

Emerald Ash Borer

by Erin C. Young

Emerald Ash Borer (EAB) is an Asian flat headed borer that is currently devastating ash trees in the North Eastern United States. First reported in 2002 in the Detroit, Michigan and Windsor, Ontario area, it swiftly made its way into Maryland and the surrounding states in 2003 (Fig 1).



Figure 1(USDA Federal Quarantine Map 2017)

Adults usually emerge from previously infested trees and wood sources in May. Female EABs deposit their eggs between layers of outer bark and in cracks and crevices of the trunk and larger tree limbs on Ashes. The larvae bore into the ash tree and feed in the cambium layer on the phloem, creating galleries underneath the bark (Fig 2). The feeding disrupts the tree's ability to transport water and nutrients, resulting in thinning in the upper canopy and bark "blonding" caused by woodpeckers that feed on EAB larvae (Fig 3).



Figure 2(David Capert Michigan State University)



Figure 3(Jim Adams Chilli, NY 2015)

Young trees infected with EAB can die in two years if left untreated. Adult trees can survive from four to as long as seven years. The rate of decline and eventual death varies depending on infection population from tree to tree. The good news is that different treatments options are available. In Figure 4, trees on the left have received no treatment for Emerald Ash Borers. The

trees on the right have been treated every 2 years for the last 6 years and have also been deep root fertilized after each treatment. These street trees were all installed at the same time.



Figure 4 (Steve Castrogiovanni, Mead Tree & Turf Care)

If EAB is caught early it can be controlled and some ash trees can live for years to come. On the converse, if fifty percent of the canopy is thinned, it's probably too late to save the tree and it should be removed before it becomes a safety hazard. Our arborists at Mead Tree & Turf Care can inspect your trees, determine the degree of damage, and make recommendations for treatment or removal.