OREGON TREE HEALTH THREATS

## September 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:**



## Washington State officials announce their first confirmed EAB detection

Emerald ash borer has been found for the first time in Washington State, according to a news release from the Washington State Dept. of Agriculture (WSDA). Read the release here.

According to the release, on Aug. 3, 2026, a couple traveling in Clark County in the community of Hazel Dell (just 4 miles north of Vancouver) found a single specimen of EAB (*Agrilus planipennis)* on their windshield. The vehicle had been within the Hazell Dell community the entire day. The couple did not recognize the insect and searched on-line where they found several outreach pages. They reported the beetle on the Washington Invasive Species Council pest app with several quality photos and then collected the specimen. They then turned the specimen over to a Washington State park employee at a nearby state park, who turned the specimen into WSDA on August 5th.

The specimen was identified as *Agrilus planipennis* by WSDA, which then sent it to the U.S. Dept. of Agriculture (USDA) for verification on August 6th. The USDA lab verified the specimen and notified Washington officials on August 19th.

Clark County is close to infestations in northwest Oregon along the busy Interstate 5 freeway so its arrival there is not unexpected officials said.

Washington has a multi-agency and partner approach planned for the management of impacts from EAB. Details can be found in a new Resource and Management Guide released earlier this year. The guide can be found at Washington State Emerald Ash Borer Resources & Management Guide.

*Above: A high-value Oregon ash tree at Jackson Bottom Wetlands Preserve being protected from EAB with a systemic injection of insecticide. Photo credit: JBWP*

## EAB confirmed in Oregon ash stand in Jackson Bottom Wetlands Preserve

On July 27, emerald ash borer (EAB) was confirmed at Jackson Bottom Wetlands Preserve, where multiple Oregon ash trees were found with significant canopy decline consistent with EAB infestation.

The 635-acre wildlife preserve contains one of Hillsboro's largest Oregon ash-dominated riparian forests. This forest provides vital habitat for native fish and wildlife while shading waterways, filtering stormwater, and supporting hiking trails and environmental education programs.

With Oregon ash making up 99% of the forest canopy, EAB poses a serious threat to the preserve's long-term ecological health. Recognizing this risk after EAB was first detected in nearby Forest Grove in 2022, Jackson Bottom launched an ambitious, proactive program to manage vulnerable ash trees and restore a more diverse and resilient forest.

With grant funding from the Tualatin Soil and Water Conservation District, Oregon Department of Forestry, and Metro Parks and Nature, Jackson Bottom has:

- treated more than 150 high-value Oregon ash trees to preserve critical canopy resources and wildlife habitat
- implemented strategic ash management practices to reduce future safety risks
- started reforesting the preserve with a diverse mix of native and climate-adapted trees and shrubs.

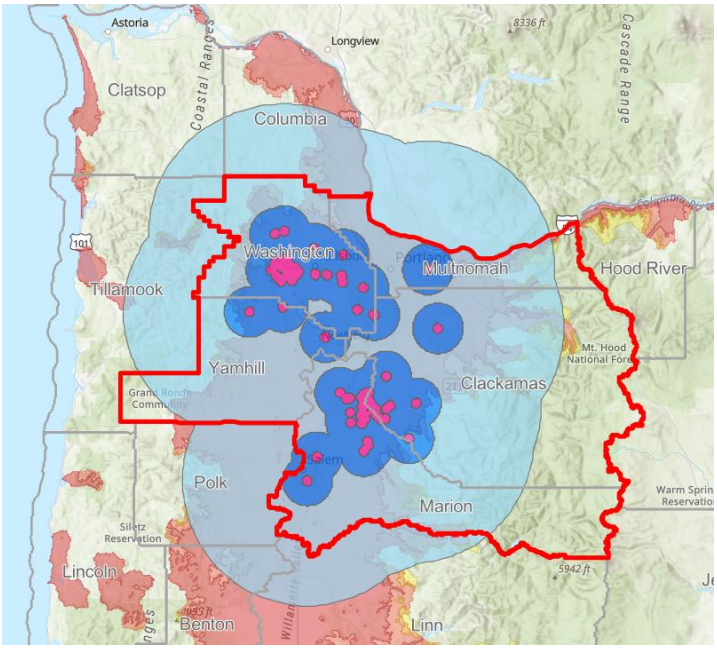
*Below: Untreated ash trees near hiking trails and parking lots are being pre-emptively removed for public safety at Jackson Bottom Wetlands Preserve. Photo credit: JBWP*

This long-term effort will:

- strengthen the forest's resilience
- protect essential watershed functions
- enhance habitat for native fish and wildlife
- ensure Jackson Bottom continues to provide ecological and recreational benefits for generations to come

## The 2026 trapping season for EAB winds to a close in September

Adult EAB activity in the Willamette Valley is predicted to end between Sept. 13 and 30 depending on the locale This will mark the end of what has been a very busy summer for EAB trapping. Forty cooperating agencies placed a total of 426 traps statewide. EAB was identified in 10 of the traps (8 in the northern Willamette Valley and 2 in Silverton and Salem). More EAB might be found when traps are checked at the end of the season.




*Above: Pink spots are where EAB has been confirmed. Dark blue are areas within 5 miles of an EAB site.*

In other EAB news:

- A late season report confirmed the presence of the pest in a stand of ash in north Salem, a portion of which is on the campus of Chemeketa Community College. This makes the second discovery of EAB within Salem city limits this summer
- Most EAB are now in the life stage of egg or first larval instar

## Albany is preparing for EAB's arrival by protective treatment of ash trees

The City of Albany is barely 18 miles south of where emerald ash borer was found in south Salem earlier this summer. Aware that EAB is approaching their city, Albany's staff have been working to protect high-value ash trees along streets and in parks with injections of emamectin benzoate. This insecticide has proven highly protective against EAB. Treated trees in parts of the country heavily infested with EAB have remained green and healthy while untreated ash trees in the same area have become infested with EAB and died.

So far 272 ash trees (genus *Fraxinus)* have been treated. This represents about 20 percent of Albany's park and street trees that are ash. The city has also prioritized removal and replacement of ash trees in poor condition or otherwise problematic, such as those planted in spaces too small for their mature size.

ODF EAB Support Specialist Kat Bethea said Albany's pre-emptive efforts to prepare for EAB are what the state is recommending communities near known infestations should be doing to get ready. "We know EAB will continue spreading to new areas. Well ahead of EAB's arrival pre-emptively start removing any ash trees that are not doing well or are planted in inappropriate spaces. By spacing out those removals and replacing with a diverse mix of trees that aren't vulnerable to EAB, cities like Albany can reduce the impact when EAB does

eventually arrive. When EAB is within 15 miles of a community, it's advised to take steps to treat urban ash trees that are important for shade and cooling."

## Dallas is gradually replacing ash in City-owned stands with other natives

Knowing that emerald ash borer is headed south towards Polk County, the City of Dallas for some time has been focusing its replanting efforts on replacing ash trees in ash stands owned by the City. The majority of those Oregon ash trees occur along Rickreall Creek, either in parks or along the trail system.

*Below: Bigleaf maple is one of the native trees Dallas, Ore. Is planting in ash-dominated stands ahead of EAB's arrival.*

Dallas Public Works Director Jennifer Ward said, "We have a small line item in our Parks budget for removing hazard trees and replanting. We are using a portion of those funds to plant trees in ash-dominated riparian areas."

Ward said the City has switched from planting 6- to 12-inch seedlings to planting larger saplings that have better survival. City staff are also moving away from Douglas-fir and western redcedar due to their low survival.

"Bigleaf maple *(Acer macrophyllum)* does well along our streamsides and seems like the most likely native replacement for Oregon ash in our area. We're also planting more incense cedar, anticipating that it will be more resilient to climate change than other choices," Ward said.

You can find a list of alternative native trees to Oregon ash here.

## City of Salem will compare effectiveness against EAB of 2 insecticides

Now that emerald ash borer has been found in locations in both north and south Salem, treating high-value ash trees in the city has become more urgent than ever. While emamectin benzoate has been the recommended treatment to protect ash trees from EAB, new formulations of other products are also now being marketed. One chemical treatment that has caught the attention of Salem City Forester Milan Davis is azadirachtin. Davis is organizing a field trial in Salem to see how well this treatment works in Willamette Valley conditions compared to emamectin benzoate.it is a water-soluble, botanical insecticide applied by microinjection into the active sapwood of affected trees.

- the active ingredient, azadirachtin, is derived from the neem tree *(Azadiracta indica),* and is an extract of neem seeds (not neem oil).
- it is not a neonicotinoid nor is it from the avermectin family of pesticides.

- it acts as an insect growth regulator, interfering with the metabolic process and molting of insects, has antifeeding properties, and reduces fecundity in female adults.
- It is compatible with multiple tree injection systems
- It degrades naturally within tree tissues and does not persist in the environment

Azadirachtin is injected under the bark, at the base of the tree, and directly into the active sapwood post-bloom. It is made to inject quickly and translocate rapidly (within 48 hours). Treatments must be repeated yearly compared to every 2 to 3 years for emamectin benzoate.

The manufacturer states that the product doesn't pose any measurable risk to aquatic and terrestrial invertebrates, and minimal risk to human applicators, birds, bees, and mammals in urban environments.

Davis says "We will most likely use azadirachtin in sensitive areas in the right of way near streams, waterways and in our city parks. Because it disrupts the molting and growth of feeding adults as well as reducing fecundity in female adults, we believe this will be a very effective way to control adult populations and slow the spread of EAB."

## East Coast researchers find ash trees close to those treated with emamectin benzoate may also be protected to some extent

In natural systems, defenses against herbivores used by one plant can confer resistance to neighboring plants. Knowing that, researchers on the East Coast wanted to answer three questions:

1. Do treated ash trees confer protection from emerald ash borer to untreated neighboring trees?
2. Is there a recommended proximity to a treated tree for which a tree can remain safely untreated?
3. Does the protective neighboring effect, if it occurs, decay with time?

The researchers sampled 896 untreated ash trees in the vicinity of trees treated with emamectin benzoate in Maryland and Washington DC. They recorded signs of EAB infestation (canopy condition, exit holes, wood pecks, epicormic growth, and bark splits). Two subsequent yearly samplings were made of 198 and 216 trees, respectively.

Results showed a consistent decrease in EAB infestation signs in untreated trees as nearness to treated trees increases. EAB damage was greater the farther an ash tree was from a treated one. Since adult EAB females feed on ash leaves up to 2 weeks before laying eggs, and alternate between bouts of egg-laying and feeding, the treatment potentially kills adult beetles that may lay eggs on other trees in the vicinity of the treated tree.

This suggests that treating a few ash trees in a stand could be cost-effective because of the protection afforded nearby ash trees.

Read the full study here.

## Velvet longhorned beetle poses risk to orchards and other trees

Oregon has another tree-killing invasive pest to worry about. Native to Asia and Russia, velvet longhorned beetle (*Trichoferus campestris)* first showed up in North America in eastern Canada in 2002 and in the U.S. in Rhode Island in 2006.

The first sighting in Oregon was in Umatilla County in 2019. The Oregon Dept. of Agriculture confirmed the pest was in Multnomah County in 2022.

*Above: Velvet longhorned beetle. Photo by Christopher Pierce, USDA APHIS PPQ*

A wood-boring beetle, it can infest apple, cherry, peach, mulberry, and several other deciduous and conifer tree species. It can also burrow into green and dry wood, such as timber and lumber. VLB can greatly reduce fruit production and wood value, and even shorten the lifespan of infested trees.

VLB is spread in firewood and wood products, such as furniture. One way to slow the spread is to not move untreated firewood more than about 10 miles from where it is cut.

Signs and symptoms of VLB infestation include round emergence holes in trunks, larval tunnels beneath the bark, frass (looks like fine sawdust) at the base of the tree, canopy thinning, and leaf yellowing.

Females lay their eggs on trees. The larvae then burrow deeply into trees, forming tunnels that damage tree tissues. From May to August, adults emerge from trees through ⅜ inch round exit holes, which they make by chewing through the wood. They are difficult to spot because they fly at night.

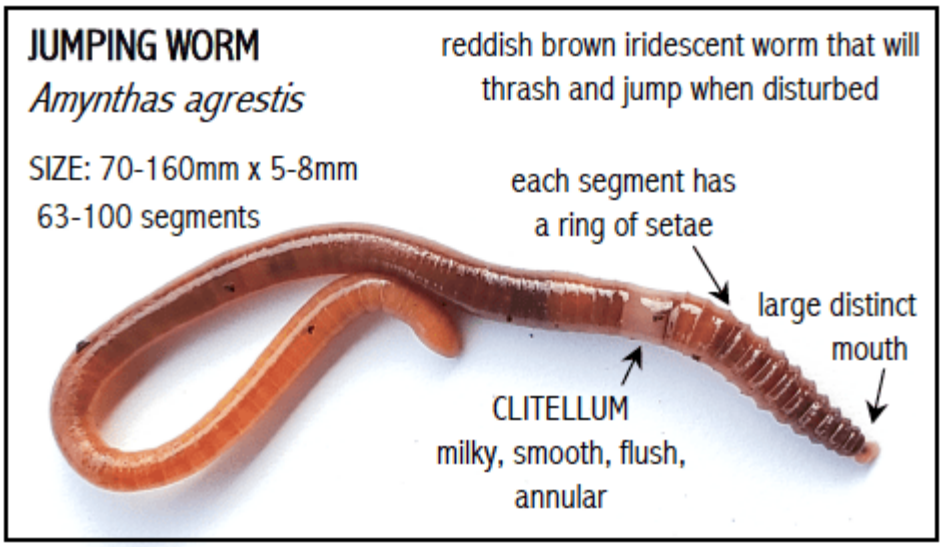
Learn more here

## Invasive jumping worms are likely to disrupt forest ecosystems in Oregon

Jumping worms from Asia are a growing problem across the U.S. and in Oregon. They displace European earthworms, degrade forest floor structure, alter nutrient cycling, and reduce biodiversity and soil health.

Unlike beneficial earthworms and nightcrawlers that burrow deep tunnels in the soil — helping aerate and release nutrients — jumping worms remain in the surface debris layer and eat two to three times more leaf litter than other earthworms, according to Sam Chan, a watersheds and aquatic invasive species specialist at Oregon State University Sea Grant Extension

Their voracious feeding outcompetes native micro-organisms and invertebrates that other species rely on. Their appetite also strips leaf litter, leaving bare soil that encourages invasive plants and animals, disrupting native ecosystems. They remove mulch that helps cool soil and retain moisture.




Earthworm castings improve soil structure by diversifying particle size, enhancing moisture penetration and water retention. Jumping worms, however, have a different gut biome that leads to opposite outcomes.

According to Chan, jumping worm castings don't absorb moisture well. Their castings quickly dry into hard granules that are difficult to rewet and are less hospitable to plant roots.

Watch an Oregon Field Guide program about these invasive worms here.

## Publications

- ***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