



VILLAGE OF GLEN ELLYN

EMERALD ASH BORER MANAGEMENT PLAN

Prepared by Public Works Department

May 2010

Updated August 1, 2013

I. Background

Emerald Ash Borer (EAB), *Agrilus planipennis Fairmaire*, is an invasive beetle native to Asia that was first discovered in southeastern Michigan near Detroit in the summer of 2002. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark of ash trees, disrupting the tree's ability to transport water and nutrients. Emerald ash borer probably arrived in the United States on solid wood packing material carried in cargo ships or airplanes originating in its native Asia. Emerald ash borer has also been reported as established in Ohio (2003), Indiana (2004), Maryland (2006), Illinois (2006), Pennsylvania (2007), West Virginia (2007), Wisconsin (2008), Missouri (2008), Virginia (2008), Minnesota (2009), and New York (2009). Since its discovery, EAB has:

- Killed tens of thousands of ash trees in southeastern Michigan alone, with tens of millions more lost in the other states mentioned above.
- Caused regulatory agencies and the USDA to enforce quarantines and fines to prevent potentially infested ash trees, logs or hardwood firewood from moving out of areas where EAB has been reported.
- Cost municipalities, property owners, nursery operators and forest products industries tens of millions of dollars.

On March 20, 2009 the Illinois Department of Agriculture (IDOA) confirmed the presence of EAB in Glen Ellyn.

II. Impacts on Glen Ellyn

The Village of Glen Ellyn has approximately 15,500 parkway trees of which approximately 1,900 are ash trees (12% of our total parkway tree population). The value of these ash trees has been estimated at \$7.1 million dollars.

We do not know the inventory of private ash trees but can only guess it will make a significant negative impact on the community if all ash trees become infested and need to be removed. While this impact on the environment is obvious we cannot assess the overall impact tree loss will have on areas like storm water run off and the increase in local temperature. The loss of shade, wildlife habitat and overall tree benefits to the Village will be devastating.

The Village of Glen Ellyn takes great pride in its Community Forest as shown by the 26 years of Tree City USA awards and 12 Growth Awards. It is important to understand that this EAB Management Plan is a recommendation that should be flexible, taking new circumstances and the most current research into consideration. Research on EAB and how to manage this insect is in a continual state of change. By being steadfast yet open minded about managing this insect we

hope that this management plan helps to create a more healthy community forest that provides greater benefits to all those that live and visit here.

III. Management Recommendations – Public Trees

Our management plan will consist of a number of procedures that will focus on maintaining a healthy urban forest. Trees infested will be removed and healthy trees will be treated. Currently over six hundred trees are being treated and the goal is to save as many as possible.

The first step in combating EAB was to update our inventory of all parkway ash trees. Each ash tree was identified and location recorded. Each public ash tree has been assessed each year to fit into one of four categories: “Infested Tree - Removal Necessary”, “Village Treatment Tree”, or “No Action at This Time”.

- A. EAB Removal Program** – The Illinois Department of Agriculture (IDOA) has established guidelines for recognizing EAB infested ash trees. There are eight identifiable signs and symptoms that a tree may be infested with EAB (dieback, sprouting, bark splits, D-shaped holes, S-shaped larvae galleries, presence of larvae, woodpecker damage, and presence of adult beetles). If two or more of these signs and symptoms are present or the tree is at least 50% dead, we will consider the tree infested and it will be removed. In addition if the tree is determined to be in decline, and/or the tree is exhibiting splitting or decay/ hollowness the tree will also be removed. No treatment will be allowed to be done on these trees. The tree will be removed by the Village as time and budget allows
- B. “Village Treatment” Trees** – Since EAB was first discovered the research on chemical treatments are more promising than in the past, but there is still no guarantee of success. It is not fiscally possible (nor would we try) to save every ash tree. It is our hope that we will be able to save over 600 trees with these treatments. The Village will continue to follow the research to stay on top of the latest advancements.
- C. “No Action Necessary” Trees** – These trees do not show two or more signs of infestation and do not fall within the category of “Village Treatment” Trees. A resident may choose to fund a treatment application on a “No Action Necessary” tree. They will be required to obtain a no cost permit for the application with the understanding that once the tree shows two or more Signs and Symptoms it will be marked for removal.

IV. Management Recommendations – Private Trees

Focusing only on the removal of public infested ash trees will not help to prevent the further spread of EAB. The Village of Glen Ellyn’s current ordinance (8-4-10) requires the removal of Public Nuisances such as diseased elms and oaks on private property. EAB is a Public Nuisance and will be incorporated into this ordinance.

If a resident thinks a private tree may be infested with EAB, they should contact a certified arborist to inspect the tree in question. If the tree is confirmed to exhibit signs of EAB, it should be reported to Public Works at 630-469-6756.

Residents who are concerned that trees on others private property that may pose health or safety concerns for their own property may request an inspection by Village staff.

Private trees that exhibit signs of EAB infestation (as defined in Section III-A of this Plan) will be required to be removed within 180 days of notification. However, if the tree is considered a hazard, removal will be required within 30 days of notification. If the tree is not removed at that time, the Village will proceed to remove the tree in accordance with Section 8-4-10(d) of the Village Code.

If a private property owner wants to treat their trees we can provide a wide variety of information to help them make that decision. It is important to note that if/when the private trees becomes infested (as defined in Section III-A of this Plan) then the tree must be removed. Due to the difficult economic times, efforts will be made to seek low or no cost loans through area banks for those that can prove financial hardship.

V. Material Handling

In order to minimize the spread of EAB through infested material the IDOA began asking that any company or municipality handling ash debris sign an official IDOA Compliance Agreement. This agreement requires that the company properly dispose of infested wood in compliance with the state's Department of Agriculture requirements. Glen Ellyn signed this agreement in 2007 and it will stay in effect. All contractors performing landscape or tree care work for the Village are required to sign a compliance agreement.

V. Reforestation

It is critical that we continue to pursue mixed species tree planting on parkways and provide proper species planting information to residents so as to mitigate the impact of extensive tree loss. Not every tree can be replaced due to several factors including under and above ground utilities and location of other private and parkway trees. The Village will continue to pursue tree planting in every possible available space as budget allows.

VI. Public Education

The Village of Glen Ellyn will continue with our Public Education Campaign. It will be important to provide the most current information to help residents make educated decisions

regarding their private property. We will continue to use the following methods of communication:

1. Keep current information on the VGE website.
2. Provide information through the Glen Ellyn radio station.
3. Show informational DVD's on GETV.
4. Village Newsletter Articles
5. Information letters to residents specifically affected.
6. Provide brochures at Village Buildings/Library
7. Provide speeches to groups as requested.
8. Video on EAB was created in 2012 by Public Works.

VI. Program Future

This management plan should be a flexible document that is amendable due to new research and technology that will best help combat this insect.

EAB SIGNS AND SYMPTOMS

SYMPTOMS

Crown Dieback: Dieback of the upper and outer crown begins to occur after multiple years of EAB larval feeding. Trees begin to show dead branches throughout the canopy, beginning at the top. Larval feeding disrupts nutrient and water flow to the upper canopy, thus resulting in leaf loss. Foliage in the top of the tree may be thin and discolored.



Epicormic Sprouting: Stressed trees will attempt to grow new branches and leaves where they still can. Trees may sucker excessively both at the base of the tree and on the trunk, often just below where the larvae are feeding.



Bark Splits: Vertical splits in the bark are caused due to callus tissue that develops around larval galleries. Larval galleries can often be seen beneath bark splits.



SIGNS

D- Shaped emergence holes: As adults emerge from under the bark they create an emergence hole – 1/8 inch in diameter and D-shaped.



S-Shaped larval galleries: As larvae feed under the bark they wind back and forth, thus creating galleries that are packed with frass and sawdust and follow a serpentine pattern.



Larvae: Larvae are cream-colored, slightly flattened, and have pincher-like appendages at the end of their abdomen. Mature larvae reach 1 ½ inches in length and all larvae are found feeding beneath the bark.



Adults: Adult beetles are metallic green in color and are 3/8 -1/2 inch in length and 1/16 inch in width. Adult's area flat on the back and rounded on their underside



Woodpecker Damage – Damage occurs from woodpeckers drilling through the bark of trees to forage for larvae located under the bark. White patches of bark are observed on trunks and branches and feeding is typically evident higher in the tree where the emerald ash borer prefers to initially infest.



Decline: Refers to progressive loss of vigor and health, not to any specific disease or disorder. Trees decline for many reasons, sometimes as the result of a single disease or damaging environmental factor but often as the result of several environmental and biotic factors acting in concert or in sequence. Decline results from the action of stressing factors over periods of years.

Parkway Trees Planted, Parkway Ash Trees Removed and Treated for EAB 2008-2013
 Revised 8/1/13

Parkway Ash Trees Treated for EAB	
Year	Trees Treated
2008	121
2009	127
2010	441
2011	433
2012	685
2013	636

Parkway Reforestation Program	
Year	Trees Planted
2008	296
2009	75
2010	112
2011	274
2012	207
2013	320
Total	1284

Parkway EAB Removals	
Year	Trees Removed
2008	39
2009	6
2010	299
2011	137
2012	335
2013	67
Total	883

Parkway Ash Removals (Not EAB)	
Year	Trees Removed
2008	5
2009	28
2010	21
2011	19
2012	19
2013	2
Total	94

949* - Current Inventory of Parkway Ash Trees 977 - Parkway Ash Trees Removed 2008-2013 1772 - Parkway Ash Inventory 12/31/07

*Note: Due to re-inventory and property annexation, trees that were not accounted for in previous years have been added to parkway tree inventory.