several years ago, following a drought. A large, severe infestation has been moving southeast from the Catskill region of New York and northeastern Pennsylvania for several years. Camp No-Be-Bo-Sco was on the leading edge of that infestation during the summer of 2006.

During January 2008, the forest at the camp was assessed to predict whether or not a severe infestation will occur during the summer of 2008. According to the results of that assessment, there are about 6,700 gypsy moth egg masses per acre, thus predicting that a catastrophic infestation leading to large-scale tree mortality is likely. The Council sprayed the camp during May of 2008. The results of that spraying were very positive.

As of the printing of this sheet, minor amounts of gypsy moth caterpillars were observed in camp. However, the amount of damage to the camp and forest appears to have been minimized as a result of spraying in 2007 and 2008. The camp was not sprayed in 2009 or 2010.

Consecutive defoliations by gypsy moth caterpillars weaken oak and white pine trees, often causing them to die from insects and fungi the trees would normally be able to fight off. If left untreated over decades, the oak-dominated forest would gradually change into a black birch and red maple dominated forest. This would have significant impacts. For example, the wildlife value of acorns produced by oak trees are of tremendous value. Also, oak is far more valuable as a wood than either black birch or red maple.

Impacts on camper satisfaction, aesthetics, and health and safety would be dramatically affected by consecutive severe infestations. Large numbers of caterpillars are unsightly, as are large areas of dead or defoliated trees. The sound of gypsy moth defecation is unmistakable. Finally, dead trees near campsites, cabins, and other camp infrastructure would need to be addressed by the one ranger employed by the Council, or by many volunteers for a number of years. Dangerous trees in sensitive areas would need to be felled by professional arborists.

This brochure was written by the Northern NJ Council, BSA Conservation Committee (last updated 3/2010). For more information on conservation activities within the Council and at Council camps, visit http://www.nnjbsa-conservation.org