



# Field Guide:

## Spongy Moth

*The caterpillars of this moth are leaf-eating machines! They can completely strip every leaf off a tree.*



**Plant  
Protection  
Program**

AMERICAN PUBLIC GARDENS ASSOCIATION



Photo: Franco 1961, Flickr.com

# SPONGY MOTH

## Identification

### DID YOU KNOW?

The spongy moth is known as the hairy lizard in various Spanish speaking countries.

The larvae (caterpillars) can grow to about 2 inches long. They have a mottled yellow to gray pattern with tufts of bristlelike hairs. A unique color pattern of five pairs of blue dots followed by six pairs of red dots runs along their backs.

Spongy moth egg masses are usually 1.5 inches long and about 0.75 inches wide. They can contain up to 1,000 eggs and are covered with tan hairs.



A UGA5081033



B UGA2652080

<< Male spongy moths (*Lymantria dispar*) are brown with a darker brown wing pattern, and have a 1.5-inch wingspan. Females are almost white, have dark saw-toothed patterns on their wings, and are slightly larger.

✓ Male spongy moths also have feathery antennae!



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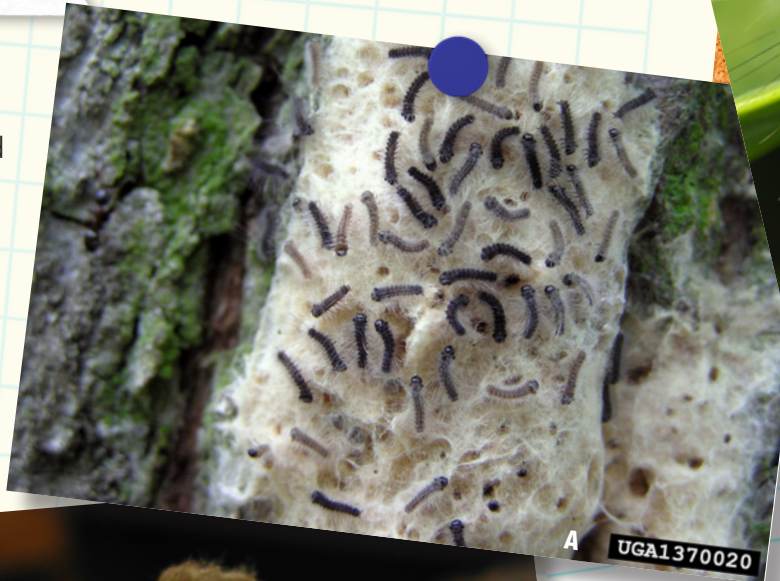
<< The female spongy moths do not fly. They can only crawl and lay eggs. Here we see an egg mass covered with yellowish hair (or "buff") from the abdomen of the female.



# SPONGY MOTH

## Life Cycle

Spongy moth egg masses can be found between August and April. After eggs hatch in the spring, the caterpillars (larvae) feed on tree leaves. >>



⚠ The larvae grow in stages called "instars" and must molt in between each stage. Male spongy moths have five instars and females have six. The larva is the life cycle stage that damages trees by eating leaves, and these caterpillars are active from May to June.



⚠ Here we see an adult male and female ready to reproduce late in July.



After the final instar stage, the larva pupates before becoming an adult moth. Spongy moth pupae can be found in early to mid-July. >>



# SPONGY MOTH

## Host Trees

Host trees are trees that the spongy moth lives and feeds on.



^ Spongy moths can feed on over 100 species of plants, but oak trees are one of their favorite foods.

>> Oaks tend to grow large and round, reaching heights of 100 feet or more. Acorns are a sure sign you have spotted an oak tree.



<< Aspen is a favorite of the spongy moth. The big tooth aspen (*Populus grandidentata*) shown here has alternating, oval-like, shiny leaves with flattened petioles (the stalks between the leaf and the twig), making them easily ripple in the wind. As its scientific name suggests, it has "big teeth" on the edges of its leaves.

Spongy moths also feed on several types of birch trees. The outer bark of this paper birch (*Betula papyrifera*) is smooth, thin, and white. The inner bark is orange. The paper birch grows along stream banks, lakeshores, and on the moist slopes of hills. >>



^ Sweet gum (*Liquidambar styraciflua*) is also preferred by spongy moths. These trees can reach 100 feet tall, have star-shaped leaves with 3-7 points, and a distinctive spiky fruit. Sweet gum leaves are green most of the year but can turn many different colors in the fall.

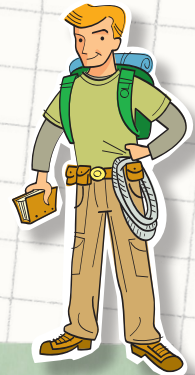
# SPONGY MOTH

## Symptoms

Symptoms are visible clues that a tree might be suffering from a pest or disease issue.

Keep alert for egg masses on trees, logs, stones, walls, and other objects in the outdoors. An egg mass can contain up to 1,000 eggs and is covered with tan-colored hairs. They average 1.5 inches long, and 0.75 inches wide. >>

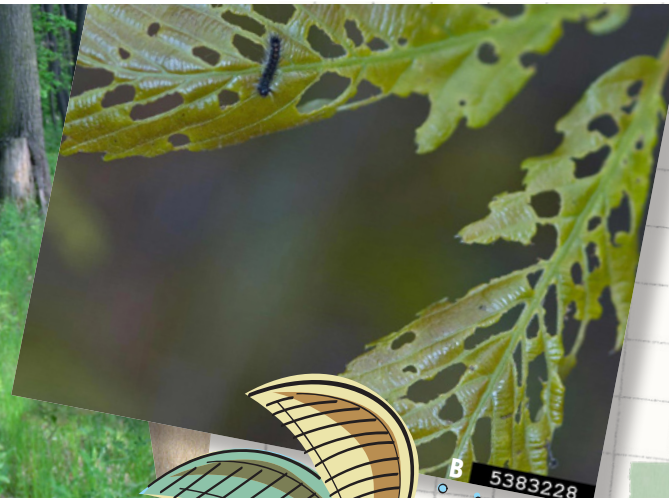
<< Damage from larvae on chestnut oak leaves.



Spongy moth larvae feeding on leaves—caught in the act!



⚠ Branch that has lost all its leaves from larval feeding.



<< Close-up of leaves that have been skeletonized (stripped down to the veins) by spongy moth larvae.



# SPONGY MOTH

## Damage

<< Entire trees can be defoliated (or lose their leaves) by spongy moths.



A 5569660

Infestation in tree.  
You can see females,  
larvae, and pupae, as  
well as egg masses.

>>

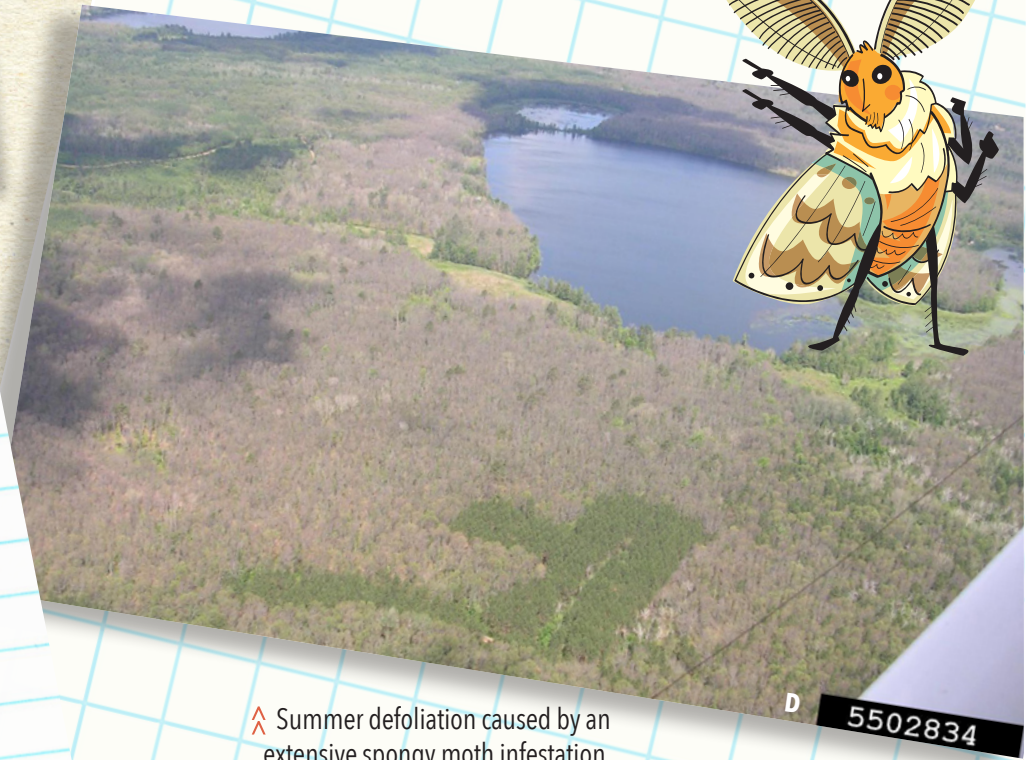


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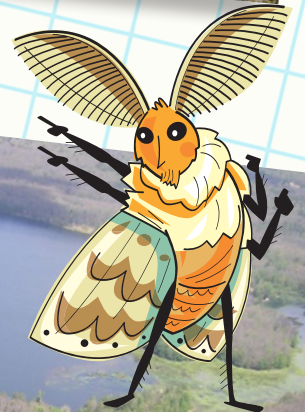
B UGA0000004b

⚠ Defoliated forested area in late spring.



D 5502834

⚠ Summer defoliation caused by an extensive spongy moth infestation.



# SPONGY MOTH

## Control



A UGA1523119

<< Pheromone (scent) lure traps are used to detect male adult spongy moths. If there are male moths in the traps, scientists know that nearby trees are at risk of a spongy moth invasion!

*Entomophaga maimaiga*, a fungus introduced to control the spongy moths in the early 1900s, has dramatically reduced the spongy moth population over the years. √



B

>> Nucleopolyhedrovirus (NPV) is a naturally occurring virus specific to spongy moths. It spreads like the common cold and is very effective at reducing high-density spongy moth populations but not as effective when there are only a few of them in an area.

Spraying pesticides is considered only if trees of great value are affected. √



D UGA2122004



E

⚠ Spongy moth populations can only reach high numbers if there are many host trees nearby; otherwise their populations tend to crash because of starvation and disease. However, in certain situations they can strip other trees nearby like pines and hemlocks.



F UGA2133024

⚠ Deer mice are an important native and natural enemy of the spongy moth.



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**PLANTHEROES.ORG**

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