

Square miles known to be infested with EAB: 5.7

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Editor's Note:

As more tree pests besides emerald ash borer have been confirmed in Oregon, both the Oregon Dept. of Forestry and Oregon Dept. of Agriculture wanted to share important information about those pests in a single monthly format. So while continuing to report new developments related to emerald ash borer in Oregon, this newsletter will now carry important information about other tree pests in Oregon. To reflect that broader focus, the newsletter has been renamed Oregon Tree Health Threats.

ODA changes reporting EAB from trees infested to square miles

The Oregon Department of Agriculture confirms the presence of emerald ash borer by conducting visual inspections of individual ash trees. These inspections take a lot of time. Due to limited staffing and a large area to inspect, ODA field technicians will no longer be documenting every single EAB positive tree. Once field staff have identified EAB on a property, neighborhood, or block, that entire block will be considered part of the infested area. The technicians will then stop looking in that area and move to search adjacent areas. This strategy will increase ODA's ability to more efficiently use staff resources to determine the boundary of the infested area.

Starting with this edition of the Oregon EAB Bulletin, instead of reporting a count of positive trees, the ODA will provide the square milage of the area created by the perimeter of known positive trees. This change has already taken effect on the <u>AshDash</u>, where the area known to be infested is represented by a red polygon. Property owners inside, or next to, this red area are at high risk for EAB. They should familiarize themselves with the <u>EAB resources available from Oregon State University</u>, including options for how to protect their property.

EAB not reported in any traps in outlying areas

As of this edition, EAB has still not been found in any of some 140 EAB traps the Oregon Dept. of Forestry has distributed to landowners and other agencies. While many of the traps are in Washington County, traps have also been placed in Clackamas, Columbia, Marion and Lane counties. Traps are not entirely reliable for detecting EAB's presence, since the insect is not strongly attracted by chemical scents that can be used to lure other insects into traps. They can prove that EAB has moved into an area if any are found in a trap. Since adults typically are done emerging by early October, traps will soon be coming down for the winter.



Mediterranean oak borer confirmed in Oregon white oaks in Wilsonville

In recent years, MOB has been killing native oaks in Northern California. Late this summer the tiny insect was found infesting Oregon white oaks (*Quercus garryana*) in Wilsonville. In May, at least one Oregon white oak near Troutdale also found to be infested. These represent the first time this insect was confirmed from inside trees in the state, although since 2018 it had been caught in traps in Clackamas, Multnomah, Marion and Linn counties. So far, no other species have been found to be infested in Oregon. In California, a number of native oak species have been found to be infested. In their native Europe, North Africa and the Middle East, MOB is known to infest a long list of oak species.



The tiny insect - a type of ambrosia beetle - carries fungi when it tunnels into trees. The insect feeds its larvae with the fungus. One of the fungi MOB introduces into trees can cause an oak wilt that causes canopy thinning and dieback. Death of severely impacted trees can occur within two to three years. Landowners are asked to keep a close eye on their oak trees to look for signs of decline in the canopy. To learn more about this pest, please go to

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

After reviewing the signs and symptoms, reports of suspected MOB presence can be made to the Oregon Invasives Species Council at https://oregoninvasiveshotline.org/reports/create

Beneficial biocontrol agent found in Forest Grove

Max Ragozzino, ODA's invasive species entomologist, reports he has found evidence that two of the three species of tiny wasps released to control EAB in Oregon have parasitized EAB in the field. These tiny wasps lay eggs inside of EAB larvae under the bark of ash trees, killing the EAB larvae before they become adult beetles and spread. Recovering them requires peeling the bark off infested ash trees. He found the cocoons of *Spathius galinae*, and overwintering adult *Tetrastichus planipennisi* at the site where the wasps were released. Both species typically remain under the bark in the EAB gallery until late spring. Earlier this summer, to combat



EAB ODA released in Forest Grove these two species, and a wasp that parasitizes EAB eggs. The parasitoids were produced and supplied from the United States Department of Agriculture's Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ) EAB Parasitoid Rearing Facility in Brighton, Michigan. For parasitoid information please call 866-322-4512. Biocontrol recoveries this early are extremely rare. This early recovery is a promising first sign in the battle to slow the spread of EAB in Oregon.

Fall brings new warnings about not moving firewood

With the arrival of cooler weather, many Oregonians look to buy firewood, or to take firewood with them to build campfires or to burn at second homes at the beach or in the mountains. Please remember that



<u>not</u> moving firewood out of your local area is a key way to keep EAB and other insect pests that live inside wood or under tree bark from spreading. So plan to buy firewood in the local area where you plan to burn it. This is especially important in light of Mediterranean oak borer being in Oregon.

ODF hires a second staffer to work on EAB

Lilah Gonen (uses they/them pronouns) is the new Emerald Ash Borer Support Specialist with ODF's Urban and Community Forest program, working alongside Evan Elderbrock. Lilah has a BS in Forestry from the University of California, Berkeley, where they also worked in labs studying Sudden Oak Death and historic wildfire trends. They have an MS in Botany and Plant Pathology from OSU, where their research focused on tree-microbe ecology and forest pathology, specifically Swiss needle cast in Douglas-fir and red needle cast in New Zealand radiata pine. Lilah has also worked in invasive weed management with City of Gresham and invasive insect surveillance and eradication with ODA. When not



working outdoors, they're playing outdoors: climbing, hiking with their dog, mushroom hunting, and gardening. They also enjoy cooking and baking (yes, they were one of those sourdough people), reading strange stories, and playing all forms of games and puzzles. Please reach out to Lilah if you have any questions or ideas about managing and planning for EAB on the local or state level.

Publications

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

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

