

Borough Street Trees & the Emerald Ash Borer

In July, Downingtown Borough staff removed several shade trees on the one-hundred block of E Lancaster Avenue. The eight Marshall Seedless Green Ash trees were infested by the invasive Asian insect, the Emerald Ash Borer (abbreviated EAB) and had to be removed.

In the 1990s, the small shiny green beetles arrived in wood packing materials from China to southeastern Michigan. In 2002 the Emerald Ash Borer of northeast Asia was identified near Detroit and it spread quickly from Michigan to other states, including our own. Visible symptoms are thinning crowns, branches dying off, and bark falling to the ground. The EAB has been killing Green and White Ashes throughout the region. The Green and White species are the most common in the wild and have been planted more than any other species as shade trees in landscapes in the East and Midwest. The Blue Ash is native to areas in the Midwest and northern South, including western PA. The Blue species has been showing resistance to the new pest as, like Asian Ashes, it has more tannins in the leaves. We will see how that resistance holds up.

Asian species of Ash have resistance to Emerald Ash Borer as they have existed with it for hundreds of years and there are natural predators and parasites that deal well with it in its native land. North American predators, including woodpeckers and parasites have attacked the pest, but have not been effective to control it. Asian predator insects and parasites have been released in the U.S. to control the borer, but it will take years to see if they can control it. Ash trees can be treated with systemic insecticides by trunk injection or soil drench that would protect the tree for about two years, but it was too late for the trees on E. Lancaster Avenue.

I have hope in that a few wild Ash trees have been showing various degrees of resistance. It is possible with time wild ash trees may eventually adapt to the new insect and new saplings will have sufficient resistance. Biological science may also find solutions by genetic engineering or breeding to overcome the problem.

Downingtown Borough staff and the Shade Tree Commission will be selecting new street trees to replace the ones lost along E. Lancaster Avenue.

Richard Webb, Horticulturist

Downingtown Shade Tree Commission