FEATURE ARTICLE II Thomas Green Ph.D., *Western Illinois University*



A Method To Prioritize Your Ash Trees And Protect Them From The Emerald Ash Borer

Now that the entire Chicago Region is within the Emerald Ash Borer (EAB) quarantine boundaries most MAGCS members should be discussing which of their ash trees, if any, need preserving.

The EAB was discovered in 2002 in Michigan and Ontario. It has destroyed over 25 million ash trees in MI, OH, and IN and has been found as far east as MD. In 2006, it was found in Kane and Cook Counties in IL. The EAB guarantine now covers all of northeast IL. The EAB guarantine helps to stop the spread beyond the boundaries but not necessarily within the boundaries. The original EAB discovery in Kane County appears to be related to a neighbor who owned property in Michigan and brought back firewood two years prior to its discovery. Even though MI had a guarantine and restriction on the movement of firewood, it still did not stop the movement of firewood. A guestion for MAGCS members... Do any of your neighbors who live next to your golf course own property in where EAB has become established? There is no realistic way of answering this guestion. Without an active and aggressive surveillance program, it often takes two years of borer infestation before it is discovered.

Do you have an EAB Readiness Plan? Does your community have an EAB Readiness Plan? If the answer is no to both, then perhaps you should consider developing one. An EAB Readiness Plan should provide a way to PREVENT and DETECT EAB, and PROTECT valuable ash trees. If EAB has been found within 12 miles of your golf course, you should be protecting high value ash trees.

PREVENTION:

The major means of prevention of spreading EAB is to control the movement of infested firewood. It is unlikely that members or the golf club will be bringing infested wood within the property limits. The only means of control of infested wood movement in the community surrounding your golf club is through ordinances developed by the municipality in which your golf club resides. This is the most difficult part of a Readiness Program. Check to see if your community has an EAB Readiness Plan. If none exists, help your community to develop one. There are several sources for assistance in EAB Readiness Plan development¹.

DETECTION:

What are you doing to determine if any of your ash trees already are infested? You will need to inventory your trees to know where all the ash trees are located. Ash Yellows is a lethal disease that is killing ash trees in the Midwest. Some of its symptoms, watersprouts (suckers) on the base of the trunk, resemble trees infested with EAB. Ash Decline, where trees dieback from the top also resembles trees infested with EAB. Every ash tree that is removed from your golf course should be inspected for the presence of EAB. There should be a systematic inspection of every ash tree, e.g. once per month, to look for symptoms of EAB infestation.

PROTECTION:

There are chemicals, e.g. Imidacloprid (²see Sept 2007 ON COURSE), which can be applied to the root system or injected into the trunk that can prevent borer infestation. The chemical must be inside the tree before the beetles attack. So, do you have to treat every ash tree? If you wish to save every ash tree, you will need to treat every ash tree.

PRIORITY ASSESSMENT:

It is doubtful that you want to treat every ash tree. I have conducted tree inventories for over 20 Chicago area golf courses and the ash population ranges from 20 to about 30% of the total tree population. The average 18-hole golf course has 2000 to 2400 trees. This means the average golf course has from 400 to 700 ash trees.

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These inventories provide a determination of tree priority. If a tree is involved in the play of the game, i.e. lines fairways and tees, backdrop for greens, THE dogleg tree, etc., it is considered a KEY tree. If it is a beautiful example of its species, it is a SPECIMEN tree. If it adds to the beauty of the clubhouse or entrance, it is a FUNCTIONAL tree. Other priority designation may be given if the tree is a MEMORIAL tree (planted in memory of a loved one) or a STATE RECORD or HERITAGE (existed before European settlement). The more combinations these trees have, e.g. KEY + FUNCTIONAL + SPECIMEN, the higher its priority. There may be many ash trees on your golf course that meet the criteria of a KEY tree. Can you afford to lose them? If the answer is no, then these trees should be treated.

What about the low priority ash trees; those that are not key, specimen, functional, heritage, nor memorial? Since long term preservation of all ash trees is not feasible, they should be considered expendable. There should be consideration for the systematic removal of non priority ash trees that have health problems.

TREE CONDITION:

The current condition of the tree should be considered. A tree that is hazardous because of trunk and/or branch defects should be removed for safety reasons. If the tree is declining, i.e. has top dieback, its health probably cannot be restored, and the tree should be removed. If the tree has chlorotic leaves and/or is producing watersprouts (suckers) at the base of the trunk, it should be removed.

In Macomb, IL the city is placing its ash trees in a Condition Class system that will help determine which of the unhealthy trees to remove first by classifying ash trees into two groups.

Condition Class 5.0: These are trees that are dead or have a contagious disease or serious insect pest. They should be removed immediately. They should also be thoroughly inspected to see if they are already infested with EAB.

Condition Class 4.0: These are trees not expected to live another 20 years, which because of EAB includes all ash trees.

CC: 4.1 - 4.4: Young Ash tree, relatively healthy, possibly in shade location and removal recommendations are not urgent [4.1 is small diameter tree, 4.4 is large diameter tree]

CC: 4.5 – 4.9: Mature Ash tree, declining, not in key location and systematic removal is recommended as budgets permit

The trees that are the least healthy trees are given 4.9 designation, somewhat better trees are given 4.8, better trees are given 4.7, etc. Now, place into next year's budget the cost for the removal of all trees designated as 4.9. Trees designated as 4.8 can be removed in two years and so on. Your budget for next year should also include the cost for the treatment of all ash trees you have designated having Priority (Key, Specimen, Functional, Memorial, Heritage, Other), especially the Key trees.

Tree Removal:

Tree removal is always controversial, especially if the trees are alive and apparently healthy. Make sure the membership is aware of the phasing out of all non Priority ash trees. All CC 5.0 trees need immediate removal. The removal of CC 4.9 trees should be done in the winter after the ground is frozen making tree removal easier. **-OC**

'Where to get help

http://www.illinoiseab.com/

1. Paul M. Deizman Illinois Department of Agriculture Bureau of Environmental Programs PDQ/Emerald Ash Borer Program Manager 2280-b Bethany Road Dekalb, IL 60115 Office: 815.787.5476 Desk: 815.787.5486 Cell: 815.786.4117 FAX: 815.787.5488

2. EAB Community Readiness Plan Workbook www.dnr.state.il.us/conservation/forestry/urban/COMMUNITY_ READINESS_PLAN_03_07_TCU_final.pdf Reinee Hildebrandt, Ph.D. Urban Conservation Program Admin. IL DNR One Natural Resources Way Springfield, IL 62702-1271 Phone: 217.785.8771 FAX: 217.785.2438 Email: reinee.hildebrandt@illinois.gov

Listing of Tree City USA communities that are providing assistance to the IL Dept of Ag for EAB identification and monitoring: http://www.dnr.state.il.us/conservation/forestry/urban/index.htm

²Information for treatment

EAB Insecticidal Management www.ipm.uiuc.edu/pubs/eab_insecticidal_management.pdf

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