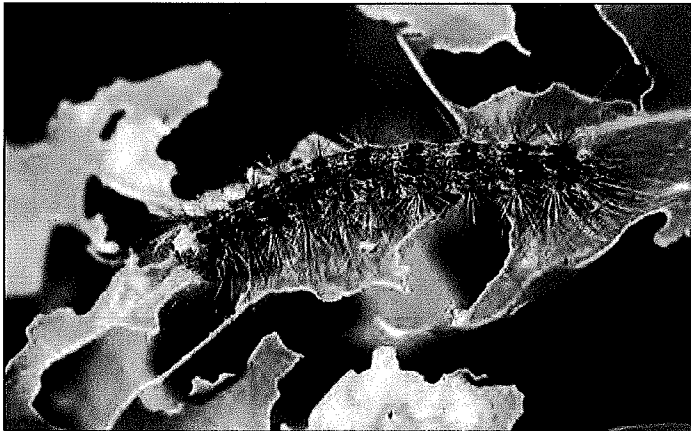


# Pest Alert

United States  
Department of Agriculture  
Forest Service  
Southern Region  
Northeastern Area  
NA-PR-05-01  
Reprinted November 2007

## Gypsy Moth



Larva (May-June) - hairy caterpillar with five pairs of blue spots and six pairs of red spots along the back

The gypsy moth has been an important pest of hardwoods in the Northeastern United States since its introduction in 1869. Established populations exist in all or parts of 19 states from Maine to Wisconsin and south to Illinois and generally in a southeasterly line from Illinois to northeastern North Carolina.

Oaks are the preferred host species for feeding caterpillars, but apple, sweetgum, basswood, gray and white birch, poplar, willow and many others serve as hosts. Gypsy moths avoid ash, yellow-poplar, sycamore, black walnut, catalpa, locust, American holly, and shrubs such as mountain laurel, rhododendron and arborvitae. Older larvae will also feed on a number of conifers such as hemlock, pines, spruces and southern white cedar.

Because the ecological range for this pest is extensive, there are still many states that can expect infestations in the future. Without intervention, this pest spreads about 13 miles per year. Artificial movement dramatically hastens the spread by the insect hitchhiking on items that are moved long distances such as nursery stock, vehicles, forest products, and outdoor household articles such as deck furniture. Federal and state regulations require that items to be moved from infested areas to uninfested areas must carefully be inspected and certified to be free of gypsy moth life stages.



Pupa (July-August) - female left and male right



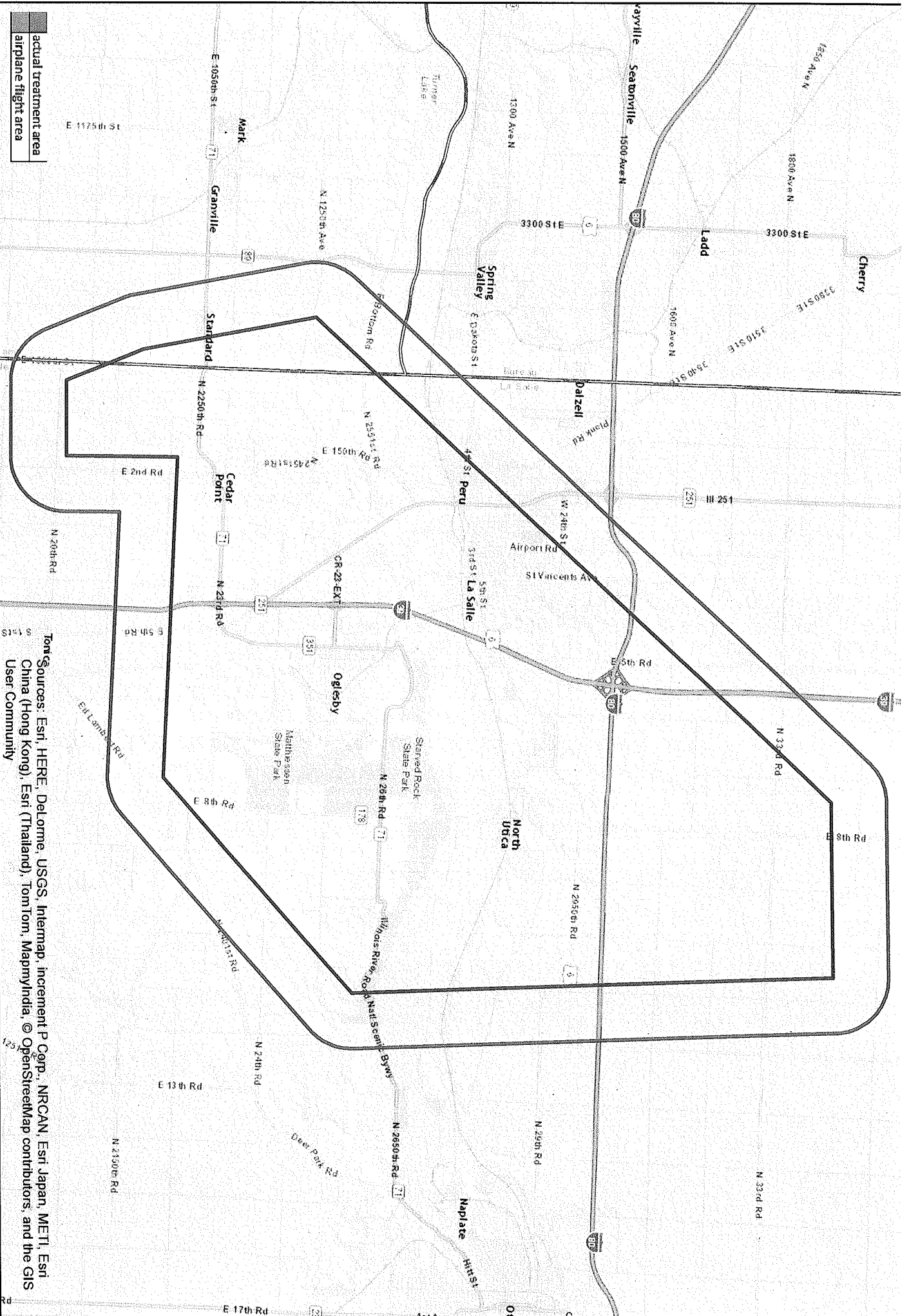
Adults and egg mass (July-August) - male moth is brown; female is white with brown markings



Adults females with egg masses (eggs-August-May)



For more information about the gypsy moth see this website:  
<http://www.na.fs.fed.us/pubs/detail.cfm?id=895>



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri  
 China (Hong Kong), Esri (Thailand), TomTom, MapmyIndia, © OpenStreetMap contributors, and the GIS  
 User Community

**2016 Planned Treatment Location for Eliminating European Gypsy Moth 12/2015**  
**63697 Acres of treatment with yellow airplanes (Air Tractors) with Mating Disruption flakes**  
**1 application at 15 grams of active ingredient applied around the end of June**

Starved Rock Lasalle County area  
 ID: II Starved Rock Lasalle



**STS** Slow the Spread of the Gypsy Moth  
 map prepared by:  
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**Bureau of Environmental Programs – Dekalb Field Office** 2280 Bethany Rd., DeKalb, IL 60115  
 815/787-5476 (Voice/TDD) Fax: 815/787-5488 Pesticide Misuse Hotline: 800/641-3934 (Voice/TDD)

## AERIAL SPRAYING FOR EUROPEAN GYPSY MOTH OVER YOUR AREA




Weather permitting, during June, the area you live in is scheduled for an aerial application to eliminate European Gypsy Moth (EGM). A yellow, fixed wing aircraft will apply 6 grams of active ingredient (about 1/8 cup) per acre of the biological product Disrupt II. This could occur on just about any day of the week.

EGM is an invasive species from Europe, is one the most damaging forest and tree pests in the United States, and has become permanently established in Illinois. This treatment is part of a statewide program prevent EGM from establishing itself outside of the northeast corner of Illinois. We are also attempting to reduce the impact of its invasion from other states.

EGM defoliates multiple species of trees with the huge numbers of caterpillars that result from an infestation. After a few years (1-3) of having its leaves completely stripped-off, a tree will die. Also, the caterpillars are a tremendous nuisance, as they may render your yard nearly unusable from mid-June to early July.

Disrupt II is the chemically copied female pheromone of the EGM. By saturating the area with pheromone, males in lightly infested areas are not able to find the females, hence mating is prevented. Small, green plastic flakes are impregnated with the pheromone, a Post-it-type glue is added, and then the flakes are aerielly released. This product does not pose a risk to humans, animals, non-target organisms or the environment.

Our DeKalb Office can be contacted at 815.787.5476 or email our Program Manager, [Nancy.Johnson@Illinois.gov](mailto:Nancy.Johnson@Illinois.gov) Keep in mind that our Gypsy Moth Specialists will be in the field on the spray team during the spray program. You can view treatment blocks (areas) on line at the Illinois Department of Agriculture's website.

 <p><b>Don't help the gypsy moth move into new areas by giving it a free ride.</b>        The gypsy moth is usually spread to new areas by hitchhiking on outdoor articles. Although all life stages can hitchhike, it is usually the egg stage which is transported. Be sure to inspect your camper and other equipment for egg</p> <p><small>(1/2 size) ADULT FEMALE</small></p>	<p>masses or other life stages after camping in or moving from infested areas.</p> <p>Get into the habit of checking your outdoor belongings. For more information, or if you think you have found a gypsy moth, call your local forester, county agent, or agricultural agent.</p>	 <p>Information:        (866) 296-6684</p>	 <p><b>DON'T GIVE THE GYPSY MOTH A FREE RIDE</b></p> <p>The gypsy moth is a major tree pest once it becomes established in new areas. It eats leaves on most trees and may kill them. It is currently established in eastern parts of the United States and Canada.</p> <p><small>(Actual size) EGM MASS</small></p>
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**DON'T GIVE GYPSY MOTH A FREE RIDE.**



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# Fact Sheet

## HERCON<sup>®</sup> DISRUPT<sup>®</sup> II

### Gypsy Moth Mating Disruptant

### EPA Reg. No. 8730-55

#### **What is DISRUPT II?**

Hercon Disrupt II is an environmentally friendly insect pheromone product to control gypsy moth infestations. It consists of two outside barrier films and a middle reservoir containing the gypsy moth (*Lymantria dispar*) specific pheromone known as disparlure.

#### **How Does it Work?**

The pheromone is a sex attractant produced by the female moth creating a distinct scent trail that the male moth uses to locate her for mating. It is species specific meaning Disrupt II targets only the gypsy moth and no other insects, fish, reptiles, birds or mammals. Disrupt II works by interfering with the scent communication between the adult male and female moths. It is not a chemical that will kill the gypsy moth but will hide or "mask" the scent trail the male moth follows to locate the female for mating purposes. When the product is aerially applied over trees the tiny flakes start to slowly release a small amount of gypsy moth pheromone into the area. The released pheromone will then permeate throughout the treated area covering up the distinct scent trails produced by the female gypsy moths. Therefore the male moths cannot find and mate with the female moths causing a significant decrease in fertilized eggs and reducing the gypsy moth population.

#### **How is DISRUPT II Applied?**

DISRUPT II is applied by airplanes flying above the trees. Approximately 1/4 to 1/2 cup of DISRUPT II (35 to 85 grams of total product which contains 6 to 15 grams of gypsy moth specific pheromone) is applied along with approximately 1.2 to 4 tablespoons of sticker (0.6 to 2 ounces) per acre. The tiny 1/32" x 3/32" flakes (about the size of a grain of rice) are hardly noticeable when applied at this low rate (i.e. only 1 to 2 flakes per square foot).

#### **Is DISRUPT II Harmful to Humans, Animals or the Environment?**

No, DISRUPT II is not harmful to humans, animals or the environment. DISRUPT II has been used for more than 15 years to manage gypsy moth infestations on over 2 million acres and there have been no reports of this product causing detrimental effects.

#### **Is DISRUPT II Harmful to Car Finishes?**

No. If you find DISRUPT II flakes on your vehicle they can be removed by pre-treating the area and scrubbing with regular car wash soap.

***Please see the DISRUPT II product label for more information.***

# Fact sheet

## HERCON® DISRUPT® II Gypsy Moth Mating Disruptant

EPA Reg. No. 8730-55  
Controlled Release Dispenser for the Gypsy Moth Pheromone

### WHAT IS IT?

Hercon's Disrupt II is a synthetic insect pheromone product used to control low-density populations of the gypsy moth (*Lymantria dispar*). It is target specific meaning Disrupt II affects only the gypsy moth. Disrupt II works by interfering with the chemical communications between the male and female adult moths. It is not a poison that will kill the gypsy moth when applied; instead it hides or "masks" chemical trails emitted by the female moth to attract males for mating. When the product is aerially applied the tiny 1/32" x 3/32" flakes slowly emit the pheromone over several months. The released pheromone permeates the treated area, covering up the natural pheromone trails produced by the female gypsy moth. This disrupts the normal communication between the male and female moths, reduces or prevents mating and reduces or eliminates the subsequent years' population.

### COMPONENTS

Disrupt II is made from four main components: disparlure (the gypsy moth pheromone and active ingredient), polyvinyl chloride films, polyvinyl chloride resin and a plasticizer. This is how the product is put together:

Disrupt II is a three-layered laminate consisting of two outside barrier films, and a middle reservoir layer containing the disparlure. The films control the release rate of the pheromone as it migrates up through the reservoir to the top of the films. The reservoir layer consists of the pheromone, resin and plasticizer. The resin and plasticizer create a polymer matrix that protects the pheromone from environmental degradation and rapid evaporation. This construction insures that the pheromone is released at a controlled rate over a period of 3 to 4 months and explains why the product is called a controlled-release dispenser.

### TOXICITY

The components found in Disrupt II all have low toxicity. It is classified as a 'low risk' pesticide by the U.S. Environmental Protection Agency. Ecological toxicity studies indicate that Disrupt II is practically non-toxic to birds, mammals, fish and *Daphnia* (a sensitive aquatic invertebrate). Both the resin and the PVC films are essentially inert and pose no threat to the environment at the labeled application rate.

### APPLICATION RATES

Rates up to 170 grams of Disrupt II per acre (30.4 grams active ingredient per acre) are labeled but in operational treatments the rate of 85 grams of Disrupt II, combined with 1.5 to 2.0 fluid ounces of a sticking agent, is usually applied per acre. This is equivalent to deposits of approximately 2 sticker-coated flakes per square foot. Recent studies indicate that rates as low as 35 grams per acre may also be effective.