

VILLAGE OF NORTHFIELD
EMERALD ASH BORER
ACTION PLAN
2009



Adopted by the
Village President and Board of Trustees
October 20, 2009

Introduction

The Emerald Ash Borer (EAB) is native to Asia and is believed to have made its way to North America at least 15 years ago traveling on ship pallets or crates. In 2002, the EAB was identified in southeast Michigan. At last estimate, the EAB has killed 25 million ash trees in Michigan and Ontario. The insect has spread by flying, the transportation of infested firewood or lumber, pallets/crates and through infested nursery stock. The insect has now been found in thirteen states and Ontario.

EAB was first discovered in Kane County, Illinois in June of 2006, followed closely by several North Shore communities. As of March 2009, it has been found at 62 different sites in 21 counties in Illinois. Northfield became enclosed by quarantine in 2006. In June 2009, Village staff identified the EAB on a dying ash tree that has subsequently been removed.

Adult EAB are active from Mid-May to July, flying, eating and laying eggs. The larvae feed vigorously and tunnel in the cambium (layer of cells that lies between the inner bark and the wood of a tree, that repeatedly subdivides to form new wood and bark cells) which kills the tree within three (3) years. The EAB attacks White, Green, European and Blue Ash. Infestation of the EAB is hard to detect until the branches start to die. The leaves on the upper third of the tree thin out and the branches die back while the tree produces shoots at the base. Tiny D-shaped holes, where the adult has emerged are visible and S-shaped tunnels are present under the bark. Many of these symptoms are difficult to detect and associated with problems other than EAB.

It is important to note that unlike Dutch Elm Disease, the EAB will likely destroy many ash in a short period of time unless a cure is found. The following quote sums up the exponential growth rate of the disease as noted by professionals and from the Michigan experience; 'If eight (8) trees are removed this year because of EAB, 80 will need to be removed next year and 800 trees removed the following year.'

State/Federal Response

Federal quarantines were imposed by USDA Animal and Plant Health Inspection Service (APHIS) and the Canadian Food Inspection Agency. Federal agencies have been researching control methods including biological controls, developing resistant species and testing insecticides.

The Illinois Department of Agriculture is the lead agency for control of invasive pests and USDA-APHIS assists with regulatory and control action at the request of the state. The Illinois Department of Ag declared EAB a Public Nuisance in Illinois in 2006 and enacted a quarantine restricting the movement of ash trees and firewood. Originally, the Department of Ag removed a small number of infested trees. Presently funding has not been made available for communities to remove or replace trees, but Senate Bill 1617 (2007), creates the Emerald Ash Borer Revolving Loan Program, which provides low-cost loans to local governments for replanting trees on public lands within the boundaries of the state's emerald ash borer quarantine area.

Village of Northfield Ash Trees

The Village of Northfield, with help from a grant through the Illinois Department of Agriculture (IDOA), inventoried all Village parkway trees in 2007. (12.8 miles of roadway are public and were inventoried. 31.18 miles are private, county or state and therefore were not inventoried.) The inventory determined there are 421 ash on Village right-of-way. This is 16% of the inventoried Village parkway tree population. 172 (41%) of the ash are in average to above average condition with the majority in average condition. The Village parkway ash population is relatively young with the average DBH of 12". The majority of these trees have minor deadwood, lower tree splits and multiple leaders. In other words, none of the trees are specimens.

Village Response

Village staff started attending EAB meetings in the fall of 2006 after EAB was found in Wilmette. The original Illinois Department of Ag recommended response to the infestation included removal of all ash trees within two (2) square miles. Wilmette started to remove all ash from the parkway.

The IDOA also recommended all communities devise an Action Plan for EAB. The first draft of the Northfield Action Plan was written in 2007 and dealt only with public trees. The Village of Northfield Emerald Ash Borer Action Plan adopted in the fall of 2009 includes the following for private and public trees:

1. PRIVATE TREES

The Village does not have an inventory of private trees in Northfield. Due to the ease of transplanting, low cost, tolerance of salt, drought and sterile soils, the ash species was overplanted in many neighborhoods.

In order to best manage EAB throughout the community, privately owned infested trees will have to be removed in a timely manner. In order to accomplish this, the *Diseased Trees Section (Article IV)* of Chapter 10, Landscaping and Tree Preservation, of the Code, was changed to include EAB. This allows EAB to be treated in a similar fashion to Dutch Elm Disease (DED). This requires property owners to remove infested ash trees from their property within a fifteen (15) day period unless the tree is professionally being treated with insecticide approved for EAB control. Staff will continue to send out Nuisance Letters to homeowners with dead/declining ash. If the homeowner does not act in a reasonable time frame, the Village may elect to remove the tree and charge the homeowner or place a lien on the property.

As part of The Village of Northfield Emerald Ash Borer Action Plan, staff will assist residents with identification and control of EAB on private property by doing the following:

- Keep the Village website and newsletters up-to-date.

- Review and identify areas with ash concentration and evaluate the health of the ash and examine for EAB.
- Frequently check the Dorina Drive neighborhood where the first EAB was sighted.
- Check ash for EAB in high traffic areas.
- Look for grant monies to remove and replace trees.
- Review all tree removal permits, and Applications for Tree Protection for contractors that have the Illinois Department of Agriculture EAB Compliance Agreement in place. Review landscape plans to assure no ash are proposed.

2. PUBLIC TREES

The following management plan is the most effective and cost sensitive; to remove ash as they become infested and replace with a 1 ½" – 2" tree. Again this assumes all ash will become infected in a three year time period based on industry professionals' projections. Eventual removal of all ash and replacement costs approximately \$500 per tree x 421 ash for a total of \$210,500.

Contract growing of trees can reduce the cost of replacements. The Suburban Tree Consortium was created to allow municipalities to enter into a contract growing arrangement whereby nurseries would grow trees according to predetermined specifications. Those trees are made available for the fall and spring planting season up to five (5) years in advance. Staff can order high quality trees at a discount price. Participation in the program is voluntary and municipalities are not required to purchase a specified number of trees each year. In order to participate in this program, the Village must first become a member which includes a \$500 fee.

Staff also recommends treating a dozen or so public ash of higher quality with the insecticide Tree-age. (See attached Ash Candidates for Treatment) Tree-age lasts for as long as two years (maybe three) and is 99 percent effective. Only certified arborists can handle Tree-age, which is injected into the tree. Approximate cost for Tree-age injection is \$12.50 per inch or \$200 for a two-year treatment for an ash with a 16-inch diameter. The City of Evanston, in conjunction with U.S. Forestry officials, recently released parasitic wasps in a cluster of ash. The wasps kill the EAB and their release in Michigan has shown good results. Staff will follow the Evanston wasp vs. ash results.