

Private Residential Gypsy Moth Spraying Program Information Bulletin

The Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry, (DCNR) annually conducts an aerial gypsy moth suppression project for private residential landowners throughout Pennsylvania. This program is conducted and cost shared in cooperation with participating counties or other local municipalities and receives partial funding from the USDA Forest Service. To qualify for this program, your property must meet the requirements detailed below, and you must be willing to assume the responsibilities indicated.

Objective – DCNR’s sole objective under this program is to prevent gypsy moth caused defoliation in treated forest residential areas from exceeding 30% on 80% or more of the highly favored host trees.

Because of the limitations inherent in the insecticides available and the degree of gypsy moth infestation in Pennsylvania, it is not economically feasible, nor is this program designed to eradicate the insect from any part of the Commonwealth. In addition, because of the variation in insect tolerance levels of individual people, the nuisance problem caused by larval populations may not be reduced sufficiently to placate all landowners serviced even though the foliage protection objective is met.

Insecticide -- A biological insecticide, *Bacillus thuringiensis*, is the only spray material that DCNR will use on private residential lands under this program. DCNR will select the rate of application based upon gypsy moth population density and health with the highest rate used on the heaviest, healthiest populations. Because Bt is a biological insecticide whose effectiveness can be affected by weather conditions during and after application, DCNR does not guarantee the degree of control.

Minimum Spray Block Size - The minimum spray block size for an area to qualify to be sprayed must be at least 25 acres. These 25 acres may be made up of more than one qualifying property as long as when in total the area meets the minimum 25 acre requirement.

Qualifying Areas – Only forested private residential sites containing trees 25 feet or more in height qualify for this portion of the program. These sites must have at least 50 percent of the surface area, when viewed from above, covered by the crowns of these trees. Twenty percent or more of this crown cover must be made up of tree species which are highly favored by the gypsy moth. Highly favored species include apple, aspen, basswood, beech, birches (gray, white, and river), boxelder, hawthorn, larch, oaks (all species), willows, and witch hazel. The site must have a dwelling located within or no more than 200 feet from the forest. The spray block to protect this site will be designed to provide treatment to all forested areas within 500 feet of the dwelling and, in so doing, must include at least six acres of forest. The spray block will be designed in this manner to facilitate aerial spraying regardless of how large or small the landowner’s property actually is. Spray blocks will not be custom designed to accommodate property boundary lines. Neighboring residential properties where all the landowners desire treatment will be combined into a single block whenever possible.

Non-Qualifying Areas – Residential properties with only scattered ornamental trees and shrubs or any property with trees that are readily accessible to ground spray equipment do not qualify for this program. Also, areas that contain any nontarget organisms that would be adversely affected by spraying or areas which are unsafe for aerial spraying because of obstructions or terrain will not be considered.

Egg Mass Density – The proposed treatment areas must contain at least 250 healthy, current-season gypsy moth egg masses per acre or, if there are less than 250 egg masses per acre, there must be a reasonable expectation that high numbers of gypsy moth larvae will be blown into the area next spring. Only areas within one air mile of a heavily infested ridge qualify in the latter respect.

The landowner can measure egg mass density by randomly establishing 1/40-acre circular plots (radius = 18.6 feet) and counting all of the egg masses including those under rocks and those high in the trees (use binoculars). Multiply the plot count by 40 to get the per-acre equivalent. As many egg masses as possible should be touched to ensure that they are from the current season. Egg masses from previous seasons, while often very viable looking in appearance, will feel soft and mushy to the touch. The current-season egg masses should not be removed and destroyed until after December 1 when the cooperator and DCNR field evaluations will be completed.

Areas that have very small egg masses (less than dime size), regardless of the number, often do not qualify for the program because the gypsy moth population will most likely succumb to natural mortality agents shortly after they emerge in the spring.

Request for Treatment – The private residential landowner who meets the above qualifications must initiate a request for treatment with the program coordinator designated by the cooperating county or municipality—no requests can be made directly through DCNR. This person can be reached by calling the Dauphin County Conservation District at 717-921-8100 a request must be made each year the landowner experiences a problem. All affected landowners within a qualifying area should get together and submit a united request.

Spray Block Coordinator – If requested by the cooperator as a condition of treatment, one of the landowners within a proposed spray block must agree to serve as the spray block coordinator (SBC). The SBC will be responsible for distributing notification letters to and collecting landowner assessments (see below) from all spray block residents. With some training from DCNR and the cooperator, the SBC will be used to monitor future gypsy moth population buildups and to initiate future requests for treatments in a timely manner.

Landowner Assessments – Many county or municipal cooperators require the landowners within an approved spray block to pay a per-acre fee which is issued to partially or wholly pay the cooperator's required cost-sharing to DCNR. The total landowner assessment for the block must be paid by the cooperator's deadline or the entire block will be dropped from the program on December 1. The cooperator will refund a landowner's payment only if the entire block is dropped from the program because of nonpayment of the total assessment for the block or if a neighbor's objection to spraying causes the landowner's property to be dropped from the block.

LANDOWNER'S CHECKLIST

If you can answer yes to all of these questions, your property can qualify for the Pennsylvania cooperative gypsy moth suppression project.

QUESTION	YES	NO
Is your county or local municipality cooperating in the cooperative gypsy moth suppression program?		
Does your area contain a forest with trees 25 feet or more tall with at least 50 percent crown cover made up of at least 20 percent highly favored species which are inaccessible to spraying by ground equipment?		
Is your house within the forest or no more than 200 feet from it?		
Does your area contain an average of at least 250 healthy egg masses per acre or a reasonable potential for blow-in?		
Have you contacted your neighbors to include their properties in the treatment request?		
Are you or a neighbor willing to serve as a spray block coordinator?		
Are the funds available to pay the entire landowner assessment for the area?		
Was a timely request for treatment made with the program coordinator?		

