Ada Township, Kent County
Recommended Spongy Moth Spray Areas 2025

Aquatic Consulting Services II, LLC
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Block #	Acres	Reason for Spray
AdaTwp01	46	An established population in prime habitat. Nuisance is the primary concern due to history of infestation in the area. Population is continuous into unmanaged Cascade Twp, so reinfestation post-treatment is also a concern. Spray to mitigate potential nuisance and inhibit reinfestation.
AdaTwp02	23	A rising population in prime habitat. Nuisance is the primary concern in this area due to the population residing in a portion of a high use public park and footpath. However, nuisance level is likely to be variable due to varied public and residential land use. Population buildup is a secondary concern due to history of infestation in the area. Spray to mitigate potential nuisance and suppress population growth.
AdaTwp03	323	A rising population in favorable habitat. Population buildup is the primary concern in this area. Tree damage is a secondary concern due to relatively high egg mass density, particularly in the northern portion of the block. Population is also continuous into unmanaged Vergennes Twp, so reinfestation is also a concern. Nuisance is likely to be variable due to varied residential land use. Spray to suppress population buildup, inhibit reinfestation, and mitigate future tree damage and potential nuisance.

Total Acreage = **392 acres**

The term “nuisance” is subjective and relates to the likelihood that the feeding behavior and number of caterpillars in the area will impact a property owner’s quality of life. Some property owners may experience heavy infestation yet go unbothered. Other property owners may view 5-10 caterpillars visible on a barn door as a nuisance. Field experience during spongy moth infestation suggests that the number of egg masses found in an area may yield a widespread nuisance situation. The term “tree damage” is more literal, but relative to environmental and historical factors as well. Any level of defoliation should be considered damaging, but otherwise healthy trees are generally much more resilient, even after consecutive years of defoliation. Other environmental stressors such as drought or disease are additive factors that will contribute to greater risk of tree degradation and/or mortality. Defoliation levels of >60% are also very stressful to trees, although most trees can survive 3+ years of >60% defoliation if few other stressors are present. Habitat quality relates to tree species composition, density, distribution, understory, and topography of an area. Mixed forest type consisting primarily of oaks, neatly groomed understory, mixed age-class, and low topographic variability are the ideal conditions for persistent infestation, and so this habitat is designated as “prime” with favorable, suitable, and marginal habitat in decreasing suitability. Trends in populations are designated by the egg mass residues in the area. Rising populations show a high new/old egg mass ratio, with established, sustained, and remnant populations extending toward a high old/new egg mass ratio.

As stated in previous reports to Ada Township, spongy moth suppression programs in Michigan generally follow an Integrated Pest Management (IPM) strategy which is focused on low environmental impact and economic awareness. Further, an IPM strategy intends to mitigate exponential population growth with treatment only until latent environmental controls begin to limit populations sufficiently. This approach requires that a monitoring period be commenced once environmental controls begin to act on populations sufficiently where tree damage is expected to be minimal and nuisance levels will be tolerable in the coming season. Considering the low number of complaints, and low defoliation levels observed in the 2022-2024 post-spray surveys, we are confident this was the correct approach. However, in two previously suppressed populations in Ada Twp, we observed the early signs of a rebound. This is common as in any spongy moth cycle, but it is a situation we must respond to aggressively. Accordingly, **we are recommending an increase of 103 acres for a total of 392 acres indicated above**. The current population cycle continues to be challenging, and we are still seeing volatility in a few adjacent communities. Further, we are seeing slight rebounds in historically infested areas of Ada Twp that have been suppressed for several years. We will just have to continue to stay on top of monitoring and treatment of rebounding populations as we continue to reduce numbers in wait of latent environmental controls. For these reasons, we strongly encourage the Ada Township to maintain a monitoring program in coming years.

Spongy moth suppression programs often are tasked with balancing high potential for damaging spongy moth numbers with high community benefit. Areas where these considerations overlap are generally the areas that are treated first with available funds and areas of diminishing return are treated as funds are depleted. Our treatment recommendations take this into account, and we try to limit recommended spray areas to these top-tier areas. There is always some risk the objection of "Why did you treat them and not me?" Given this trade-off, some of our broadly infested clients decide that the best use of available funds is to treat areas of high residential population density that are also generally infested with spongy moths. We cannot offer any guidance on this consideration and take no responsibility for the concluded spray acreage. It is solely the decision of the municipality to treat all, some, or none of the recommended treatment area.

Photo 1: Several new egg masses on underside of locust tree branch, block: AdaTwp01

Photo 2: Several new egg masses and pupal cases on stone wall, block: AdaTwp02

Photo 3: Several new egg masses on underside of white oak branch. Block: AdaTwp03