



ADULT MALE
Daytime Flier



PUPA
Pupates for 2 Weeks



**MULTIPLE GYPSY MOTH
LIFE STAGES ON A TREE**



LARVA *Feeds 5-6 Weeks*



ADULT FEMALE
With Egg Mass



**GYPSY MOTH HITCHHIKING
ON A PICNIC TABLE**

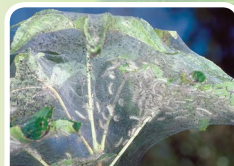
Wisconsin Department of Natural Resources

These are **NOT** Gypsy Moth:

- Caterpillars that make tents or webs
- Caterpillars without 5 pairs of blue and 6 pairs of red dots
- Caterpillars that feed in the fall
- Adult moths that feed or are attracted to light



**EASTERN TENT
CATERPILLAR**



FALL WEBWORM



**FOREST TENT
CATERPILLAR**

For More Information



Arrest the Pest
1-888-545-6684 (Toll Free)
Arrest.The.Pest@state.mn.us

Gypsy Moth Brochure 2015.indd

What is a Gypsy Moth?

The gypsy moth is a leaf-eating insect. It belongs to the same order as butterflies and moths (Lepidoptera). It was imported from Europe in an attempt to breed a hardier silk worm. Instead, the caterpillars escaped and headed for the trees. Leaving its natural enemies in Europe and armed with an ability to feed and survive on over 300 different tree and woody plant species, it was soon chomping its way into the eastern forests. It now ranks as one of the most destructive overall pests to trees and shrubs in the U.S.

Is Gypsy Moth in Minnesota?

Gypsy moths have started to make their way into Minnesota. As of 2014, the main population front extends into northeastern Minnesota and south through western Wisconsin. Because of this population move into Minnesota, Lake and Cook Counties were the first in Minnesota to be quarantined for gypsy moth in 2014. Quarantines are laws which make it illegal to move items that may contain plant pests. The invaders will continue to move westward, but not without a fight!

Minnesota participates in a national gypsy moth program called Slow the Spread (STS). STS targets gypsy moth with detection trapping and follow-up treatments. The program significantly delays establishment of the species. It also delays the increased costs and burdens associated with management of gypsy moth once it is established.

Each year the Minnesota Department of Agriculture sets ~15,000 pheromone (female scented) traps designed to capture male moths. This is an extremely effective method to detect small and otherwise undetectable start-up populations. Minnesota has treated over 100 start-up populations since 1980, many of which were traceable to human transportation of infested materials.



In accordance with the Americans with Disabilities Act, this information is available in alternative forms of communication upon request by calling 651-201-6000. TTY users can call the Minnesota Relay Service at 711. The MDA is an equal opportunity employer and provider.

GYPSY MOTH

YOU CAN HELP PROTECT OUR FORESTS

Why is Gypsy Moth a Problem?

- ✈ Gypsy moths are among America's most destructive, non-native, invasive forest insect pests. They defoliate millions of acres of forests and urban trees annually.
- ✈ Each gypsy moth egg mass will produce up to 1,000 new caterpillars. During an outbreak, millions of hungry caterpillars are feeding and consuming massive amounts of foliage, placing enormous stress on trees.
- Defoliated trees are more susceptible to disease and other insects that may ultimately kill them. Defoliation destroys habitats for mammals and birds.
- All of this feeding is very noisy and fouls the environment with a layer of droppings and shed skins before the caterpillars pupate.
- ✈ Female gypsy moths deposit egg masses on the nearest available surface. This includes outdoor recreation equipment, grills, lawn chairs, vehicles, tents, and firewood. This allows them to easily hitchhike to new areas.

If You Find a Trap, Remember...



Delta trap



Milk carton trap

- ✈ Don't disturb the trap. Survey traps are our BEST early detection system for finding gypsy moths before they damage our trees.
- ✈ "Delta" traps are not toxic to humans or pets, but they contain a sticky substance inside that the moths get stuck in.
- ✈ "Milk carton" traps are designed to trap high numbers of moths. They contain a pesticide strip that kills the moths when they enter.

Eggs

Eggs are laid in a fuzzy, buff-colored mass about the size of a quarter. Each egg mass contains an average of 500 – 1,000 eggs. Eggs are laid starting in late summer or fall and hatch the following spring. Egg masses may be laid on tree trunks, logs, under tree wraps, wheel wells, or on almost any available surface.

Caterpillar (larva)

This is the only damaging stage. The caterpillars are voracious feeders and can grow to 2" in length. The older, larger caterpillars have five pairs of blue spots and six pairs of rusty red spots along their backs. They typically feed in the treetops at night but migrate down the trunk to the ground each day.

Pupa (cocoon)

The pupa is an immobile stage during which the caterpillar changes into an adult moth. Pupae may wiggle if they are disturbed, but left alone they will appear still as the change occurs. They are dark, reddish brown and leathery. Pupae attach themselves to a vertical surface with strands of silk. They are usually found in crevices on tree trunks or on larger branches. Pupae may also be found buried in leaf litter, attached to the sides of houses, under picnic tables, or on almost any available surface. Female pupae are larger than male pupae.

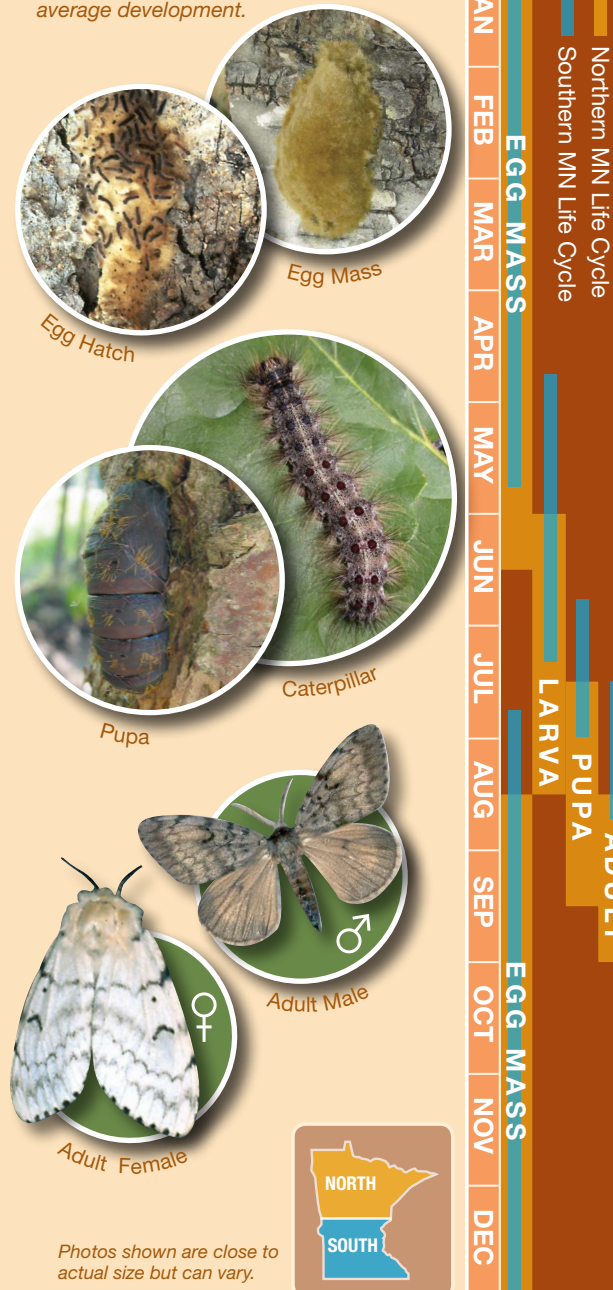
Adult (winged moth)

Adult moths emerge in mid-summer and they do not feed – their sole purpose is to mate.

Females have tan bodies from 1" to 2" long. Their wings are cream-colored with dark-brown, zig-zag markings. They do not fly because they are too heavy (full of eggs). Females emit a scent to attract a mate. Scientists have been able to mimic this scent, using it to trap male moths and to conduct mating disruption treatments.

Males are smaller than the females, brownish gray, have feathered antennae, and fly in the late afternoon. Males also have dark-brown, zig-zag markings on their wings.

Gypsy moth life cycles depend on weather, which varies annually. The chart shows average development.



What is a Gypsy Moth Quarantine?

Areas are quarantined for gypsy moth once the moths have invaded and become permanently established. Gypsy moth quarantines are intended to slow the human-assisted or artificial spread of gypsy moth from infested to non-infested areas. The quarantine makes it illegal to transport potentially infested items (such as logs, firewood, nursery stock, campers, and picnic tables) from the quarantined area to a non-quarantined area without first taking appropriate actions. For the general public, self-inspection of items that could be harboring gypsy moth and removal of all gypsy moth life stages is required prior to moving items to a non-quarantined area.

What Can I Do?

Self-Inspect for "Hitchhikers":

- ✈ Become familiar with all gypsy moth life stages and the timing of their annual life cycle.
- ✈ Know which counties of Minnesota and the rest of the United States are quarantined for gypsy moth.
- Lake and Cook Counties were the first in Minnesota to be quarantined for gypsy moth in 2014. Other states that have quarantines include Wisconsin, Michigan, Illinois, Indiana, Ohio, Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Delaware, Connecticut, New York, Pennsylvania, New Jersey, Maryland, Virginia, West Virginia, and North Carolina.*
- ✈ Don't let gypsy moth hitch a ride! Before leaving a quarantined county or area, always self-inspect outdoor household articles, equipment, vehicles, etc. Remove and destroy any gypsy moth life stages you find before traveling to non-quarantined areas.
- ✈ Report suspect gypsy moth life stages:



If you spot gypsy moth caterpillars, pupae, adults, or egg masses...

Note the exact location.
Take a digital photo if possible.

Immediately call or email
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