



Proposal for Gypsy Moth Management Winona & Houston Counties, Minnesota March 2009



For the latest up-to-date treatment information contact:

Minnesota Department of Agriculture

www.mda.state.mn.us/gypsymoth

gypsy.moth@state.mn.us

“Arrest the Pest” Hotline: 651-201-MOTH (6684) or 1-888-545-MOTH (6684)

Future notification will be done through public media outlets so be sure to watch your local newspapers, TV and radio stations for updates on the gypsy moth treatment.

In accordance with the Americans with Disabilities Act, an alternative form of communication is available upon request.
TDD: 1-800-627-3529. MDA is an equal opportunity employer and provider.

Minnesota Department of Agriculture
Plant Protection Division
625 Robert St. N.
St. Paul, MN 55155-2538

What is a gypsy moth?

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 is now established as close as central Wisconsin. Gypsy moth caterpillars strip trees of their leaves, and this defoliation can contribute to tree mortality. 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. This damage to forests diminishes environmental quality and may affect human health and local economies. Widespread gypsy moth outbreaks can alter water quality, wildlife habitat, microclimate, and soil fertility.

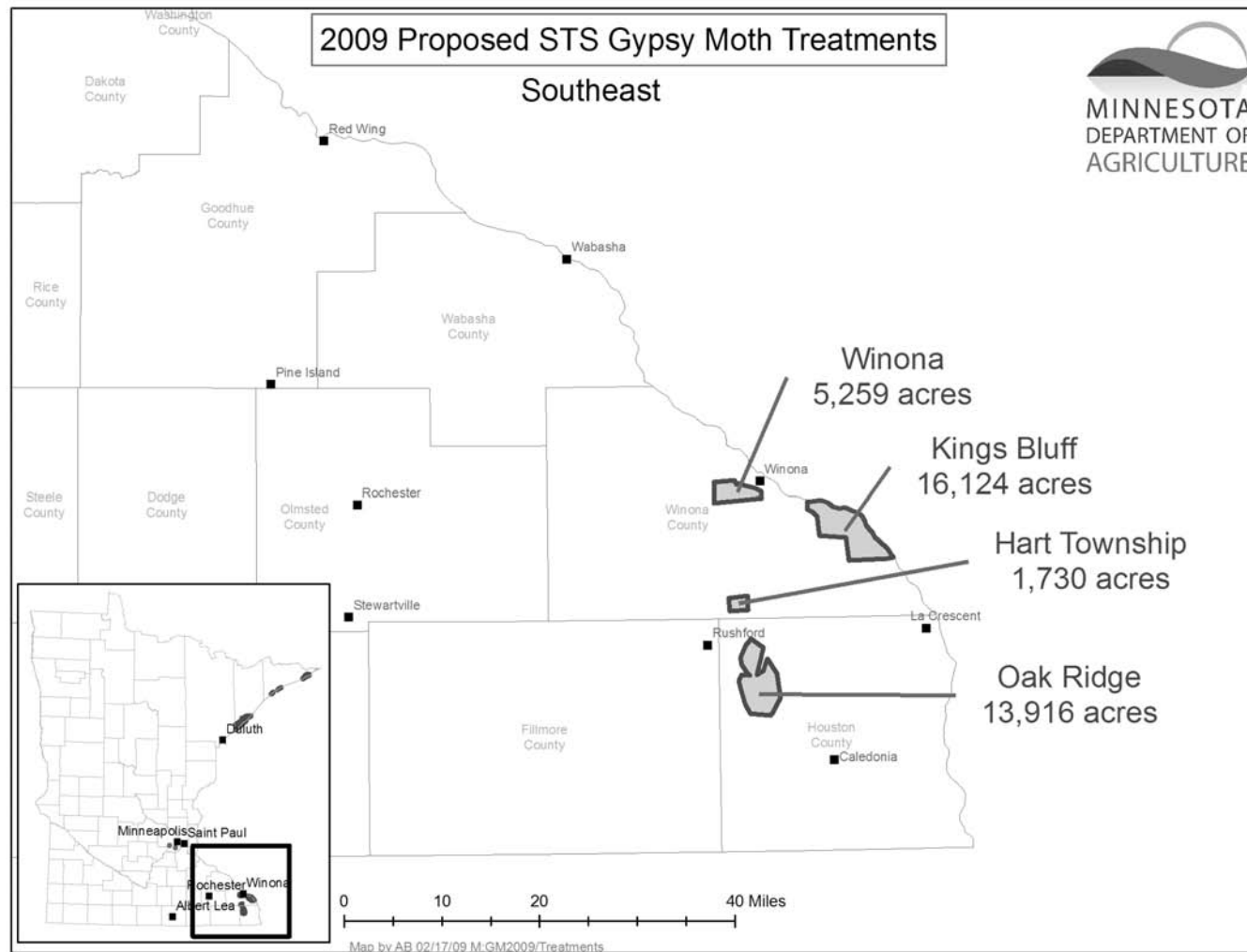
THE Minnesota Department of Agriculture (MDA), in collaboration with federal, state, and local partners, is proposing to treat gypsy moth populations in Houston and Winona Counties in southeast Minnesota. Surveys in 2008 revealed pockets where monitoring traps caught high numbers of moths. In order to reduce current populations of gypsy moths and retard the growth of future generations of this forest pest, MDA proposes to treat a total of about 37,000 acres with mating disruption. Four treatment blocks have been identified and named for their geographic locations: Kings Bluff, Oak Ridge, Hart Township and Winona. Forests in the proposed treatment areas include many of the trees species considered susceptible to gypsy moth defoliation.

Throughout Minnesota, the 2008 gypsy moth survey resulted in the capture of 12,255 moths, the highest ever recorded in the state. These results, combined with the trap records of previous years, prompted MDA, the USDA Forest Service’s Slow the Spread (STS) program, and local officials to develop the proposed treatment project for 2009. Visit the MDA website for details on other gypsy moth management projects throughout the state.

MDA and its partners are holding open houses to provide information about the gypsy moth, trapping data, and the proposed treatments. Public comments on this proposal are solicited through these open houses or in writing until April 15. The public is encouraged to attend and comment on the treatment proposal, or contact us with questions or comments using our contact information on the back of this bulletin.

OPEN HOUSE SCHEDULE	
<p>Wednesday, March 25th Houston Houston Nature Center 215 West Plum Street 12-2pm</p>	<p>Wednesday, March 25th Winona Winona County Human Services 202 W. Third St. 4-7pm</p>
<p>There will be no formal presentation at these locations. We invite you to take advantage of one-on-one time with several experts from participating agencies that will be available to explain the treatment proposal and answer your questions.</p>	

Proposed Gypsy Moth Treatments



Why continue to treat for gypsy moth?

Minnesota is a member of a federal program called Gypsy Moth Slow-the-Spread (STS). As the name suggests, member states share federal resources to monitor and treat gypsy moth populations. The STS program has been successful in keeping gypsy moth out of our state for years by treating comparable populations to the east. We have benefited greatly by these actions and can help protect our own state as well as those to the west of us by implementing these proposed treatments.

Using information collected each summer, MDA tracks the presence of gypsy moth in Minnesota. Based on this monitoring, we determine the extent of gypsy moth populations, and whether and what types of treatments are needed. Each gypsy moth female is capable of laying an egg mass with 500-1,000 eggs. If left untreated, gypsy moth infestations can build and spread quickly. The goal of slow the spread treatments is to reduce the building moth populations in your area, protecting valuable natural resources.

Similar treatments have been used extensively in the U.S. to slow the spread of gypsy moth. Treatments made soon after the discovery of new populations can delay a costly, full-scale infestation and protect the forest's health, local property values, and the quality of outdoor recreation activities.

Are gypsy moths similar to forest tent caterpillars (FTC)?

Similar to FTC, gypsy moth often defoliate extensive areas, feeding on many of the same species, including quaking aspen, birch, oak, and basswood. However, FTC is a native insect and has several natural enemies to keep populations in check. FTC outbreaks in the Lake States are cyclical and typically last for 3-5 years then subside for 3-5 years.

In oak-dominated stands, the gypsy moth outbreaks last 2-5 years or more. Defoliation by gypsy moth larvae starts and ends a little later in the season than FTC defoliation, possibly extending into early July. In aspen-dominated stands, gypsy moth outbreaks may build and decline faster than in oak stands, according to recent observations in Michigan. Gypsy moths, unlike FTC, will feed on and defoliate some conifers, especially if they are growing alongside a favored host such as oaks and aspen. Young conifers do not survive complete defoliation events.

Other concerns addressed...

What happens next?

Pursuant to the National Environmental Policy Act, an Environmental Assessment (EA) is being prepared for this project. An EA is being completed to assess the potential effects to the environment. One EA will be written to cover all STS sites in Minnesota. It will include cumulative effects with references to all sites in analyses and conclusions.

Further description of the treatments as proposed will be available on MDA's website, www.mda.state.mn.us/gypsymoth, in March. Paper copies will also be available from MDA, or mailed upon request. The public is invited to submit comments in writing to MDA before April 15. Contact information for MDA is provided on the last page of this bulletin.

A final Environmental Assessment is expected to be released in April. It will be posted on the MDA website and will be mailed to those who comment on this proposal.

What is mating disruption?

Mating disruption is a way to prevent mating between a male and female gypsy moth, consequently preventing reproduction. It is achieved by flooding an area with a synthetic sex-attractant (pheromone) just prior to when the moths emerge as adults. The presence of the pheromone confuses the male moths so they cannot find the female moths. Pheromones are very specific, and in North America, gypsy moth is the only species attracted to this pheromone. Mating disruption has been used widely in gypsy moth management in recent years

and has been very effective. It has no known adverse environmental impacts; pheromones affect only the intended species and are not toxic.

Disparlure is the name of the synthetic pheromone. Disparlure can be contained in either plastic flakes or waxy droplets. The pheromone is emitted at a controlled rate over several months while the males are seeking females. The flakes are about this size: [] and the droplets vary but are around this size: O. These tiny flakes and droplets stick to leaves and branches.

Is it safe?

The pheromone is specific to the gypsy moth so it will not affect other animals or organisms. Harmful effects of the plastic flakes and waxy droplets themselves have not been reported, and they will degrade over time. All products proposed for application are registered with the U.S. Environmental Protection Agency and are classified as low-risk pesticides. Over the course of 25 years of this product being used at thousands of locations, no reports of adverse health effects on humans or pets have been documented. Disparlure minimally dissolves and is nontoxic to fish, birds or mammals.

How is it applied?

Flakes and waxy droplets are applied with aircraft operated by licensed applicator pilots. Aerial treatments are at low altitude (~50 feet above the treetops). Application is discontinued when winds are too strong, when rain is expected, or when leaves are dripping wet. The aircraft are calibrated to be sure the product is applied at the proper rate and are equipped with the latest available technology, including

Global Positioning Systems to help to ensure application accuracy. Open bodies of water, such as lakes, are excluded from the treatments.

When will the proposed treatments take place?

The proposed mating disruption treatments would be made in July 2009. Exact dates depend greatly on weather conditions and insect development. Notification will be made 7-14 days in advance of any treatments through various media outlets including local newspapers, TV and radio. Minnesota Department of Agriculture (MDA) staff will be on-site to oversee the treatment. MDA's Arrest the Pest Hotline will be updated with treatment information frequently.

For best results, the treatment generally starts early in the morning. It is possible that you may be awakened by the noise of a low-flying aircraft. We apologize in advance for any inconvenience this may cause, but the aircraft should be over your area for only a brief time. Pets may be spooked by low-flying aircraft noise, so we recommend keeping them indoors during the time when your area is treated.

Will I be charged for treatment?

No. The Minnesota Department of Agriculture will work with federal, state and local officials and residents to carry out these treatments at no cost to homeowners. Funding will be provided by the state of Minnesota and the U.S. Department of Agriculture. Cost of application is about \$7-15 per acre for mating disruption.