OREGON TREE HEALTH THREATS



January 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

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- Minnesota researchers are testing fungi in hopes of killing adult emerald ash borers
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- Tree planting in memory of Karen Ripley is set for Saturday, Feb. 14 in Washington County
- Florida is the only state east of the Rockies not yet reported infested with EAB
- Nurseries face heavy demand to produce trees to replace those lost to EAB and other pests
- Registration is now open for national conference on invasive species Feb. 22-24 in Maryland

OSU and ODF have drafted a list of resilient trees for NW urban areas



Photo above: Trees like these silverleaf oaks, which are adapted to the hotter, drier climates the Northwest will be experiencing in coming decades, are among those on a draft list prepared by OSU and ODF feedback.

The Oregon Dept. of Forestry and Oregon State University have drawn up a draft list for Pacific Northwest cities and towns of trees expected to be resilient in the face of climate change and disease and pest challenges. The draft version of the Oregon Regional Resilient Tree List (ORRTL) was a collaborative effort by many urban forestry colleagues and organizations.

ODF's EAB Specialist Kat Bethea said of the list "Our aim is to provide a regional tree selection resource for the state of Oregon, for a variety of audiences. This list includes both practitioner experience and data from research combined into one tree list."

Bethea said a variety of factors were considered, including environmental data, climate resilience, and urban forestry factors like minimum planting site widths.

ODF is now seeking people with technical experience with trees in

Oregon, urban forestry, or climate resilience and adaptability. If you are interested in reviewing and providing feedback on the list, please visit this <u>link</u>. You can select whether you would like to review the list or be put on the mailing list when it is released.

"We highly appreciate this input and will be incorporate it into the final published list," said Bethea. "Our aim is for the final publication to be a tree list that is both a filterable database, as well as a planting guide with tree selection, planting best practices and other technical information."

Researchers in Minnesota have found that certain fungi can kill adult EAB

A recent study from the University of Minnesota finds that a number of parasitic fungi can kill emerald ash borer beetles in lab settings. One area of future study is how to spread the fungi to adult beetles.

One tool they say shows promise is an autodissemination device. The device draws in adult beetles and coats them with spores of insect-killing fungi. Once covered in spores, the beetles fly from the trap and spread spores to one another through mating.

University of Minnesota researchers in a lab setting tested 10 fungi from Minnesota to assess for their ability to kill emerald ash borer when used in these traps.

Recently published in <u>Forests</u>, the study found:

- All of the fungi used in the study were successful at infecting emerald ash borer beetles.
- The lifespan of emerald ash borer beetles varied depending on which fungus they were exposed to in the trap.
- Three Minnesota-sourced fungi, and one commercially available fungus, reliably reduced emerald ash borer beetle lifespan and were consistently seen sprouting from dead emerald ash borer beetles.

"Laboratory studies show that biological control of the beetle using fungi is possible and the next step is to figure out how to get this to work under field conditions," said co-author Robert Blanchette, a professor in the College of Food, Agricultural and Natural Resource Sciences.

The researchers are now testing the four most successful fungal strains in autodissemination devices placed at sites across Minnesota's state parks and forests.

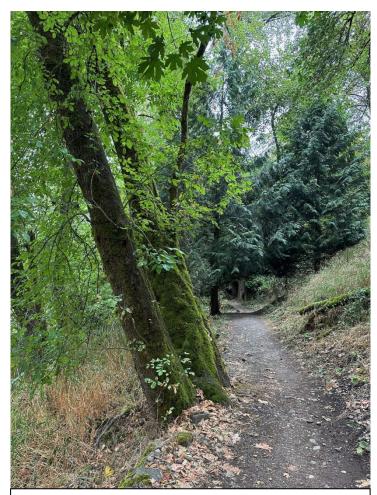
ODF EAB Specialist Matt Mills says there are a number of issues still to be addressed before fungi could become a tool in the fight against EAB. First, researchers need to figure out how to lure EAB into devices under field conditions, something which has proven very challenging. Second, the fungi may harm other insects besides EAB, which needs to be carefully studied to avoid unintended effects on the ecosystem. Lastly, even if fungi kill EAB adults, it does not appear that larvae inside trees would be reached.

The research was funded by the Minnesota Invasive Terrestrial Plants and Pests Center at the University of Minnesota and supported by the Minnesota Environment and Natural Resources Trust Fund.

Oaks Bottom Wildlife Refuge in Portland prepares for EAB's arrival

Oaks Bottom Wildlife Refuge is a 163-acre natural area on the east bank of the Willamette River in Southeast Portland. The Refuge is home to over 175 species of birds, including bald eagles, peregrine falcons, and red-tailed hawks. Other wildlife includes beavers, river otters, raccoons, and even deer. It is also home to large numbers of Oregon ash trees. This has led Ruth Howell with the City of Portland, which owns and manages the property, to write an excellent overview of the threat posed by emerald ash borer (read <a href="https://example.com/here/basel

In places like Oaks Bottom, where soils are heavy and saturated with water for months each year, Oregon ash thrives where few other native trees can. Howell writes that the tree is important to more than 50 species of butterflies and moths, which use Oregon ash as a larval host plant. Among these are the two-tailed swallowtail and Sympistis fortis, a moth that relies exclusively on Oregon ash. Finches and grosbeaks (especially evening grosbeaks, a species already in decline), consume the tree's seeds. Songbirds and waterfowl use Oregon ash for shelter and nesting sites, while woodpeckers hunt for insects in the bark. Aquatic invertebrates in the Refuge



Above: Oregon ash trees beside a trail in Portland's Oaks Bottom Wildlife Refuge. They are among 68,000 trees in the city's natural areas at risk from EAB. Photo credit: Ruth Howell.

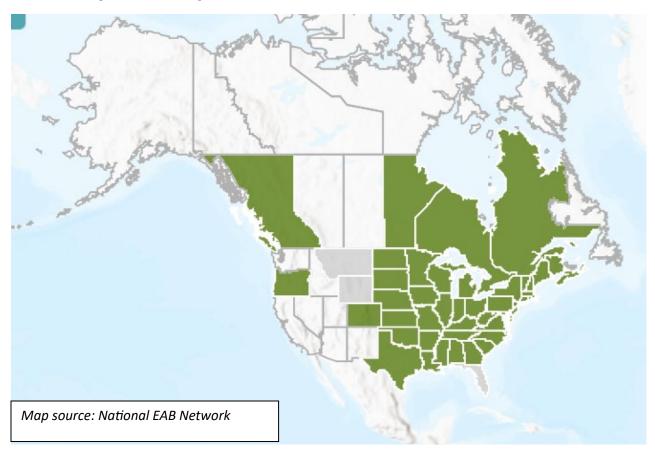
feed on Oregon ash leaf litter and use it for shelter.

Howell writes that as with other natural areas in Portland, the city government plans to treat ecologically important Oregon ash trees, and gradually remove those near trails, parking lots or adjoining properties that will pose a hazard to people once they become infested with EAB. Portland estimates that there are some 68,000 Oregon ash trees in natural areas inside the city.

Tree planting in memory of Karen Ripley to take place on Valentine's Day

The non-profit Friends of Trees organization invites colleagues and friends of the late USDA Forest Service Entomologist Karen Ripley to help plant an Oregon white oak tree in her memory. The planting will take place from 8:45 a.m. to 1 p.m. on Saturday, Feb. 14th. It will be part of a Friends of Trees planting in partnership with Clean Water Services. The planting will be in the Balm Grove area a few miles northwest of Forest Grove in Washington County. Please register for the planting with <u>Friends of Trees</u>.

Latest map of EAB's presence in North America



The map above shows EAB is now confirmed in every state from the Great Plains to the Atlantic, with the sole exception of Florida. More than 80 percent of the U.S. population lives in a state where EAB is confirmed. That's about 250 million Americans in infested states vs. fewer than 89 million who live in states not yet infested.

In Canada, EAB is present in the most populous provinces, including British Columbia, Ontario, Quebec, Manitoba, New Brunswick, and Nova Scotia.

EAB is hitting cities on the Great Plains especially hard given the high percentage of ash trees making up their canopy. Reportedly 19% of street trees in Fargo, North Dakota are ash, with 23% of trees in the state's capital, Bismark, being ash. Due to the harsh climate, a limited number of species can be planted in place of EAB in the upper Midwest. That is similar to the

dilemma in eastern Washington and eastern Oregon, where cold winters limit the number of alternatives to ash.

Heavy demand for trees to replace ash puts pressure on nurseries

With millions of urban ash trees dying and being removed across much of the U.S. and



Canada, demand on nurseries for replacement trees is high. This can make it hard to find desirable species. Ordering well in advance is recommended, as some in-demand species may not be available when planting season rolls around.

For individuals looking to buy trees in the greater Portland area, City of Portland Urban Forestry staff offer a list of retail nurseries selling trees in and around Portland. Find it at https://www.portland.gov/trees/tree-planting/wheretopurchasetrees

The Oregon Association of Nurseries offers a similar list for wholesale buyers of trees and other plants. Find it a https://nurseryquide.com/

Photo at left: Trees like this Kentucky coffeetree are highly sought after to replace ones lost to emerald ash borer and other pests. This is putting pressure on nurseries to meet the demand.

National conference on invasive pests set for February 22-24 in Maryland

The USDA Cooperative Research Forum on Invasive Species will take place Feb. 22-24, 2026, in Annapolis, Maryland. Non-member cost to attend the full conference is \$399, or \$275 for students. Registration is now open at this <a href="https://link.google.com/link.google

Hosted by the North American Invasive Species Management Association in partnership with USDA agencies, this national forum will bring together researchers and invasive species professionals from across the country to strengthen collaboration and advance applied research on invasive species challenges. Building on the expanded focus of the Cooperative Research Forum, the event will address a wide range of non-native invasive insects, diseases, and weeds affecting forest and urban trees. These will include but not be limited to:

- Emerald ash borer
- Asian longhorned beetle
- Hemlock woolly adelgid
- Spotted lanternfly

The conference will highlight research updates and knowledge exchange featuring:

- Cross-sector and international collaboration
- Student and early-career engagement
- Discussions on invasive insects, pathogens, and weeds impacting forests and urban landscapes

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

<u>Journal of Economic Entomology | Oxford Academic</u>

- 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