OREGON TREE HEALTH THREATS

November 2026

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:

- *Go ahead and prune or remove ash trees as EAB adults are done for the year*
- *ODF plans to hold more air curtain incinerator demonstration burns in November*
- *EAB detected at two sites in Cedar Mills area of Washington County*
- *Experts weigh in on the optimal time to treat ash trees to protect them from EAB*
- *EAB found east of the Cascades for the first time in the Pacific Northwest*
- *Federal researchers are working to find and bolster EAB resistance in lingering ash*
- *Spotted lanternfly has been found for the first time in Canada and New Hampshire*

With EAB adults gone for this year, ash pruning/removals can resume

For those waiting to cut down ash trees or prune them, the season to do so has now arrived. That's because adult emerald ash borers never see the winter. The larvae mature into adults inside ash trees and emerge from exit holes in late spring. They soon mate. Then the females find an ash tree to lay their eggs on. By the end of September almost all of the adults have died. Their offspring will overwinter inside the ash trees chosen by their mothers, chewing galleries under the bark that eventually cut off water and nutrients to their host tree.

"Best management practice is to wait until the adults have died before disturbing the canopy of an ash tree to avoid sending EAB adults flying off to other trees," says Oregon Dept. of Forestry EAB Support Specialist Matt Mills. "Starting in October and continuing till early April one can safely remove or prune any ash tree."

Mills reminds people that any firewood cut from downed hardwood trees within the five counties under EAB quarantine must stay within those counties. Those counties are Clackamas, Marion, Multnomah, Washington and Yamhill.

Below: With no more adult emerald ash borers active till next spring, it is now okay to fell or prune ash trees. Just remember to keep resulting firewood within about 10 miles of where it is cut to avoid spreading this pest.



Mills recommends that, since the larvae of EAB and other wood-boring pests can travel inside firewood, people should also not move firewood more than 10 miles or so from where it is cut.

“This really helps slow the spread of EAB and other forest pests and gives communities not yet infested with EAB have more time to prepare,” Mills said.

ODF will hold air curtain incinerator demonstration burns in November

The Oregon Department of Forestry's Urban and Community Forestry Program will be holding a series of air curtain incinerator (ACI) demonstration burns in Southern Oregon throughout the month of November.

These demonstrations are intended for fire departments, municipalities, natural area land managers, Firewise communities, prescribed burn associations, nurseries, orchards, vineyards, arborists and tree care companies, citizens and landowners, and anyone who has to manage woody biomass on private or public land in Oregon. The burns will show how ACIs can be used as a tool for biomass reduction and carbon sequestration in wood sanitization, wood-waste utilization, and fuels-reduction projects, while reducing smoke and air pollution compared to pile burning. A number of private companies now offer burning services with an ACI.



If interested in attending, please register below for one of these free events and participate in a discussion on how ACIs can be used throughout Oregon.

- Friday, Nov 13th – Port Orford, Cape Blanco State Park – 11:30 to 1:30 p.m.
- Tuesday, Nov 17th – Talent, Plant Oregon Nursery 11:30 a.m. to 1:30 p.m.
- Thursday, Nov 19th – Grants Pass, Valley of the Rogue State Park 11:30 a.m. to 1:30 p.m.
- Friday, Nov 20th – Roseburg, Abacela Winery 10:30 a.m. to noon
- Monday, Nov 23rd – Cottage Grove, Center for Rural Livelihoods 11:30 a.m. to 1:30 p.m.

We ask you to share this information with others in your network who may be interested participating. More information about the ACI demos can be found here.

EAB confirmed for first time in the Pacific NW east of the Cascades

Just a month after emerald ash borer (EAB) was first confirmed in Washington State, the state's Department of Agriculture (WSDA) and the U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA APHIS) have confirmed the presence of the pest east of the Cascades.



Photo credit: Pennsylvania Department of Conservation and Natural Resources - Forestry, Bugwood.org

Earlier this fall an arborist working in the College Place area south of Walla Walla noticed and reported potential EAB damage on ash trees. WSDA staff responded and found multiple larvae as well as D-shaped exit holes — typical of EAB infestations — in multiple ash trees. Specimens were collected and sent to a USDA lab, which confirmed the specimens as emerald ash borer on October 14.

Walla Walla County borders Oregon's Umatilla County. It is only about eight miles north of the Oregon town of Milton-Freewater.

Most ash trees in eastern Oregon are non-native species planted in cities and towns. Green *ash (Fraxinus pennsylvanica)* has escaped cultivation and can now be found growing along rivers and wet areas in eastern Oregon.

Emerald ash borer is found in two new locations in Washington County

This summer the tree-killing emerald ash borer (EAB) was confirmed at two new locations in Washington County this summer. One was in a tree on a private residence near NW Saltzman and NW Thompson Road in the Cedar Hills area. Another one was found in a trap set by Tualatin Hills Parks and Recreation Department in the Willow Creek Greenway.

The new detections are within the existing EAB quarantine zone covering the five counties where this pest has been found so far. Counties within the quarantined zone are Clackamas, Marion, Multnomah, Washington and Yamhill. By order of the Oregon Department of Agriculture, tree material from ash, olive, and white fringe tree must remain within quarantined counties, along with firewood from any hardwood tree.

Oregon Department of Forestry EAB Support Specialist Matt Mills said, "We have long known that EAB would spread from infested sites to nearby areas, so these new detections are not unexpected. Experience from other states shows that four to five years or so after first being detected EAB spreads from pockets of infested ash trees to become much more widespread over an entire county or metropolitan area."

The report of the infested tree was made by a private individual who recognized ash trees that were showing signs of EAB infestation and knew to report them on the invasive species hotline at https://oregoninvasiveshotline.org/

Kat Bethea, also an EAB Support Specialist with the ODF, said this shows the success of years of outreach to the public in northwest Oregon with information about EAB and where to report sightings.

“We are thankful that people are paying attention to the health of ash trees around them and letting us know when signs point to a possible EAB infestation,” Bethea said.



Above: Classic signs of EAB infestation in an ash tree are a dying top and shoots on the lower trunk. Photo credit: Daniel Herms, The Ohio State University, Bugwood.org

What the public can do

“This is a good time to identify any ash trees on your property. Decide which ones, if any, you want to keep. Then contact a licensed pesticide applicator to begin protective treatment with a systemically injected insecticide,” said Bethea.

Mills said after these two detections, and several others throughout the summer, that EAB has been detected in much of Washington County. Areas not currently known to be infested should expect to in the next year or two. Homeowners in Cedar Mill, as well as neighboring communities, are within five miles of a known infested tree. They should work with a certified arborist to determine the best outcomes for their ash trees, especially since ash trees quickly become brittle and hazardous to climb or work under once killed.

He advises homeowners to treat larger, healthy ash trees to protect them from EAB, or start pre-emptively removing any ash trees in poor condition in the fall and winter when adult EAB are no longer flying. “This allows for replanting with trees that aren’t vulnerable. It also spreads out the cost of removals and gets trees growing to replace those that will be lost to EAB. Simply waiting for EAB to start killing trees in your town can become overwhelming in a short period of time and costly.”

For more information on how to identify ash trees or EAB, what the signs of infestation are, and what can be done in response to an infestation, please visit www.OregonEAB.com.

What's the optimal time for treating ash trees to protect them from EAB?

Although there are several different treatment options available for emerald ash borer (EAB), a trunk injection of emamectin benzoate has been deemed as the preferred "consensus choice" for treatment across the United States. This is because it is the most effective treatment available in preventing canopy decline and lowering larval densities while also posing the lowest risk to most nontarget species when properly applied by a licensed pesticide applicator.

The recommended timing for a trunk injection of emamectin benzoate is starting in spring (after leaves have emerged) through fall (when leaves begin changing color). Since this treatment is injected directly into the vascular tissue of the tree, uptake is dependent upon the tree's transpiration. Transpiration is reliant on several factors such as soil moisture, soil and ambient temperature and time of day. The manufacturer labels indicate applying when soil is moist, soil temperatures are above 45° F, ambient temperatures are between 40° to 90° F, and during the 24-hour period when transpiration is greatest, typically before 2 p.m. While ash trees can leaf out as early as April in Oregon, we may see more optimal uptake if we wait until May or even June to ensure that we have warm enough soil and ambient temperatures.



Irrigating before application may be necessary if we are having a dry spring, as applications to drought- or heat-stressed trees may result in injury to tree tissue, poor treatment, and subsequent control. At the same time, injections should not be done if there is standing water within three feet of an ash tree, or if the soil around them is saturated. If water collects where an applicator steps, then it is too wet to treat.

Other factors such as site conditions, location of injection sites, type of drill bit, drill depth, and proper equipment use can also impact the uptake time and efficacy. Each licensed pesticide applicator should be trained directly by the equipment manufacturer to learn the nuances of the devices and application processes.

For more application considerations and tips for effectively administering tree injections, homeowners and applicators can refer to the International Society of Arboriculture Best Management Practices—Tree Injection. Or visit ODF's information on how to protect ash trees here.

Federal researchers are working to find EAB-resistance in ash trees

At a special US Forest Service research site in Ohio, federal scientists are waiting for trees they planted to die. More accurately, the researchers want to see which trees survive the

onslaught of emerald ash borers. They hope to find the most resistant ash trees from among the survivors and cross-breed them to build up enough resistance that native species of ash can one day be returned to American forests and cites.

The USDA Forest Service is leading the charge along with numerous partners to find ash trees still surviving in areas where most mature ash have been killed by EAB. According to a recent webinar presented by USDA Forest Service Geneticist Mary Mason, the focus is to grow seedlings or grafted saplings from these survivor trees and then test their resistance by applying an equal number of EAB eggs to each under controlled conditions. About eight weeks later they look to see what percentage, if any, of the larvae are still alive and gaining weight.



Above: Researchers have found that green ash, such as this one in Salem, Ore., has very little resistance to emerald ash borer.

Mason said results show that some of the replicated trees that have managed to survive in infested areas are able to kill more EAB larvae than dying trees. The researchers hope to take those that kill the highest percentage of EAB larvae and cross-breed them to increase the level of resistance. Some of the resulting seedlings kill even more larvae than the original lingering ash parent trees, and the best families have a higher family average.

Mason added that the EAB egg transfer experiments match the field monitoring work for species preferences: black ash (*Fraxinus nigra*) is most preferred and kills the least larvae in egg transfer tests. Following after that are green ash *(Fraxinus pennsylvanica)*, then white ash *(F. americana)*, then blue ash *(F. quadrangulata*). But it is important to distinguish between the species or population levels of resistance versus the individual tree resistance since there are both resistant and very susceptible trees in all species.

Reasonably high levels of resistance have been found in Asian ash species whose native ranges overlap with EAB, such as Manchurian ash *(F. mandschurica).* However, most of these Asian ashes are distinct enough from North American species that hybridizing them to breed in resistance is unlikely. And more importantly, we don't need to use a hybrid approach since resistance has been found in the native species!

Oregon State University and the US Forest Service's Dorena Genetic Resources Center in Cottage Grove, Ore., are working in a similar fashion in Oregon. Seedlings collected from throughout the range of Oregon ash *(F. latifolia)* were planted at three sites in December 2025,

including ODF's seed orchard near St. Paul, Ore. They will be followed to see if any show resistance to EAB, a process which could take several years.

Spotted lanternfly confirmed for first time in Canada and New Hampshire

Below: Just before they become adults, spotted lanternfly nymphs develop a red color. Photo credit: Emelie Swackhamer, Penn State University, Bugwood.org



The Canadian Food Inspection Agency (CFIA) recently confirmed the presence of spotted lanternfly in Windsor, Ontario in eastern Canada. Windsor sits across the border from Detroit, Mich. This is the first detection of the invasive pest in Canada since it was first detected in North America in Pennsylvania in 2014.

The CFIA is urging the Canadian public to report suspected sightings and egg masses with photos and location information to help prevent its further spread.

In the U.S., New Hampshire in August confirmed that spotted lanternfly had been confirmed for the first time in that New England state.

To date this pest has not yet been confirmed on the West Coast. State invasive species staff suggest that Oregonians learn to identify the insect at its various life stages, including its egg masses and nymph stages. That will make it easier to identify if they encounter it so they can report it to the Oregon Invasive Species Council website.

For more info on spotted lanternfly go here.



Below: The Oregon Dept. of Forestry and Oregon Dept. of Agriculture last month hosted a debarking demonstration at the agency's Seed Orchard near St. Paul in Marion County. The workshop taught attendees how to carefully remove outer bark to find the tell-tale emerald ash borers underneath. Attendees included staff from the City of Beaverton, City of Portland, Washington Dept of Natural Resources, Clackamas SWCD, and USDA Forest Service.



Publications

- ***Forest resistance to biotic stressors under climate change: Lessons from the European ash system*** By K. Davydenko, T. Markina, O. Shcherbak, and V. Meshkova Published in **Biosystems Diversity** e2613 Published Oct. 20, 2026 DOI: https://doi.org/10.15421/012613

- ***Protective neighboring effect from ash trees treated with systemic insecticide against emerald ash borer*** by Rafael B de Andrade, Kristopher Abell, Jian J Duan, Paula Shrewsbury, Daniel S Gruner First published in *Pest Management Science* Aug. 10, 2020 https://doi.org/10.1002/ps.6041

- ***Ash population dynamics after two decades of Emerald Ash Borer infestations in Canada*** by Élise Deschênes, Christian MacQuarrie, Laura Scott, Craig Zimmerman, and Isabelle Aubin in the *Canadian Journal of Forest Research,* May 2026. https://cdnsciencepub.com/doi/abs/10.1139/cjfr-2026-0075

- ***Select genotypes of white and green ash show heritable, elevated resistance to emerald ash borer*** by Mary E. Mason, Dave W. Carey, Jeanne Romero-Severson, Kathleen S. Knight, Therese M. Poland and Jennifer L. Koch in the international journal *New Forests* *Select genotypes of white and green ash show heritable, elevated resistance to emerald ash borer | New Forests | Springer Nature Link*

- ***Sequestration of plant defenses by spotted lanternfly (Lycorma delicatula) and effects on avian predators.*** by Anne E. Johsnon, Allison Cornell, Fang Zhu, Ashley E. Shay, Gabrielle Davis and Kelli Hoover. Pennsylvania State University. Journal of Chemical Ecology Oct. 23, 2025. https://link.springer.com/article/10.1007/s10886-025-01647-6

- ***A Valley Without Ash: Exploring Strategies for Forested Wetland Restoration Post Emerald Ash Borer Invasion in the Willamette Valley, Oregon*** by Hull, Chloe (2024). OSU. https://ir.library.oregonstate.edu/concern/graduate_projects/3j333b36w

- ***Genomics-Driven Monitoring of Fraxinus latifolia (Oregon Ash) to Inform Conservation and EAB-Resistance Breeding'*** *by Melton, A.E., Faske, T.M., Sniezko, R.A., Thibault, T., Williams, W., Parchman, T. and Hamilton, J.A. (2025), Molecular Ecology e17640. https://doi.org/10.1111/mec.17640*

- ***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://oregon-eab-geo.hub.arcgis.com/pages/latest-news

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