

Browntail Moth FAQ

Information from March 21, 2019 Information Event, Georgetown Central School

Speakers:

Thomas Schmeelk, Entomologist, Maine Forest Service
Kyle Rosenberg, City Arborist, Bath Forestry Division
Drexell White, Midcoast Maine Health Liaison, Maine CDC
Dr. Eleanor Groden, U. Maine Orono Research Entomologist

Invited Guests who also answered questions were: David Brown, Safe Yard Organics; Brian Gehan, Georgetown Climbing Arborist; Jerrod Hawkes and Sadia Crosby, Hawkes Tree Service; Jeffrey Gillis, Welltree, Inc.; Jane Whittaker, Georgetown Health Officer; and, Karla Boyd, U. Maine Research Assistant. Thanks to all!

Disclaimer: This sheet attempts to capture useful information presented by or asked of our four expert speakers that is not already readily available from other sources or on our Resources page at gtownconservation.com. It is an unofficial summary prepared by Lee Johnson for the Georgetown Conservation Commission, and sometimes represents the hypotheses and/or work-in-progress of those in the field who have been working most closely with this pest. If you notice inaccuracies, please let Lee know at conserve04548@gmail.com so that we can correct any misinformation. Thanks to Sheila McCandless for organizing this session, which was attended by over 130 concerned residents.

What caused this current infestation?

Short answer: unclear. Midcoast Maine and much of coastal New England was severely infested for a 20 year period from approximately 1900-1920. We didn't begin to notice them again in Sagadahoc in any significant numbers until around 2010. The recent five year period of drought and statistically higher than average August-September temperatures is good for them (climate change). Their overwinter survival rates appear to be higher in coastal areas than further inland, and colder winters do not affect their survival rate.

It is likely that we will begin to see some serious tree defoliation from the infestation in the midcoast this year, and that the moths will continue to spread up the coast and inland, unless we have a particularly cold, wet spring, which may encourage the growth of fungus and bacteria which harm them.

What do we know about them?

Because this is not a widespread problem and has been essentially dormant for the past hundred years, there is very little state-of-the-art knowledge about the health impacts of the browntail moths, or how this pest might be controlled.

Dr. Eleanor Groden and a small team at the University of Maine Orono began studying browntail in 2016, exploring parasites which might be introduced to attack the browntail; substances which would weaken the silk that forms their winter webs, nests and feeding trails; and efficacy

of available pesticides. The research is complex, and currently unfunded. Contributions to the research are desperately needed and can be directed to: The University of Maine Foundation, Two Alumni Place, Onono, ME 04469-5792, specify that the funds are for the support of The University of Maine Browntail Moth Project.

In February, Rep. Denise Tepler (D. Topsham) introduced to the legislature LD 1037, a bill supporting some of this research at U. Maine for a period of three years “To Address the Browntail Moth Infestation”. It is pending and public support for this bill as it works its way through Augusta will help its passage, so speak up, preferably in person.

How can I be outside this summer?

There are two main ways you can make a dent in the population around your house. If you can reach them on smaller trees (or hire an arborist), clip winter webs and destroy them before the larvae hatch out in mid to late April. There’s lots of information available on how to do that — each web contains hundreds of larvae, so every web you destroy means fewer caterpillars in your yard. Kyle Rosenberg also suggested destroying the egg masses from leaves and surfaces after the adult moths have laid them in August-September. Egg masses will be lower down and easier to reach — they’ll also be covered with toxic hairs, so use protective covering.

Note, however, that the moths move around. So putting effort/investment into this tree-by-tree destroying of webs or eggs in the immediate area around your house may make it significantly more comfortable for you in the coming season, but is unlikely to have much effect on the regional moth population.

In August-September when you are seeing the adult white moths, don’t leave outside lights on at night. Lights will attract the moths, which will then lay their eggs nearer to your house. Most moths you see flying, though, will be, by a ratio of about 15:1, males more than females, so killing the adult moths doesn’t much affect the population.

What can I do to protect myself / help with the rash?

After they emerge from their winter webs, the caterpillars will be active in feeding and then pupate in nests they make in sheltered areas like overturned boats, under campers, decks, sheds and eaves. It’s the caterpillars who are protected from predators by their toxic hairs, and their nests are also full of those hairs. The microscopic hairs are shed in leaf piles and blow around in the wind; they retain their toxicity for up to three years. They are barbed, so they typically break off in your skin and then work their way further in. The toxin is a histamine — repeated exposure increases sensitivity rather than encouraging an immune response. Trying to avoid exposure is worth it, and the obvious tips are readily available in already printed materials. Your doctor is unlikely to have the answer (see above, no research). The CDC is hoping to publish this year answers to some questions like: Should I eat the vegetables from my garden if I know I have browntail moths?

We learned:

- High heat neutralizes the toxin. If you were exposed to browntail moth, put the clothes you were wearing into the dryer on high heat for 20 minutes or so. (Don't hang laundry outdoors.)
- If you know you are going into a high exposure environment, poison ivy pre-wipes work by closing up skin pores, and they also work to keep the barbed hairs from getting into your skin.
- Some people find calamine lotion effective for the itch. The other popular remedy is witch hazel, 1% hydrocortisone cream, and antihistamine cream, either mixed together in thirds or applied one on top of the other. Rumor has it these over-the-counter ingredients are the same ingredients in the medication your doctor may be able to prescribe for you (only cheaper).