



# Proposal for Gypsy Moth Management

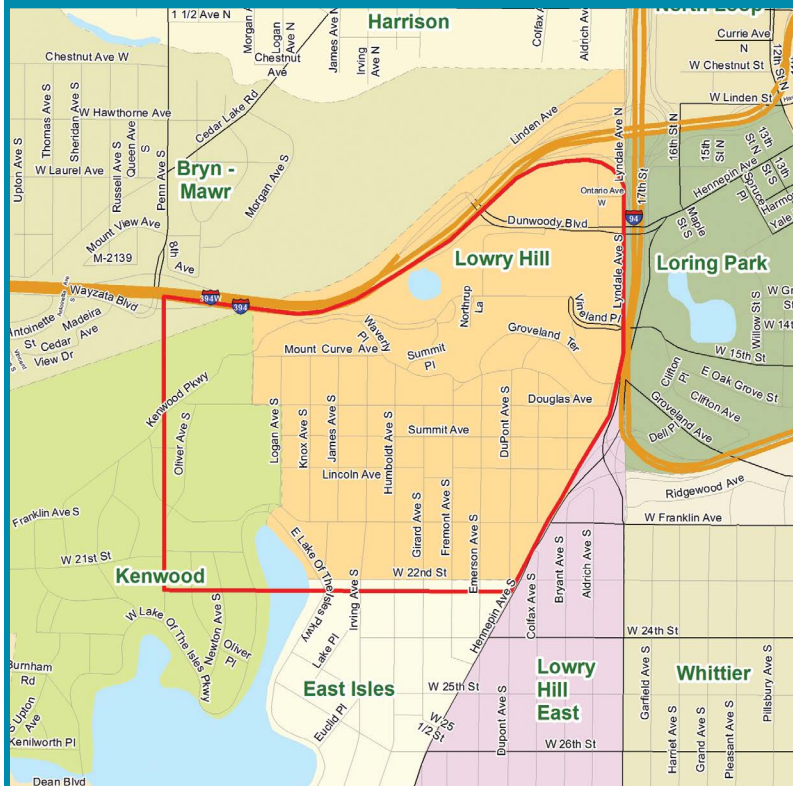


## LOWRY HILL, MINNEAPOLIS, 2018

The Minnesota Department of Agriculture (MDA), in collaboration with federal, state, and local partners, is proposing to treat an isolated gypsy moth population in the city of Minneapolis in the spring of 2018. A state monitoring program in 2017 found a high number of moths in the area. These results, combined with follow-up site visits that found gypsy moth egg masses, prompted the MDA and the Minnesota Gypsy Moth Program Advisory Committee to develop proposed treatments for 2018. The proposal includes treating 310 acres for gypsy moth.

A complete description of all the 2018 treatments as proposed will be available on MDA's website, [www.mda.state.mn.us/gypsymoth](http://www.mda.state.mn.us/gypsymoth). You can also find out more by attending a local meeting. Information on that meeting is at the end of this bulletin.

### 2018 PROPOSED TREATMENT AREA: LOWRY HILL, MINNEAPOLIS



# Information about gypsy moth

## What is a gypsy moth and why control it?

The European gypsy moth (*Lymantria dispar* L.) is not native to the United States. After being introduced in Massachusetts in the late 1800s, gypsy moth has continuously moved westward and southward and is now established in northeastern Minnesota. Gypsy moth caterpillars are voracious eaters and can strip trees of their leaves. The preferred host species include oaks, aspen, paper birch, basswood and willow, which are all very common trees in Minnesota. High numbers of gypsy moth caterpillars can cause a substantial public nuisance, a reduction in tree growth, branch dieback and tree death.

The treatments proposed for 2018 will not only decrease the possibility of defoliation but will delay the arrival and expansion of gypsy moth in Minnesota and beyond. This delay can hold off a costly, full-scale infestation and protect natural and urban forest health, local property values, and the quality of outdoor recreation activities.

## How do we control gypsy moth?

Since 1973, the State of Minnesota has been actively surveying for gypsy moth. Our first gypsy moth eradication project was conducted in 1980. Since that time, and in partnership with the federal Slow the Spread program, over 830,000 acres have been treated in Minnesota to eradicate or slow advancing gypsy moth populations. In recent history, treatments have been conducted in the cities of Duluth (2011, 2014), Minnetonka (2011), Coon Rapids (2011), Oak Grove (2014), Ely (2016), and Richfield (2017).

Throughout the years, the MDA has used two different methods: 1) a biological insecticide called *Bacillus thuringiensis* var. *kurstaki* (Btk) or, 2) a mating disruption treatment, to control gypsy moth in Minnesota. For this proposed treatment, the MDA and its partners recommend using Btk on the 307 acre area in Minneapolis.

# Information about Btk

## What is Btk?

*Bacillus thuringiensis* var. *kurstaki* (Btk) is an organic, biological insecticide that works well at killing gypsy moth caterpillars. The active ingredients are crystalline proteins formed by naturally-occurring bacteria. When ingested, the proteins are toxic to certain susceptible caterpillars like the gypsy moth. Caterpillars stop feeding and die within a couple days. Btk is broken down naturally by sunlight so two applications about a week apart are used to make sure all gypsy moth caterpillars are exposed to the bacteria.

## How and when is Btk applied?

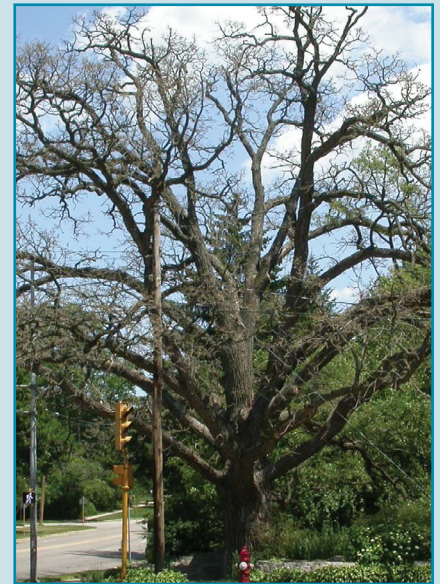
The proposed Btk treatments will take place in May when gypsy moth caterpillars are very small. Treatments generally take place very early in the morning using an airplane or helicopter. The aerial treatments are at low altitude (approximately 50 feet above the treetops). The aircraft are equipped with the latest available technology including Global Positioning Systems to help to ensure application accuracy. Non-forested areas such as large fields, stretches of pavement, and open bodies of water are excluded from the treatments. You may see or hear the low flying aircraft in your area for a short period of time.

Exact dates and times depend greatly on weather conditions and insect development. You will be notified days in advance of any treatments through a variety of ways:

- **Check your mail.** We will be sending a postcard in late April or early May that will identify a timeframe for the treatments.
- **Call MDA's Arrest the Pest line (888-545-6684).** The phone line will be updated with treatment information frequently.
- **Follow the MDA on social media.** Live updates will be made up to and on the day of treatment.
  - ▶ Twitter at [twitter.com/mnagriculture](https://twitter.com/mnagriculture)
  - ▶ Facebook at [www.facebook.com/mnagriculture](https://www.facebook.com/mnagriculture)
- **Sign up for email updates.** Go to [www.mda.state.mn.us/gypsymoth](http://www.mda.state.mn.us/gypsymoth) to get email updates before treatments.

## What are the environmental and human health effects of Btk?

Btk toxicity is generally limited to caterpillars. Caterpillars are the immature stage of moths and butterflies. To have any effects, caterpillars must be actively feeding within approximately two weeks after treatment, they must eat the Btk, and they must be susceptible to the bacteria. The MDA works with the Minnesota Department of Natural Resources and the



Gypsy moth defoliated this oak tree.  
[www.entomology.wisc.edu](http://www.entomology.wisc.edu)



U.S. Fish and Wildlife Service to identify, and evaluate impacts to any threatened or endangered species and ensure that no known sites of sensitive, threatened, or endangered species of moths and butterflies overlap with this year's proposed Btk treatments.

Btk is produced from a bacteria found in soils, plants and insects worldwide. It is cultured by fermenting grains and potatoes with fish or cornmeal – a process similar to brewing beer. The final product contains water, Btk, leftover growth medium, carbohydrates, and other ingredients approved as food additives. The product breaks down quickly in sunlight, but is extremely potent to gypsy moths and can kill nearly 100% in treated areas under proper conditions.

Numerous studies have documented the low risk of Btk for humans, pets, and other species. Btk is a common product that is approved for use in organic farming, and is an alternative to chemical pesticides. Unlike a broad-spectrum pesticide, Btk has a very narrow target of caterpillars so it will not disrupt the balance of nature. More information can be found at [www.mda.state.mn.us/gypsymoth](http://www.mda.state.mn.us/gypsymoth). Click on "Learn more about Gypsy Moth."

If you have individual human health concerns about Btk, contact your physician or other health care professional. For general questions about health risks or steps to prevent or reduce exposures to Btk, see the Minnesota Department of Health website at: [www.health.state.mn.us/divs/eh/pesticide/bt.html](http://www.health.state.mn.us/divs/eh/pesticide/bt.html) or call 651-201-4899.

## Getting more information

### What happens next?

Public involvement and participation is encouraged. Citizens are invited to submit comments about the gypsy moth treatment proposal in writing to the MDA. All comments will be reviewed and a response will be given. Comments received by March 15 will be most useful for identifying issues and alternatives for the required environmental assessment. Contact information is provided at the end of this bulletin.

Comments received by the MDA will be evaluated and considered as the site specific environmental assessment is developed. A final environmental assessment is expected to be released in April. It will be posted on participating agency websites and will be mailed to those who comment on this proposal. The environmental assessment and public comment will inform decisions to be made on authorizing the proposed treatments by the USDA Animal and Plant Health Inspection Service on 310 acres.

A postcard will be mailed to residents in the proposed treatment area in late April/ early May that will identify a timeframe for the treatment.

### Where can I find out more?

The MDA and its partners are providing information about the gypsy moth, trapping data, and the proposed treatments at local government and community organization meetings. Please join us at a meeting near you. You are also encouraged to contact us with questions or comments using our contact information below.

## PLEASE JOIN US AT A 2018 OPEN HOUSE

March 6, 4:45-6:45 pm

Kenwood Recreation Center – 2101 W Franklin Av, Minneapolis, MN 55405

A formal presentation will be given beginning at 5:30 pm. Experts from participating agencies will be available to explain the treatment proposal and answer your questions.

### CONTACT US

Minnesota Department of Agriculture  
625 Robert St. N.  
St. Paul, MN 55155

Website: [www.mda.state.mn.us/gypsymoth](http://www.mda.state.mn.us/gypsymoth)  
Email: [gypsy.moth@state.mn.us](mailto:gypsy.moth@state.mn.us)  
Arrest the Pest Info Line:  
888-545-6684 (MOTH)



### CONNECT WITH US

To track the latest news on gypsy moth treatments, follow the Minnesota Department of Agriculture on:

Facebook: [www.facebook.com/mnagriculture](http://www.facebook.com/mnagriculture)

Twitter: [twitter.com/mnagriculture](https://twitter.com/mnagriculture)

Email: go to [www.mda.state.mn.us/gypsymoth](http://www.mda.state.mn.us/gypsymoth) to sign up for email updates





## Gypsy moth, an invasive species, has invaded your neighborhood!

Join us on March 6 to learn how we plan to stop  
them from devouring your backyard trees.

