

## SPONGY MOTH

Spongy moth\* is a non-native invasive insect. It was introduced to the United States in the late 1800s and first detected in Ontario in 1969.

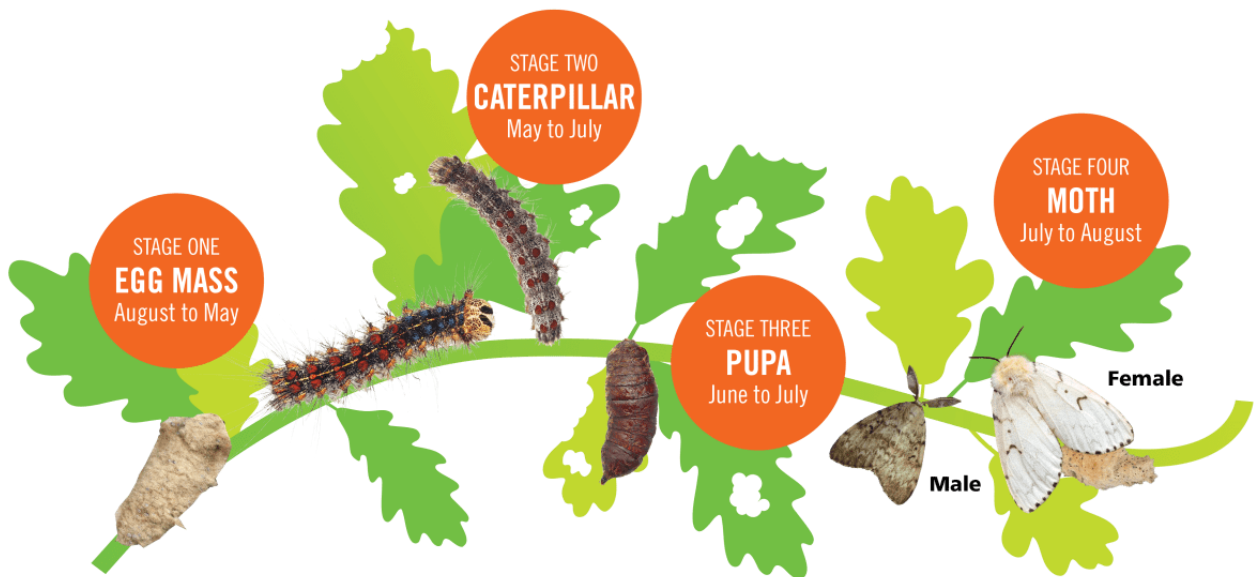
Spongy moth is a defoliating insect that prefers to feed on oak tree leaves but will feed on the leaves of many other hardwoods including maple, elm, birch, poplar and willow trees. In some rare cases, when their numbers are extremely high, the caterpillar will feed on evergreens such as pine and spruce.

*\*The [Entomological Society of Canada](#) has adopted the common name of 'spongy moth' for *Lymantria dispar*. The new common name was selected to acknowledge the spongy egg masses that the insect produces.*

Spongy moth, *Lymantria dispar dispar* (LDD) and European gypsy moth refer to the same non-native insect. While all York Region public communications use spongy moth, at times we link to some materials **not created by the Region** where you may see *Lymantria dispar dispar* (LDD) or European gypsy moth used.



### About Spongy Moth



The spongy moth lifecycle has four stages. Timing of each stage may vary due to climate and location.



### **Egg Mass Stage**

Eggs are covered with brown fuzz and are found as oval shaped “egg masses” 2 to 3 centimetres wide and a few centimetres long. They are usually in tree bark crevices or other hidden places. It’s common to find them on vehicles, garbage cans, firewood piles, outdoor furniture and children’s toys. The insect spends the winter in the egg stage and then hatches the following spring.

### **Caterpillar Stage**



Caterpillars hatch from eggs in spring (end of April/May). By mid-June caterpillars will grow to about 2.5 centimetres in length. During the day they will begin moving down trees to seek refuge from the mid-day sun and will climb back up at night to eat leaves.

The caterpillar stage lasts for approximately 40 days; at first the caterpillars are very tiny, but they can grow up to 6 centimetres in length, covered with dark hairs. The caterpillar is characterized by five pairs of blue dots and six pairs of red dots that run down its back. People usually notice the caterpillars later in their life cycle when they are larger and if their feeding damage is visible.

### **Pupa Stage**



At the end of the caterpillar stage, the larvae seek safe shelter to pupate.

In early summer (late June to July), the larvae enter a transitional stage for 10 to 14 days in which the larvae transform into adult moths.

### **Moth Stage**



The winged moths have less than two weeks to mate and reproduce before they die. Each female moth can lay between 500 to 1,000 eggs.

Only male moths can fly. Female moths often remain on the tree they fed and pupated on because their heavier, wider bodies make flying difficult.

## Spongy moth impacts

The caterpillars tend to only eat leaves for a short period of time throughout June and July. Most trees will put out new leaves when the weather is favourable (with periodic rain).

While forested areas may be affected by spongy moth, trees in urban areas including street trees on local and regional roads and trees on private property are most at risk; soil compaction, air pollution and other pests and diseases make trees in urban areas more susceptible.

While most healthy trees can withstand several years of severe defoliation, trees that are already in poor health may have a harder time recovering. Additional stressors such as other pest/diseases or hot, dry weather may result in tree decline or mortality.

At high numbers, caterpillars can be a nuisance; caterpillar droppings and bits of foliage dropped by feeding caterpillars can create messes on decks and walkways near infested trees, on York Regional Forest trails and in local parks and greenspaces.

Although York Region experienced an infestation of spongy moth last year, trees across the Region showed resilience and most put out new leaves ending the summer with full canopies.

## Did you know?

York Region was not the only area to experience an infestation of spongy moth last year. Many areas across southern and central Ontario were also affected.

## What you can do to protect your trees

There are several pest management options you can consider to control the impact of spongy moth. Always wear gloves when handling caterpillars, egg masses and pupa to avoid an allergic reaction.



## CONTROL OPTIONS

### AUGUST TO APRIL

- Egg masses can be scraped off trees into a bucket of soapy water, stirred then left for a day or two before disposing of them
- Egg masses can be found in tree bark crevices or other out of the way places like garbage cans, firewood piles and children's toys
- Leave burlap bands up until the end of August and then remove; moths may lay eggs under the burlap making them easier to find
- **Burlap and twine/rope can be reused** next year if spongy moth populations reach high numbers, or put it in the garbage so it doesn't become litter

### APRIL TO JUNE

- If trees are severely infested (many egg masses are visible), an insecticide may be a viable option
- Homeowners should contact a licensed tree care company to discuss the best options
- Some products have very tight timing windows for application to be successful and may require more than one treatment; if an opportunity to treat trees is missed this year, homeowners may want to reserve a spot the following spring

### MAY TO AUGUST

- To trap caterpillars (making them easier to collect), wrap a piece of burlap around the tree's trunk at chest height, tie twine/rope around the middle or slightly below the centre of the burlap.
- Drape the burlap over the twine/rope so there is an overhang where the caterpillars can crawl under to seek shelter during the day
- While **burlap bands DO NOT stop spongy moth caterpillars from climbing trees and eating the leaves**, they are a safe and effective collection method
- Leave burlap bands up until the end of August and then remove; moths may lay eggs under the burlap making them easier to find
- **Burlap and twine/rope can be reused** next year if spongy moth populations reach high numbers, or put it in the garbage so it doesn't become litter

### JUNE TO JULY

- In the spring and into the summer, caterpillars can be handpicked
- By mid-June, caterpillars will grow to about 2.5 centimetres in length and begin moving down trees during the day to seek refuge from the mid-day sun and will climb back up at night to eat leaves
- Each afternoon, check burlap bands for caterpillars by lifting the overhanging burlap
- Remove caterpillars and place in a bucket of soapy water, stir then dispose of them after a day or two
- In late June through to July, caterpillars will enter the pupa stage; remove pupa and place in a bucket of soapy water, stir then dispose of them after a day or two
- Always wear gloves when handling caterpillars, egg masses and pupa to avoid an allergic reaction
- Note: **check your burlap bands daily** to ensure birds or any other wildlife don't get unintentionally caught. If you come across injured wildlife, contact your local Animal Control Services or Wildlife.