



February 2025

Square miles known to be infested with EAB:

Forest Grove – 16.2 Butte Creek/Pudding River – 23.6

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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- Revamped, more user-friendly EAB website www.OregonEAB.com launched this month
- ODA finds seven new properties infested with EAB after felled ash trees examined
- Four dozen trees are planted to replace ash trees removed in Forest Grove neighborhood
- Air curtain incinerator burns planned for late March and April; southern WV site sought for fall
- EAB pocket guide for homeowners now available in four additional languages
- Significant genetic variation is found in Oregon ash genome by Penn State researchers

OISC went live with revamped EAB website at start of February

The Oregon Invasive Species Council's EAB web pages have served as a central information source for all things related to emerald ash borer in Oregon. As the number of resources on that page has grown over the past two years, it was becoming harder for people to navigate the site to find the specific type of information they needed. ODF staff have revamped the site to be more user friendly, with navigation bars that make it easier to find just what you're looking for. Take a test read at www.OregonEAB.com. The new website also includes a link to ODF's Oregon EAB Map, which is an interactive map where users can view where EAB positive trees are located and get management suggestions based on how close they are to those trees.

Seven new properties west and south of Forest Grove found to have EAB

Examining the 215 ash trees felled last fall in and around Forest Grove, ODA staff found 40 of the trees were infested with emerald ash borer larvae. Most of the trees were in areas already known to be infested. However, a total of seven new properties west and south of Forest Grove each had one to two infested trees. This increased the area generally known to be infested by EAB in Washington County to about 16.2 square miles – up from 10.4 last year.

The size of the infested area in Clackamas and Marion counties, 23.6 square miles, was determined by visual surveys last fall. Visual survey is likely to resume in this area in the late spring, after ash trees leaf out this spring.

Due to reductions in funding, state agencies will not be implementing the Slow Ash Mortality (SLAM) method this year, which includes trunk injections along with girdling and harvesting of trap trees. Local partners and state agencies are meeting to discuss best practices moving forward. Community partners interested in using SLAM approaches to reduce EAB population

in their areas may attend the ongoing meeting series. If interested, please contact Oregon Dept. of Agriculture's Cody Holthouse at cody.holthouse@oda.oregon.gov

Friends of Trees, ODF help replace 48 EAB-infested trees with new ones

Neighborhoods with lots of ash trees can be devastated when EAB kills those trees. Such was the case last spring when 53 ash trees in a residential neighborhood in Forest Grove that were infested by EAB had to be felled before they died and became too hazardous. On Jan. 18th 48 of those street trees were replaced by a diverse mix of non-ash tree species at no cost to the homeowners, thanks to funding from the Oregon Dept. of Forestry.

The non-profit organization Friends of Trees was contracted to organize the planting, which will restore canopy to the affected residents. Friends of trees will water and care for the trees for three years to help them get established and increase the trees chances of survival. Five of the felled trees could not be replaced because they were growing in locations not appropriate for street trees under current city codes.



Demonstration burns using air curtain incinerators planned for spring

Air curtain incinerators (ACIs) are a much cleaner alternative to burning wood waste than pile burning. Tests last year by Oregon Dept. of Environmental Quality showed the mobile incinerators produce far fewer emissions (up to 93% fewer) than pile burning. ODF has contracted with DEQ permitted ACI operators to hold a number of demonstration burns this spring

- Last week in March – ODF Seed Orchard in St. Paul will host a demonstration burn for ODF staff, nursery owners and orchardists. ODF plans to burn wood waste from trees it thinned from its Willamette Valley ponderosa pine orchard.
- April 9 – Clean Water Services will host a demonstration burn at its Tualatin River Farm property outside Hillsboro. Information on how to register to attend will be included in the March issue of this Bulletin. For general questions, contact Clean Water Services' Julie Cortez at cortezj@cleanwaterservices.org

- April 30 – Columbia Soil and Water Conservation District will host a demonstration burn at the Scappoose Airport. The Airport plans to burn English hawthorn that has invaded airport property. Sign up to attend here: <https://rb.gy/lzmy6d>

ODF is also seeking property owners in the southern Willamette Valley who may be interested in hosting a demonstration burn for community members next fall or winter. If interested, please email contact info and preferred dates to invasivepests@odf.oregon.gov



Pocket guide to EAB is now available in more languages

The U.S. Forest Service under the former Biden administration completed translating ODF’s pocket guide to EAB into four additional languages. The guide had already been available in English and Spanish.

The new translations make the pocket guide available in the next four most common languages spoken in Oregon – Vietnamese, Russian, Korean, and Mandarin Chinese. The guides can be found at and printed from www.OregonEAB.com or the [ODF forest health website](http://www.ODFforesthealth.com).

LEFT: The Vietnamese-language version of the EAB pocket guide, which is now also available in Korean, Russian, Mandarin Chinese, Spanish, and English.

ODF to do EAB outreach in north coast communities later this month

ODF’s EAB specialists Kat Bethea and Matt Mills will be heading to the north Oregon coast later this month to spread information about EAB and answer questions from folks in the city governments of Astoria, Lincoln City, and Newport. They will also update staff in ODF’s unit offices at Astoria, Tillamook, and Toledo, as well as at the Oregon Vegetation Management Association’s conference.

Penn State researchers find lots of variation in Oregon ash genome

Researchers at Penn State are working with the U.S. Forest Service, ODF, and other partners to identify and develop ash trees genetically able to withstand emerald ash borer infestation and strategize how to restore ash to forests.

Since 2019, scientists at Penn State’s Louis W. Schatz Center for Tree Molecular Genetics have focused research efforts on Oregon ash (*Fraxinus latifolia*), a species that plays a critical role in the Pacific Northwest by providing wildlife habitats, stabilizing streambanks with an extensive root system, keeping waterways cool through shade and serving as a food source for birds and insects.

Prior to the arrival of EAB in Oregon, ODF's Wyatt Williams had organized collection of more than 900,000 seeds of Oregon ash from across the range of the species. From those and other collections, the researchers analyzed genomic variation in the species. They looked at more than 1,000 individual trees from 61 separate populations of Oregon ash.

In a study recently published online before inclusion in a print edition of [Molecular Ecology](#), the researchers found significant genomic variation across the range of Oregon ash. The genetic makeup of the trees that stretch from California to British Columbia varies, the researchers found, depending on their location and environmental adaptation. This variability could inform the development of hardier ash trees, resistant to both the [invasive beetles](#) and rising temperatures — critical needs, the researchers said, because no other tree species occupies its niche in the region's ecology.



ABOVE: This study represents the first application of genomic data to conservation and restoration for Oregon ash, the researchers said. (Credit: Penn State. Creative Commons)

“The emerald ash borer recently has been observed in Oregon and British Columbia, and we know what to expect in terms of mortality in Oregon ash,” said study senior author Jill Hamilton, associate professor in ecosystem science and management and director of the Schatz center. “Our research aims to quantify and preserve genetic diversity for future resistance breeding efforts. Penn State is leading international conservation genetics efforts to preserve genetic diversity across ash species that will be critical to developing breeding and reforestation programs.”

To develop breeding programs that will produce climate-resilient, emerald ash borer-resistant trees, it will be necessary to conserve the species' genetic diversity, according to the researchers.

Anthony Melton, who was a postdoctoral scholar at Penn State and is now professor of biology at the University of Montevallo in Alabama, spearheaded the study.

Among others contributing to the research were:

- Wyatt Williams, Oregon Department of Forestry
- Richard Sniezko, Dorena Genetic Resource Center, U.S. Forest Service, Cottage Grove, Oregon

- Trevor Faske, Southwest Biological Science Center, U.S. Geological Survey, Flagstaff, Arizona
- Tim Thibault, The Huntington, San Marino, California
- Thomas Parchman, Department of Biology, University of Nevada Reno.

Publications

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 \(mdpi.com\)](https://www.mdpi.com/forests/Free-Full-Text/Wood-Decay-Fungi-Associated-with-Galleries-of-the-Emerald-Ash-Borer)

Useful links for more information

Mediterranean oak borer fact sheet

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

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>