



EMERGENCY OPERATIONS CENTER



(March 29, 2022)

TREATMENT OF SPONGY MOTH EGG MASSES

EMAIL: Treatment Tips for Spongy Moth (formerly known as Gypsy Moth) Egg Masses

WHAT IS HAPPENING NOW (Month of April)

The Spongy Moth (formerly known as the Gypsy Moth) are currently in the life stage of egg masses. This is the phase before the caterpillars hatch in May. Egg masses are typically teardrop shaped and about 1-2 inches long. They contain all the eggs a female moth produces, typically 600 – 1000 for a healthy female.

Now is the time to treat Spongy Moth egg masses. Each egg mass destroyed represents several hundred caterpillars that will not hatch. The following steps can reduce Spongy Moth numbers and the damage they cause on isolated trees and properties:

1. Look for and identify locations that may harbor Spongy Moth egg masses.

Egg masses can be found in any protected location. They can be found on logs or debris on the forest floor to the tops of trees. On trees, egg masses are often found in cracks in bark, on the underside of large branches, under peeling bark or in holes. Log or rock piles are other favorite spots to hide egg masses. Female moths will also place egg masses on lawn furniture and play sets, behind shutters, underneath tree houses, beneath lower shingles, and under soffits on homes and garages. Old egg masses lose their color, fade to white, and have small pin size holes where caterpillars hatched last year. New egg masses are tan/brown and look soft and fluffy.

2. Remove objects around the yard that may harbor Spongy Moth egg masses.

Cut out dead branches and trees. Remove signs, decorations, or birdhouses nailed to trees or siding. Get rid of trash and debris such as barrels, cans, old tires, or unused structures like old treehouses or sheds.

3. When you find Spongy Moth egg masses, take action by late-April before larvae begin to hatch.

Scrape and soak: Use a scraper or hard plastic card to scrape egg masses into a container of soapy water. Let the masses soak overnight, then bag and dispose of them. Just scraping egg masses onto the ground will not kill the eggs, and the larvae will still hatch.

Scrape and burn: Use a scraper or hard plastic card to scrape egg masses into a contained fire pit. Egg masses will burn with a snap, crackle, and pop.

Spray and Soak: When temperatures are above 45 degrees, use a spray bottle mixed with recommended solutions to thoroughly soak each egg mass. MSU Extension Office recommends the following:

Commercially available horticultural oils labeled for Spongy Moth (aka. gypsy moth) egg masses

- Golden Pest Spray Oil (mostly soybean oil)
- Neem Oil (vegetable oil from fruits and seeds from neem tree)

Homemade solution of oil and water and dish soap

- 1 cup vegetable oil + 1 cup water + 1 Tbs of dish soap

WHAT TO EXPECT NEXT (Month of May and June)

The Spongy Moth (formerly known as the Gypsy Moth) will move into the life stage of larvae by late-April to early-May. During this stage, the caterpillars will feed for 6 – 8 weeks. Most caterpillars feed on trees less than 100-150 yards from where they hatched. Smaller caterpillars feed during the day while larger sizes feed at night and move down the tree to hide in the bark of a leaf litter during the day.

This is the time to treat Spongy Moth caterpillars by taking the following steps:

1. Look for signs of naturally occurring biological controls for Spongy Moths.

There are three naturally occurring biological controls of note.

- Entomophaga maimaiga is a fungal pathogen present in Michigan. This pathogen lives in the soil and needs moisture to spread spores. If this fungus is in the area, caterpillars will die in a straight line with their head pointing to the ground.
- The Nucleopolyhedrosis virus (NPV) is a naturally occurring virus specific to Spongy Moths. This virus is always in the population and activates during outbreaks. If this virus is in the area, caterpillars will die in a V shape.
- Parasitic wasps lay their eggs inside the spongy moths egg masses. The wasps then feed on the tissues of the spongy moth host and killing about 20 to 30 percent of the eggs in an egg mass. The tiny, dark adult wasps can be observed if you look closely at the egg masses.
- Click here for more information from the MSP Extension Office:
<https://www.canr.msu.edu/uploads/files/e2700.pdf>

2. Wrap burlap or duct tape bands around tree trunks.

Burlap bands wrapped around a tree trunk create a flap where caterpillars will hide during the day. Caterpillars can then be knocked into a bucket of soapy water to kill them. Pupal cases and egg masses may also accumulate which make it easier to locate and treat.

Duct tape bands should be wrapped by 3 overlapping bands with the sticky side down. Placing a small amount of petroleum jelly on the middle band creates a barrier which the caterpillars do not like to cross.

3. **Spray containing BTK (*Bacillus thuringiensis* var. *Kurstaki*)**

BTK is a naturally occurring bacteria in the soil that must be ingested by the caterpillar to take effect. Timing (caterpillar age) and weather is critical. Spraying should target the foliage and not the trunk or bark. There are many considerations which go into spraying individual yards by ground and neighborhoods by aerial applications. For additional information, references, and contact information, please visit:

https://www.newaygocountymi.gov/board_of_commissione/gypsy-moth/

And view information on slides 27 – 33 <https://www.newaygocountymi.gov/wp-content/uploads/2021/10/Forum-Presentation.pdf>