OREGON TREE HEALTH THREATS

November 2025

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

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Summer trapping shows MOB is present across northern Willamette Valley

Before now, state and federal officials did not know how extensive Mediterranean oak borer's presence in Oregon might be. Individual borers had shown up in traps here and there in the Willamette Valley even before the first infested Oregon white oaks *(Quercus garryana)* were found in Troutdale and Wilsonville. So this summer they set up traps all over the Willamette Valley and beyond to try and determine where MOB had reached.

Photo: Characteristic dark streaks on this MOB-infested Oregon white oak trunk show clear signs of the fungal infection associated with the pest. ODF photo by Christine Buhl.

What they found was that more than 500 MOBs turned up in more than 30 traps spread across the northern Willamette Valley. Catch rates varied from a single borer at a number of traps to 160 at a trap east of Oregon City. MOBs were caught even in locations where no Oregon white oak trees had been reported declining.

"The results show us that, unfortunately, Mediterranean oak borer is firmly and widely established in the northern Willamette Valley," said Cody Holthouse, current chair of the state's Interagency EAB Task Force.

Of 944 oak trees inspected since MOB was first detected in Oregon, a total of 38 have been found to be infested with MOB. About half of those have been removed.

An excellent article by Kayla Seaforth of the Bonneville Environmental Foundation summarizes what's been learned about MOB in California and Oregon. Read it here.

Trapping plan for Mediterranean oak borer takes shape in Oregon

Oregon and California are the first places in North America where Mediterranean oak borer (MOB) has turned up. The Oregon Dept. of Agriculture (ODA) is the lead organization on the identification and response to detections of MOB in Oregon. ODA is setting up a collaborative trapping program to trap Mediterranean oak borer (MOB) in Oregon. The program aims to improve the understanding of MOB distribution and pest status in the state. The program relies on individuals who can recognize (*Quercus* spp.) and follow detailed trapping protocols.

Photo: Frass is one sign of MOB infestation. However, rain often washes frass away.

Collaborators need to:

- Be able to identify oak trees, place trap(s) in them, and record all site information on provided trap card.
- Collect and submit trap samples according to instructions.
- Use agreed-upon reporting mechanism (Oregon Invasive Species Hotline) to alert state and federal government experts in case a host tree is seen to be infested.
- Upon request, follow up on public reports or inquiries, serving as a liaison between the public and state entomologists.
- Refrain from sharing information about a possible detection until it has been confirmed by an expert from ODA or ODF.
- Share appropriate public messages about preventing the spread of invasive forest pests (such as Don't Move Firewood).

Collaborators will be asked to sign a statement agreeing to protect privileged information about the presence of MOB until the proper authorities (ODA and ODF) have released the information to the public. Privileged information includes the pest name, location, and name and contact information for any landowner or individual requesting assistance with pest identification.

If interested in becoming a collaborator, please contact Cody Holthouse at cody.holthouse@oda.oregon.gov.

Researchers still have questions about MOB they are seeking answers for

Questions about MOB that officials still lack enough evidence to answer include:

1. *What species in Oregon will be affected by MOB.*

So far, only Oregon white oaks have shown signs of infestation in the state. Other native oak species have been attacked in California, including valley oak *(Quercus lobata)* and blue oak *(Q. douglasii).*

2. What percentage of Oregon white oak trees might become infested?

Widespread decline of Oregon white oak has not been observed. In many cases, even trees near those that have been heavily infested have not shown signs of infestation or decline. This raises questions about whether MOB will only infest stressed or otherwise unhealthy trees. Oregon researchers stress that more data is needed to be able to answer that question.

3. Will all infested trees go on to experience oak wilt from the fungus carried by MOB?

There has not been enough data gathered to say whether or not healthy Oregon white oak trees have resistance to the fungus carried by MOB. It has been noted anecdotally by forest health staff examining even heavily infested Oregon white oaks that healthy trees nearby in many cases show no signs of infestation or disease. This suggests that, unlike EAB, there might not be widespread, rapid die-off of Oregon white oaks like EAB has been causing with ash species.

An Oregon perspective on results of the response to EAB in eastern US

This review of EAB biological control was written before the invasive beetle was discovered in Oregon. It looks back at the EAB invasion response in the eastern US, including research from the Mid-West, New England, the Mid-Atlantic, and South. The authors discuss the history and effectiveness of biological control.

In “The Ecology of the Problem” part of the paper, the authors describe the three-phase nature of an EAB invasion – it’s cusp, crest, and core.

- At the cusp (or beginning) of an EAB infestation the beetle is detected. Their populations are growing, and trees are starting to die.
- Next, the EAB infestation crests. EAB numbers increase rapidly, and large stands of ash trees die.
- Finally, after most ash trees have died, the EAB population collapses to a lingering core infestation.

Oregon Dept. of Agriculture (ODA) Entomologist Max Ragozzino said, “In Oregon, most of our infested ash stands are still at the cusp phase. In the next few years, we’ll begin to see large numbers of ash trees die from EAB infestations.”

In the section “How Well Did Biological Control Work?” the authors speak about the different species that predate EAB in the field. This includes field studies on the introduced parasitoids, native predators, and even woodpeckers. Researchers found that populations of the parasitoid wasp *Tetrastichus planipennisi* built up slowly in the field. The *T. planipennisi* start out with a small impact, but after six years they parasitized 30% of EAB at some sites. The authors found *S. galinae* populations followed a similar trend. After five years in the field, *S. galinae* parasitized 31-57% of EAB during the ‘crest’ phase of the infestation. The combination of these two parasitoids should help lower EAB populations, giving more time for uninfested communities to prepare or for infested communities to cope with impacts over a longer period.

Early detection and rapid response is key to a successful invasive species control program. If left unchecked, invasive species, including EAB, rapidly reproduce to unmanageable levels. This rapid growth limits control and mitigation options. Oregon detected EAB relatively early into the ‘cusp’ phase of infestation when populations were lower. ODA began releasing three species of biological control agents in 2023, as soon as they were available. This was comparatively earlier in the infestation than most states in the Mid-West.

“We hope that the parasitoids will follow similar timelines in Oregon,” said Ragozzino. “If they do, we hope they will help us buy time for communities, cities, and landowners to make plans for managing their ash trees.”

Oregon Research Subcommittee hosts talk about what drives EAB spread in the U.S.

The Oregon Interagency EAB Task Force’s subcommittee on research has invited Sam Ward, Assistant Professor of Forest Entomology at Ohio State University, to talk about what has been driving EAB’s spread in the United States.

The free talk will be on the TEAM platform at 2 p.m. on Thursday, Nov. 6. The meeting link is below:

Join the meeting now

Meeting ID: 241 354 016 673 7

Passcode: r4Xx37Gs

Photo: Sam Ward, Ohio State University Assistant Professor of Entomology. Ward will speak Nov. 6 about what’s been driving EAB’s spread in the U.S.

Oregon Integrated Pest Management Center has new web page about EAB

A new web page devoted to emerald ash borer has been launched by the Oregon Integrated Pest Management Center. Based at Oregon State University as part of the College of Agriculture, the Center promotes and supports integrated pest management (IPM) for agriculture and non-agricultural sectors in the Pacific Northwest. Center staff collaborate with Oregon's university researchers, Extension agents, producers, and state and federal agencies to protect Oregon's natural resources. Their primary goal is to serve as a one-stop hub of information regarding IPM research and Extension activities in our region. Find a link to the new page here.

Seattle group recently got an in-person look at EAB and Oregon's response

The discovery of emerald ash borer in Portland this summer prompted staff from the City of Seattle to check out first-hand what an infestation and the response to it looks like. A delegation from Washington State's largest city was hosted October 1 by the City of Portland's Forests in Cities team from Portland Parks and Recreation and the Bureau of Environmental Services, joined by two Oregon Dept. of Forestry staff.

The field tour included seeing:

- early-symptom sites (this included training on subtle indicators and the importance of early surveying)
- advanced canopy dieback (severity ratings, communicating urgency)
- removal/replanting site (documenting species-diverse replacements and post-treatment tracking)
- active monitoring/pre-infestation planning locations in Forest Grove and Jackson Bottom (reviewing work to slow ash mortality, biocontrol deployments, and landscape-scale coordination).

Key survey/monitoring takeaways from the visit were :

- double-down on early detection training
- standardize communication and data flows
- pair replanting with follow-up monitoring plots
- maintain regional coordination with ODF and Seattle to align methods and share signals.

Because EAB has not yet been detected in Washington, the Seattle team said they were particularly impressed by the level of preparedness and proactive learning, planning, and interagency coordination demonstrated by ODF, ODA, and local Oregon partners.

Two air-curtain incinerator demonstration burns planned for central Oregon

Join Oregon Parks and Recreation, OSU Extension Service, Oregon Department of Forestry's Urban and Community Foresty Program, and Valley Environmental for two live air curtain incinerator (ACI) demonstrations and discussions in central Oregon in November.

They will demonstrate ACI's role in fuels reduction, wood waste management, the control of pests and pathogens like emerald ash borer, as well as the benefits of ACI's for biochar production and as a lower-pollution alternative to open burning. Experts will be available to answer questions on these topics.

Share this invitation with public and private land managers, natural resource workers, wood waste disposal professionals, and those concerned about wildfire who may be interested in this free and informative event.

Not sure what an ACI is? Check out ODFs ACI playlist on YouTube

Date: Monday, Nov. 17th, 2025

Time: Noon to 2:30 pm.

Location: LaPine State Park,15800 State Recreation Rd, La Pine, OR 97739

Date: Tuesday, Nov. 18th, 2025

Time: 11 am to 1:30 pm.

Location: Collier Memorial State Park, 46000 US-97, Chiloquin, OR 97624

Register for both events here - beav.es/aci-demo

Denver musicians create rap song about emerald ash borer

Hoping to raise awareness of emerald ash borer and the threat it poses to ash trees in a fun, approachable way, the Denver Botanic Gardens enlisted Denver-based experimental hip-hop group Flotbots to create rap song about the pest. The result is a music video just shy of three minutes called “Get Ready.” The video features vocals by Jamie Laurie aka Jonny 5 and can be viewed here.

Sample lyrics include:

I’m beautiful,

I’m nasty,

I’m coming to kill your ash trees.

Publications

- ***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://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