

OSU EXTENSION SERVICE

Emerald Ash Borer in Oregon

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<https://extension.oregonstate.edu/eab>

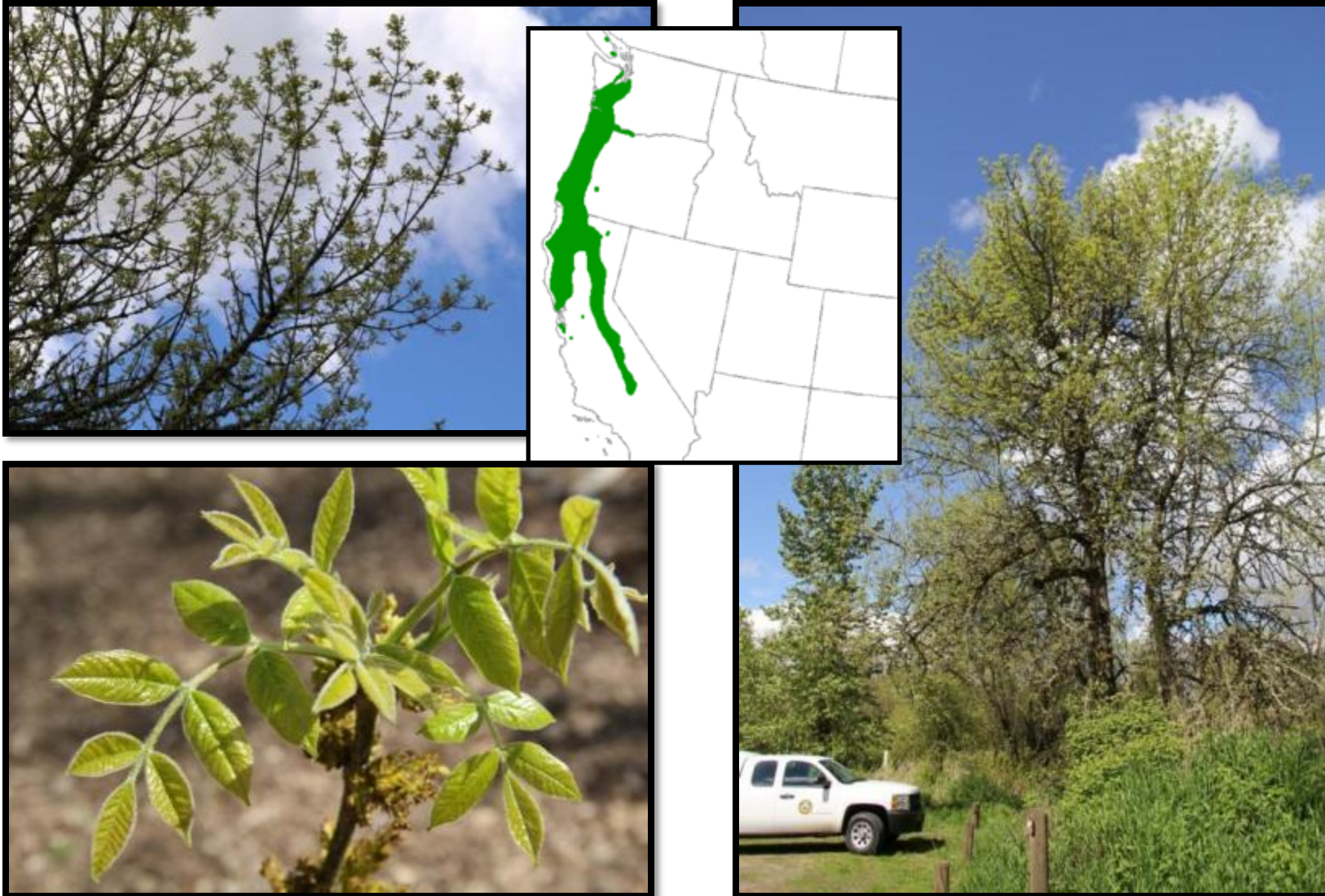


EAB adult. D. Cappaert.



Oregon State
University

Oregon Ash, *Fraxinus latifolia*



Oregon ash in riparian area

80% of Oregon ash occurs below 1,000'



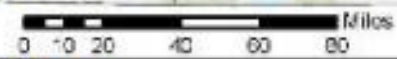
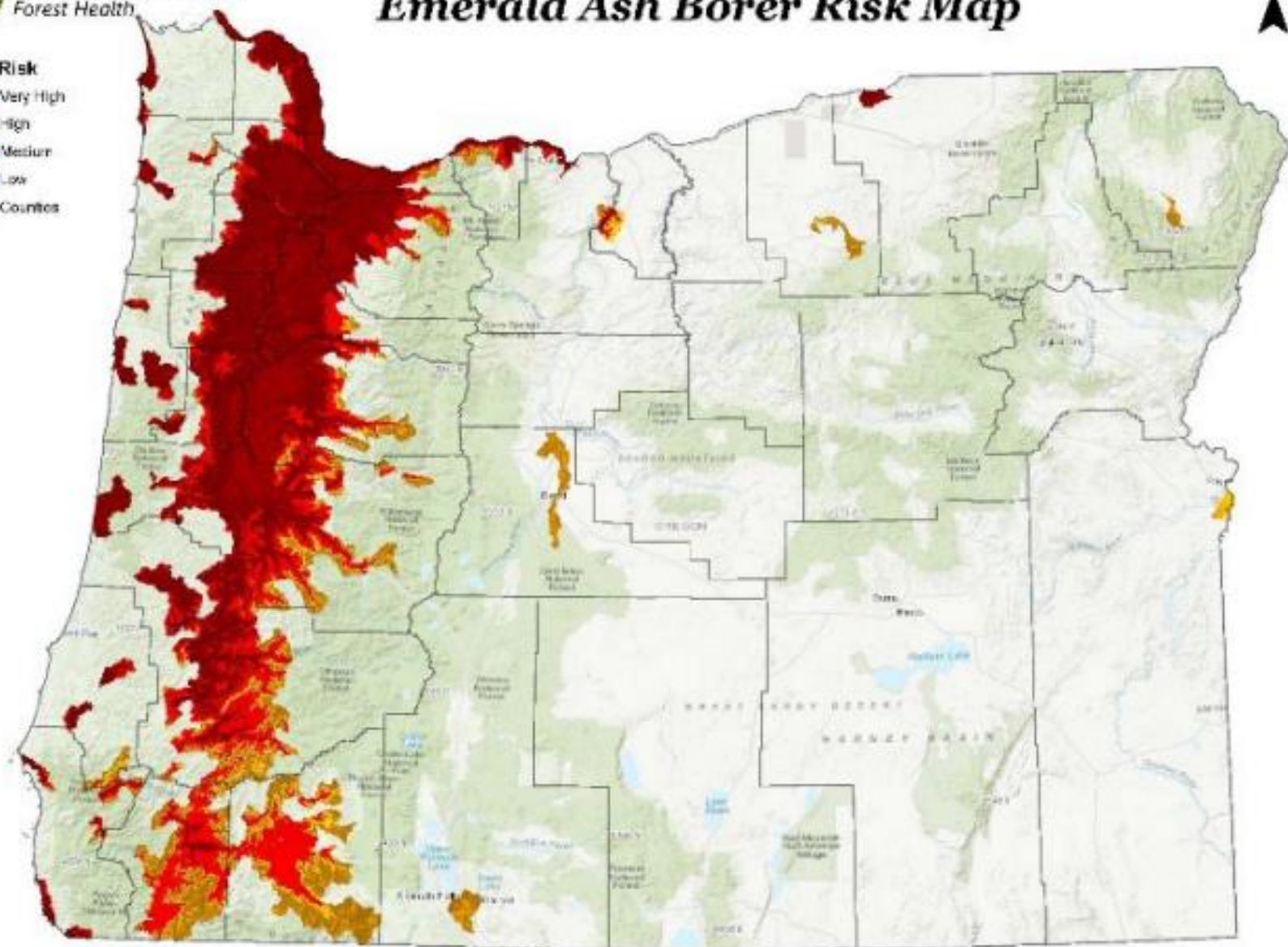
Private Forest Program
Forest Health

Emerald Ash Borer Risk Map



EAB Risk

- Very High
- High
- Medium
- Low
- Counties



Date: May 2018

EAB risk map for Oregon. M. Lathrop.

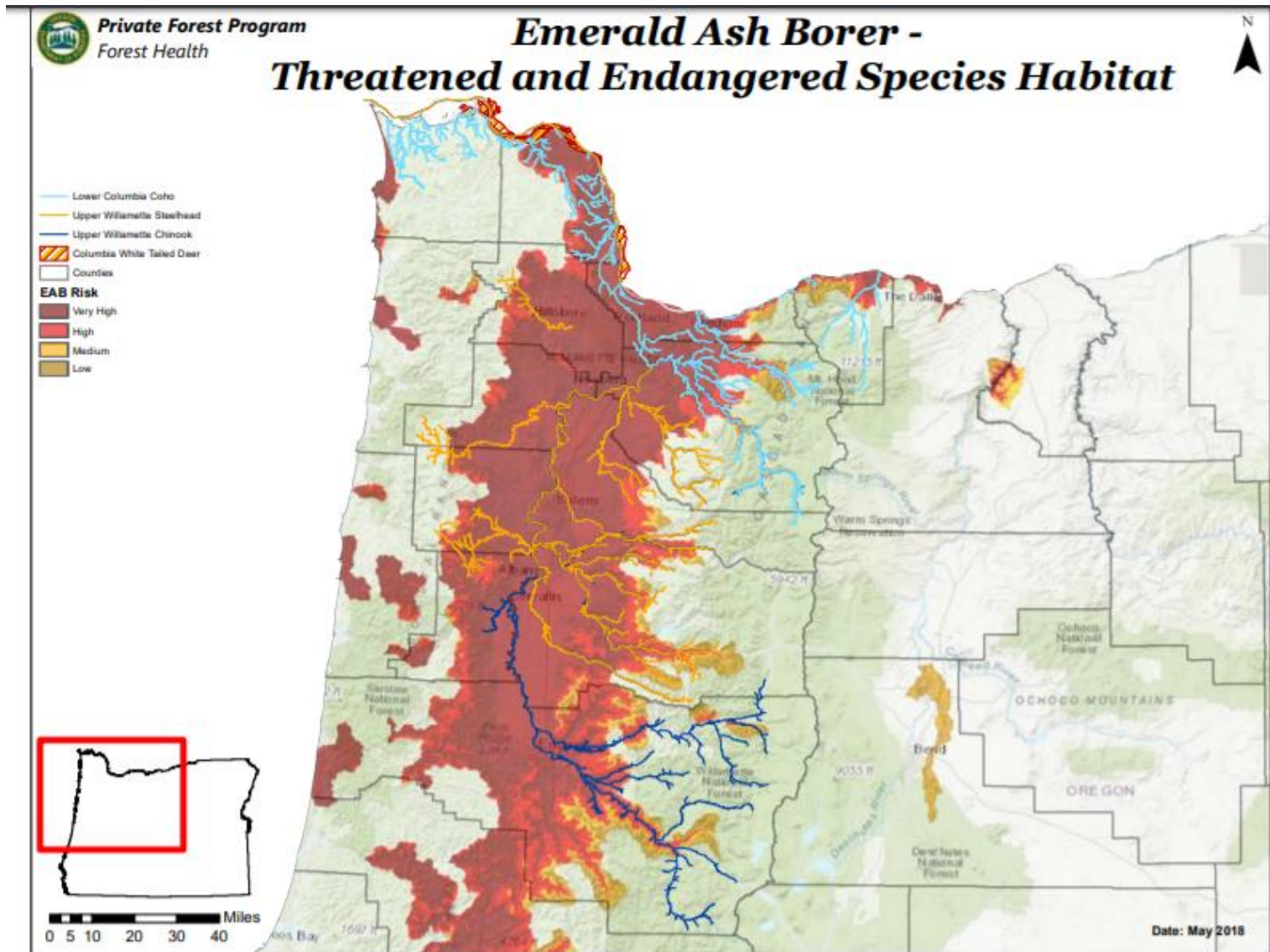


Figure 2. The EAB Threatened and Endangered Species Habitat map shows critical habitat that intersects with EAB risk and the distribution of wild ash in riparian areas of the state. The Threatened and Endangered species includes Lower Columbia Coho salmon (Oregon endangered species, federally threatened species), Upper Willamette Chinook salmon (federally threatened species), Upper Willamette steelhead (federally threatened species), and Columbia white-tailed deer (federally threatened species). Data is not shown for Nelson's checkermallow (Oregon threatened species).

White or American ash (*Fraxinus americana*)



Source: Patrick Breen



Source: Patrick Breen

Green Ash (*Fraxinus pennsylvanica*)



Source: Patrick Breen



Source: Patrick Breen

European/Common Ash (*Fraxinus excelsior*)



Source: Patrick Breen



Source: Patrick Breen

Raywood ash (*Fraxinus oxycarpa*)



Source: Patrick Breen



Source: Patrick Breen

European mountain-ash (*Sorbus aucuparia*)



Source: Patrick Breen

Damage

- >95% ash mortality in some counties
- 100+ million trees killed in 30+ states since 1990s
- Never successfully eradicated
- High economic and ecological cost



TOLEDO STREET BEFORE AND AFTER EMERALD ASH BORER
BEFORE: JUNE 2006 PHOTO COURTESY OF DAN HERMS, OSU AFTER: AUGUST 2009

EAB larvae

- About 3 cm long.
- Bell-shaped segments.
- Flat and tapeworm-like in appearance.

Note: If you find what looks like an EAB larva in a tree, make sure it is an ash tree.



EAB larvae.

Credit: David Cappaert, Michigan State University, Bugwood.org, CC BY-NC 3.0



EAB larvae are about 3 cm long.

Credit: David Cappaert, Michigan State University, Bugwood.org, CC BY-NC 3.0

Identifying emerald ash borer

- Metallic green body.
- Coppery-red highlights and abdomen.
- ¼ to ½ inch long.
- Narrow, bullet-shaped body compared to other metallic green, native insects.



Emerald ash borer adult.

Credit: David Cappaert, Michigan State University, Bugwood.org, CC BY-NC 3.0



Emerald ash borer in the palm of a hand.

Credit: Marianne Prue, Ohio Department of Natural Resources–Division of Forestry, Bugwood.org, CC BY 3.0

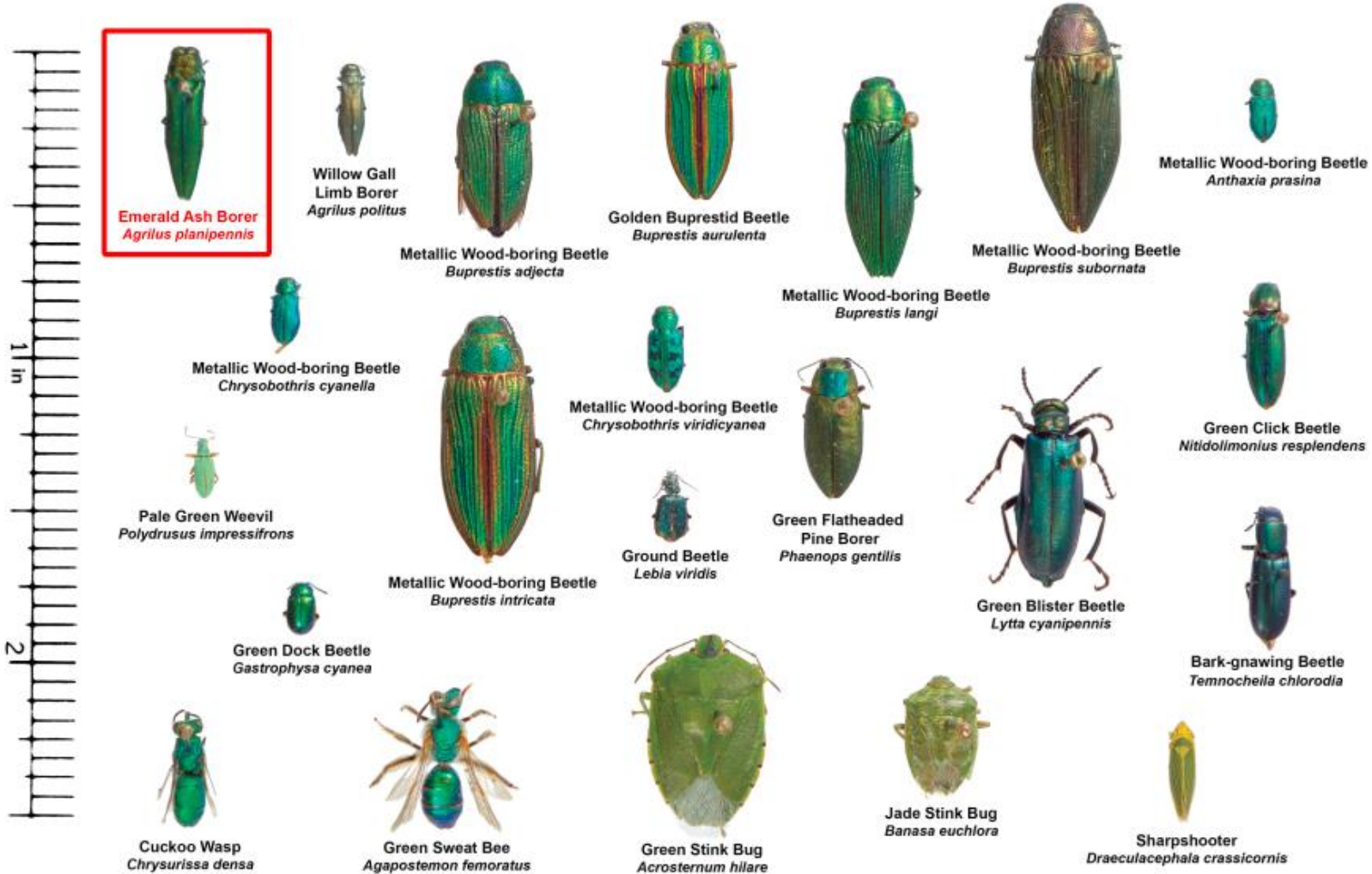


Emerald ash borer viewed from the top.

Photo: Oregon Department of Agriculture

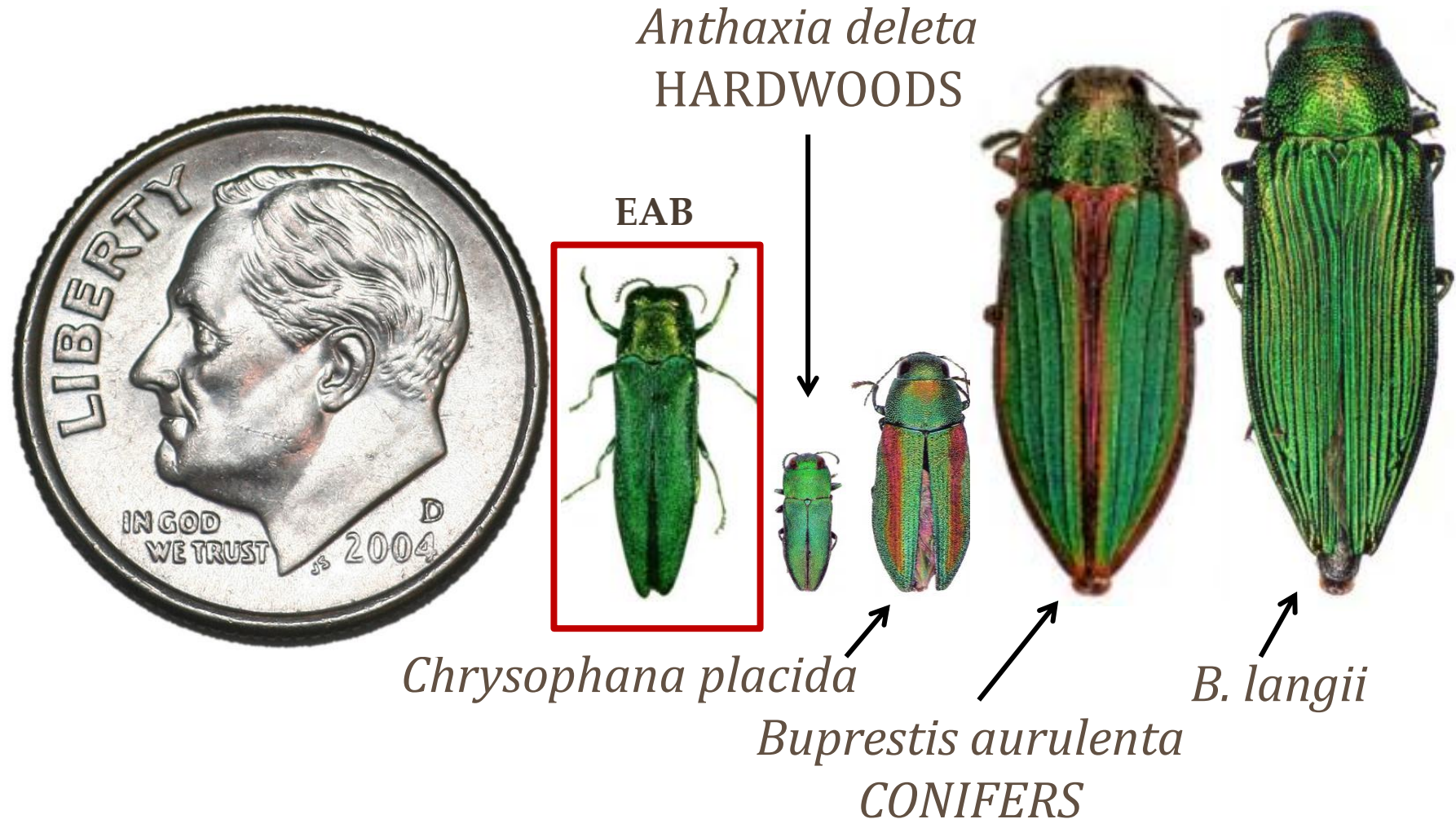


Emerald Ash Borer Look-Alikes



Please note these images and the ruler have been enlarged for detail.

Oregon Look-Alikes: Other metallic wood borers (Buprestids)





Canopy thinning & tip dieback



Epicormic sprouting



Woodpecker damage





D-shaped exit holes



S-shaped galleries





A crack in the bark of an ash tree reveals S-shaped galleries below.

Credit: Joseph O'Brien, USDA Forest Service,
Bugwood.org, CC BY 3.0

Oregon EAB task force

Overview

- Led by ODA
- Facilitated by OR Invasive Sp. Council
- More than 40 agencies
 - State Agencies
 - Federal Agencies
 - Universities
 - Non-profits
 - Municipalities

7 subcommittees:

- Communications
- Research
- IPM-BMP
- Training and Technical Assistance
- Wood Waste Utilization
- Surveying and Monitoring
- Funding

Management Considerations

- *What ash are trees present on your property?*
- *What values do you wish to preserve during and after an EAB outbreak on your property?*



Source: Alex Gorman

What questions do you have?



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