





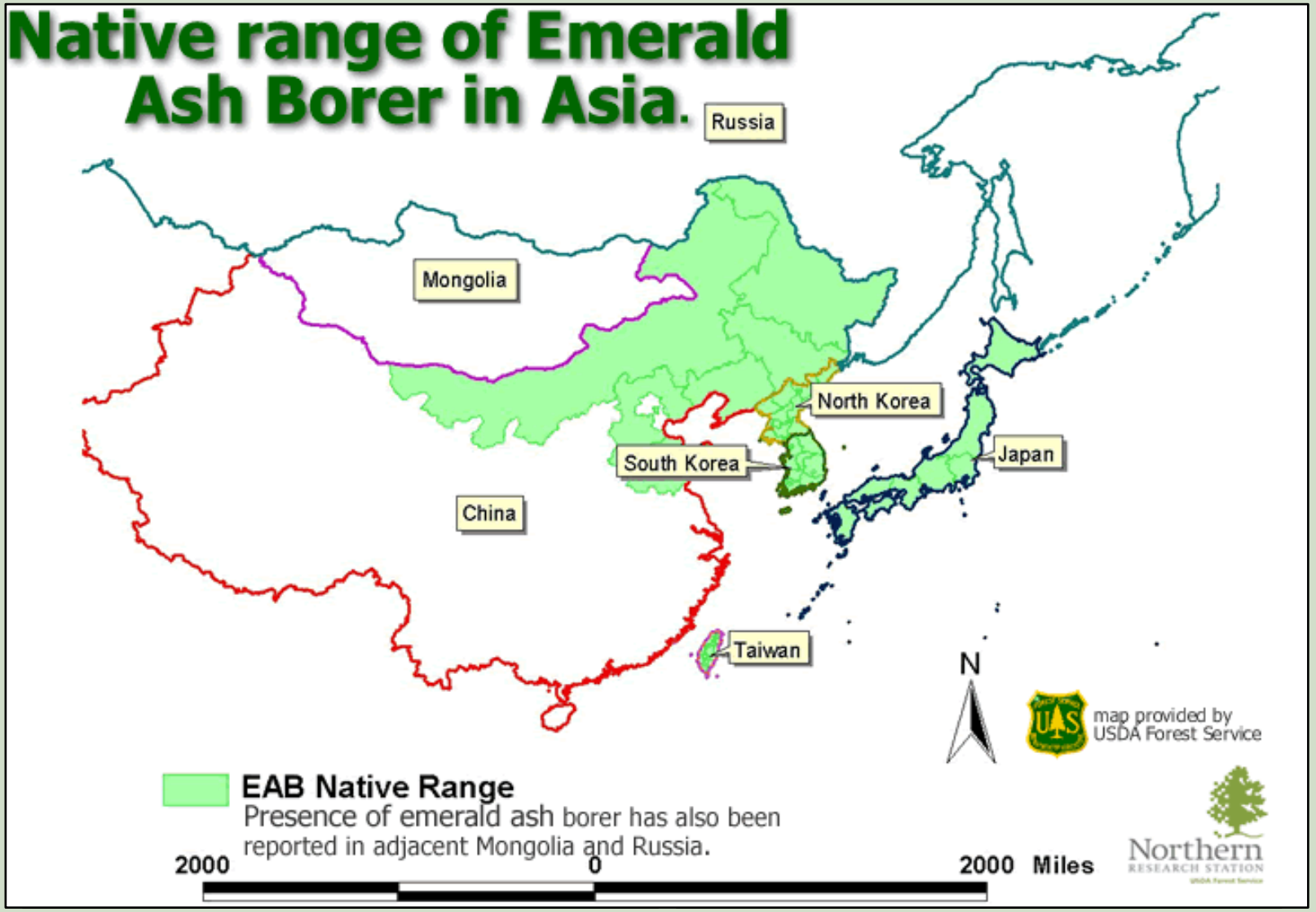
What's bugging our ash trees: Emerald Ash Borer in Oregon

Oregon Department of Forestry
Urban & Community Forestry Assistance Program

Kat Bethea | EAB Support Specialist

Emerald Ash Borer (EAB)

Agrilus planipennis



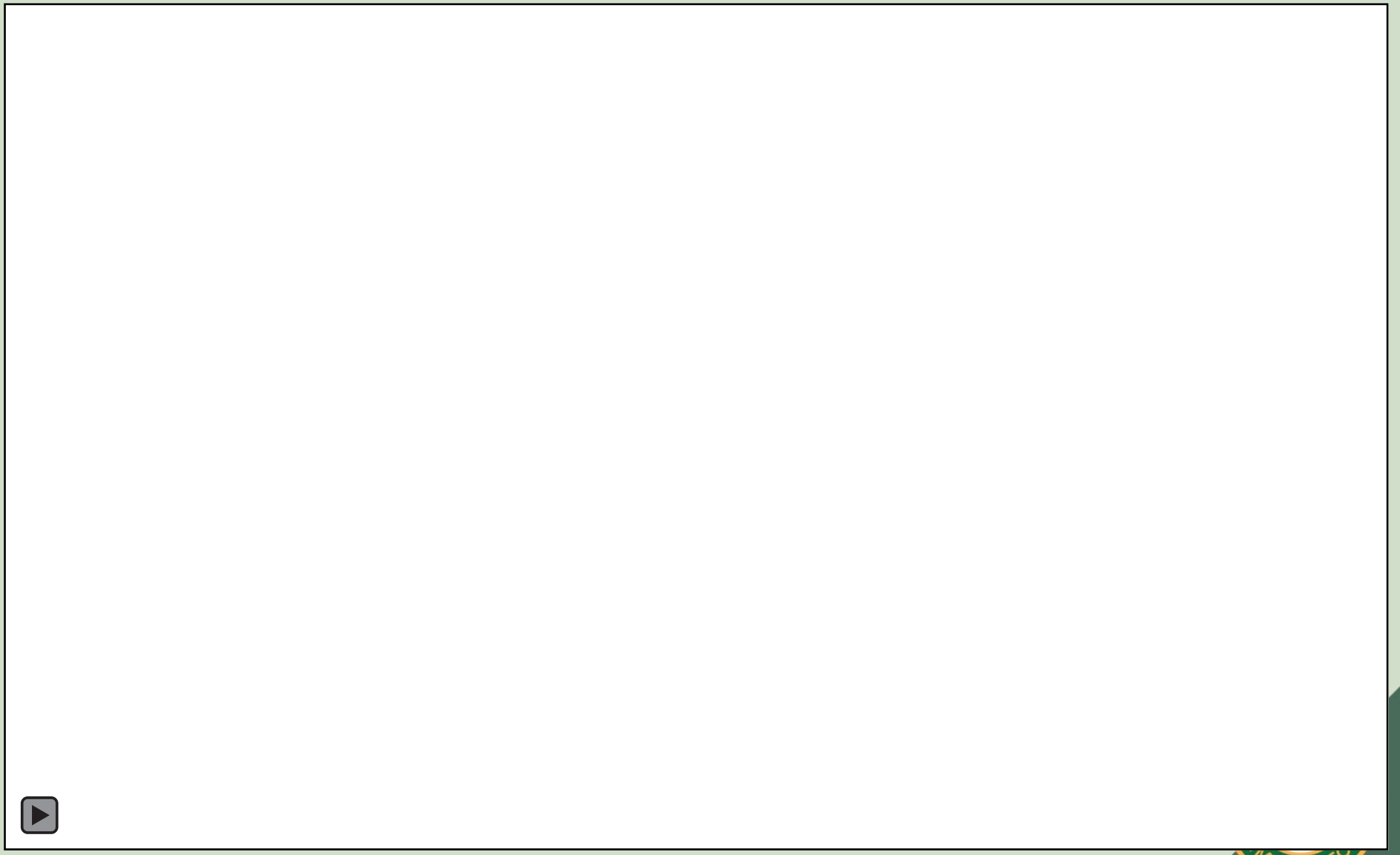
Invasive and highly destructive woodboring beetle that kills ash trees (*Fraxinus* spp.).

Larvae feed beneath bark, eventually girdling and killing the tree

100+ million trees killed since 1990s, highest cost forest pest in the Americas

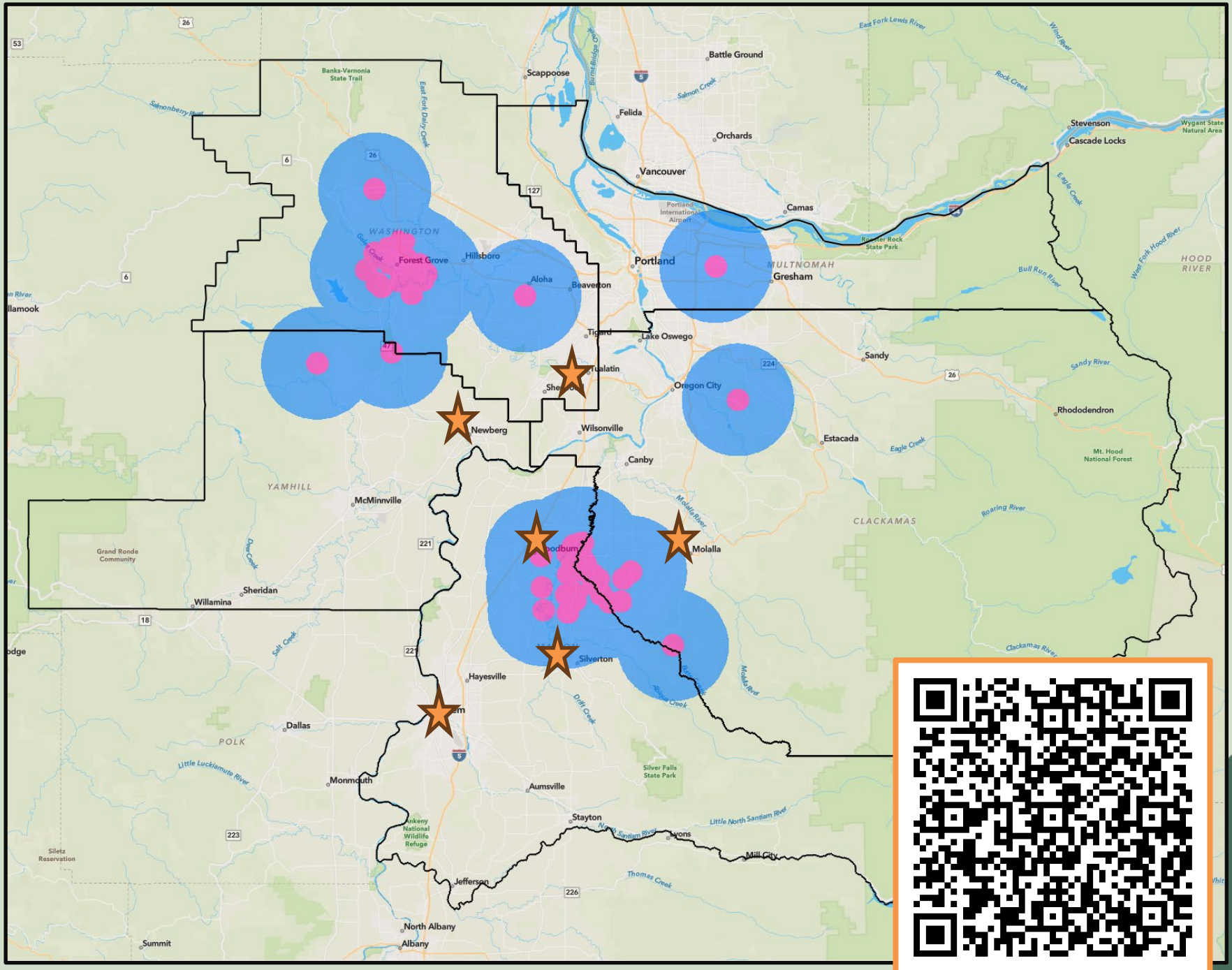
EAB Spread in the US

- 2002: Detroit, MI
- 2012: 16 states with known infestations
- 2013: EAB jumps 1200 miles to Colorado
- **2022: Oregon**
- **2024: Vancouver, BC**
- **2026: Washington**



EAB in Oregon

- 5 infested counties
  - Washington
  - Yamhill
  - Clackamas
  - Marion
  - Multnomah
- New positives this season
  - Expansion around all known infestations
  - Salem is the new southernmost point



11/3/2026



Ash Trees in Oregon





Wildland Urban Interfaces (WUI)

Natural Areas

- Riparian Corridors
- Wetlands

Landscaped Areas

- Streets
- Yards
- Parks

Ash in Oregon: Identification



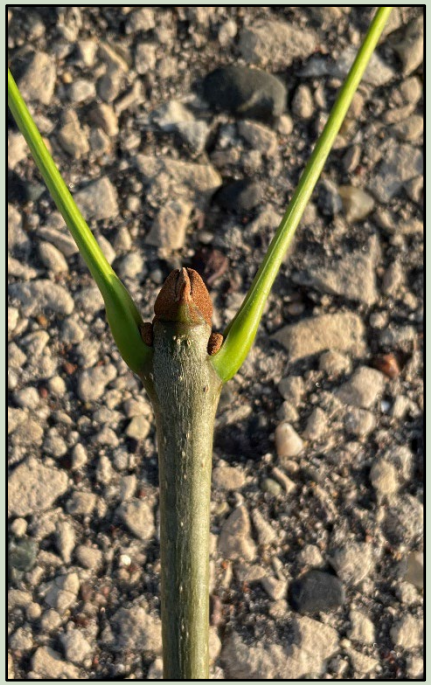
Furrowed Gray Bark



Fuzzy, Brown & Pointy Buds



Pinnately Compound Leaves



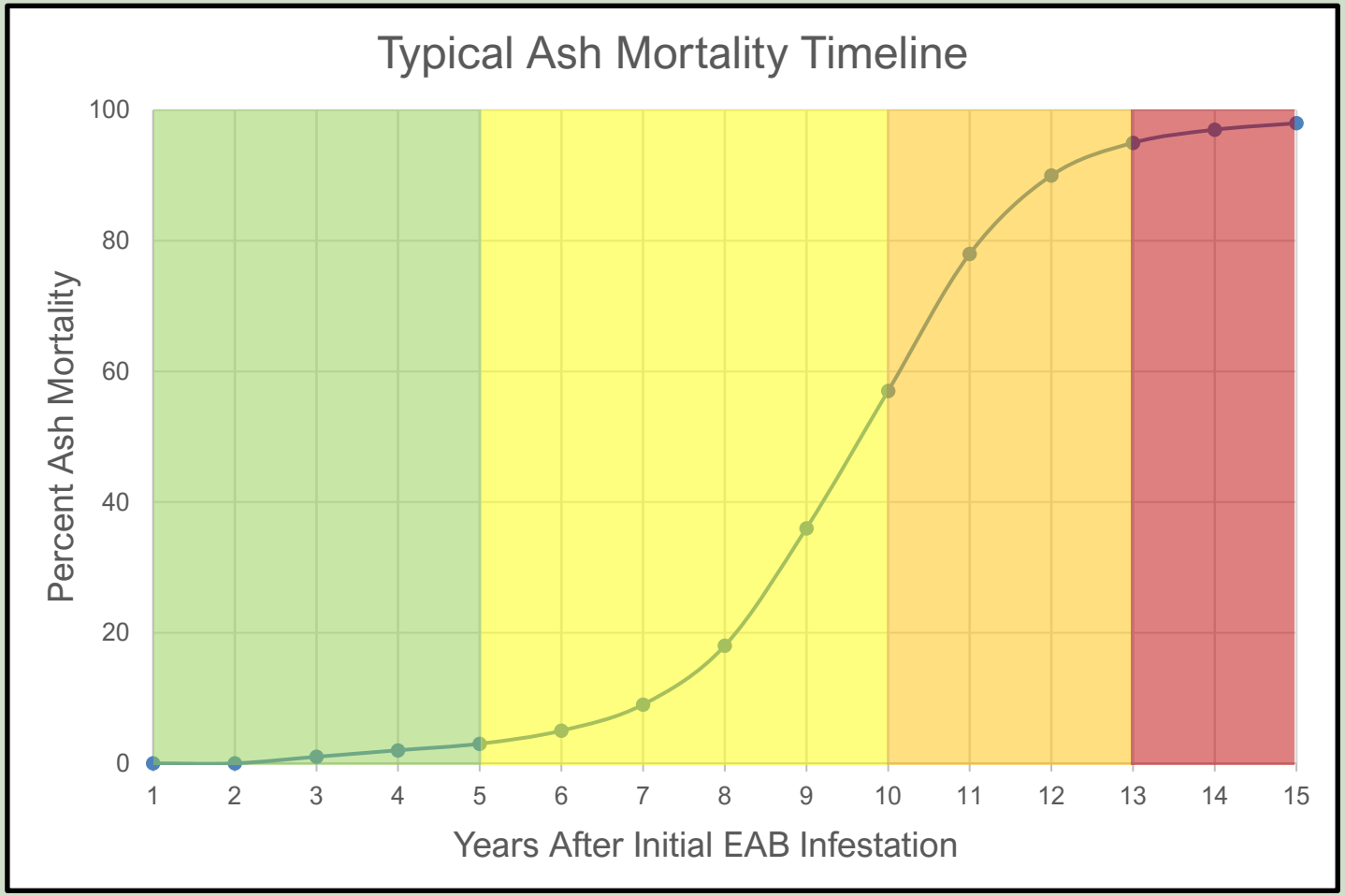
Opposite Branching



Single-Wing Samaras

Infestation Timeline – Community Scale

The rate of ash mortality may outpace a community's ability to deal with dead/dying trees.







EAB: Biology and Lifecycle



EAB Lifecycle

(1-2 years)

1. 

May - June
Pupae become adults

2. 

June - August
Adults emerge, mate, lay eggs on bark, and die within 6 weeks
~ 400 to 500 GDD

3. 

July - September
Larvae hatch and burrow under bark to begin feeding

4. 

October - April
Cool temperatures cause larvae to go dormant and overwinter in tree

5. 

May
Larval lifecycle complete, EAB go deeper into wood for final metamorphosis

EAB Signs & Symptoms



Thinning crown and canopy decline



Epicormic sprouting or shoots

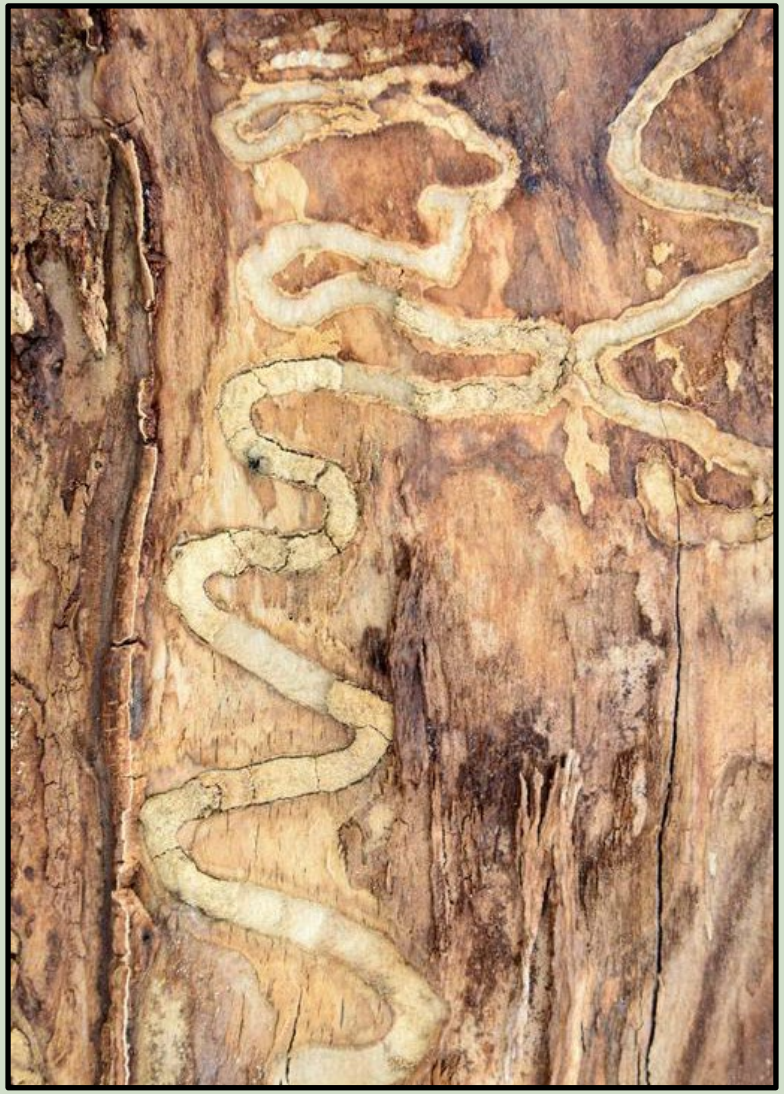


Woodpecker damage

EAB Signs & Symptoms



Bark splits



Serpentine galleries

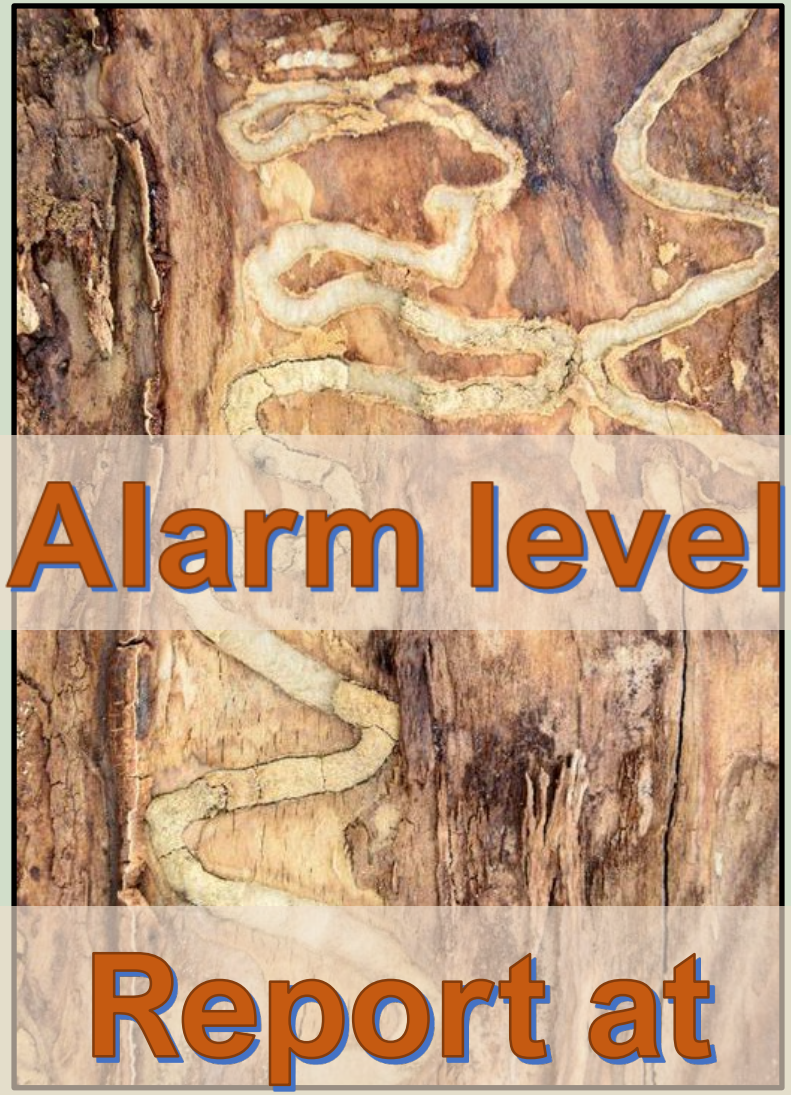


D – shaped exit holes

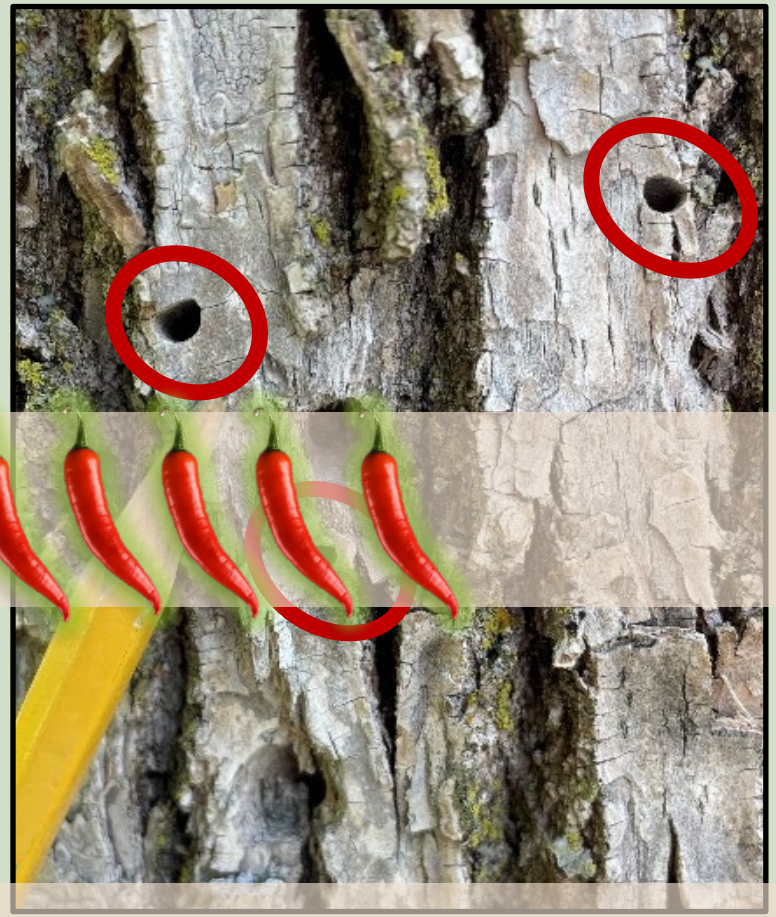
EAB Signs & Symptoms



Bark splits



Serpentine galleries



D – shaped exit holes

Alarm level

Report at

https://oregoninvasiveshotline.org/

Infested trees: what it could look like



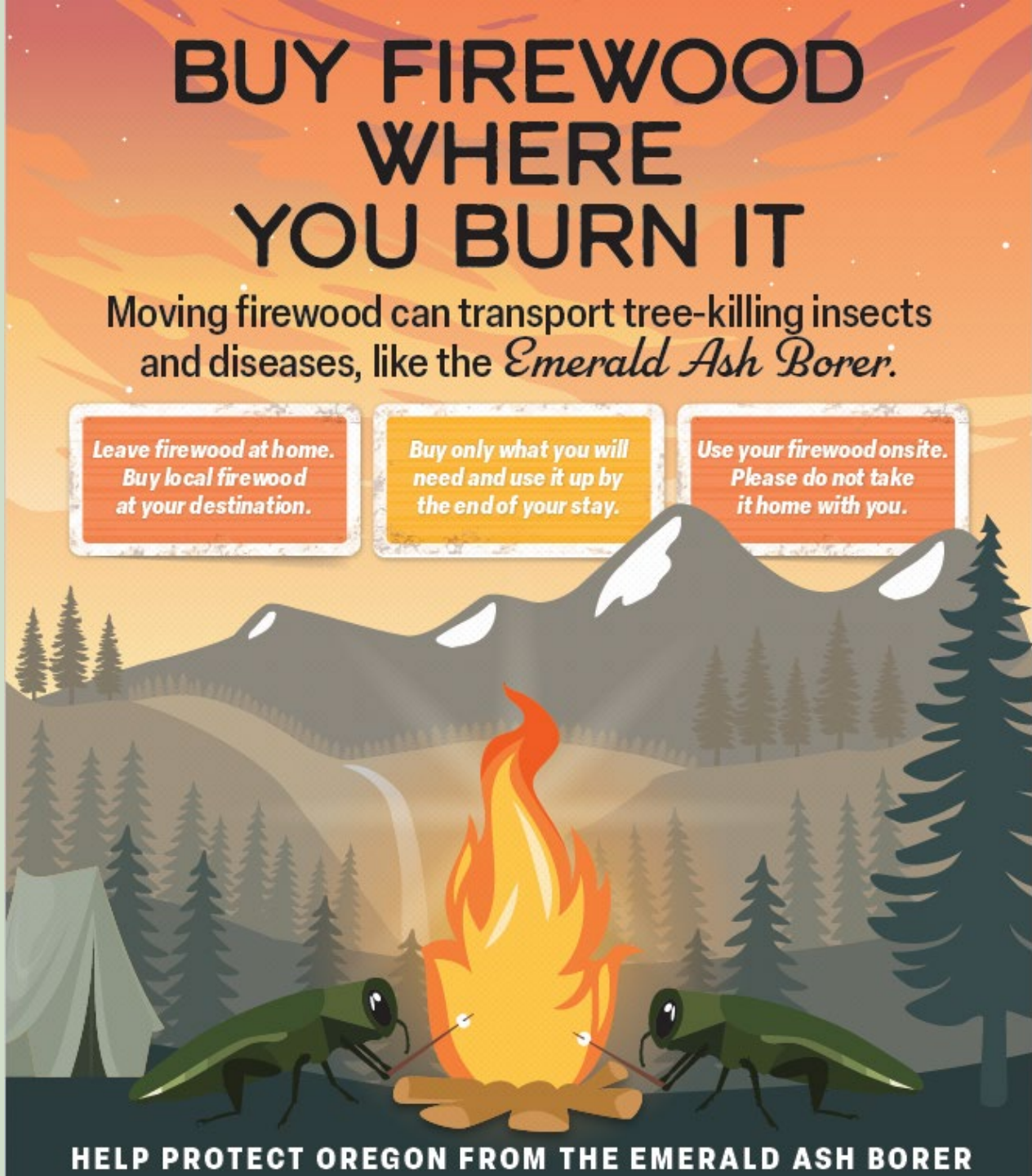




Ash Dash, ODA |
Matt Mills, ODF

3 Takeaways

1. The best way to help our forests is **Don’t Move Firewood**
2. Keep an eye out for signs & symptoms
3. Report EAB if you find any!





Thanks!

Kat Bethea
InvasivePests@odf.oregon.gov
OregonEAB.com

Oregon Department of Forestry
Urban and Community Forestry Assistance Program

EAB Resources: OregonEAB.com

The ‘one-stop shop’ for all things EAB in Oregon

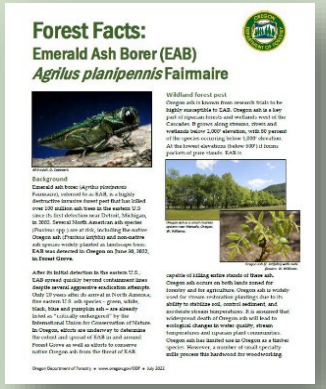
Check out the updated **Oregon EAB Map**, where you can track nearest EAB populations

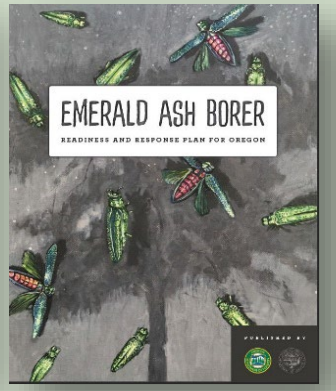
Managed by ODF’s Urban & Community Forestry Program



Link: https://www.OregonEAB.com

EAB Resources: OregonEAB.com


Forest Facts:
Emerald Ash Borer (EAB)
Agrilus planipennis Fairmaire



State Resources

- Oregon's EAB Readiness and Response Plan
- ODF Forest Health Website
- Biological Control for EAB

Identification and Fact Sheets

- Ash Identification
- EAB Look-Alikes
- EAB Fact Sheet
- EAB Quarantine
- MOB Fact Sheet

OSU EAB Resources

- Oregon Ash: Insects, Pathogens, and Tree Health
- Alternatives to Ash in Western Oregon
- Recommendations for Tree Protection Against EAB

Management Resources

- 10 Recommendations for Managing Ash
- Managing Northeastern Forests Threatened by EAB
- EAB Management Review
- EAB Insecticide Treatment Fact Sheet

Report Invasive Species

- Reporting Potential EAB Insects or Infestations

Wood Use

- Resource Directory of Wood Waste Professionals
- What To Do with Ash Wood

Other Forest Management

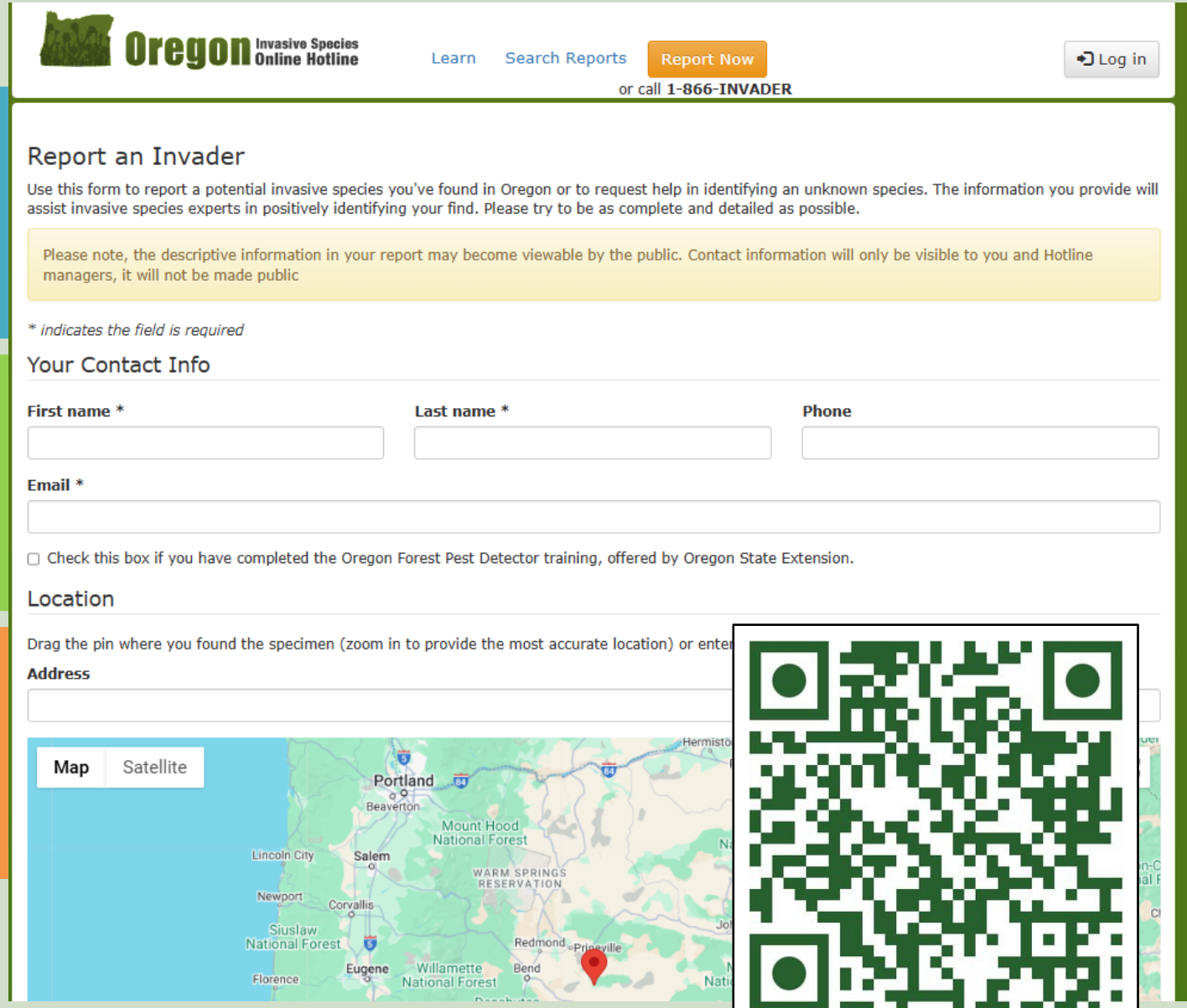
- Find an Arborist
- Tree Risk Management

How to Report

Report using Oregon Invasive Species Hotline

Take photos of symptoms

Add tree location



EAB Resources: Where to Report

United States – USDA APHIS

- Report.EAB@usda.gov
- 1-866-322-4512

Oregon

- oregoninvasiveshotline.org
- 1-866-INVADER

Washington

- invasivespecies.wa.gov
- Download the app – Washington Invasives

Idaho

- Idaho Invasive Species Hotline
- 1-877-336-8676

Canada – Invasive Species Centre

- invasivespeciescentre.ca
- 1-866-463-6017

British Columbia

- bcinvasives.ca/take-action/report/
- 1-800-563-7711
- Download the app - Report Invasives

Ontario

- Ontario Ministry of Natural Resources and Forestry
- www.eddmaps.org
- 1-800-667-1940

Natural Areas: Species List

Tree species associated with ash, clay soils

- Garry oak
- Western crabapple
- Chokecherry
- Piper willow
- White alder
- Ponderosa pines



Tree species associated with ash, clay intolerant

- Black cottonwood
- Quaking aspen
- Douglas-fir
- Scouler willow
- Bitter cherry
- Cascara buckthorn



Species for climate resilience

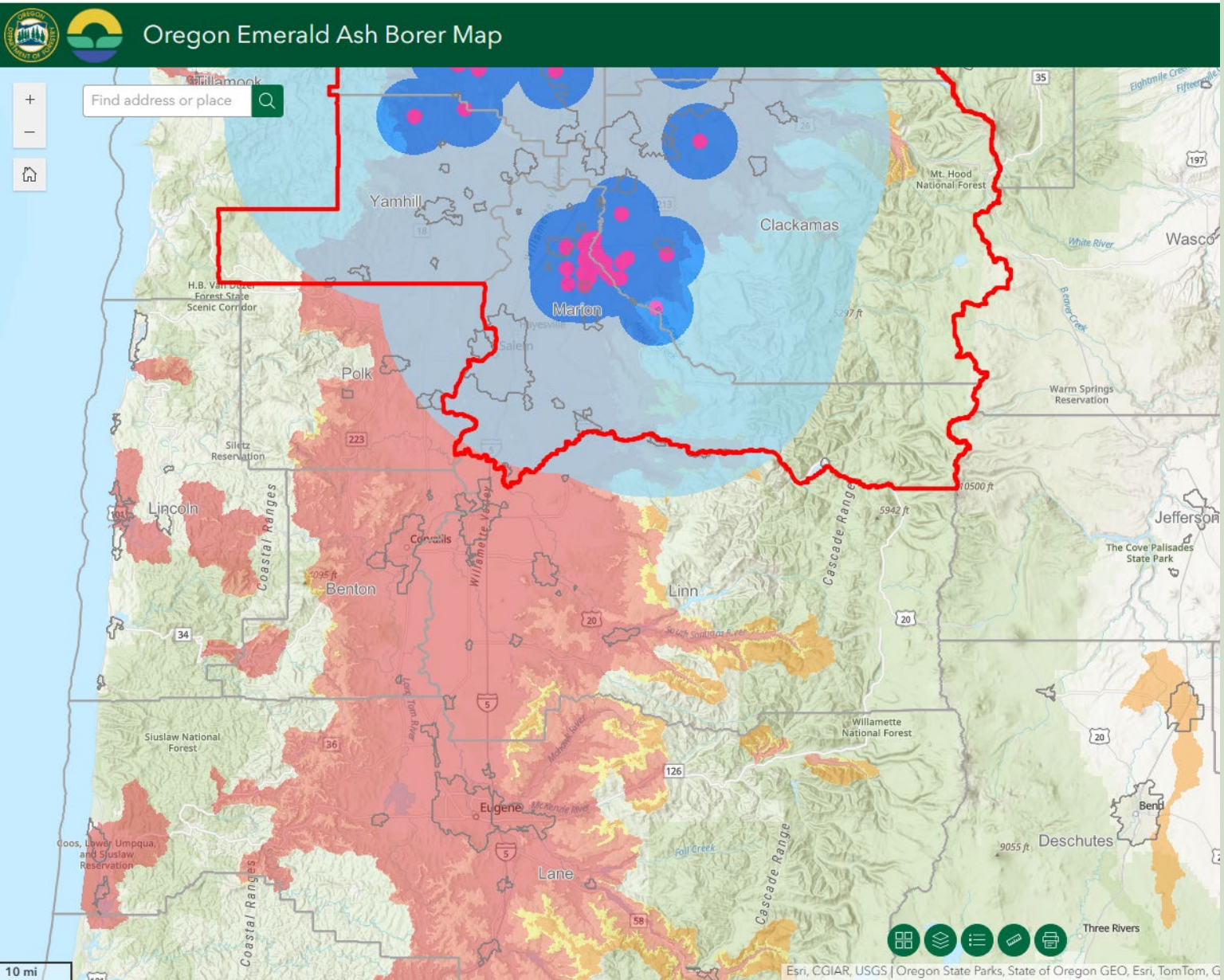
- Incense cedar
- California Black oak
- Coastal redwood
- Dawn redwood
- Oregon myrtle



Pollinator friendly species

Adapted from Kral and Shaw, 2023 and Hull, 2024

EAB Resources: Oregon EAB Map



Circle color buffers indicate how close you are to an infestation

Background feature layer highlights ash likelihood in and near watersheds

Updates throughout the trapping and field season

https://www.OregonEAB.com

Ash in Oregon: Landscape Areas

Popular landscape ash species:

- Green ash
- White ash
- Narrowleaf ash ‘Raywood’
- European ash ‘Golden Desert’

All are susceptible to EAB



Golden Desert Ash
(*F. excelsior ‘Golden Desert’*)



Green Ash (*F. pennsylvanica*)



White Ash (*F. americana*)



‘Raywood’ Narrowleaf Ash
(*F. angustifolia ‘Raywood’*)

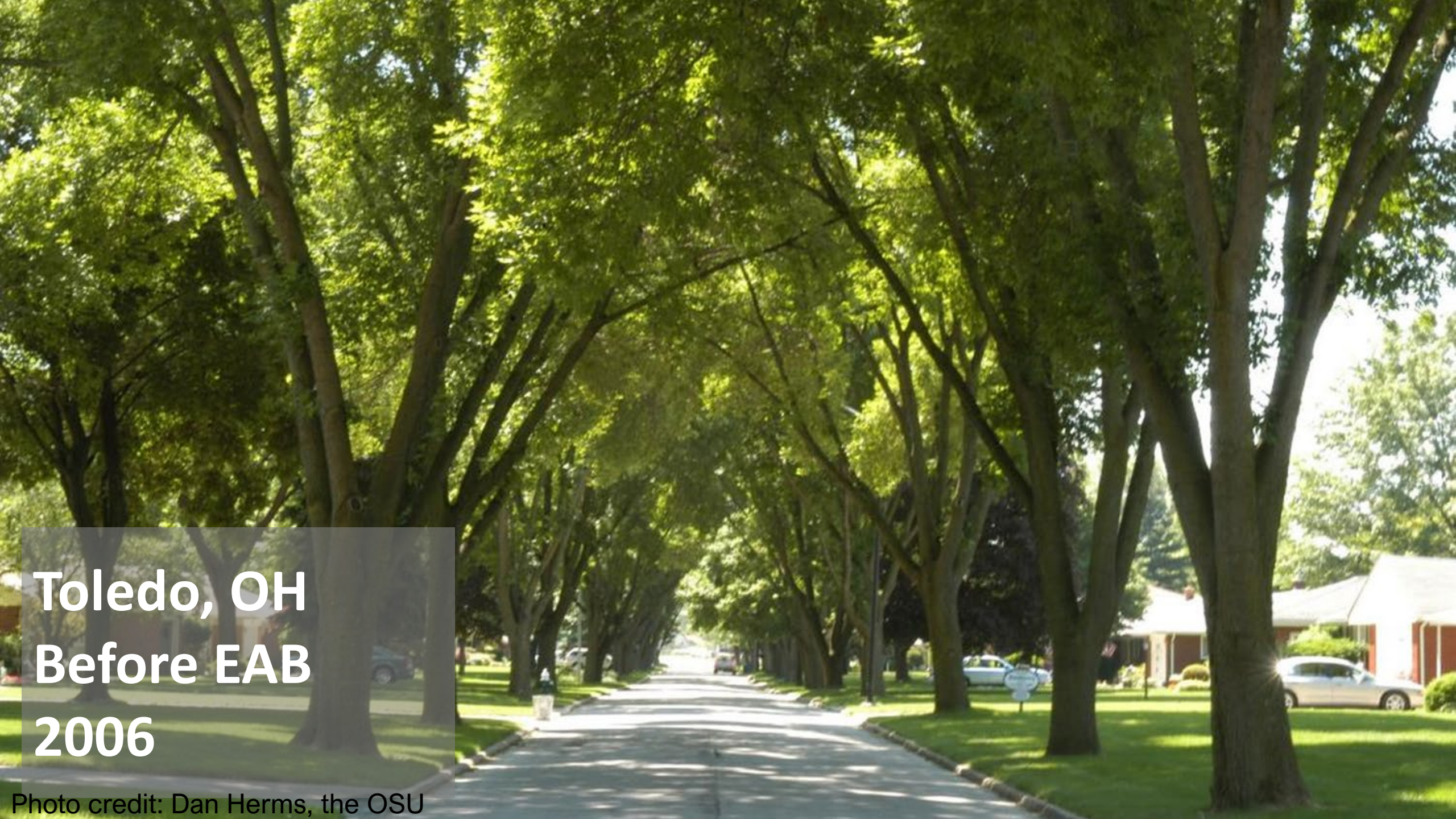
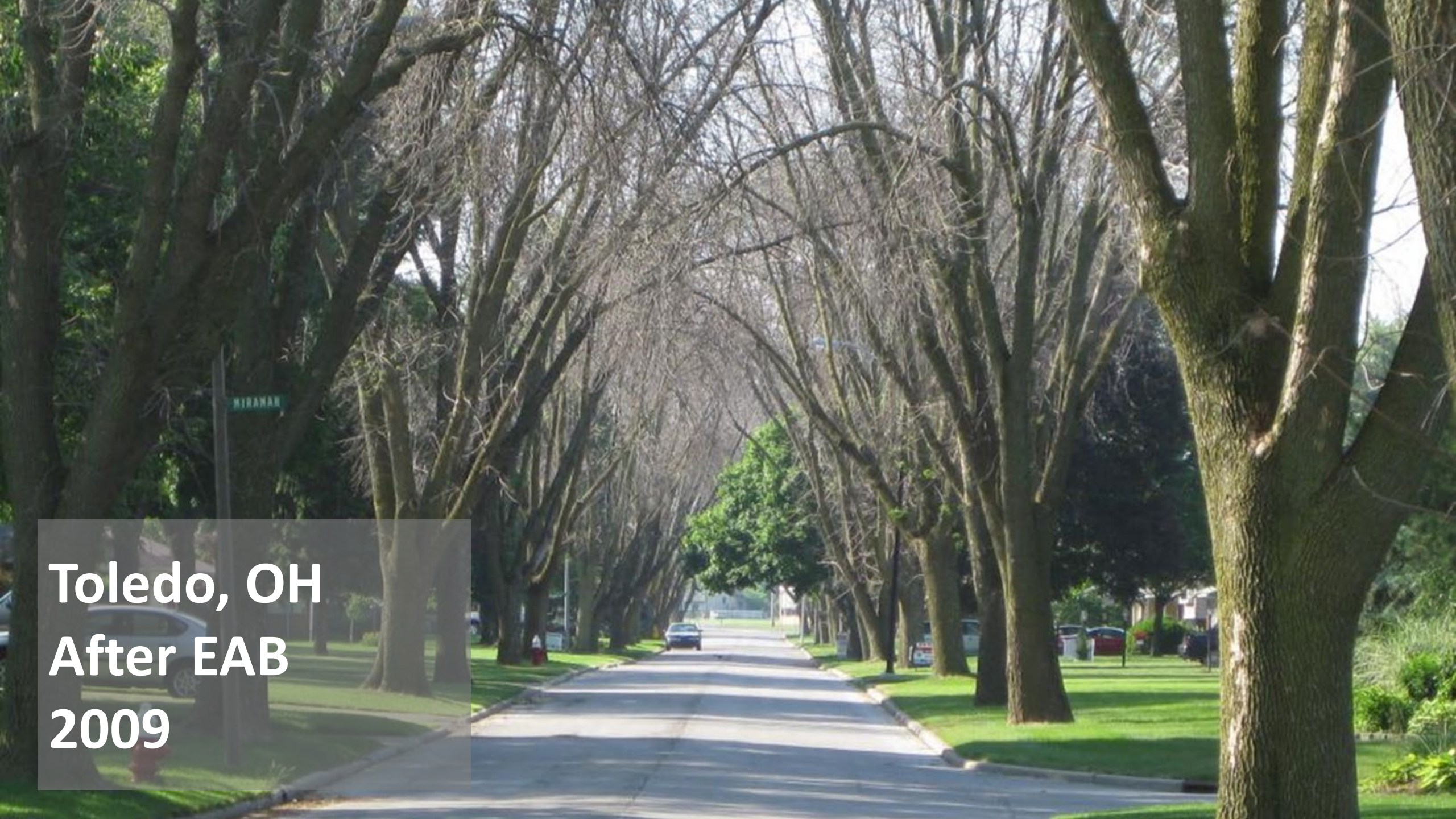


Photo credit: Dan Herms, the OSU



Toledo, OH
After EAB
2009