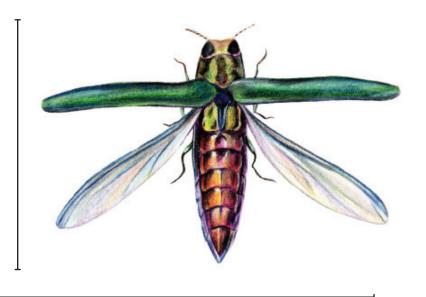
EMERALD ASH BORER

Emerald Ash Borer (EAB)

EAB is an invasive pest from Asia and threatens the ash tree population in the United States. In Michigan alone it has killed over 20 million trees since its discovery in 2002. Through a combination of natural spread and human activity it is now found in Ohio, Maryland, Illinois, Indiana, New Hampsire, Massachusetts, Conneticut, New York, Pennsylvania, New Jersey, Virginia, West Virginia, North Carolina, Georgia, Tennesse, Arizona, Kentucky, Kansas, Colorado, Missouri, Minnesota, Wisconsin, placing millions of additional ash trees at risk. It will continue to spread and is probably a permanent member of our insect population.





Attacks Ash Trees

The Emerald Ash Borer has predominantly targeted green, black, and white ash in the US, although in Asia other types of ash have also been infested. Ash do not have natural defenses to the Emerald Ash Borer, and trees of all sizes and conditions have been killed.

What To Do

Despite the challenges presented by the Emerald Ash Borer you can take steps to protect your tree. Current insecticide technology, Xytect, can protect your tree from EAB and other insects. With one soil treatment your tree will have year long protection. Trees that are already infested with EAB may be treated with ArborMectin using a tree injection method. ArborMectin can be effective for multiple years and should be followed with Xytect soil treatments once the pest population has subsided. Success is ultimately determined by both tree condition and treating the tree before it is challenged by Emerald Ash Borer.

Ash trees located within 20 miles of the nearest EAB infestation should be treated preventively. However, because symptoms from EAB can be difficult to identify in the early stages, and in most cases EAB has been present in an area multiple years before it is officially documented, high value trees greater than 20 miles should be considered for treatment.

Emerald Ash Borer Symptoms

Adult beetles cause relatively little damage, but the larvae feed on the xylem layer and disrupt the movement of water and minerals







"S" shaped feeding galleries



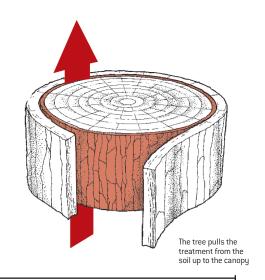
FAB Jarvae

- Native to Asia, this pest was probably introduced to the United States in wood packing material carried in on cargo ships or airplanes.
- The Emerald Ash Borer is most recognizable by the metallic green wings.
- The Emerald Ash Borer is an insect that has killed over 20 million ash trees since its discovery in southeastern Michigan in 2002.

Treatment: Emerald Ash Borer

Emamectin Benzoate

If you have a tree that is infested, or a large tree that is in a high risk area your arborist may recommend a treatment using emamectin benzoate. Emamectin benzoate is applied by injecting it into the root flares of the tree and has been shown in University trials to get excellent control of actively feed EAB larvae. Emamectin benzoate works for 2 growing seasons.



EAB Treatment Considerations

- Treat important trees first: specimen trees, trees shading your home, patio trees, etc. These trees should be healthy and vigorous.
- Research trials have shown systemic insecticide treatments are highly effective at protecting ash trees.
- Preventively treating your tree is the best defense against EAB.
- If the state starts doing eradication cutting and the tree you have been treating falls within the eradication area, the state will remove your tree even if the tree is healthy and free of EAB.



A tree injection of emamectin benzoate can control EAB