

FAQ: Gypsy Moth

How do I know if I have gypsy moth feeding on my trees?

Many insects will feed on tree leaves, but the European gypsy moth is what many Michiganders are currently dealing with. Gypsy moth caterpillars have pairs of red and blue spots along the back and long, dark hairs. They feed on leaves of oaks and other preferred host trees including aspen, apple, basswood, birch, crabapple, willow and many other types of trees in early and mid-summer, usually from mid-May until late June.

Does gypsy moth kill trees?

Trees completely defoliated by gypsy moth caterpillars may look dead; however, healthy trees will “re-flush” and produce a second set of leaf buds, usually by late July. This second set of leaves will provide enough energy for the tree to survive winter. Severe defoliation does stress the tree, but trees can usually tolerate even complete defoliation for a few years. If trees are affected by other stress factors such as severe drought, disease or poor growing conditions, there is a greater chance severe defoliation will lead to canopy dieback or in severe cases, mortality.

Are conifer trees vulnerable to gypsy moth?

Gypsy moth caterpillars seldom feed on conifers unless populations are high and leaves on oaks and other preferred hosts have already been consumed. However, when conifer trees such as spruce, pine, fir and Douglas-fir are severely defoliated, it is difficult for them to recover and may die. Conifer trees have no ability to re-flush if they are defoliated.

How can I reduce the gypsy moth population?

Various insecticide products are available for homeowners. Some insecticides use the microbial insecticide Btk or Bt. This is a naturally occurring bacteria called *Bacillus thuringiensis* var. *kurstaki* that only affects caterpillars consuming leaves sprayed with Btk. These products are most effective if young caterpillars are targeted in mid to late May.

If you decide to treat with pesticides, be sure to choose an EPA registered pesticide and apply it according to label directions. Failure to follow the direction for use on a pesticide label is a violation of state and federal law and could result in harm to yourself, other people, or the environment.

You may also choose to hire a pesticide applicator business. A list of Michigan businesses licensed to apply pesticides is available online at Michigan.gov/MDARDPABL. Businesses licensed in category 2 (Forestry) or 3B Ornamental are most likely to offer gypsy moth treatments.

If I treat with insecticides, but my neighbors don't, will it still be effective?

In short, yes. Any insecticides effective against gypsy moth used according to label instructions and at the right time will reduce the gypsy moth population. However, depending on surrounding gypsy moth populations, host tree species present, density of trees, size of the area treated, etc. some recolonization may occur. The caterpillar pressure would most likely be less than if no treatment was applied.

Besides using pesticides, what else can I do to reduce gypsy moth populations?

Search for gypsy moth egg masses everywhere. They may be on trees, firewood, or outdoor furniture. Scrape egg masses into a bucket or similar container filled with soapy water or burn the egg masses. Don't leave the eggs or bits of egg mass on the ground – those eggs can hatch the following spring.

Burlap barrier bands can be wrapped around a tree trunk. The caterpillars will hide under the flap of burlap during the day. Every day or so, knock the caterpillars into a bucket of soapy water to kill them. While this will not affect the overall gypsy moth population, it can help protect an individual tree and the nuisance of caterpillars in your yard or around your home.

How can I help keep my trees healthy?

Drought stress can be a problem for trees that are heavily defoliated. The best thing you can do to water them once a week during dry periods in the summer and fall. Let a hose run slowly near the base of the tree for a few hours once a week or. place a sprinkler between the trunk and the drip line of the canopy. Set an empty can or plastic container near the sprinkler and let the sprinkler run until an inch of water has accumulated in the container. Avoid compacting the soil or damaging the root system of trees, which can affect water uptake.

Do gypsy moth cause skin irritation?

Gypsy moth caterpillars have long hairs along its body which could cause skin irritation to those handling the caterpillars with their bare hands. It is uncommon to many, but for those with sensitive skin, they may want to wear gloves when smashing caterpillars.

What impact does gypsy moth have on forest health?

Defoliation from gypsy moth and the mess caused by the caterpillars and their waste can be upsetting, but gypsy moth caterpillars are not a significant threat to forest health. Most healthy trees, whether in the forest or growing in our backyards, recover from gypsy moth attacks with no long-term impacts.

What's being done to combat gypsy moth in Michigan?

Several Michigan counties, local governments, and property owner associations have long-standing gypsy moth control programs, typically involving aerial pesticide applications. These programs work to evaluate the prevalence and density of

gypsy moth at its various life stages to determine if populations are reaching outbreak levels. When monitoring shows populations reach outbreak levels, treatment may be provided by local governments to reduce the population and control the infestation. Treatments vary by location and municipality but can include aerial spray applications from aircraft or ground based spraying. Please reach out to your local municipality to find out about gypsy moth control.

In years past the state and its partners put a lot of effort into introducing some natural gypsy moth disease's to help control the population. Two pathogens, nucleopolyhedrosis virus (NPV) and a fungal disease called *Entomophaga maimaiga*, are especially effective at causing gypsy moth outbreaks to collapse. These two insect diseases will not affect people, pets or beneficial insects like pollinators or insect predators. Over time, NPV will increase in a population affecting more and more gypsy moth caterpillars. Effects of the fungal disease on gypsy moth populations vary depending on spring temperatures and rainfall.

What additional recommendations do you have?

We encourage all Michigan communities considering a gypsy moth spray program to become familiar with state and federal laws governing pesticide use and to only hire businesses licensed by the [Michigan Department of Agriculture and Rural Development](#). Licensed pesticide applicator businesses are familiar with the complex pesticide laws including notification and permitting requirements, and to carry minimum liability insurance. They are also required to use certified or registered applicators who have passed MDARD's proficiency exams.

Is it too late to spray?

Typically, once you reach June, it is too late to spray pesticides such as BTK or Dimilin for the season. For 2021, it is too late to spray, but individuals can use the above recommendations to still have an impact on gypsy moth populations and lessen the nuisance around their homes.