



ADULT MALE  
DAYTIME FLIER



PUPA  
PUPATES FOR 2 WEEKS



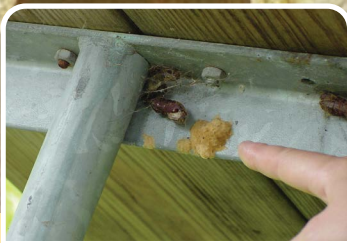
MULTIPLE SPONGY MOTH  
LIFE STAGES ON A TREE



LATE INSTAR LARVA FEEDS 5-6 WEEKS



ADULT FEMALE WITH EGG MASS



SPONGY MOTH HITCHHIKING  
ON A PICNIC TABLE

Wisconsin Department of Natural Resources

### These are NOT Spongy Moth:

- Caterpillars that make tents or webs
- Late instar 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



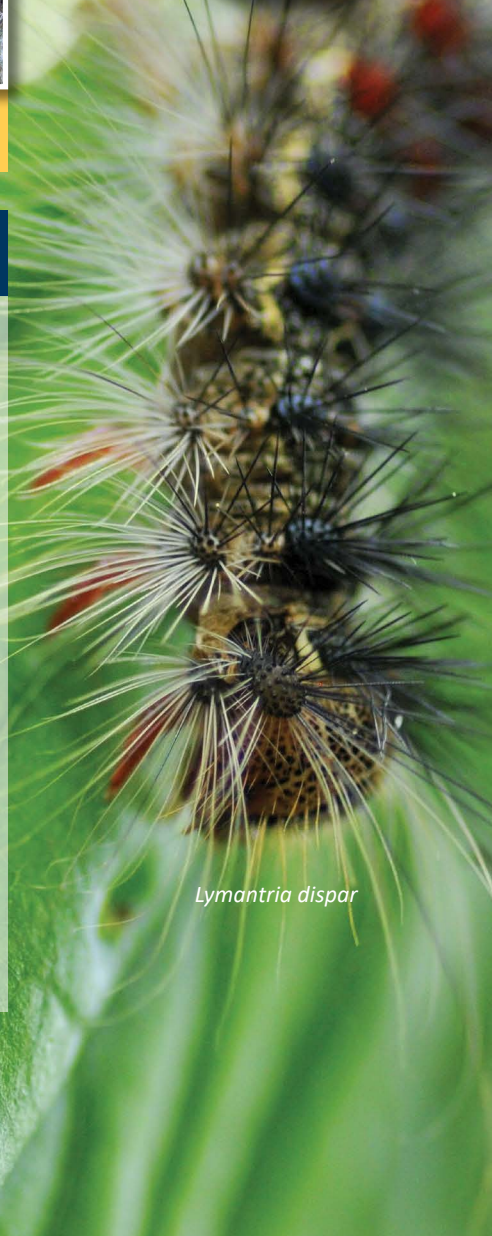
EASTERN TENT  
CATERPILLAR



FALL WEBWORM



FOREST TENT  
CATERPILLAR



*Lymantria dispar*

# SPONGY MOTH

## What is a Spongy Moth?

The spongy moth (*Lymantria dispar*) is a leaf-feeding insect that belongs to the order Lepidoptera (butterflies and moths). It was imported to Massachusetts from Europe in 1869 in a failed attempt to cross-breed with the silk worm for a more cold-hardy hybrid. The moths escaped, headed for the trees, and were soon chomping their way through New England's forests and infesting urban trees. With the ability to feed and survive on over 300 tree and woody plant species and leaving natural enemies behind in Europe, spongy moth now ranks as one of the most destructive invasive pests to trees and shrubs in the U.S.

## Is Spongy Moth in Minnesota?

Spongy moths have started making their way into Minnesota as the invasion front pressure pushes eastward from western Wisconsin. Minnesota's Lake and Cook counties were the first to be quarantined for spongy 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 spongy moth program called Slow the Spread (STS). STS targets spongy moth with early detection trapping and follow-up treatments. The program significantly delays the spread and establishment of the pest as well as the costs and burdens associated with management once it is established.

Each year the Minnesota Department of Agriculture sets ~20,000 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 150 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.

## For More Information



Report a Pest  
888-545-6684 (Toll Free)  
reportapest@state.mn.us  
mda.state.mn.us/reportapest

## Why is Spongy Moth a Problem?

- Spongy moths are among North America's most destructive, non-native, invasive forest insect pests. They defoliate millions of acres of forests and urban trees annually.
  - Each spongy 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 spongy 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...



- Don't disturb the trap. Survey traps are our BEST early detection system for finding spongy 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, spongy 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.

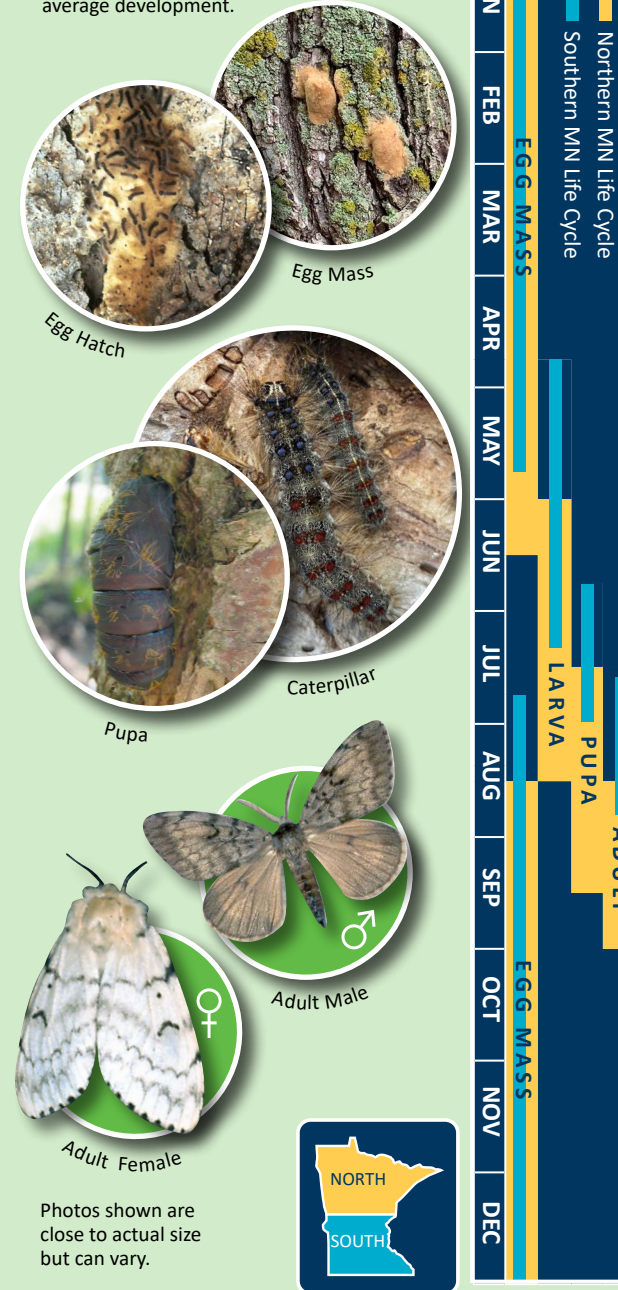
## Adult (winged moth)

**ADULT MOTHS** emerge in mid-summer and they do not feed – their sole purpose is to mate.

**FEMALES** are 1-2" long with tan bodies and cream-colored wings that have dark zig-zag patterns and a distinct "comma" marking on each wing. The feathered antennae are less pronounced than males. They do not fly because they are too heavy (full of eggs). Females emit a scent (pheromone) 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 during the day. Males also have dark zig-zag patterns and a distinct "comma" marking on each wing.

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



Photos shown are close to actual size but can vary.



## What is a Spongy Moth Quarantine?

Areas are quarantined for spongy moth once the moths have invaded and become permanently established. Spongy moth quarantines are intended to slow the human-assisted or artificial spread of spongy 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 spongy moth and removal of all spongy 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 spongy 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 spongy moth.
- Lake and Cook counties were the first in Minnesota to be quarantined for spongy moth in 2014. Other states that have quarantines include Connecticut, Delaware, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and Wisconsin.
- Don't let spongy moth hitch a ride! Before leaving a quarantined county or area, always self-inspect outdoor household articles, equipment, vehicles, etc. Remove and destroy any spongy moth life stages you find before traveling to non-quarantined areas.
  - Report suspect spongy moth life stages:

