### How does spongy moth get to Oregon?

The spongy moth (formerly known as the gypsy moth) mainly enters Oregon on infested items brought from eastern areas of the country where spongy moth populations are established. The female lays eggs on solid surfaces, such as outdoor furniture, vehicles, firewood, birdhouses, and doghouses. As people travel from the eastern states, they often bring these contaminated items with them, allowing the moth to hatch and spread.



Invasive insects have many pathways into Oregon. The red area shows the established range of spongy moth.

### How are we managing spongy moth?

Prevention is the best method to keep spongy moths out of Oregon. The United States Department of Agriculture (USDA) requires inspections of all recreational vehicles, outdoor household articles, nursery stock, and other items that travel from infested areas of the eastern United States. In addition, USDA has established strict inspection and compliance procedures for ships that may carry spongy moth. Furthermore, state and federal agencies in those infested states conduct intensive treatment programs to suppress spongy moth populations and slow their spread.

## Early detection and rapid response

The Oregon Department of Agriculture (ODA) and affiliated organizations have successfully protected Oregon's natural and agricultural areas from biological invaders, such as spongy moths, for over 40 years. The success of these projects has largely been attributed to applying the Early Detection Rapid Response (EDRR) protocol for invasive species, which prioritizes preventing the introduction and establishment of spongy moths. To facilitate early detection of newly introduced spongy moths, ODA has a yearly large-scale trapping program throughout the state.



Oregon uses the delta trap to detect spongy moth.

In 2022 alone, over 12,000 spongy moth traps were deployed and monitored. The protocol states that detecting a single spongy moth will result in increased trapping and monitoring. If a breeding population of spongy moth is discovered or thought likely based on trapping data, eradication is necessary. Eradicating spongy moth populations when they are small allows for an overall decrease in pesticide use. Controlling spongy moth requires greater and widespread use of pesticides if allowed to establish.

# For more information

If you have questions, or would like to know more about spongy moth, contact us:

### Oregon Department of Agriculture Insect Pest Prevention & Management Program

635 Capitol St. NE, Ste. 100 Salem, OR 97301 503-986-4636 or 1-800-525-0137



Adult male spongy moth (Photo: USDA-APHIS PPQ)

For more information about the Insect Pest Prevention and Management program and the services it offers, please visit our website: **ODA.direct/IPPM** 

To learn more about the Oregon Invasive Species Council, visit: www.oregoninvasivespeciescouncil.org



# OREGON DEPARTMENT OF AGRICULTURE PEST ALERT



SPONGY MOTH

A Destructive Pest of Natural and Urban Forests



Revised 01/2023

#### What makes spongy moth so destructive?

The spongy moth is a highly destructive invasive species that has defoliated millions of acres of trees and shrubs in the northeastern



Adult spongy moths (Photo: John H. Ghent and Manfred Mielke, USDA Forest Service, Bugwood.org).

United States. It is established in 20 eastern and midwest states and threatens new states each year. Spongy moths can spread rapidly if not controlled and will feed on hundreds of tree and shrub species. Preferred hosts include oak, apple, alder, hazelnut, willow, birch, madrone, cottonwood, and plum. When populations are high, they have been known to also feed on firs and other coniferous species.

## Spongy moth and the flighted spongy moth complex

The spongy moth (formerly known as the European gypsy moth) is a pest of known to the United States. The Asian gypsy moth has been renamed and is now part of the flighted spongy moth complex, which includes several closely related species and is not known to occur in the United States. Unlike the spongy moth, females of the flighted spongy moth complex can fly. They also develop more quickly and feed on a wider range of host plants, including pines and firs. All of these factors may assist in their ability to spread quickly across the country if introduced.

### What kind of damage does it do?

Spongy moths pose high economic, ecological, and recreational costs as populations defoliate natural and urban areas. Tree defoliation along streams can result in higher water temperatures and increased loading of organic material. When the spongy moth defoliate the area, the entire habitat is affected. Fish and other aquatic organisms, as well as terrestrial plants and animals, can suffer due to the damage that is caused.



Forest defoliation from larval feeding (Photo:Mark Robinson, USDA Forest Service, Bugwood.org)

Spongy moths may prevent shipments of trees, lumber, and nursery plants by forcing guarantine restrictions, which will affect the economy of an infested area. Increased pesticide use often occurs once

populations are established to keep their numbers from exploding. Caterpillars can

induce rashes in those that suffer allergic reactions from contact with caterpillar hairs.

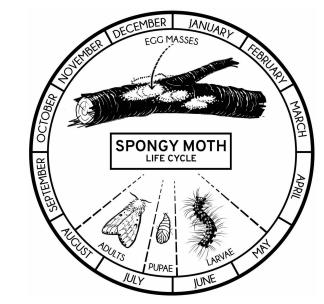
Spongy moth larva head. Photo: Didier Descouens, Wikipedia.org

## Biology and life cycle

Spongy moths produce one generation of offspring per year and lay 50-1000 eggs during the fall, depositing them in small, spongy-looking masses, from which their new name was inspired. Caterpillars hatch during the spring and begin to feed on host plants. In early July, the caterpillars transform into a non-feeding stage called the pupa, then develop into a moth. By mid-to late-July, adult moths emerge, mate, and the life cycle begins again.



Spongy moth larva (left) and egg mass (Right). (Photos: Jon Yuschock, bugwood.org and USDA).



#### Get Involved

- 1. Report any suspected spongy moth life stages to the **Oregon Invasives Hotline** (oregoninvasiveshotline.org/ reports/new).
- 2. Only move wood products, firewood, plant material, outdoor household articles, or recreational vehicles out of spongy mothinfested areas with proper certification.
- 3. Encourage anyone you know who has recently moved here or visited here from the northeastern US to contact ODA for a free inspection of outdoor household articles and recreational vehicles.
- 4. Volunteer to have a trap placed on your property during the summer.
- 5. Keep up to date with all invasive species issues in Oregon by visiting the Oregon Invasive **Species Council website:** oregoninvasivespeciescouncil.org



Larval feeding damage on oak leaves (Photo: L. Sachsen, Bugwood.org).

