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DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY
MAINE FOREST SERVICE
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http://maine.gov/dacf/mfs/forest_health/index.htm

Forest & Shade Tree - Insect & Disease Conditions for Maine
October 11, 2018

This is the last planned Conditions Report bulletin of 2018. You may receive additional electronic bulletins from time to time before April of next year. More limited information will be shared with paper subscribers during the “off-season.”

Personnel

We are pleased to welcome Thomas Schmeelk (rhymes with ‘elk’) to the Entomology Lab in Augusta. Tom fills the position vacated in February with the retirement of Charlene Donahue. He most recently worked for the State of New York Forest Health Diagnostics Lab where he responded to client inquiries and worked on programs involving a variety of pests including Asian longhorn beetle, emerald ash borer, thousand cankers disease, southern pine beetle and *Ips* spp. He received a Master of Science Degree in Entomology from The University of Illinois, where he studied native longhorned beetle ecology. Tom’s experiences in New York will serve him and us well in his new position with the Maine Forest Service. Please join us in welcoming Tom to Maine.

Allison Kanoti is in temporary Acting Capacity as State Entomologist. With this, there is still effectively a continued reduction in staffing. Please be understanding in regard to any delay in responses to inquiries, and don’t be shy about reiterating a request for assistance.

Insects

Boxelder Bugs (*Boisea trivittata*) – Several calls have come in regarding swarms of boxelder bugs. From www.gotpests.org: “Boxelder bugs normally feed on leaves, flowers and seed pods of boxelder trees and other trees of the maple family. They cause little damage to their host plant, usually only distorted leaves or damaged seeds. They are considered a pest because they congregate in large numbers, trying to get into homes and structures in the fall, and trying to get out of homes and structures in the spring. They produce no odor and do not damage or injure wood, cloth, fruits, vegetables, humans or pets.” Other nuisance home invaders (this list not native to Maine) such as western conifer seed bugs, Asian lady beetles and the newer arrival, brown marmorated stink bug, may also be trying to move in soon.

DOUG DENICO, DIRECTOR
MAINE FOREST SERVICE
18 ELKINS LANE, HARLOW BUILDING

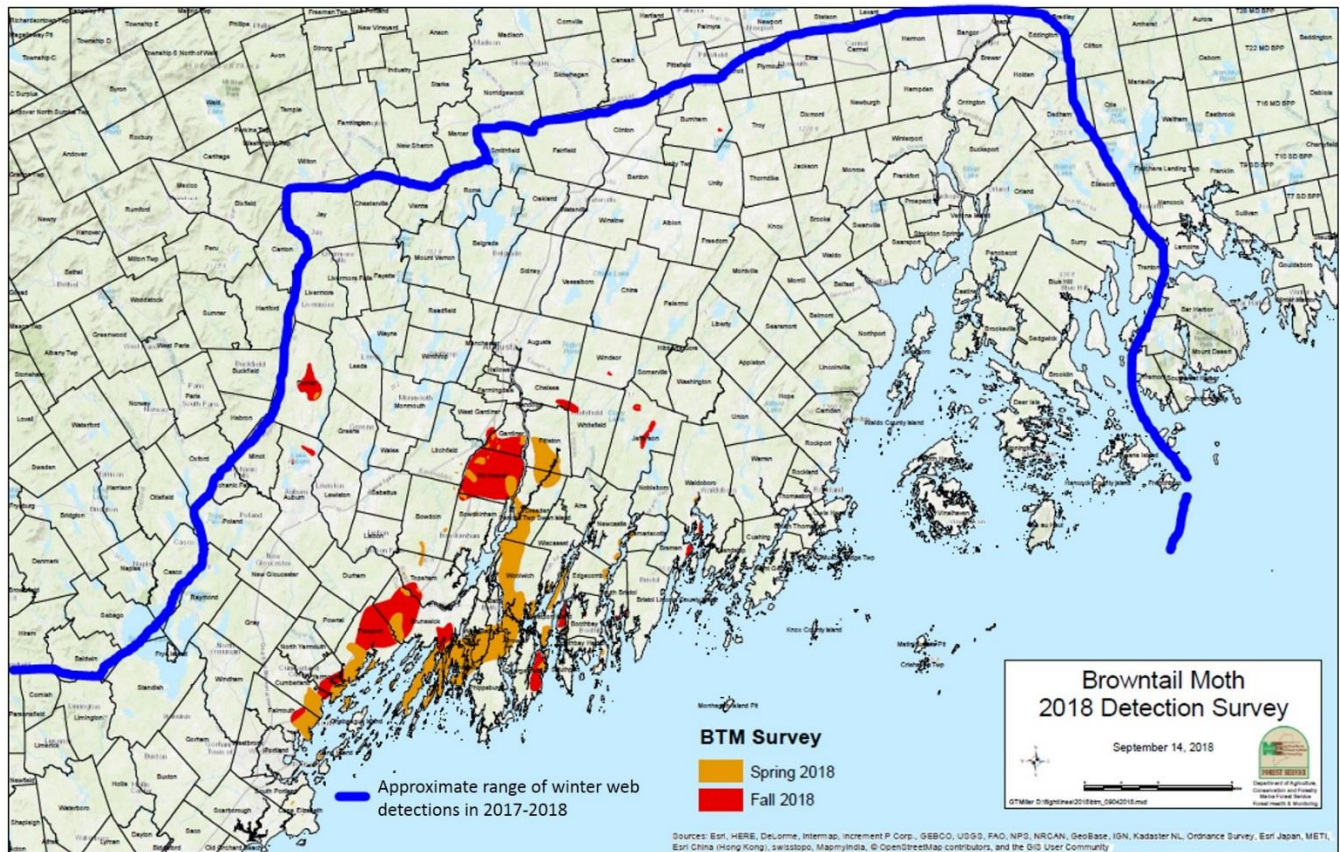


PHONE: (207) 287-2791

www.maineforestservice.gov

Sealing windows and installing screens are your best defenses against these insects. Be aware that some of these listed insects emit a foul odor when harassed. You can find more information at www.gotpests.org.

Browntail Moth (*Euproctis chrysorrhoea*) – The late-summer defoliation caused by early-instar browntail moth larvae has been quite apparent throughout parts of southern Maine this year. The map below shows what was visible during aerial survey, but additional spots could be seen from the ground including small patches along the I-95 corridor from Auburn to West Gardiner. This only represents the locations of the highest populations of the insect. Webs were seen in the winter of 2018 from Deer Isle (Hancock County), inland to Eddington (Penobscot County), and west to Parsonsfield (York County).



Regardless of where you live and work in Maine, please be on the lookout for overwintering webs of this insect. Because of the human nuisance factor and potential health impacts, we try to provide the public with information about where this pest has been found. However, given the limits of our resources and difficulties in detecting low populations, you are an important part of the detection network for this invasive pest (and many others). In addition, we recommend management of small populations to help forestall the need to treat larger areas. You can find more information about browntail moth, including how to recognize winter webs and where we saw webs in 2017–2018 at www.maine.gov/dacf/mfs/forest_health/invasive_threats/browntail_moth_info.htm.

Three talks have already been scheduled to help the public in affected areas become more familiar with how to identify, manage and live with browntail moth (see calendar below). Additional talks will

be scheduled and advertised on-line on the department website and through other Maine Forest Service lists.

Emerald Ash Borer (*Agrilus planipennis*) – New Hampshire has just suspended their internal quarantine for emerald ash borer. What does that mean for Maine? Ash coming from all areas of New Hampshire is now considered regulated, as are mixed-hardwood chips. Ash wood products from that area, such as logs, pulp and chips, need to be accompanied by a certificate from USDA Animal and Plant Health Inspection Service (APHIS). Regulated ash from out-of-state needs to go to a receiver that holds a compliance agreement from USDA APHIS.

In September, we announced that several ash trees shipped in violation of the federal quarantine had been sold by a national chain in Maine. Those trees are still “at large.” In general, with the threat of EAB, ash is not a wise choice for planting. People planting ash must understand that once EAB is found in the planting location, the trees will require long-term periodic insecticide treatment to survive. It is not advised that these treatments start until emerald ash borer is confirmed within 10 miles of ash trees. Details of the shipment are available at:

<https://content.govdelivery.com/accounts/MEDACF/bulletins/20b1b74>. Information about protecting high-value ash trees can be found at www.maine.gov/eab.

During the winter, until the trees start to leaf out in the spring, the evidence of woodpeckers foraging for and feeding on overwintering EAB larvae is most visible. As the birds forage, they flick off the gray outer bark, and expose the light-blond inner bark, leaving a distinctive signature (this is also sometimes seen associated with woodpeckers feeding on native insects). It is primarily the smaller woodpeckers, like the hairy and the downy, that feed on EAB, although even smaller birds like nuthatches do as well. When you are out and about, watch for signs of woodpecker feeding on ash and let us know if you see any. If you can, take a picture of any feeding you see on ash and pass it on to us.

We encourage subscribers interested in getting all the department announcements about emerald ash borer (EAB) to sign up for the topic “Emerald Ash Borer (EAB)” on the department’s e-mail/SMS subscription service: <https://public.govdelivery.com/accounts/MEDACF/subscriber/new>. Department staff from the Commissioner’s Office and two bureaus contribute to that topic, therefore posts do not always reach Maine Forest Service Conditions Reports subscribers. The EAB topic postings can be received as SMS messages (text to a cellular phone) or by e-mail.

Please refer to the latest emerald ash borer update for additional information about this pest in the region <https://content.govdelivery.com/accounts/MEDACF/bulletins/21130c4>. You can find more resources regarding emerald ash borer in Maine at www.maine.gov/eab.

Gypsy Moth (*Lymantria dispar*) – The gypsy moth is a pest of quarantine significance in Maine. Each year the Maine Forest Service and USDA APHIS conduct a joint survey for gypsy moth in the area of the state not yet subject to regulations for this pest. This year, the cooperators deployed more than 500 milk carton traps in northern and western Maine. In years past, we have detected new reproducing populations of gypsy moth, causing a need for revision of state quarantine rules. The process for

revision has been started, and full information about the proposal will be posted to the Secretary of State's office on October 24th at <https://www.maine.gov/sos/cec/rules/notices.html/>. A public hearing has been scheduled for November 14th in Ashland, ME (details can be found in the Calendar section of this report).

Several reports of light defoliation caused by gypsy moth have been received by our offices. With the continued dry conditions and outbreaks in southern New England, this is a pest worth watching. This time of year, look for tan egg masses on just about anything. If you are finding lots of egg masses (more than you can count on your fingers) around your home, let us know. Photos and information about location, the number of masses, the size of the plot of land where masses are found are all of interest. Your information can help us focus survey efforts to areas we might not otherwise visit. Please let us know if you think you have found egg masses outside the gypsy moth quarantine area. Photos and information can be sent to allison.m.kanoti@maine.gov or call (207) 827-1813.



Clusters of tan gypsy moth egg masses. Photo: Maine Forest Service

Minute Pirate Bug (*Orius* spp.) or **Cinch Bug** (*Blissus* spp.)—A case of mistaken identity. While the first of the flood of calls re. minute pirate bugs reported in the last bulletin was correctly identified (they were sucking aphids dry on someone's peach plant), several later calls were mistakenly attributed to this beneficial insect after that first identification. The correct identification was cinch bug, a pest of turf and some crops (<https://www.maine.gov/dacf/php/gotpests/bugs/chinch-bugs.htm>). According to the Pest Management Office of Cooperative Extension, this was a banner year for cinch bugs. If you are uncertain of what you are seeing, a clear, very close-up picture of the insect may help us with identification. Otherwise, please collect a sample of the insects and send them to us or to the Pest Management Office of Cooperative Extension.

Tree-of-heaven (*Ailanthus altissima*) / **Spotted lanternfly** (*Lycorma delicatula*) – Spotted lanternfly (SLF) is an invasive insect native to China, India and Vietnam that threatens agriculture as well as northeastern forests. SLF was first found in Pennsylvania in 2014 and has the potential to spread throughout the northeast. Current research indicates that SLF requires a meal from tree-of-heaven (which itself is a non-native invasive) to complete its lifecycle. SLF may require this meal to sequester chemicals from tree-of-heaven that allow it to protect itself from predators.



Spotted lanternfly is an invasive insect that has potential to spread throughout the northeast. Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org

Surveys for SLF are being conducted in Maine by DACF personnel through the Cooperative Agricultural Pest Survey Program, <https://www.maine.gov/dacf/php/caps/index.shtml>. The risk from SLF may be low in areas without tree-of-heaven. We would like to know where in Maine tree-of-heaven is, so we

can better target surveys.



Tree-of-heaven can be identified by a combination of the following characteristics:

- Pinnately compound leaves (each leaf is comprised of multiple leaflets), 12–48” long, 10–40 leaflets on each leaf.
- SMOOTH leaf margins with 1–2 teeth at the base of each leaflet.
- Twigs have no terminal bud and the leaf scar is large and heart shaped.
- The bark of the tree is smooth and resembles a cantaloupe.
- The fruit is a samara.

Two common native trees that resemble tree-of-heaven are staghorn sumac and black walnut. Listed below are characteristics you can use to differentiate these species from tree-of-heaven. Note that black walnut and staghorn sumac both have serrated leaflet margins while tree-of-heaven has smooth leaflet margins.

- **Staghorn sumac:** Pinnately compound leaves, 16–24”, **SERRATED** leaf margin, fruit is a red drupe, fuzzy twigs, bark smooth but with lenticels.

- **Black walnut:** Pinnately compound leaves, 12–14”, **SERRATED** margin, has a terminal bud, bark rough with diamond-shaped patterns.

See more photos at <https://gobotany.newenglandwild.org/species/ailanthus/altissima/>).

***If you see tree-of-heaven, we’d like to know. You can enter sightings at https://login.imapinvasives.org/meimi/report_invasives/ or contact Nancy Olmstead at Nancy.Olmstead@Maine.gov**

Diseases, Injuries and Environmental Issues

Fall needle drop of conifers - This time of year people may notice coniferous tree species shedding needles. The needles on twigs and branches furthest toward the interior of the tree, which are the oldest needles, begin to turn a pale-yellow to orange color before dropping onto the ground, lawns, cars and driveways. Unless there are clear signs of injury, wilting, signs of insect feeding or signs of fungal infection (black spots or banding on needles), there is no cause for alarm. This is very likely simply due to the natural phenomenon of seasonal needle drop and not an insect or disease problem.



Orange inner foliage typical prior to seasonal needle drop by mugo pine (top); white cedar (bottom). Photos: Maine Forest Service

Although conifer needle disease incidence and severity has been high during the past few years, the premature needle drop caused by those disease agents typically happens in June and July.

Unlike broad-leaved trees (deciduous trees), conifers do not completely re-foliate each year. Seasonal needle drop in coniferous trees is a way for them to increase their efficiency. The older needles are shed because they represent a greater energy cost in terms of maintenance and defense than they generate through photosynthesis compared to newer foliage. The energy that the tree no longer spends on maintenance and defense of the older, shed needles is instead invested in growth, maintenance and defense of more valuable tissues.

Seasonal needle drop can be expected to be more noticeable in Maine this year, as more needle age classes are shed due to the droughty summer conditions throughout most of the state. **Deciduous conifers like larch species and dawn redwood will lose all their needles (leaves) in fall and re-foliate each spring.*

Calendar

For more information contact 287-2431

Oct 17, 2018, 6:00 pm, Falmouth Maine, Browntail Moth Public Information Session, for more details see the Maine Forest Service Calendar: <https://www.maine.gov/dacf/mfs/eventinfo.shtml?id=815305>.

Oct 18, 2018, 10:30 am, Palermo Maine, Coping with the Browntail Moth, Sheepscot Lake Fish and Game Club, 1579 Route 3, Palermo, ME 04354. Hosted by Palermo's Women's Extension, all welcome. Coffee beginning at 10:00. Full announcement on the Palermo Community Library page: <http://palermo.lib.me.us/>.

Oct 18 2:00 pm – 4:00 pm, Boothbay Maine, Woodland Stewardship Tour with Knox-Lincoln Soil and Water Conservation District, including a look at hemlock woolly adelgid. More details at: <https://content.govdelivery.com/accounts/MEDACF/bulletins/212fe1c>.

Oct 29, 2018, 6:00 pm, Freeport Maine, Browntail Moth Public Information Session, for more details see the Maine Forest Service Calendar: <https://www.maine.gov/dacf/mfs/eventinfo.shtml?id=815306>.

Nov 14, 2018, 6:30 pm, Ashland Maine, Public Hearing for Proposed Revision of Chapter 271 Gypsy Moth Quarantine, Maine Forest Service Regional Office, 45 Radar Road, Ashland Maine. Details will be posted at the Secretary of State's Website on October 24th
<https://www.maine.gov/sos/cec/rules/notices.html/>.

Nov 15, 2018, Madawaska Maine, Girdled Ash Trap Tree Log Peeling Workshop, Madawaska Municipal Garage. Details to follow on Department's EAB Topic (see body).

Early to mid-December 2018, Maine Forest Service Foresters Institutes will focus on Forest Management and Emerald Ash Borer. Details to follow on Department's EAB Topic (see body).

Office hours are 7:30 am to 4:00 pm, Monday through Friday, except for holidays. If you plan to visit either office, you may wish to call ahead just to make sure someone will be present to meet with you. (207) 287-2431 (Augusta) and 827-1813 (Old Town)

Conditions Report No. 4, 2018

On-line: http://maine.gov/dacf/mfs/publications/condition_reports.html

DEPARTMENT OF AGRICULTURE CONSERVATION & FORESTRY

Maine Forest Service - Forest Health and Monitoring

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