

Protecting Our Park Ash Trees Against Emerald Ash Borer

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Spring is finally here, and every walk I take I'm searching for my favorite birds ... the joyful songs and brilliant colors of Baltimore orioles! The orioles remind me every spring to check the park ash trees and see how they are doing since they were treated for emerald ash borer (EAB) in 2015. It seems only yesterday that hundreds of wonderful neighbors, friends, and park lovers from Eastmorland, all over Madison, Middleton, Rio, Fitchburg, Milwaukee, and Tel Aviv pitched in to save and treat some of Eastmorland's beautiful towering park ash trees through generous donations and lots of hard work.

In 2014, the orioles had nested in a Sherry Park tree for five years. Each spring they wove a tiny basket nest at the end of a large branch. In a few weeks, they brought their little gold and yellow babies to eat jelly at my bird feeders. Then in August of 2014 the Park Division suddenly appeared and cut their tree down. I was shocked as this was a beautiful healthy shade tree.

Craig Klinke, Eastside Parks Division Supervisor, told me the orioles' tree was too small to treat. It didn't meet the 10-inch diameter criteria to be treated for EAB. I had never heard of emerald ash borer before! I learned an estimated 15,000-20,000 park ash trees grew in Madison. There was no money in our city budget to treat any of them against EAB, an exotic beetle accidentally introduced in whole wood packing shipped to Detroit from China in 2002. So, the Parks Division had set up an Adopt-a-Park-Tree program. I called the Eastmorland Community Association (ECA) and we started a yearlong campaign to inform the community how many trees we could lose and how we could save some of the beautiful shade trees in our neighborhood parks.

Treatment Frequency

Our park ash trees must be treated every three years per current city policy. They were first treated in August and September of 2015. We must have all the re-treatment funds ready by January 2018 to confirm a contract with Tree Health Management to re-treat them in May 2018. We saved the healthiest largest ash trees. They are 50 -100 years old with one over 200 years old: 22 are in Olbrich Park, 6 in OB Sherry Park, 4 in Eastmorland Park, and 1 in Ontario Park. Sadly, we lost close to 200 large ash trees in Eastmorland parks so far, with over 50 yet to be cut down.



Large iconic ash tree in Olbrich Park

Significance of Ash Trees to the Midwest

Ash trees are a native species that have existed in North America for thousands of years. Researchers at the University of Wisconsin–Madison developed several seedless varieties. However, most of Madison’s ash trees are the true natives, as they date back before these varieties were planted.

Ash trees are a key component of all Midwestern forest ecosystems. They support the banks of all our streams, creeks, rivers, and ponds. Many beneficial insects, mammals and birds depend on them. This includes orioles, green herons, chickadees, cardinals, woodpeckers, falcons, eagles, hawks, and wild turkeys. Birds that don’t nest in them use their towering canopies for lookouts for food, prey, mates, and danger. Urban ash trees were overplanted because they were the perfect city tree. They are fast growing and very tolerant of pollution and clay soils. They have huge beautiful canopies that provide deep shade. Wisconsin and Minnesota are considered the last stand for the native ash tree against EAB. Wisconsin has over 830 million ash trees, Minnesota has billions.

The Godzilla of Exotic Insect Pests

People often compare EAB to Dutch elm disease and wonder why we didn’t learn better preventative techniques before EAB happened. Dutch elm disease killed an estimated 77 million American elms over a period of 90 years. EAB is now found in 30 states and 2 Canadian Provinces and has **killed an estimated several hundred million ash trees in less than 20 years**. It is truly the Godzilla of exotic insect pests, despite the fact it is the size of a grain of rice! It is considered an environmental disaster, and the most destructive pest ever seen in North America by scientists, foresters, entomologists and more.

Emerald ash borer is extremely hard to detect, and thus populations reached extraordinary high levels before it was discovered and before effective treatments were developed. The beetle lands in the top of ash tree canopies and eats leaves, not enough to cause much damage. Then it lays eggs and the larvae hatch and immediately burrow under the tree’s bark. Inside the tree the EAB larvae destroy the conductive tissues so the tree cannot get enough nutrients or water. When the larvae mature, adult beetles burrow out of the bark making tiny D shaped holes and fly off to infest more trees. The month of May is the start of the EAB beetle flight season. Without removing the bark or cutting the trees down, EAB is usually not detected until the tree has less than 60% leaf-out, or when branches or trunks start to split, or excessive woodpecker damage occurs. When any of these happen, it is too late to treat the tree. To look for EAB symptoms, always look up as the uppermost branches will be affected by woodpecker/EAB damage first.

Treatment of Urban Ash

Urban ash over 10 inches in diameter are treated by injection under the bark. The treatments are very safe; no traces are left in fall leaves or found in surrounding soil. Thus, the exposure risk is close to zero. Scientists like UW-Madison Professor Chris Williamson have proved in studies that current treatments can protect ash trees 4 to 6 years or more. However, city policy will take longer to change. When the tremendous populations of EAB begin to decline, native parasitic wasps that eat EAB larvae will help control the scourge, with woodpeckers controlling the spread from infested trees also. Many of these wasps have been released in the Midwest in larger numbers already to encourage EAB feeding preference and establish long-term populations.

Entomologists and foresters such as Dr. Williamson and Dr. Deborah McCullough of the University of Michigan believe urban ash trees should be saved. They believe that with a combination of management practices native ash can be saved into the future. The ECA believes along with these professors (whom members of the

save the ash tree campaign have spoken with personally) that continuing to treat as many urban ash and park ash trees as possible is vital to Madison and all cities. The only way we will know if natural controls can work is to save enough native ash into the future to find out.

Reflections

As I walk by all the huge ash tree stumps on the terraces this spring, I am thankful Madison decided to treat 9,883 healthy street ash trees of the 21,000 that existed in the city. Many cities like Green Bay, Kenosha, and Superior have cut down all their ash trees. Milwaukee treated 100% of their ash trees over 8 inches in diameter – 33,000 in number. Michigan and Ohio were the first infested and lost 99% of all urban ash. The beetles only fly ½ mile to a mile every season. The transport of infected firewood and logs caused the widespread infestations of EAB in less than 20 years!

It is easy to take trees for granted until they are gone. It is often only when we remember the gorgeous tree that used to shade our picnics or frame a favorite view or the one we always saw eagles in that we miss them. Shade and beauty directly affect our quality of life. Large ash trees affect our health. Large shade trees remove 740 lbs. of carbon dioxide pollution per tree every single year. A hundred large shade trees remove 37 tons of CO2 pollution every single year (2014 Grow Magazine). Studies in Michigan where all urban ash trees were lost showed marked increases in all respiratory diseases and heart disease over a 10-year period (Minnesota Department of Agriculture article).

So, next time you are in one of our great ECA parks on a nice day, check out the saved park ash trees, marked by upside down blue Ts and metal ID tags. Stand under one and take a very deep breath, look up and out, maybe you'll see an oriole or a great view, or kids playing. And your day will be just a little better, a little more beautiful.

How You Can Help

Please help us build up our Park Ash Tree Re-Treatment Fund in time for our January 2018 deadline! Any amount of donation from you makes a difference! 600 people donating \$10 each would reach our goal!

Mail donations to:

*ECA Attn: Save the Park Ash Trees Fund
P.O. Box 14584
Madison WI 53708*

For more information on EAB and what experts are saying, please check our ECA website at eastmorland.org or visit emeraldashborer.info, which provides the most reliable, up-to-date information on EAB.



A large treated ash in OB Sherry Park

Online donations:

To make an online donation using PayPal, visit eastmorland.org/savethetrees