

What Can We Do About the Spongy Moth Outbreak?

A Few Bad Years

Unfortunately, 2024 is predicted to be another bad year for spongy moth (formerly known as “gypsy moth”) defoliation. This will be the third consecutive year of heavy defoliation in Pennsylvania, with outbreak levels in 2022, 2023, and again predicted for 2024. These voracious caterpillars strip the leaf canopy in many areas of the state. Spongy moths are known to target oaks, and many stands of oak were hit hard. If you noticed some barren mountaintops that resembled more of a winter landscape than summer, you are not alone.



Will Defoliation Kill Trees?

When a tree is stripped of its leaves, it is known as *defoliation*. This condition weakens the tree as it uses up valuable reserves to regrow leaves. It is important to note that it's too early to tell if a recently defoliated tree will die. “When spongy moth defoliation is combined with other stressors such as late frost and drought, trees have a more difficult time recovering. Trees that were heavily defoliated over the last two years are weakened and will be especially susceptible to mortality if heavily defoliated again this upcoming growing season,” said DCNR Bureau of Forestry Forest Health Division Chief, Rosa Yoo.

Don't Wait Until Next Spring!



The best time to plan for spongy moth treatment is not while the damage is actively occurring, but rather in the prior fall or early winter. Successful treatment begins long in advance with egg mass surveying and planning during the preceding year. When egg mass surveys reveal that the spongy moth population has exceeded a certain threshold, treatment is recommended for the following spring.

[Guide to Spongy Moth Egg Mass Surveying](#)



Go with the Pros

The best way to treat for spongy moths in forested areas is via aerial application (helicopter or fixed-wing aircraft), targeting a specific stage in caterpillar development, so timing is critical to effectiveness.

If your forest has been impacted heavily by spongy moth, you may wish to have your woodlot treated by professional pilots who use highly specialized equipment.

[List of Aerial Applicators](#)

Individual tree treatment options are also available for trees in yards, parks, or along streets. Contact your local tree care professional for treatment options that work best for your situation.

What Has DCNR Done to Combat the Problem?

In the spring of 2023, the DCNR Bureau of Forestry sprayed over 290,000 acres of state forest, state park, and national forest lands in Pennsylvania. This total represents one of the largest suppression programs in recent history.

[2023 Spray Block Map](#)

Cooperation is Key

In 2023, the Pennsylvania Game Commission joined DCNR in the effort to control spongy moths by spraying over 100,000 acres of state game lands.

In another positive development, the DCNR Bureau of Forestry Division of Forest Health managers noticed a substantial uptick in private land spraying in 2023, demonstrating the power of the private sector in the total effort to control spongy moths.

[Guide to Conducting a Private Spongy Moth Suppression Program](#)

Private Forest Landowners Can Help Control Spongy Moths

Pennsylvania is blessed with roughly 17 million acres of forest lands. Of this total, only about 30 percent is publicly owned. As caretakers of 70 percent of Penn's Woods, private landowners can claim an important role in helping to manage the spongy moth population.

The DCNR Bureau of Forestry offers spongy moth management [information](#) for concerned forest landowners and can even visit your property to advise. To arrange for a site visit, please contact your [county service forester](#).

Boom and Bust

Spongy moth populations follow a "boom and bust" cycle, where numbers are high for a period of years, followed by years of relatively low numbers. The current outbreak will surely end at some point, but this can't be forecast because important factors that affect their populations (for example, seasonal weather) are not known.

The DCNR Bureau of Forestry will remain active and vigilant during this current outbreak, conducting egg mass surveys and aerial defoliation assessment flights, and planning 2024's spongy moth suppression program. We encourage other forest landowners and managers, both public and private, to join us in the fight!

Special thanks to Ryan Reed and Rosa Yoo for contributions to this article.