OREGON TREE HEALTH THREATS

August 2025

Square miles known to be infested with EAB:

Forest Grove – 16.2 Butte Creek/Pudding River – 49

This monthly newsletter gives updates and resources on emerging threats to the health of Oregon's trees in natural and managed landscapes. It is published by the Oregon Department of Forestry in collaboration with other state, regional, federal, Tribal, and local agencies and organizations. To subscribe, email jim.gersbach@odf.oregon.gov

In this issue:

Oregon Department of Agriculture advises public to be on the lookout for spotted lanternflies

Someone called in a sighting of a juvenile spotted lanternfly (SLF) in the Buckman neighborhood of SE Portland this spring. After four visual survey efforts, ODA has not yet substantiated the iNaturalist report of SLF, though more surveys are happening this summer to ensure there is not a population establishing itself in the area.

Cody Holthouse from the ODA said the public can help by being alert for this invasive insect. Adults spotted lanternflies emerge in late summer – usually starting around the second week of August and peaking in September, depending on climatic factors like temperature.

Originally from Asia, SLF has spread to 18 states in the eastern U.S. since first being detected in Pennsylvania in 2014. SLF feeds on at least 70 different trees, ornamental plants, and agricultural crops, including grapevines. As Oregon is a major producer of nursery stock, wine grapes, and hops it is important that Oregonians help prevent SLF being introduced and established in the state.

Spotted lanternflies (both nymphs and adults) frequently gather in large numbers when feeding. They're easiest to spot at dusk or at night as they migrate up and down the trunk of a plant. During the day, they tend to cluster near the base or canopy of a plant, making them difficult to see.

Find photos and more information about spotted lanternfly here. You can report a suspected lanternfly sighting along with clear photos at https://oregoninvasiveshotline.org/reports/create.

ODF asks for volunteers to ground-truth new map of hardwood trees

The Oregon Dept. of Forestry (ODF) is looking for people to help ground truth a new map they have created of Oregon's most common hardwood species. Sean McKenzie, an Inventory Forester with ODF, is the person to contact if you'd like to verify that hardwood species on the ground match those on the map at specific points. You can contact McKenzie at sean.c.mckenzie@odf.oregon.gov

McKenzie said the map covers primarily the Willamette Valley and some foothills of the Coast Range and western Cascades. It shows groves of Oregon ash, Oregon white oak, bigleaf maple, red alder, cottonwood, and the non-native but widespread hazelnut *(Corylus avellana).*

"Improved satellite imagery enables us to identify from space six common Oregon hardwood species, and distinguish them from each other and from conifers," said McKenzie. "Now we need volunteers to verify the accuracy of the work by going to specific sites, look around, and tell us what tree species they find growing there."

The unpublished map can be found here.

Clean Water Services lab tests environmental DNA for EAB

The genetics lab at Clean Water Services (CWS), the Oregon Department of Agriculture, and the Oregon Department of Forestry are developing a new method to identify emerald ash borer infestations. The method – environmental DNA testing (eDNA) – starts with collecting fragments of DNA from the field.

In the most recent round of testing and methods developments, ODF staff found six ash trees and six non-ash trees from an EAB-infested park in Forest Grove and ran sterile paint rollers up and down the bark, hoping to collect bits of EAB eggs, feces, and body parts. This process was repeated at a park in Wilsonville, an area not known to be infested with EAB. They then sent the collected material on to ODA for filtration. Next, CWS lab staff at the utility's Durham Water Resource Recovery facility in Tigard, Ore., will run DNA tests to confirm the presence of EAB. Previous tests using eDNA to detect EAB showed positive results. A big advantage with this sampling method is that surveyors don't have to hack away the bark of trees with a suspected infestation looking for larval galleries.

"The next step will be testing 40 trees within a certain radius of Forest Grove to see if we can pinpoint how far out EAB has spread," said Mills.

Photo below: ODF EAB Specialist Matt Mills collects environmental DNA from an ash tree in Washington County for later testing at a Clean Water Services Lab in Tigard.

“We’re hopeful this method will prove better at finding early infestations than traps or waiting for signs of tree decline to be reported.”

Beaverton estimates it will protect 500 ash trees against EAB this year

About one in four public ash trees in Beaverton will receive systemic injections of insecticide this year to protect them against emerald ash borer.

According to Beaverton Urban Forester Jered Lane there are about 2,200 ash trees (genus *Fraxinus*). The city has started treating ones in good condition that are planted in the right spot for their mature size.

Lane says by the end of the summer season about 500 trees will have been treated with a systemic insecticide that’s proven highly effective at preventing infestation by EAB.

He says treatment will prevent rapid loss of shade and other environmental benefits healthy ash trees provide city residents.

Photo at left: Workers treat ash trees in Beaverton to protect them from EAB.

Tualatin SWCD publishes decision guide for what to do with ash trees

Oregonians who have ash trees on their property have some decisions to make now that emerald ash borer has arrived and threatens to infest and eventually kill most untreated ash trees. To help people decide what steps they can take, the Tualatin Soil and Water Conservation District in Washington County has made an online decision guide specific to this topic.

The two-page guide walks people through a series of questions with a Yes, No or Unsure response possible. Based on your answer, you are then led through a set of recommended actions. For example, if you answer Unsure to a question about whether or not you have ash trees on your property, the guide will suggest you consult Oregon's online ash identification resources or a certified arborist. If the answer is Yes, it will ask if any of the ash trees you have are worth saving. If they are, the guide recommends protective treatment at the appropriate time with an injection of emamectin benzoate, a systemic insecticide that is highly effective at staving off infestation.

You can find the guide here.

Field trials testing Oregon ash resistance to EAB move closer to launch

According to Richard Sniezko, PhD, field trials to find if there is any natural genetic resistance to the deadly emerald ash borer are getting closer to reality. Sniezko is with the USDA Forest Service's Dorena Genetic Resource Center in Cottage Grove, Ore. He says seed from hundreds of Oregon ash parent trees collected from throughout the species' native range (southern California to British Columbia) were germinated earlier this year and planted in pots in greenhouses. They are now growing vigorously. The next step will be planting them outside at four test sites in Oregon this fall or winter.

Photo below: Oregon ash seedlings in Cottage Grove await EAB-resistance field trials.

As EAB reaches the test sites and spreads through the plantings, any trees that appear to have genetic resistance will be studied more closely. If the resistance proves strong enough and durable, the parent tree the seeds came from could become the source of future EAB-resistant Oregon ash trees. Alternatively, breeding to increase resistance may be undertaken. The project is a joint effort with Dr. Glenn Howe from Oregon State University and Dorena GRC.

This year is looking promising for Oregon ash seed production. Seed collection is usually mid-September to October in the Pacific Northwest. If you'd like to support efforts to conserve genetic diversity and help with the hunt for genetic resistance, please contact Mariel King (Mariel.King@usda.gov) or Richard Sniezko (richard.sniezko@usda.gov) at Dorena Genetic Resource Center for more information."

Volunteers needed this fall to collect Oregon ash seeds

An effort is underway to find genetic resistance to EAB to ensure Oregon ash *(Fraxinus latifolia)* remains a key part of forests in the West. However, resistance to this fatal insect pest is very rare.

A volunteer community effort is needed to collect Oregon ash seeds throughout the species range from California to British Columbia. Collected seeds will be shipped to USDA Forest Service Dorena Genetic Resource Center in Cottage Grove, Ore. Researchers will store a portion of the seeds to preserve the genetic diversity of the species for gene conservation and possible future hybridizing, and plant out other batches of seeds to test for resistance to EAB.

The USDA Forest Service and Oregon State University are leading the current effort together with other agencies. They are seeking volunteer seed collectors in British Columbia, Washington, Oregon, and California to collect Oregon ash seeds this fall and send them to the federal lab in Cottage Grove.

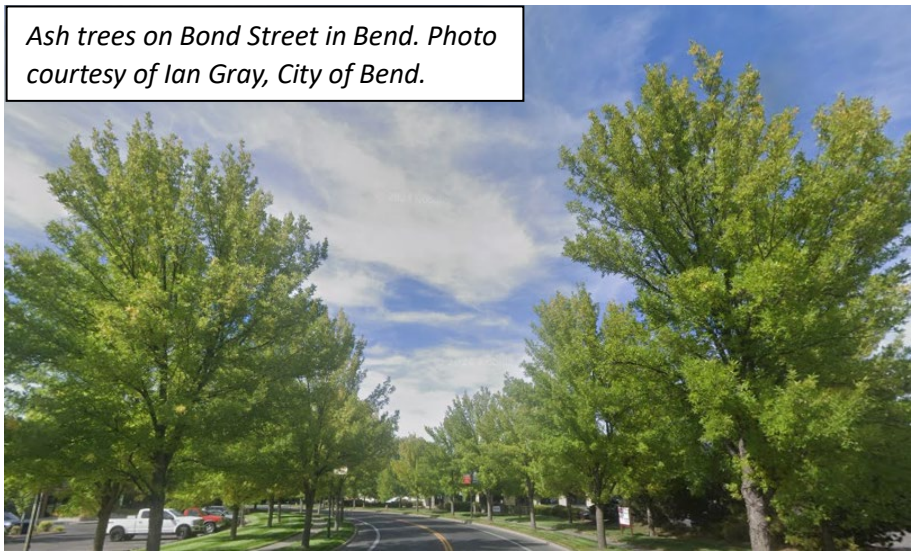
A virtual workshop on seed collection and shipping protocols will be held on **Thursday, August 14,** from **12 p.m. to 1 p.m.** This workshop will cover how to gather seeds from your area and prepare them for shipment. Anyone interested in joining seed collection efforts, including individuals, community groups, clubs, youth organizations, may volunteer. Advanced registration is required. For more information and to register, visit https://beav.es/xJw. or contact OSU Extension Forester Dan Stark at dan.stark@oregonstate.edu

This project builds on an earlier seed collection effort undertaken by the Oregon Department of Forestry prior to EAB's arrival in the Pacific Northwest. That effort collected nearly a million seeds from populations all over western Oregon and was complemented by additional seed collection done by numerous groups and individuals from California to British Columbia.

Ahead of EAB's arrival Bend to inventory its street trees to find ash

Bend's new urban forester Ian Gray says when it comes to predicting the impact of EAB the city government is flying a bit blind because it lacks an up-to-date citywide tree inventory. "Without an inventory it is impossible to know what trees are where and the condition they are in," Gray says. He plans to change that by conducting a tree inventory next spring.

A tree inventory database is a critical management tool, especially for addressing an invasive pest outbreak. Gray says a current lack of external grant funding make preparedness challenging. The nature of the beast that is EAB will also make it difficult for Bend to save many ash trees if and when the central Oregon city sees a large infestation of EAB. “The inventory will at least help us target high-value specimen ash trees that we may want to try to protect by treating preventatively,” he says. He adds that knowing where ash trees are in the city will also allow for more precise placement of EAB traps for monitoring purposes.



Ash trees on Bond Street in Bend. Photo courtesy of Ian Gray, City of Bend.

Gray says Bend will likely use the free statewide tree inventory software from PlanIT Geo. Data collection will be a combined effort – some key City staff, trained volunteers, and perhaps some college interns. Gray hopes to have the inventory get underway once trees have leafed out next spring.

ODF EAB specialists reach more than 800 people in Q2

It’s been a busy spring for ODF’s EAB outreach specialists Kat Bethea and Matt Mills. The pair participated in 30 events, most of them in person with just a few virtual ones. These ranged from trainings to learn to identify EAB and signs of infestation to demonstrations of air curtain incinerators showing how the machines can safely dispose of EAB-infested plant material. Three other ODF staffers – Wyatt Williams, Christine Buhl, and Alison Herrell – were involved in a half dozen other outreach events, including one at Silver Falls State Park on a free-admission day.

Since the start of this year, ODF staff have handed out about 10,000 outreach materials on EAB and the importance of not moving firewood. If you’d like more information on training events or outreach materials, visit OregonEAB.com, or contact Bethea and Mills at invasivepests@odf.oregon.gov.

Photo below: One of the many trainings ODF put on was one earlier this year in Wilsonville and Woodburn done in collaboration with Metro and the Oregon Dept. of Agriculture. Here attendees search for signs of Mediterranean oak borer in a Wilsonville oak. Photo courtesy of Tualatin Soil and Water Conservation District.

Photo above: Attendees at a recent ODF-led workshop learn the signs and symptoms of Mediterranean oak borer.

Publications

Monitoring Oregon ash forests in the face of the emerald ash borer: A guide for small woodland owners and managers

https://extension.oregonstate.edu/catalog/pub/em-9451-monitoring-oregon-ash-forests-face-emerald-ash-borer

Larval development and parasitism of emerald ash borer (Agrilus planipennis) *in Oregon ash* (Fraxinus latifolia) *and European olive* (Olea europaea): *implications for the West Coast invasion*

Journal of Economic Entomology | Oxford Academic

Modelling impacts to water quality in salmonid-bearing waterways following the introduction of emerald ash borer in the Pacific Northwest, USA. Maze, D., Bond, J. & Mattsson, M. *Biol Invasions* (2024). https://doi.org/10.1007/s10530-024-03340-3

Alternatives to Ash in Western Oregon: With a Critical Tree Under Threat, These Options Can Help Fill Habitat Niche. G. Kral, and D.C. Shaw. 2023. OSU Extension EM 9396.
https://catalog.extension.oregonstate.edu/em9396

Oregon Ash: Insects, Pathogens and Tree Health by Oregon State University Extension (also available in Spanish at this same website)
https://extension.oregonstate.edu/pub/em-9380

Wood Decay Fungi Associated with Galleries of the Emerald Ash Borer by the University of Minnesota and Uruguay's *Instituto Nacional de Investigación Agropecuaria*
Forests | Free Full-Text | Wood Decay Fungi Associated with Galleries of the Emerald Ash Borer (mdpi.com)

Useful links for more information

Past *Oregon Tree Health Threats Bulletins* (2023 to present)
https://forms.office.com/g/p3EbRa7HKv

Roundup of Oregon-specific EAB information including where to report new EAB sightings
www.OregonEAB.com

Mediterranean oak borer fact sheet
https://www.oregon.gov/odf/Documents/forestbenefits/fact-sheet-mediterranean-oak-borer.pdf

Map to find where EAB is currently confirmed in Oregon
https://experience.arcgis.com/experience/9f29b1860cb04d36ad71b122148277f3

EAB monitoring guidance
https://www.oregon.gov/odf/forestbenefits/Documents/eab-monitoring-guidance.pdf

Oregon Dept. of Agriculture
https://www.oda.direct/EAB

Oregon Dept. of Forestry
https://www.oregon.gov/odf/forestbenefits/pages/foresthealth.aspx

OSU Extension
https://extension.oregonstate.edu/collection/emerald-ash-borer-resources

Emerald Ash Borer Information Network, a collaborative effort by the USDA Forest Service and Michigan State University
www.emeraldashborer.info

USFS Forest Health Protection
https://www.fs.usda.gov/foresthealth/index.shtml