



# Spongy Moth

## FOREST HEALTH FACT SHEET

Wisconsin Department of Natural Resources, Division of Forestry, Forest Health Program, May 2023

**S**pongy moth (*Lymantria dispar*) was brought to Massachusetts from Europe in the 1800s. The insect became established in eastern Wisconsin in the late 1980s and has since spread across most of the state.

Spongy moth feeds on many tree and shrub species, preferring oak, aspen, birch, crabapple, willow, tamarack and basswood (linden). Populations periodically become very high when weather conditions are favorable for the insect.

During these “outbreaks,” caterpillars can defoliate numerous tree and shrub species, create a tremendous nuisance, and cause skin rashes and other irritation. Heavily defoliated trees (more than 50 percent of leaf area) are weakened and at increased risk of decline and mortality. Other insects and diseases may attack the weakened trees.

Oak trees growing on lawns are particularly susceptible to heavy defoliation. Mice and shrews are discouraged from hunting for larvae and pupae in these areas, as they have no protective cover from cats, owls or hawks.

### Life Stages

Eggs hatch between mid-April and mid-May. As the caterpillars grow, pairs of blue and red spots appear down their backs (see title photo).



*Female adults laying egg masses.*

Most feeding damage is done by the large caterpillars in June and July. Spongy moth caterpillars do not make a silk web or tent in trees.

Mature caterpillars reach 1.5 to 2 inches in size, then pupate. Within the pupal shell, the caterpillar’s body transforms into an adult moth. Pupae are present from late June to August.

The female moths are white and cannot fly even though they have wings. The males are brown and fly erratically during the daytime in July and August. The adults only live long enough to reproduce.

In July and August, the female moth lays all her eggs in one “egg mass.” Each egg mass contains hundreds of eggs and is about the size of a nickel or quarter. The female moth covers

the eggs with insulating hair from her body, giving the egg mass a tan-colored, furry appearance.

During an outbreak, it is common to see large changes in egg mass numbers from one year to the next. An egg mass survey conducted in the fall or winter is the best predictor of the following summer’s outbreak intensity.



*Caterpillars cluster below a sticky barrier band.*

### Managing Caterpillars

**Barrier Bands:** A sticky barrier will trap or deter caterpillars as they crawl up into trees. Bands should be prepared before egg hatch begins.

Wrap a band of duct tape completely around the tree and push it into bark crevices, sticky side down. Cover the tape with a sticky pest barrier found at many retailers.

Don’t apply the sticky material directly to the tree or use motor oil or similar products. The barrier band should be replaced if it becomes coated with caterpillars or dust. It

should be taken down in August or when preparing a burlap collection band.

**Collection Bands:** Burlap bands are used to collect older, larger caterpillars. In June and July, many caterpillars crawl down the tree trunk to hide from predators. Caterpillars will hide under the burlap and can be easily destroyed.



*Burlap collection band.*

Wrap a 12- to 24-inch burlap band around the tree at chest height. Tie a string around the middle and fold the top half of the burlap over the lower half, forming a two-tiered skirt.

Check the bands daily while caterpillars are present. Use a stick or knife to brush them into a bucket of soapy water to kill them. Don't touch them, as their hairs can cause a rash. Dead caterpillars can go into the trash.

Pupae and female moths can be brushed into soapy water or crushed. Avoid touching female moths with fingers.

**Insecticides:** Insecticide application may be suitable for protecting high-value trees. These are applied as a spray, soil treatment or injection. Treatments are usually done when caterpillars are small. There is an unknown risk of introducing "oak wilt" through unsealed trunk injection sites on oak trees.

An aerial spray is an option for larger areas of high-value trees found in residential areas, campgrounds and parks. Aerial sprays are usually not economically practical in woodlots.

## Destroying Egg Masses

Oiling or removing egg masses is the most effective physical method of reducing the population. Starting in August, examine trees, buildings and outdoor objects.

Masses are often found in hidden spots, such as behind signs, inside birdhouses and beneath loose bark. Old masses appear faded, feel soft and do not contain viable eggs. Remove new masses that are safely within reach.



*Scraping an egg mass into soapy water.*

Egg masses can be scraped into a can or bucket of soapy water. After soaking for a few days, they can be discarded in the trash. Egg mass pieces that fall on the ground or remain unscraped should be picked up as they may be insulated by snow cover and are likely to hatch in spring.

Alternatively, egg masses can be covered with a horticultural oil formulated to penetrate the egg mass and suffocate the eggs.

## Reduce Damage

A healthy tree should withstand one or two years of heavy defoliation and produce a new set of leaves within a few weeks. Multiple forms of tree stress simultaneously (e.g., heavy defoliation, drought or physical damage) will often kill a tree.

Watering yard trees once a week during dry periods will reduce tree

stress and aid recovery from heavy defoliation.

Increasing tree diversity in forests and yards dominated by oak will help to reduce the damage done by spongy moth and other pests.

Periodic thinning in woodlots can promote tree health and vigorous growth. Thinning may need to be delayed because of a spongy moth outbreak. Consult an arborist or forester about managing yard and woodlot trees.

## Don't Move Spongy Moth

Spongy moth often moves long distances by hitchhiking on outdoor articles such as firewood, campers, vehicles and outdoor furniture. Inspect outdoor items. Remove egg masses and other life stages before moving the articles. Obtain firewood near where it will be burned and follow firewood regulations.

A regulatory quarantine is in place in many Wisconsin counties. Items that could move spongy moth are not allowed out of the quarantine area unless inspected for life stages. These regulations help to slow pest spread.

## Additional Resources

Visit [spongymoth.wi.gov](https://spongymoth.wi.gov) and the [DNR spongy moth webpage](#).



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Wisconsin Department of Natural Resources  
PO Box 7921, Madison, WI 53707-7921

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