



# EAB Biology, Distribution, and Spread

Mark Abrahamson | Plant Protection Division Director

# EAB Biology





# EAB Biology



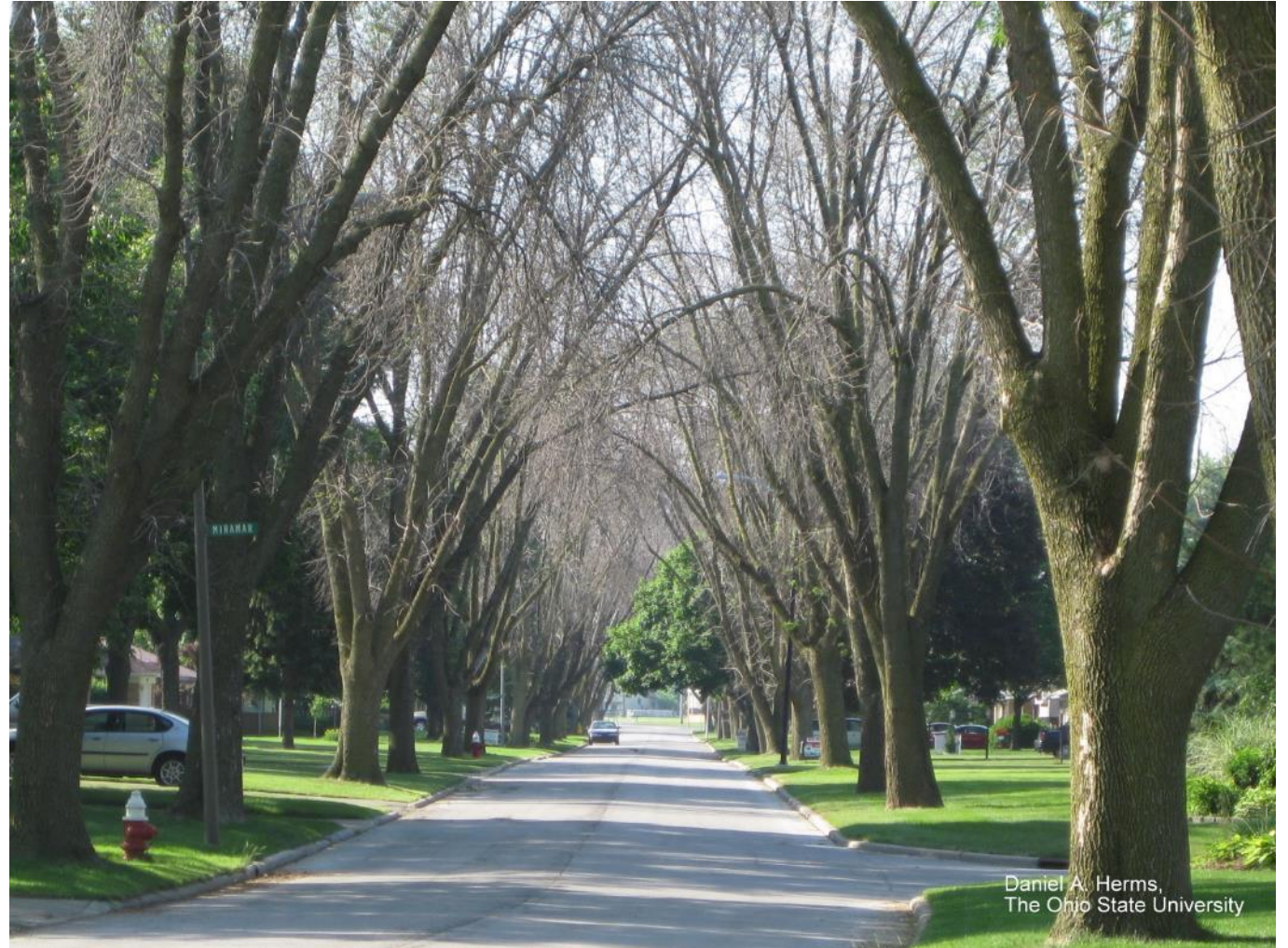
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Daniel A. Herms, The Ohio State University

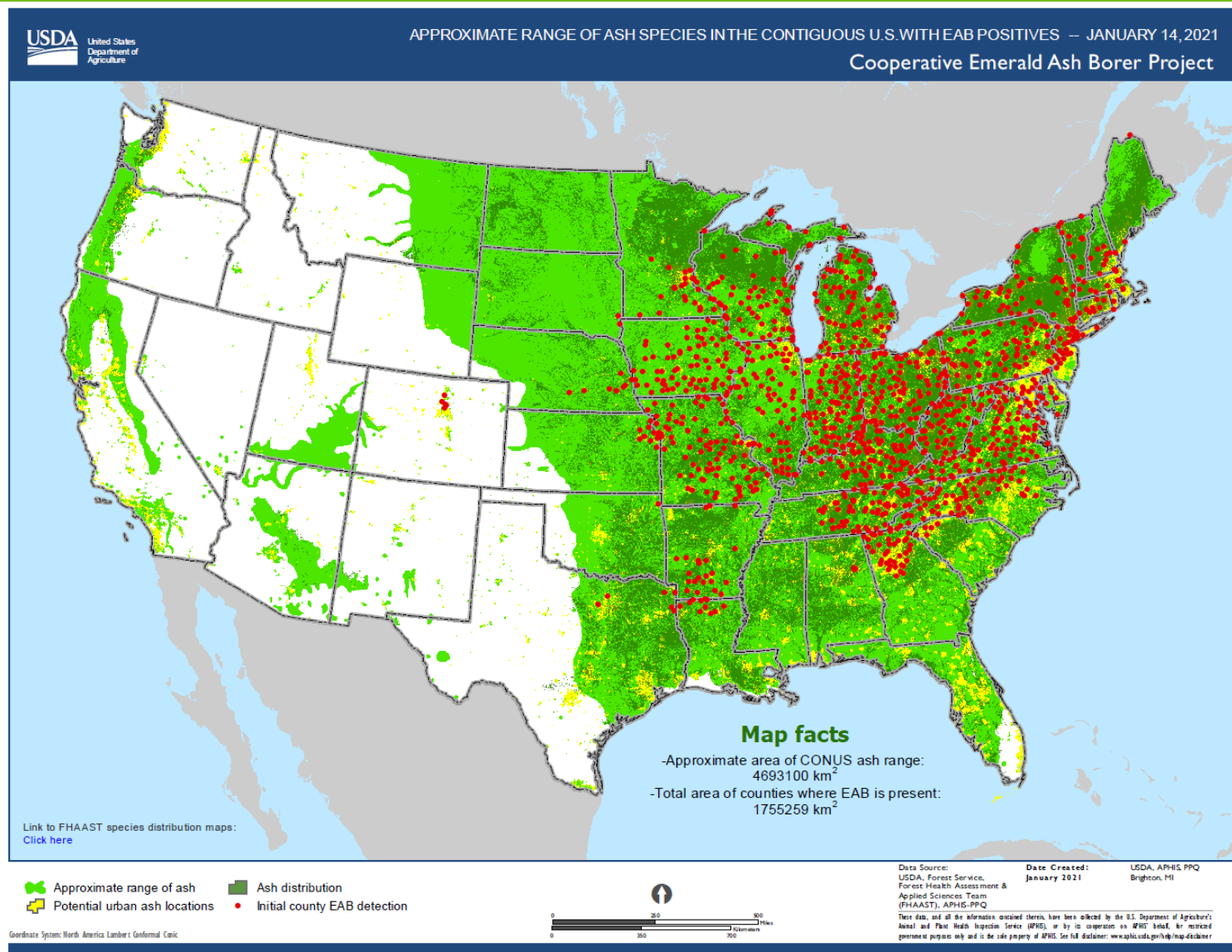


# EAB Biology



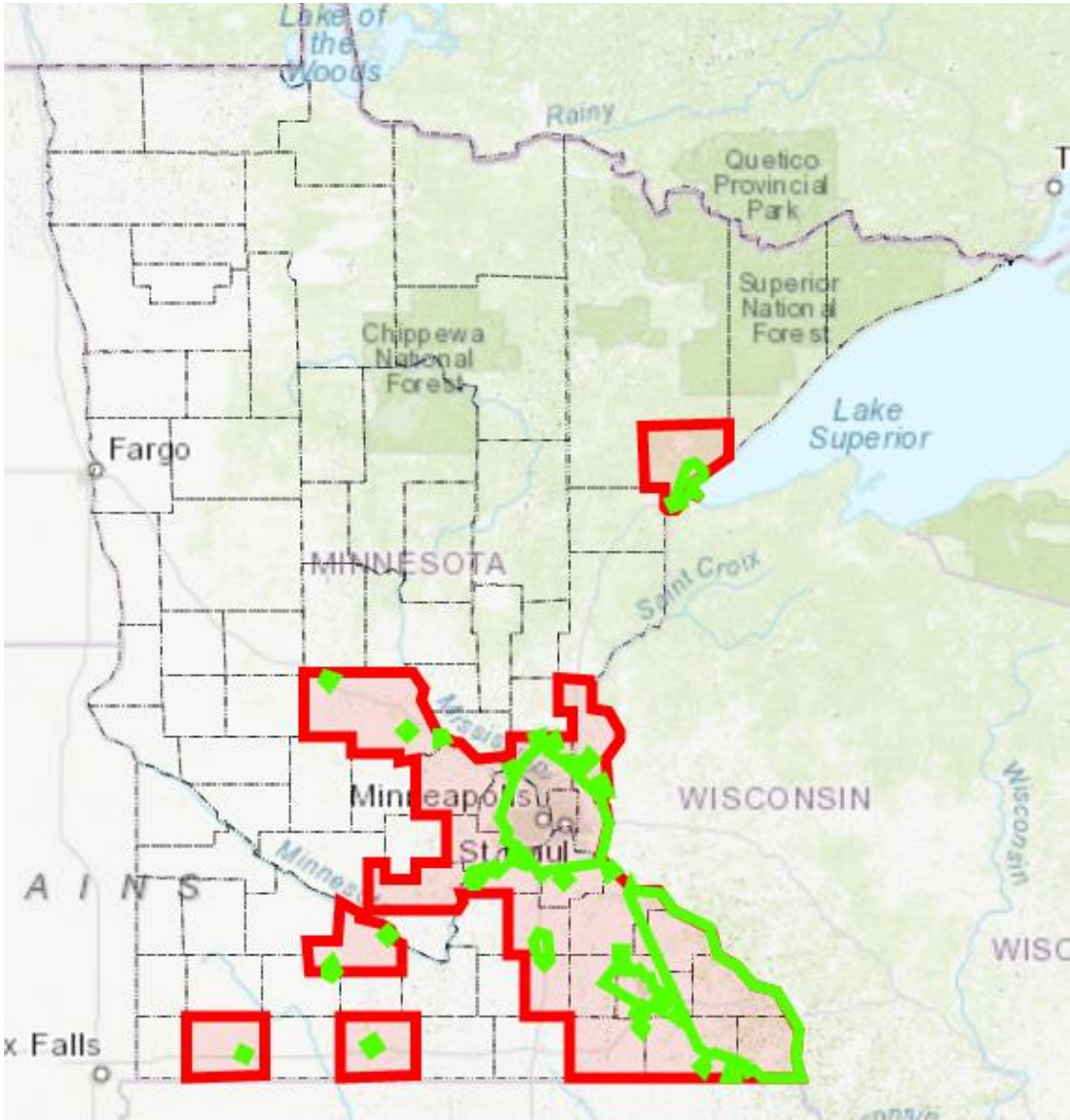


# EAB Distribution and Spread



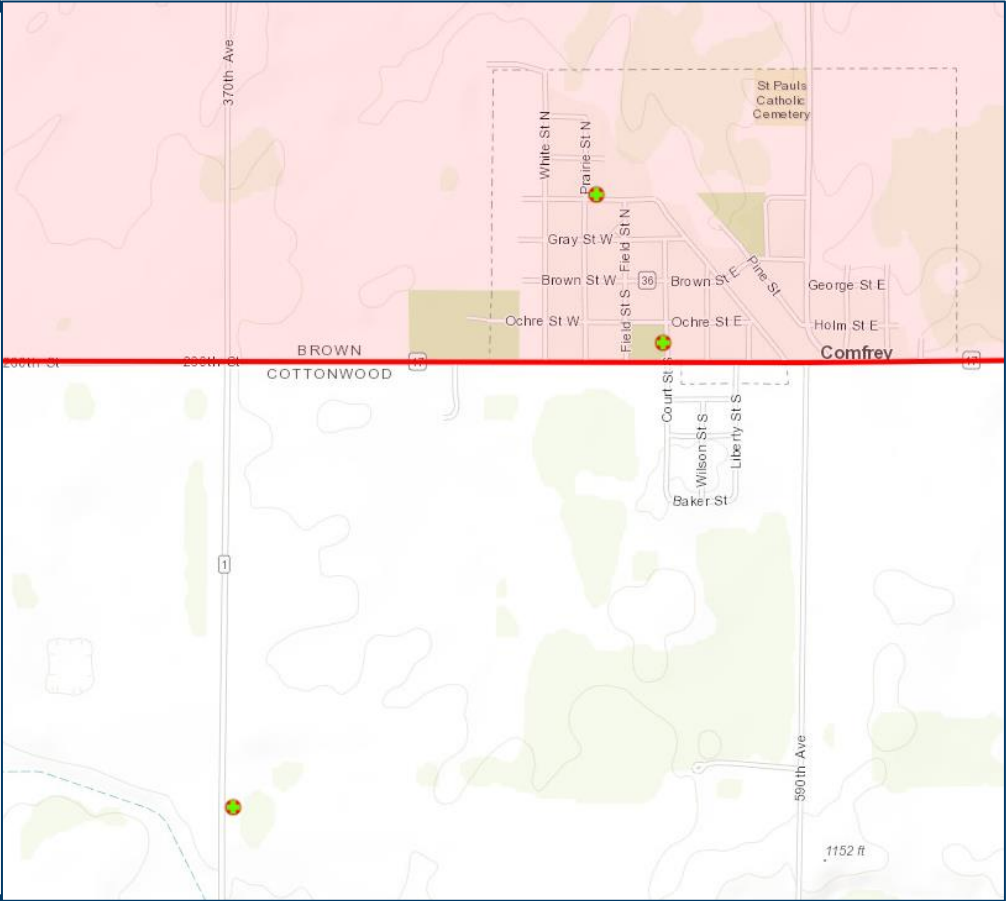
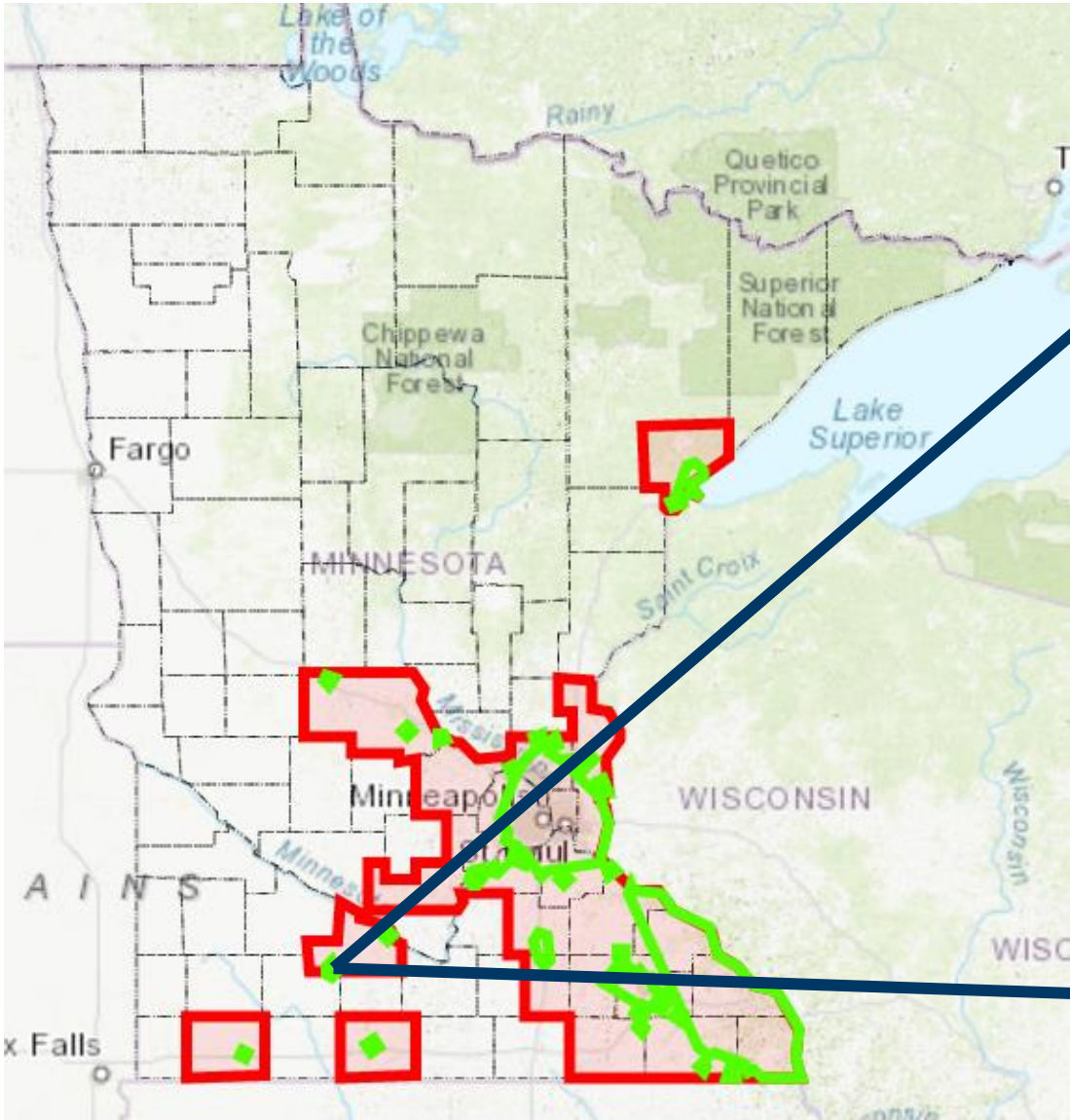
# EAB Distribution and Spread

[mda.state.mn.us/eabstatus](http://mda.state.mn.us/eabstatus)



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[mda.state.mn.us/eabstatus](http://mda.state.mn.us/eabstatus)





# EAB Distribution and Spread



**MDA**  
**CERTIFIED**  
**FIREWOOD**

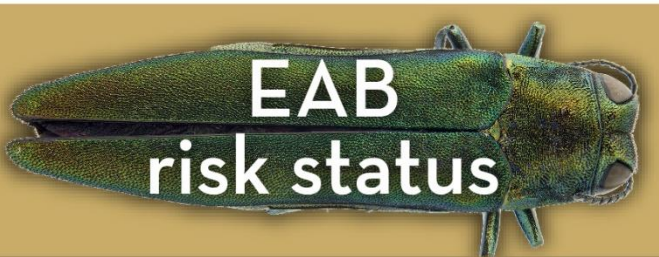


**The only safe to move  
firewood in Minnesota**



Stop the spread of insects that destroy  
our trees. Buy only heat-treated MDA  
Certified Firewood.

 UNIVERSITY OF MINNESOTA



**EAB**  
**risk status**

**LOW ACTIVITY**

[CLICK FOR INFORMATION](#)



**DON'T MOVE FIREWOOD!**

**Emerald Ash Borer is in Martin County**





# EAB Distribution and Spread

## GUIDELINES TO SLOW THE GROWTH AND SPREAD OF EMERALD ASH BORER

**mi** DEPARTMENT OF  
AGRICULTURE

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# EAB Distribution and Spread

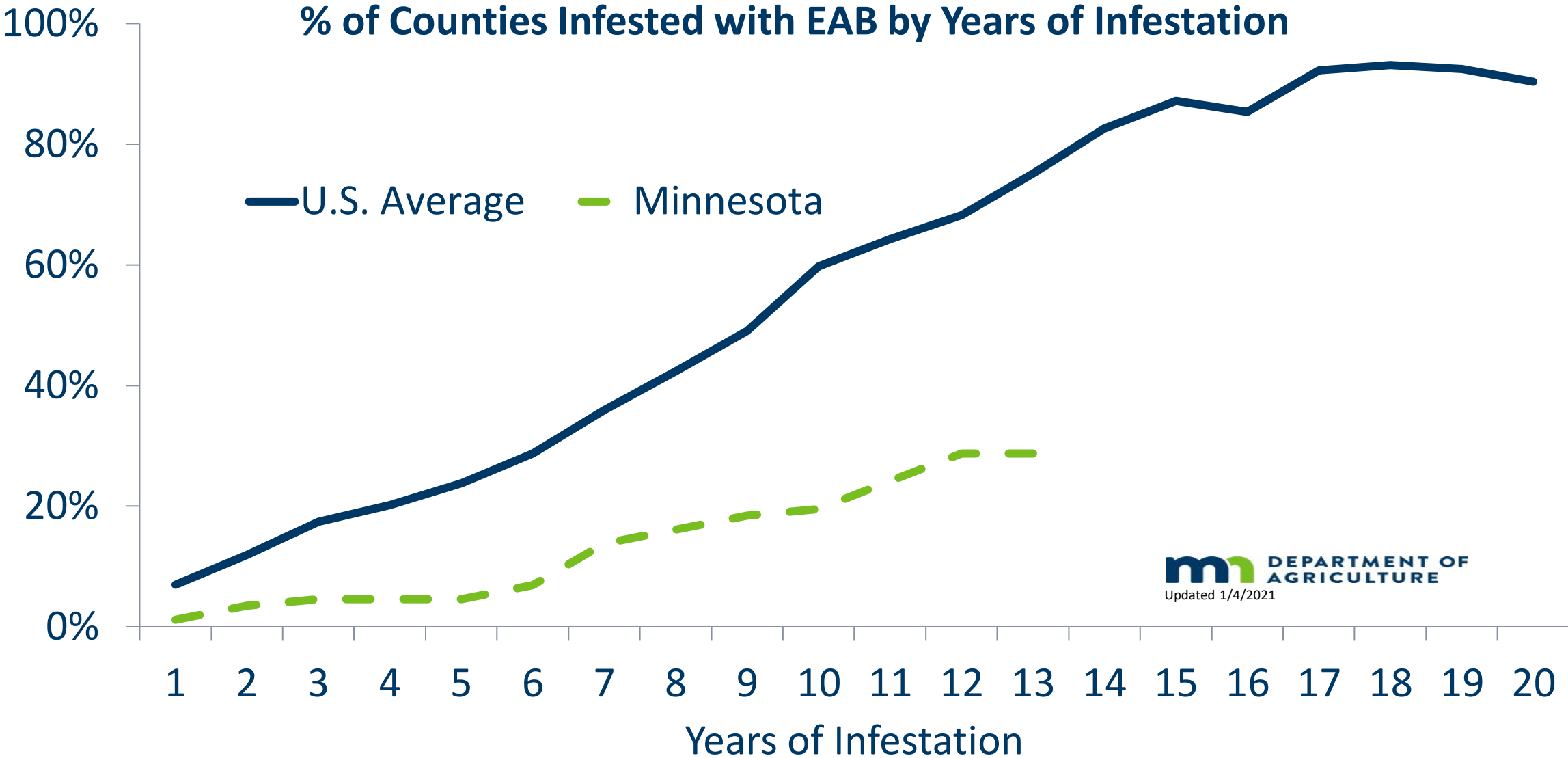
## Fate of EAB-infested Trees

1. **Removed (before or after death)**
2. **Treated with insecticide**
3. **Die and fall apart**

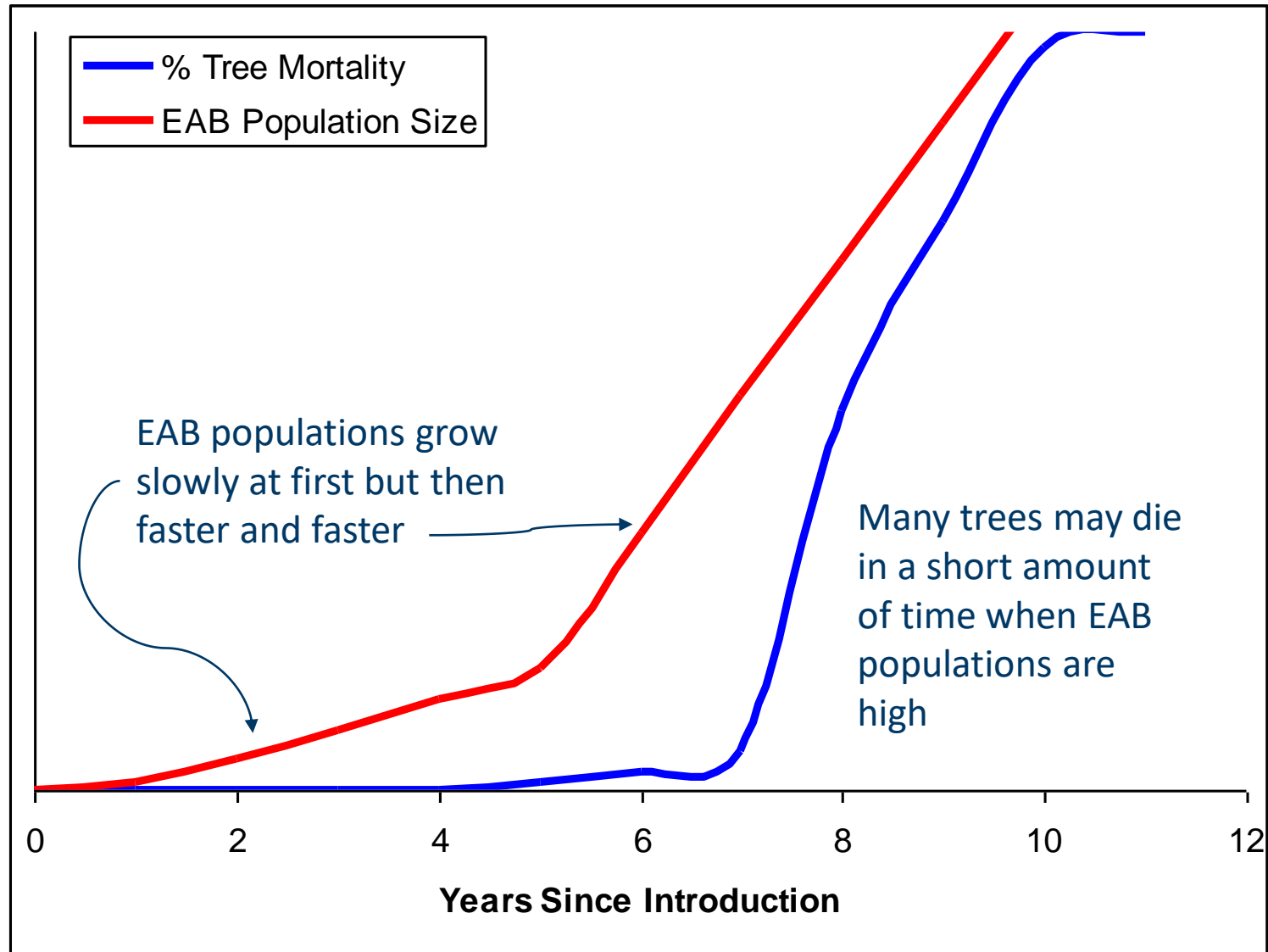




# EAB Distribution and Spread

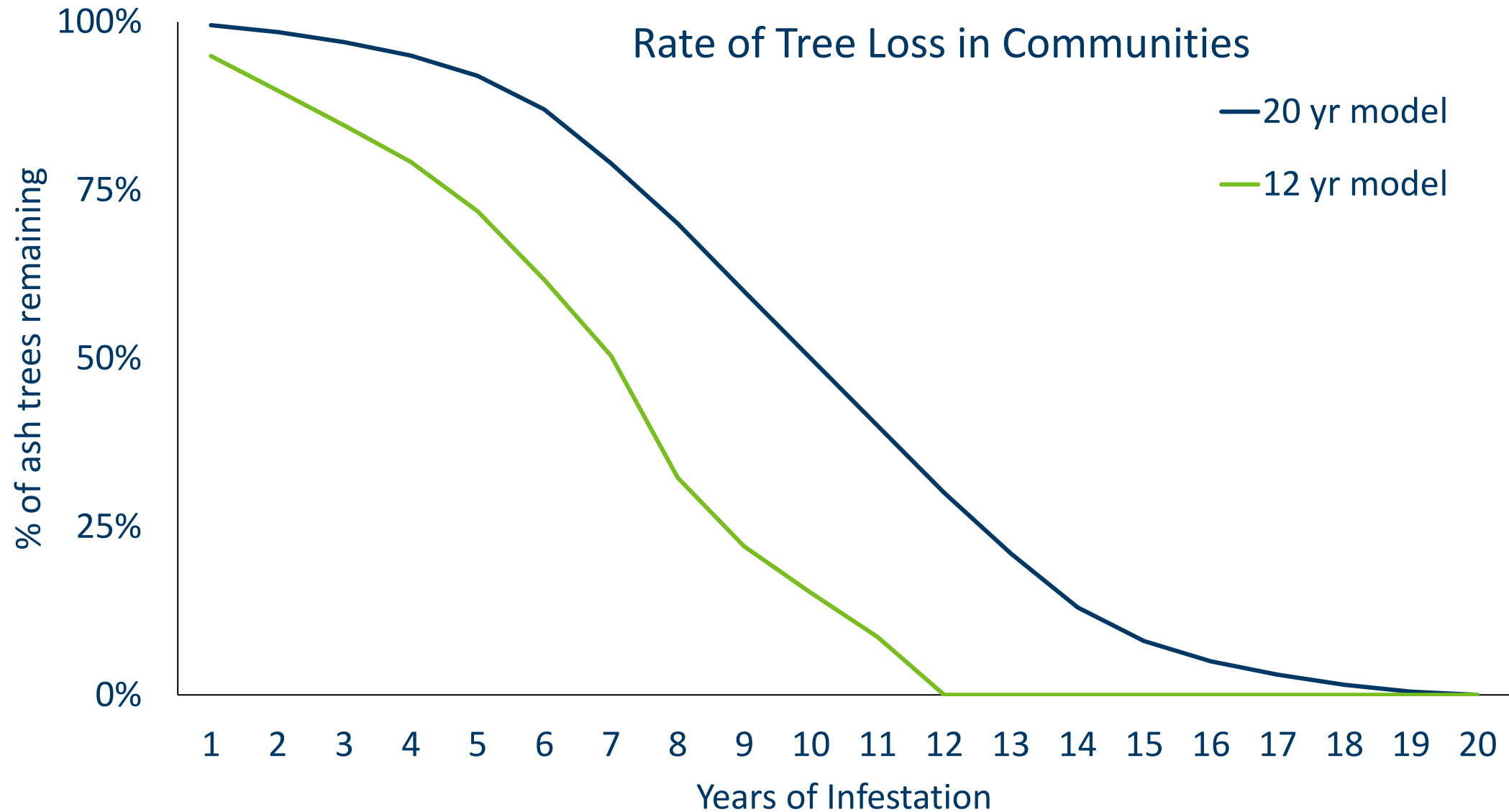


# Rate of Tree Loss

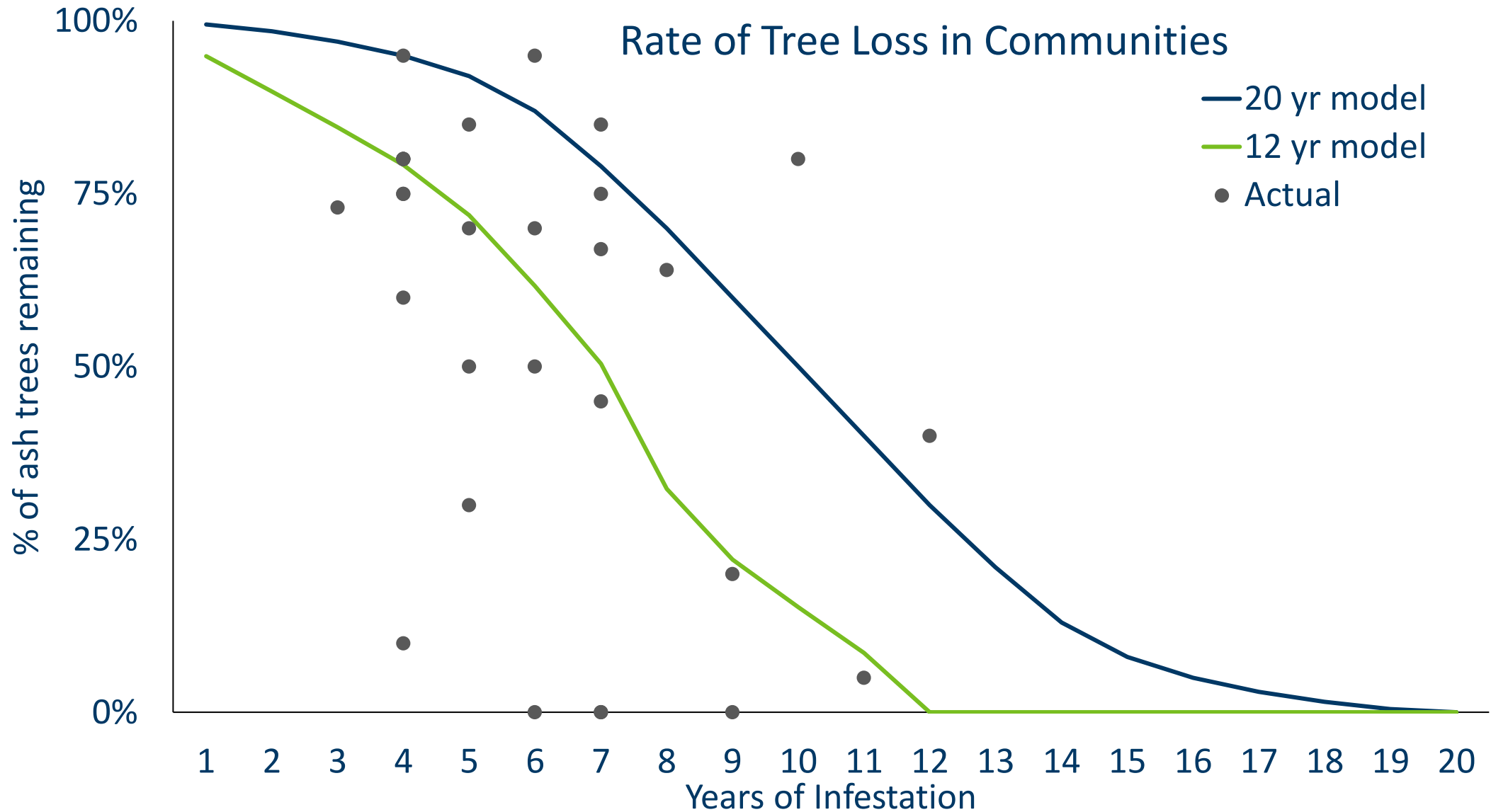




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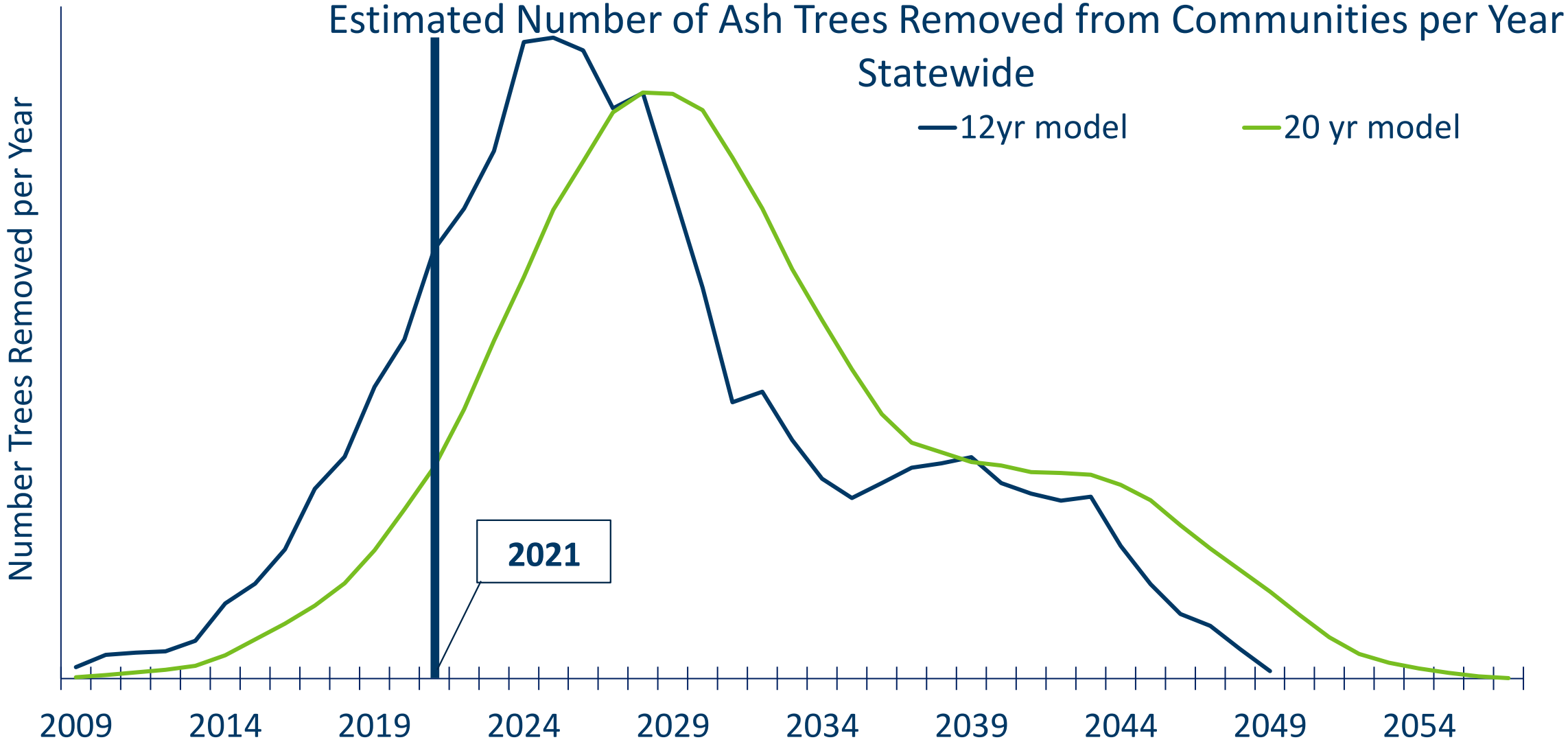


# Rate of Tree Loss





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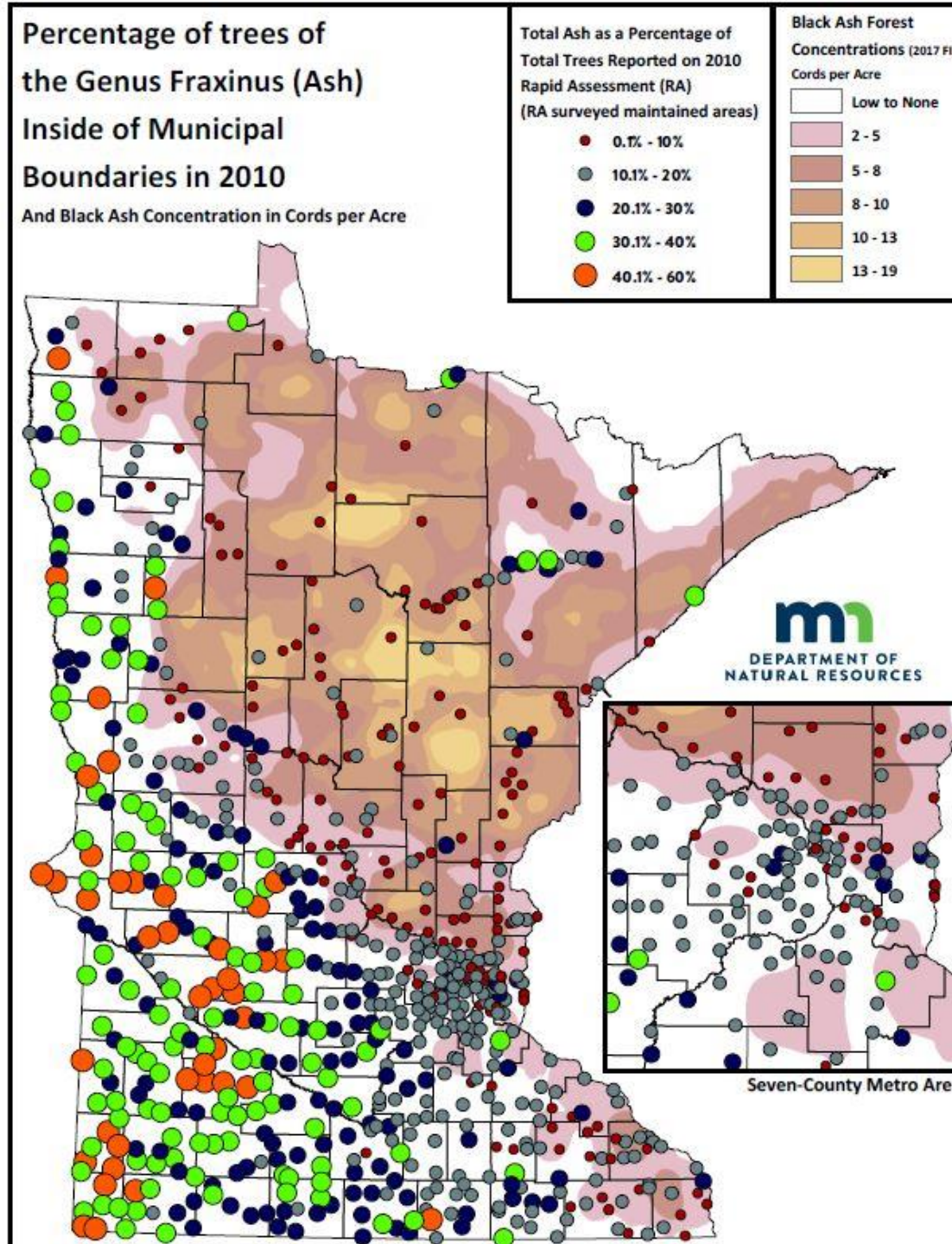
# EAB: Community Forests and Ash Forests

Amy Kay Kerber | Forestry Legislative Affairs and Outreach Supervisor



# Ash in Minnesota

- Nearly 1 billion ash trees
- 1-in-5 community forest trees are ash
  - Up to 60% ash in some communities
- EAB kill rate over 99%
  - Kills saplings down to 1" in diameter



Inventory

Management plans

Financial resources





# Community Forest Resource Needs



Inventory

Management plans

Treat and remove ash

Plant diverse replacement trees

Educate residents

Help homeowners

# Recent Community Support



2018 Federal \$109,000

2019 General Fund \$700,000

2019 LCCMR \$300,000

2020 Bonding \$1 million

2020 LCCMR \$3.5 million, recommended



# Ash Forests

1 million acres of ash forest  
statewide

Ash 2<sup>nd</sup> most common tree

Minnesota has more ash than  
any other state





# Ash Forest Management



## Management Goals

- Keep forests as forests
- Maintain hydrology
- Minimize habitat & biodiversity loss
- Harvest to treat sites
- Reforest to new species

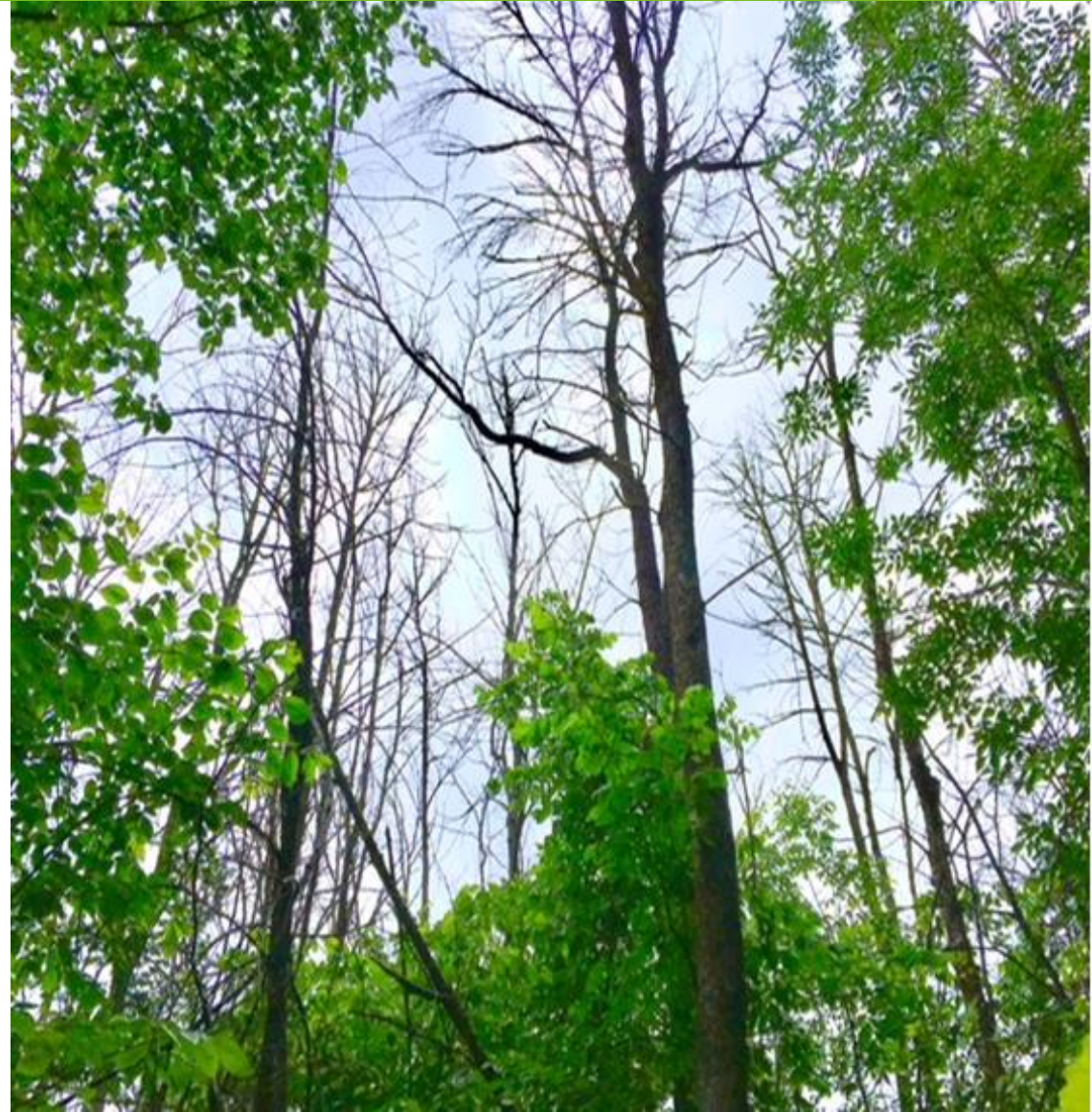


## Existing Markets

- Energy for community ash
- Firewood, pallet, & paper for ash forests

## More ash available than markets can use

- Innovate market solutions needed
- Plan for ash waste



Community assistance is critical

Ash use and waste disposal solutions  
are needed



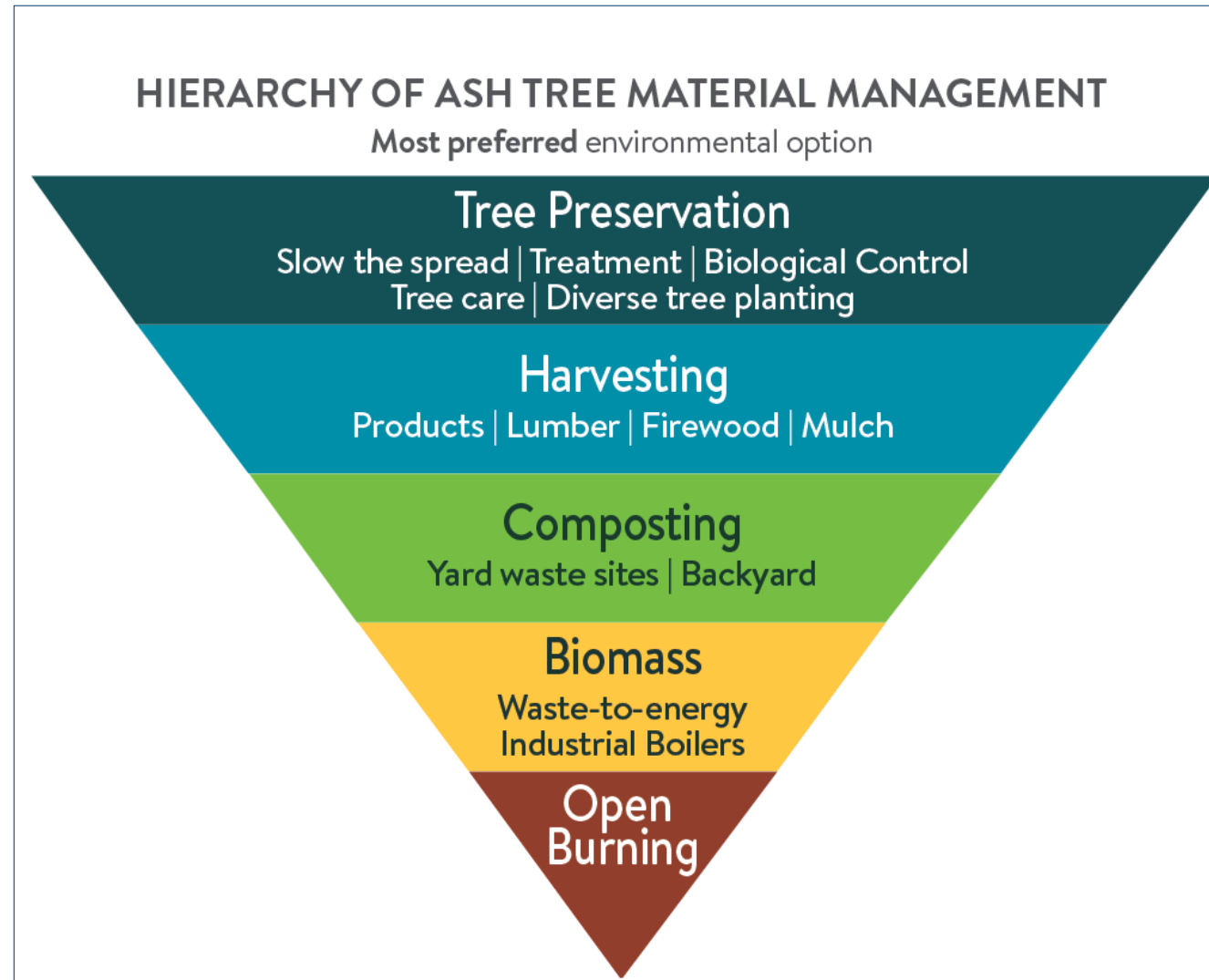




# Emerald Ash Borer Wood Management

David Benke | Director, Resource Management and Assistance Division

# Wood Waste: Where will it all go?





# Options for managing EAB-infested wood

Timber harvesting



Mulching/Composting



Biochar



Wood products



Biomass heating/energy



Recreational fires



# MPCA Ongoing activities

- Coordinate with metro counties to include wood waste management and EAB mitigation in next round of the Solid Waste Metro Policy Plan
- Monitor innovative and developmental uses/management for wood waste including:
  - Community based programs that utilize wood to make products
  - Biochar
- Support existing wood waste management infrastructure at composting facilities, biomass facilities and for use as wood fuel or firewood.
- Coordinate with partner agencies to support efforts to slow the spread and reduce harmful impacts of EAB



# Recommendations

- Strengthen statewide coordinated effort to slow the spread and delay costs
- Provide financial and technical assistance to communities
- Develop markets for making products from ash and end-of-life management
- Develop statewide approach to utilize ash and for disposal of ash waste



# Thank You!

**Emerald Ash Borer Interagency Team**