# Urban Forestry Research & Outreach (UFOR) Nursery & Lab



Department of Forest Resources

University of Minnesota **Driven to Discover®** 

# **Emerald Ash Borer (EAB)**

#### The Insect

The Emerald Ash Borer (*Agrilus planipennis*) is an insect native to northeast Asia that specifically targets *Fraxinus* genus trees as habitat and a food source<sup>1</sup>.

## **Signs & Symptoms**

- Woodpecker damage in the canopy.
- Larvae create S-shaped galleries beneath ash trees' bark.
- Small, D-shaped exit holes from the adult insect on the stem.
- Epicormic sprouts (suckers) at the base of the stem.
- Canopy dieback & thinning of the upper canopy<sup>2</sup>.

#### **Common Misconceptions**

- The insect is not a vector for a fungal pathogen. Physical damage from the insect weakens the tree and causes notable symptoms.
- The trees aren't the only ones at risk.
   Weakening ash trees increases risk of failure in loading events, thus putting people and property at an increased risk of injury, damage, and/or death¹!



Galleries created by the Emerald Ash Borer.



Emerald Ash Borer insect.

http://www.emeraldashborer.info/

### **Implications for Minnesota**

- Emerald Ash Borer poses a significant risk to urban communities with many planted ash trees; some communities possess up to 60% ash canopy<sup>2</sup>.
- If left unchecked, EAB could spread to northern
   Minnesota's black ash communities, disrupting native ecosystems.

#### **Management & Control Considerations**

- Do not move firewood or other materials that could contain EAB (nursery materials, etc.).
- Recognize the adult insect and larvae.
- Become familiar with EAB signs and symptoms and report any suspected infestation to your community's forestry department and/or the Minnesota Department of Natural Resources.
- Remove any EAB-infested trees.
- Stay informed on current trends of EAB spread in Minnesota.

#### **Sources**

- 1) https://www.mda.state.mn.us/emeraldashborer
- 2) http://www.dnr.state.mn.us/invasives/terrestrialanimals/eab/index.html

