The Gypsy Moth

The gypsy moth is a non-native insect that was brought to the United States in 1869 to start an unsuccessful attempt at the silkworm industry. Introduced in Massachusetts, the moth has moved west and become a pest of forests and residential trees. Every 10 years an outbreak in the Gypsy moth population occurs and entire trees can be defoliated by late June. Healthy trees that are free from stress can often survive one such defoliation. However, continual feeding by the moths can cause greater risks of death due to tree stress and infection from other diseases. The Gypsy moth will never be eradicated from Woodridge, but with several management techniques, it can be decreased to smaller populations.

How does Gypsy moth spread?

Gypsy moth eggs are found on firewood piles, campers, cars, houses, loose bark on trees, or anything else you may find in your backyard. To help decrease the spread of Gypsy moths, there are a few rules to remember:

- If traveling in and out of gypsy moth infested places, always check vehicles, firewood, etc. for moths, caterpillars, or egg masses.
- Do not transport any insects, plants, or fruits and vegetables that are found in other parts of the country.
- If you have questions about something you have found, contact the local agency that will have the answer.

References


Log on to www.woodridgeparks.org for more up to date information about what the park district is doing to help decrease the Gypsy moth population.
What does Gypsy moth look like?

Gypsy moth occurs in four life cycles: Egg, Larvae, Pupa, and Adult.

The female moth lays egg masses that contain 100 to 1000 eggs. They are covered in light tan to yellow colored hairs and are about 1 ½” long. The eggs hatch in April to late May. At this time, tiny caterpillars emerge and travel hundreds of feet by silk threads that get caught in the wind.

The caterpillars, or larvae, are hairy, brown and have five pairs of blue spots and six pairs of red spots along their back (pictured right). Mature caterpillars can be as big as 2 ½” and eat as much as one square foot a day. In mid to late June, the caterpillars stop eating and look for a sheltered place to pupate.

The pupa is a hard outer shell that protects the caterpillars during their transformation to moths. This process lasts seven to ten days. Male caterpillars pupate about one week earlier and have smaller pupae than females.

In early July, the adult male Gypsy moth will emerge. Male moths are brown with black markings and feathery antennae. They fly during the day looking for females. The female moth is white with black V markings on the wings. They are fertilized, the female lays her eggs and both moths die. The eggs do not hatch until the following spring.

Natural Management Techniques

Managing Gypsy moth changes throughout the season depending on the moth’s lifecycle.

**Egg masses:** Egg masses (pictured left) are present from August until May and can be on any surface in a backyard. Starting in October, there are two management methods. First, spray the eggs with a horticultural oil (found at the local garden center). This penetrates the egg masses and suffocates the future caterpillars. Do not use this method after April as it may not be affective. The second option is to scrape off the egg masses with a putty knife and kill them by drowning them in soapy water, or throwing them in the trash. Do not just throw the eggs on the ground because they may survive and hatch.

Never touch the gypsy moths at any lifestage with bare hands. The hairs on the moths can cause allergic reactions to humans!

**Larvae:** In late April when the caterpillars are freshly hatched, apply a sticky band around the trunks of trees. Kill any larvae that get caught in the trap. In early June when the caterpillars are more mature, add a cloth barrier. This can be as simply as tying a piece of twine around the middle of a burlap cloth that fits all the way around the trunk of a tree. The caterpillars will hide behind this during the day. Kill the caterpillars in the afternoon by scraping them into soapy water.

**Pupa and Moth:** The pupae can be easily spotted starting in July. Inspect all surfaces including tree bark. Detach the pupae and crush them. Also, the female moths can be killed easily because they do not fly. Simply step on them or use something hard to kill them. Remember not to use your bare hand, not only because the hairs may cause irritation to skin, but also the pheromone the female gives off may attract male moths to people. Each female killed also kills hundreds of future Gypsy moths.

Pesticide Management

There are several chemical treatments that can be used to kill gypsy moth. Bacillus thuringiensis kurstaki (Btk) is a naturally occurring bacterium which affects the stomach of the gypsy moth when ingested. It is most effective when the caterpillars are small and does not harm people, animals, or fish. A systemic insecticide can be used while the caterpillars are eating. This can be applied through trunk or root injections and kills the caterpillar after pieces of leaf are eaten. Also, a contact pesticide can be used. This type of chemical is sprayed directly on the leaves of the tree. Always read the pesticide label or consult a certified pesticide applicator before using any of these options as you may be harming beneficial insects.

What do Gypsy moths like to eat?

The Gypsy moth is a general feeding insect on a wide variety of plant species. When available, oak trees are the preferred host. The caterpillars will also feed on crabapples, alders, aspens, birches, willows, hawthorns, hemlock, hickories, box elders, cherries, ironwoods, maples, and many other types of trees. Trees that are showing the most resistance to Gypsy moth caterpillars include walnuts, dogwoods, balsam fir, catalpas, tulip trees, red cedars, sycamore.

If you have any questions or concerns about Gypsy moth, please contact Bridget Abbe, Landscape Specialist, at the Woodridge Park District or the Illinois Department of Agriculture Gypsy moth extension: 1-866-296-MOTH.