



GYPSY MOTHS



Frequently Asked Questions

What are Gypsy moths and where did they come from?

The gypsy moth was brought to North America from France by Mr. E. Leopold Trouvelot. His purpose was to breed hybrid silkworms that would be hardier than the Chinese species and that could be used to establish a silk industry in the United States. In 1869 some of them escaped and were apparently scattered by a windstorm. From this unfortunate start in Medford Massachusetts, gypsy moths have now spread to many other portions of the United States.

Does weather/climate have an impact on Gypsy moths?

In areas where they are established, gypsy moths survive in low numbers in the environment, kept in check by a naturally occurring virus (Nucleopolyhedrosis virus - NPV) and a fungus, *Entomophaga maimaiga*. It is believed that dry spring weather slows the reproduction and spread of the fungus, allowing higher numbers of gypsy moth caterpillars to reach adulthood. If that happens for a few years in a row, the gypsy moth population can expand rapidly, leading to a major infestation. NPV is most effective when caterpillar densities are high, and can therefore cause the collapse of the gypsy moth population.

I heard that gypsy moth outbreaks occur on a 15 year cycle. Is that true?

Somewhat true; while outbreaks are cyclic, it is only coincidence that they appear to occur in 15 year cycles. Outbreaks are unpredictable and will occur as environmental conditions allow.

Is there a public health risk from the caterpillars?

There is no widespread public health threat from Gypsy moth caterpillars. While some people may experience the allergy-like symptoms commonly associated with contact with the caterpillar's hairs, studies suggest that the vast majority of people's reactions will be minor and temporary in nature, and not a general threat to public health.

How long is this infestation going to last?

The end of the outbreak is not predictable because of unpredictable future environmental conditions. Historically, outbreaks last from 3-5 years, however a few outbreaks have lasted as long as ten years.

Is the State going to implement a spray program to control this infestation?

There are no plans to implement a spray program at this time. A spray program can protect some foliage but will not bring about the end of the current infestation.

Will our forests, parks, and trees be permanently destroyed?

Trees are resilient, and can survive being defoliated. Deciduous trees (those with leaves) are more likely to survive than conifers (those with needles). Other factors such as the general health of the tree, the extent and number of times a tree was defoliated, and other stressors such as drought, exposure to salt,

wind, etc., play a role in whether or not a tree will survive. It is likely that we will begin to see some measurable mortality as this infestation progresses.

I see a lot of eggs around. Is there anything I can do now to keep them from hatching?

Egg masses can be physically scraped off the tree into a bucket of soapy water and allowed to soak overnight. Use a butter knife or putty knife. Don't just scrape the masses to the ground as the eggs will still be viable. After the first hard freeze of fall, and up until egg hatch, egg masses can be sprayed with a 2-3% solution of dormant oil or horticultural oil. Hint: add some food coloring or dye to the mix so you can tell what you've already sprayed.

As a private property owner, what can I do to protect my trees? Can I hire a company to spray them? Can I hire a firm to aerially spray them?

There are several options available to homeowners who wish to try to protect their trees. Almost all options are only suitable for individual "lawn trees" or small groups of trees whose canopies are isolated from other trees that will not be included in a treatment program.

- A homeowner can spray their foliage with over the counter pesticides containing Btk or Spinosad®. For more, view [Management & Control Measures](#)
- Hire a tree care company to spray for you. Make sure the applicator is a DEM licensed pesticide applicator and that the company is insured. Ask for proof of both. Contact Howard Cook at Howard.Cook@dem.ri.gov if you'd like to verify a license with DEM.
- Aerial spraying requires a permit from DEM Division of Agriculture and highly specialized equipment and a special type of license for the pilot. View the [aerial pesticide applicator's certificate](#). This method can be very expensive and the application process can be time consuming.

Should I fertilize my trees?

Tree fertilization is not recommended. Supplemental watering is much more important especially if drought conditions occur.

When is the right time to put up sticky bands or other tree barriers?

Tree barriers may work when caterpillar numbers are low, but only when there is a solitary tree, or small isolated group of trees. Even when installed correctly and properly maintained, tree barriers may not be able to prevent defoliation as caterpillars can be blown long distances into a "protected" tree. If you choose to use them they are best installed just prior to the anticipated beginning of egg hatch, which varies from year to year and where you live within the state. As a very general rule, gypsy moths begin to hatch sometime after April 15th. If you install tree barriers up to two weeks prior to this time you will likely stop more caterpillars but the barriers will require more frequent maintenance.

Caterpillar poop is everywhere and I clean it up every day but I can't keep up. What can I do?

Unfortunately there is no magic answer to this question. Caterpillars can be swept or vacuumed up and disposed of in a bucket of soapy water. Caterpillar "frass" can be swept up or hosed with a garden hose or power washer.

Do pheromone traps (to attract males) work and are they worth it?

There is no evidence that pheromone traps help protect trees during an outbreak. Pheromone traps are generally used to delimit or detect the presence or absence of gypsy moths in areas either lightly infested or suspected of harboring moths, and not as an eradication method.

ADDITIONAL RESOURCES

- [USDA Forest Service: Forest Insect and Disease Leaflet, Gypsy moth](#)
- [USDA APHIS: Federal Regulations, Gypsy Moth Quarantine](#)
- [National Pesticide Information Center: Pesticide Fact Sheets](#)
- [Rhode Island Department of Health](#)
- [RIRCD: Forest Management](#)
- [RI Tree Council: Tree Care & General Information](#)
- [RI Woods: List of RI Certified Arborists \(self-reported\)](#)
- [Connecticut DEEP: Gypsy Moth in Connecticut](#)
- [Massachusetts EEA: Gypsy Moth Outbreak 2016](#)