

## University of Maine Browntail Moth Field Research and Trial - Harpswell

Many residents were affected by browntail moths last season and on Feb.16, 2018 the Maine Department of Agriculture, Conservation & Forestry notified the Town that browntail moth populations were expected to be extremely high in Harpswell again this year. As infestations in Harpswell have steadily worsened citizens in increasing numbers have reached out to the Town for help in dealing with this pest. Treatment options are limited because many of the infested areas are in the shoreland zone and treating with common pesticides can be harmful to the marine environment. The problem is that safer controls that can be used near the water are either prohibitively expensive for many of the residents (stem cell injection of pesticides) or practically impossible (clipping in mid-winter) because so many of the nests are too high to reach safely<sup>1</sup>. Widespread spraying had been tried in the past and resulted in killing off marine life – not a good option for our community.

The browntail moth web page provides the latest information available from the State about what remedies are currently available for control.

To get a better understanding of the infestation and explore some options for Harpswell, the Selectmen met with Entomologist, Elinor Groden, PhD from the University of Maine. The University submitted a research proposal that included eight to nine (8-9) trips to Harpswell over a one-year period, beginning in late March, with assistants, to survey the nest densities throughout Town. Once locations were identified they will be monitored during April and May, including a field trial in mid-May to evaluate the efficacy of at least three **organically certified biorational controls**. On-site evaluations will continue over the summer months. The group will return in February 2019 to monitor the presence and viability of winter webs near the treatment sites. A final report will be prepared and provided, and a public presentation on managing browntail moth will be arranged for the community.

The total cost of the research is \$19,280. The University Entomology Department will fund \$9710 and Harpswell Town Meeting voted to contribute the remainder. The field research portion will begin in April and Professor Groden is looking for **assistance from local residents in locating potential sites to include in the study**.

---

<sup>1</sup> Research of local applicators indicated that treatment of a large oak tree by bucket truck with stem injection of a pesticide or extensive clipping can cost \$200-300 per tree. Also, using a pesticide by stem injection can take a toll on a tree, so it may not be a candidate for treatment year after year.

# Univ. of Maine Browntail Moth Field Research and Trial – Harpswell 2018

Date: April 1, 2018

From: Prof. Ellie Groden, University of Maine, Orono, ME

## Dear Harpswell Residents:

With additional support from the town of Harpswell, my students and I will be expanding our research efforts on browntail moth in the Harpswell area over the next year. We will be assessing web densities in different areas this late winter and early spring. In particular, we will be looking for potential sites to include in our May field trial. In this trial we will be assessing several organically certified biorational products for management of browntail moth caterpillars. **We would appreciate any assistance from local residents in locating potential sites to include in our study**, titled Developing Integrated Pest Management Tactics for Browntail Moth Outbreak.

What kind of sites do we need?

- Sites with one or more trees w/
  - A maximum height of 15-20 feet and accessible for sampling and treatment.
  - 2-3 or more viable browntail moth overwintering webs in spring 2018.
- Sites in which property owners are willing to deploy no other browntail moth management tactics, including manual removal of winter webs, on the treated trees during the study. The study will conclude with assessment of winter webs in February 2019.

Please send information on potential sites via email to: **Prof. Ellie Groden**

Email: [Groden@maine.edu](mailto:Groden@maine.edu) cc: [Conservation@town.harpswell.me.us](mailto:Conservation@town.harpswell.me.us)

**Subject: Potential BTM study site**