

## **\*\*\*Gypsy Moth (Lymantria Dispar) Survey Results\*\*\***

As announced in our 3<sup>rd</sup> Quarter 2023 Newsletter, in response to resident's concerns the SHLOA Board approved participation in the WV Dept. of Agriculture's (WVDOA) gypsy moth egg mass survey program. Our neighbors in the Woods Resort also participated in the survey.

By letter dated November 21, 2023, the West Virginia Department of Agriculture advised that SHLOA's application to participate in the 2023 Cooperative Lymantria dispar (Gypsy Moth) Suppression Program had been reviewed and a site visit to conduct an egg mass count has been completed. The WVDOA site visit and review confirmed that spraying for control of Gypsy Moths (aka, Spongy Moth) in Sleepy Hollow is justified based upon the egg mass survey results.

Requirements for inclusion in the Gypsy Moth Suppression Program include "a minimum of 500 egg masses per acre for residential property, 500 egg masses per acre for timberland, 30% suitable host trees and 50% crown cover within the proposed treatment block."

The WVDOA advised that Sleepy Hollow has egg mass counts as high as 3217 egg masses per acre. This is significantly above the 500 egg masses per acre minimum for participation in the suppression program. There are two aerial treatment options available through the suppression program:

1. *Bacillus thuringiensis* (BTK) will provide foliage protection, **except** in high egg mass densities ("high mass densities is defined as above 1200 egg masses per acre).
2. MIMIC (Tebufenozide) will provide foliage protection **AND** egg mass reduction **even** in high egg mass densities (i.e., above 1200 egg masses per acre).

BTK is a bacterium commonly found in forest soils worldwide. It has become one of the most valuable biological pest management tools for a variety of agricultural, forestry, and urban pests. While it is highly toxic to target pests, it is very safe in regard to humans and animals. For example, different formulations of the same biopesticide are labeled to be applied to organic grains such as shelled corn and soybeans during storage and/or to organic bagged grains (popcorn) to prevent Indian meal moth. (Source, WVDOA brochure, [www.agriculture.wv.gov](http://www.agriculture.wv.gov))

Mimic® (Tebufenozide) is a pesticide in the class of insect growth regulators. This means that, once exposed to tebufenozide, caterpillars are unable to successfully molt and grow. This prevents them from reaching maturity and reproducing. Tebufenozide may be applied by air or ground. It is successful on all population densities. (Source, WVDOA brochure, [www.agriculture.wv.gov](http://www.agriculture.wv.gov))

In agriculture, tebufenozide is also used to protect many crops from caterpillar pests; this product is known as Confirm®, and is used to protect fruits, vegetables, and many field crops from harmful caterpillar pests.

Mimic does not affect any other orders of insects, including honey bees, native bee pollinators, ants, wasps, beetles, dragonflies, grasshoppers, or flies. Spring defoliating forest insects occur earlier, or are in different locations than many of the attractive butterflies (such as the monarch butterfly) that are associated with pastures, parkland, and roadside areas. Mimic also does not affect beneficial insect parasites, parasitoids, and predators that help to naturally control the

populations of the forest defoliator pests.... Mimic has no direct effect on birds as they do not have the insect ecdysone hormone which is triggered by Mimic; and exposure to the spray or consumption of affected larvae by birds has no direct impact upon them either.... Additionally, Mimic has no impact upon wild or domesticated animals, or upon fish or amphibians.... Mimic has no effect upon vegetation or soil organisms.... Mimic has no impact upon humans.... (Source, PA Dept. of Agriculture Fact Sheet, [www.pgc.pa.gov/Wildlife/HabitatManagement/Documents](http://www.pgc.pa.gov/Wildlife/HabitatManagement/Documents))

Given the very high egg mass count documented within the confines of Sleepy Hollow, the Board of Directors has approved funding for treatment of our 856 acres with MIMIC. Likewise, due to similarly high egg mass counts, the Board of Director's at the Wood Resort has reportedly also approved treatment of their 800+ targeted acres with MIMIC.

According to the WVDOA, the spongy moth (previously known as the gypsy moth) is the most serious insect pest ever to invade West Virginia's forests. The first adult male spongy moths were trapped in West Virginia in 1972. The first caterpillars were found in 1978. Since then, this destructive insect has continued to spread, while funding to combat the pest has been difficult to maintain. These circumstances created the need for a spongy moth cooperative suppression program for landowners in the generally infested areas in West Virginia (including Morgan and Berkeley Counties).

Severe economic loss of valuable timber, significant impact on outdoor recreational opportunities in heavily infested areas, adverse effects on some forms of wildlife through food loss and changes in habitat, and destruction of the aesthetic beauty of our forested communities are expected results of the onslaught of the spongy moth. In addition, a health problem, in the form of an allergic reaction, may occur in a few people when they come in contact with large numbers of spongy moth caterpillars.

Per the WVDOA, repeated heavy defoliation by spongy moth kills trees. Spruce, pine and hemlocks die after a single heavy defoliation. **Hardwood tree mortality, after two successive years of defoliation, can reach as high as 80%. The forest trees preferred by this insect are oaks, and the oak-hickory type makes up about 77% of West Virginia's woodlands.** Studies by the West Virginia Department of Agriculture and West Virginia Division of Forestry confirm that as much as 25 percent mortality after one year of heavy defoliation could be expected in timber stands if spongy moth populations are left untreated.

If as a lot owner you object to treatment, please **send written notice to SHLOA** with your full name and contact information (mailing address, SHLOA property address, phone number, email address, section/lot number, and area concerns) **via mail to SHLOA, 65 Audubon Road, Hedgesville, WV 25424 or via email at [Sleepyhollowhoawv@yahoo.com](mailto:Sleepyhollowhoawv@yahoo.com)**. Please put Gypsy Moth in the subject line of your email. SHLOA will share your correspondence with the WVDOA.

For additional information about the threat of gypsy moth infestation, and the efficacy and safety of treatment options, please contact the WV Dept. of Agriculture or visit their website at [www.agriculture.wv.gov](http://www.agriculture.wv.gov).