



Forestry Assistance Program FAQ and Referral Sheet for Spongy Moth

General Office Use
Written for Barry, Allegan, and Ottawa Conservation Districts

What is Spongy Moth?

Formerly known as “Gypsy Moth,” *Lymantria dispar* is found most often in its caterpillar stage, where it is a voracious eater of many different tree species’ leaves. Its preferred host is oak trees but it can also commonly be found on Colorado Blue Spruce, Basswood, and Apple trees. The caterpillars are most active during dawn and dusk but will remain feeding continuously until they pupate. After pupation, the adult life stage does not feed any longer and exists solely to mate and lay eggs.

What is the problem?

Infestation of Spongy Moth can cause severe to complete defoliation of trees. Most deciduous trees can survive this attack and regrow new leaves for the growing season. Evergreen trees typically do not regrow old needles, so tend to have more drastic consequences from leaf-feeding insects. Trees rarely die after one year of complete defoliation, it takes at least two years without leaves to kill mature trees.

Spongy Moth is an “outbreak pest,” meaning it has high populations for short periods, followed by an extended time of low population count. Weather and the number of eggs from the previous year are determining factors on when an outbreak may occur.

What is being done?

Currently, there is a fungus present in Michigan soils that helps control caterpillar populations, called *Entomophaga maimaima*. Infection from this fungal disease causes caterpillars to seek high places, where they then burst with spores and spread them to other Spongy Moth caterpillars. Weather is such an important factor for determining outbreak years because the fungus relies on moisture to spread. Dry springs are bad for fungal growth, so contribute to rising Spongy Moth populations. Warm and wet summers are ideal for insect growth and can cause moth populations to outgrow the pace of fungal infection.

This treatment is highly effective when environmental conditions are right, but climate change makes regular weather patterns more unpredictable. Many areas of Michigan are experiencing 3 years or more of Spongy Moth outbreaks which may be causing considerable damage to trees in these areas.

Unfortunately, the pest is not considered a priority species for the State of Michigan to combat. Any treatments besides waiting for *E. maimaiga* to spread are the burden of the

landowner. Local municipalities and county-level governments have opted for special projects for spraying early in the year to control caterpillar growth. There is an insecticide for Spongy Moth specifically that is sprayed in the early spring, with the active ingredient *Bacillus thuringiensis var. Kurstaki*, or BtK for short. This is sprayed either directly on the leaves of individual trees or used as an aerial spray from airplanes usually used for agriculture.

What can I do?

The earlier you can work to prevent the population from growing, the better. Usually when the effects are worst in the summer, there is very little that can be done to reduce the damage done. Spraying trees with “BtK” in the spring will help control the population of caterpillars drastically. In the summer, capturing the feeding worms at dawn and dusk is your best chance of reducing numbers. The caterpillars will seek cool and dark places, so wrapping burlap cloth around the trunk of the tree can trick them into hiding there to be disposed of later. Also, wrapping a sticky substance like duct tape or double-sided tape around the trunk of the tree can capture the caterpillars to be removed at your leisure.

When will it end?

Thankfully, the caterpillars are a short-lived portion of the moth’s life cycle. While it may seem like an eternity during the feeding, the caterpillar stage only lasts 7 to 8 weeks. After pupating, the adult moths do not feed, so the nastier effects of the moth’s presence will stop. The adults will lay egg sacs in dark and protected areas, such as the underside of branches, the crooks of trees, awnings, and gutters. After mating, each female moth can lay between 600 and 1000 eggs, so destroying any egg sacs you can see will help reduce the viable population for the following year.

Who can I talk to?

Talk to your local township supervisor, your township board, or the county board of commissioners to see if funding is available for a community spray next spring. If not, there are professionals who can help spray your trees at a reasonable cost. Ask your local conservation district for your local district forester, and they can provide referrals to these services and answer any additional questions you may have.