

Bowling Green, OH – Emerald Ash Borer Management Plan

Early Planning Lessens Emerald Ash Borer Impact on City

The Challenge

Many urban areas extensively planted ash trees to provide shade because of their ability to thrive in the city environment. The introduction of the destructive emerald ash borer (EAB) has cities concerned about removing ash trees at a huge expense. The city of Bowling Green, OH took a proactive approach instead of waiting for EAB to be detected in city limits.

The Solution

The City Arborist conducted a GPS survey to locate the ash resource in 2004. Data from the survey served as the foundation for a proactive management plan. The goal of the plan is to remove all ash in city owned green spaces, rights-of-ways, and parks, and replace with a variety of other tree types over the next 8 - 10 years. The Urban Forestry Division began removing ash trees in 2005 with the removal of 114 trees. The City Arborist analyzed where detection of EAB was most likely to occur and prioritized ash removal based on tree condition, planting problems, existing damage, and utility line clearance. Ash trees that are removed are replaced using the 10-20-30 Rule of Diversity to limit future impacts of destructive pests. Trees selected for replanting do not exceed 10 percent for any species, 20 percent in a genus, and 30 percent in a family.

The City Arborist knew that program success depended on keeping residents involved in the process, and provided assistance for ash trees located on private property. Letters were sent out announcing the ash reduction plan, and meetings conducted with concerned residents. Residents are recommended to remove ash trees from private property, but do not have to remove them unless a tree becomes infested.

“The goal in planting these replacements is to plant multiple species of trees to diversify the City’s urban forest. The City hopes this diversity will decrease the number of trees removed if and when another invasive pest or disease enters the City.” Bowling Green Arborist David Bienemann



Public Works Supervisor Kent Reichert, and Public Works Operators Rick Beaverson, and Anthony Redding plant a frontier elm replacing a green ash tree removed for EAB management.

The City Arborist also offers consultation on ash trees on private property, and provides assistance to citizens to replace lost trees through its Adopt-A-Tree Program.

Resulting Benefits

- City budget stabilized by spreading tree removal expense over several years.
- Replanting with a diversity of tree species will reduce the risk of large scale losses in the future.

Sharing Success

- Twenty-four cities in Ohio have developed proactive EAB management plans.
- Ohio State University has developed two research projects in Bowling Green. One study will test the effectiveness of pesticides used to treat ash trees against EAB. The second study is a field plot containing several species of ash with hypothesized and known EAB resistance. These trees will be used to identify possible resistance genes, proteins, and secondary metabolites that can be used as bio-markers for resistance.



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