

City of Fond du Lac Emerald Ash Borer Frequently Asked Questions As of August 16, 2013

I. EAB 101

1. What is the Emerald Ash Borer? The EAB is a tiny beetle that is originally from Asia. It was presumably brought to the United States—originally to the Detroit area—on wooden shipping crates approximately 20 years ago. It has slowly but incessantly spread to more than 20 states and Canadian provinces. It has no natural enemies here, so it continues to proliferate.

2. How does it kill a tree? The larvae of the beetle feed on the cambium of the tree, just under the bark, leaving a serpentine-shaped series of grooves in the wood. This prevents nutrients from traveling from the roots to the crown of the tree, effectively choking it.

3. Is EAB 100% fatal to all species of ash trees? Yes. There is one tree commonly called an ash tree (“mountain” ash) that is not a true ash, and has not been shown to be affected by EAB. There are no known cases of any immunity developed by the ash to EAB. No other tree species have been targeted by EAB as of yet.

4. Where in Wisconsin has it been located? It was first discovered in Newburg (Washington County) in 2008. Since then, it has heavily affected the southeast and southwest portions of the State, and has been found as far north as Superior. A total of 20 counties are under quarantine because of EAB.

5. How does it spread? Without human assistance, the beetle would only travel a few miles per year. However, due to the movement of infested firewood, nursery stock and pulp wood, it covers much greater distances and can be found many miles from the next known infestation.

6. How does an infestation play out in a community? It is estimated that the beetle is in an area for up to five years before its ash show signs of an infestation, as ash are a very resilient tree. In most communities, a handful of trees may die the first year an infestation is found. Each subsequent year, more and more ash trees are found to be infested. In nearby West Bend—where EAB was found in 2010—they have removed 8% of their ash trees over the past three seasons, with another 13% planned for this year alone. This may indicate that communities may have more time to react to an infestation than originally thought. All told, the beetle is likely in an area 8-10 years before the full effects are felt.

7. Are the beetles a direct health or safety threat to humans? No, although crews report that adult beetles do swarm around them as they cut down infested ash trees during the months of June and July.

8. What are some signs that my tree is being affected by EAB? The pest is attracted to the smaller branches in the upper canopy of trees, so die-back of those branches is the first sign of a problem. Increased woodpecker activity, small D-shaped exit holes from where the adults exit the tree, and epicormic shoots (where new seedlings of the tree grow up around the base of the trunk, due to the roots' nutrients not being able to move higher into the tree) may be other indications. When these signs are seen, stripping bark from a branch may reveal the S-shaped tunnels of the larvae.

9. Are ash trees prevalent in our area? Yes, ash trees are very popular throughout Wisconsin. They grow quickly and adapt well to urban environments, so they were a very popular replacement for elm trees infected by Dutch Elm Disease. About 30% of Fond du Lac's urban forest is ash.

10. What is a quarantine, and where is it in effect? A quarantine is used to slow the spread of the EAB by avoiding its transfer by humans. It prohibits the spread of ash material and hardwood firewood from quarantined areas to non-quarantined areas. We encourage residents to not move wood even throughout Fond du Lac County, as this may hasten the spread of the pest to a new community within the County. Contractors who deal with wood may receive certification to handle and move wood under strict guidelines.

11. What are the purple traps that I see hung in trees? These triangular traps attract adult EAB, and have provided early detection of the beetle in several Wisconsin communities. The State usually hangs them along major highway corridors in non-quarantined counties, but the City has hung a few throughout Fond du Lac, as well.

II. Current City Plan (as of 8/9/13)

(More details in subsequent FAQ sections.)

1. How prepared is the City of Fond du Lac for an EAB infestation? We have had a plan in place for several years, taking small steps to minimize the impact of an eventual infestation. These steps include some preemptive removal of ash trees (removing ash trees before they die and before an infestation is found) and purchasing equipment that will allow our crews to treat some ash trees. Unfortunately, recent nearby infestations (Mauthe Lake in the southeast corner of the County, and Black Wolf just 15 miles to our north, both discovered in August, 2013) mean that an infestation is likely several years closer than we previously thought.

2. What is the scope of the threat facing Fond du Lac? A 2009 inventory showed that Fond du Lac had around 5,500 terrace ash trees. (Terraces are the City-owned strips of green space alongside a street, usually between the curb and the sidewalk.) An estimated 1,500 ash trees are located in City parks, meaning that the City could see 7,000 public ash trees die as a result of an infestation. If all of these trees were to die in a relatively short period of time (say, three years), they would have to be removed by contract at an estimated cost of over \$2.8 million.

3. But can't the trees just be allowed to stand, even after they're dead? Removing trees quickly after an infestation is found may delay the spread of the beetle in that neighborhood. Unlike elms and oaks, ash trees turn brittle soon after they die. Falling limbs would create a public safety crisis within a matter of a few years. Both of these are strong reasons to remove trees once they die or are found to be infested.

4. How is the City planning to address this problem? As there are no known ways to prevent an infestation with the budget that Fond du Lac has available, we plan to avoid a public safety crisis by removing as many ash trees as possible before an infestation is found here ("*preemptive* removals"). By spreading out removals, maximizing the work we complete with in-house crews, and treating as many trees as possible, we hope that any trees that die as a result of EAB can be removed without breaking the City budget.

5. Specifically, what actions will be taken in the next year or two to prepare for EAB? We plan to hire one or more contractors to remove up to 300 large ash trees that are in poor condition. We also plan to have our in-house Parks and C&M (construction and maintenance) crews remove as many small ash trees as their schedule allows (hopefully around 200). We also plan to take steps to establish a marshalling yard to handle the large volume of wood waste that will be generated in coming years. (Also see Section IV.)

6. What if I don't want to see the terrace ash trees in front of my home cut down? Property owners, neighbors, community organizations, and individual tree advocates are invited to "adopt" an ash tree in terraces or parks. There are chemical treatment options that are very effective in allowing a tree to survive the EAB. Adopted trees will be spared, and the citizen will be invited to have the tree treated. (Also see Section V.)

7. How will I know if the terrace tree near my home is identified for removal? The City web site will include maps that show areas where removals are planned. When our City Arborist is selecting trees for removal, he will paint a white dot at the base of the tree on the curb side. He will also provide a letter or door hanger informing the property owner of the planned removal, and allowing them to become an advocate for that tree.

8. What will be done with the stumps of trees that are removed? In the past, tree removals were followed by grinding the stumps, restoring the terrace area, and usually replanting a tree. While we continue to be committed to these steps, stump grinding and planting of new trees may be delayed several years as the available budget focuses on ash removal. (Also see Section VII.)

9. What will be done with the waste wood? Care must be taken to avoid spreading EAB through our handling of this waste wood. Contractors may take much of the wood from trees that they cut. Trees removed by City crews will be taken to a marshalling yard where plots of logs may be auctioned off for firewood. Contractors may be allowed to bring sawmills to the site to utilize the wood, and brush may be ground into mulch.

III. Education Opportunities

- 1. What information is available to help us understand the EAB problem and possible actions?** The State web site (<http://datcpservices.wisconsin.gov/eab/index.jsp>) is a great resource for much more information about the EAB, including the latest finds.
- 2. What opportunities exist to meet with the DNR about this issue?** A local public information meeting has been set up with DNR officials for Monday, October 28, 2013, at 4:30 p.m. The meeting will be held in the Legislative Chambers of the City/County Government Center, 160 S. Macy St., Fond du Lac. Future meetings can also be set up, as needed.
- 3. What role might service organizations, churches, family groups, or other community partners play?** City staff would love to inform as many citizens as possible about this threat, and will accept invitations to speak at groups that may be interested. Some groups may choose to adopt trees that are meaningful to them (near their meeting place, a specimen tree, near a place where they hold fundraisers, etc.).
- 4. What consideration has been given to taking a regional approach to address EAB?** The City and County have been sharing some information about nearby infestations, but no joint plans have been made at this time. Possible areas of cooperation include shared education efforts, joint removal contracts, joint treatment contracts, operating a unified marshalling yard, and exploring wood utilization options that work best with large volumes of wood.

IV. Preemptive Removals

- 1. Why is the City preemptively removing ash trees (cutting them *prior to an infestation*)?** Fond du Lac has over 7,000 public ash trees, and most of them will not be treated and saved. If we wait until a full EAB infestation is here, we will be trying to remove almost all of those trees over a 2-3 year period, and the budget implications will be devastating. By spreading out the removals over 5-7 years (hopefully), we can add a more manageable amount to each budget and use in-house crews more. This will also allow a phased approach for planting new trees, allowing them to have some size (and neighborhoods to not look so bare) once the borer arrives. Finally, we are hopeful that a large removal project in advance of an infestation will raise awareness and motivate more residents to choose to have their trees treated.
- 2. Which trees have been preemptively removed so far, and what is the plan for the future?** In general, we have tried to remove trees that are in poor condition, in conflict with power lines, or affected by a street project. In 2014, we hope to remove up to 200 smaller ash trees using in-house crews, and to remove up to 300 large, problematic trees using a contract.
- 3. Is there a more efficient way to remove large numbers of trees?** Yes. A logging company removed several hundred trees in a single week in 2010 in Oak Creek. That company is located

near Fond du Lac, and we are exploring hosting a similar project here. The results will be more dramatic—as many trees are cut in a very short period of time—and this approach creates a lot of cleanup work for our crews, but it is a more efficient and cost-effective means of removal. Due to the severe effects of a removal project like this, we are not planning to pursue this option at least until an infestation is found in Fond du Lac.

4. Can the contractor leave the wood in my front yard after cutting the tree down? This is an option that we would like to continue to offer for non-ash trees in cases where a property owner is committed to taking *all* of the trunk wood from that tree. However, to ensure that infested ash wood is disposed of properly, this option will not be offered for ash wood.

5. Will trees removals be spread out? Obviously, removing trees from a single area is efficient, but we also understand the concerns with seeing entire neighborhoods stripped of their terrace trees. We will try to balance this by focusing on certain *sections* of the City for removals, but not removing all trees from a block at once. If an infested tree is found, however, surrounding ash trees will also likely be removed to slow the spread to neighboring areas. It is possible that nearby trees will be heavily infested, while trees a block or two away may not.

6. Will any costs be assessed to property owners for removal? No. Dead trees on City right of way will be removed at no direct cost to the property owner. The removal of dead *private* trees will be the responsibility of the property owner.

7. What should I do with my private ash trees? Private ash trees can be treated by the owner, perhaps using a contract *coordinated* by the City. If a tree dies, however, it is the responsibility of the property owner to have it removed and disposed of properly. In fact, dead trees on private property can pose a public nuisance, and the City may levy fines against owners who fail to remove them in a timely manner.

VI. Treatment Options

1. What is the cost of the annual treatment of a tree? The cost depends on the type of treatment, and the frequency that the tree needs to be treated is affected by size, whether a tree is already infested, etc. The City is planning to coordinate a treatment program that City residents can participate in, paying to treat public or private ash trees that they want to save using trunk injections. We believe that a joint project will provide a more successful and cost-effective result, but residents are also welcome to pursue other treatment options on their own. Although some large projects see the price as low as \$5 to \$8/diameter inch, the figure we have received in our area indicate that trunk injections will likely cost around \$10 per diameter inch, every two years. So a 15" tree would cost up to \$150 every two years.

2. Can I treat a tree myself? Yes, some forms of treatment do not require a certified applicator to use them. Soil injections and soil drenches are other forms of treatment; at least one such product (Bayer Advanced Tree & Shrub Insect Control) can be applied by homeowners and is

available at local stores. Residents who treat trees on their own should notify the City so we can make a record of that information. Removal of a public tree on that list would then only be removed if its health declined 40% or more.

2. What is the success rate when treatment has been administered? Trunk injections started before a tree is in decline because of an infestation are more than 95% effective.

3. Why isn't the City paying to treat its public trees? The primary reason that we are not planning to treat all of our public ash trees is expense. If we treated them every two years, we'd be treating 3,500 trees a year. If they average 15" in diameter and the cost is \$8/diameter inch, we'd spend \$420,000 every year for the next 20 years or more, and we simply can't afford to devote that much of our budget to this. The City is under strict tax levy limits from the State, and entire categories of other city services would have to be cut to make up for this budget. Contrast this with a few years of increased costs for one-time removal, and unfortunately, this is the only route that seems feasible.

4. Is the City treating any trees? Yes. We have the equipment, trained crew and budget to treat approximately 200 trees. We are planning to select white ash trees in Lakeside Park for this program.

5. Is it worth treating a tree that's in poor condition? Experts estimate that treatments can still save a tree even after the die-back in the canopy is progressed as far as 40%. Obviously, the chances of a tree surviving are much higher the earlier in an infestation a treatment starts.

6. How long must treatments continue to avoid a renewed infestation? An active infestation is around for a decade or more before theoretically the Borer would run out of food stock. Then we would have to wait for the ash trees within a 15 mile radius (the maximum flying distance of an adult) to be gone to avoid it from coming back. It is speculated that we would need to treat for at least 20 years to avoid recurrence, and even then the pest could be brought back by human activity. For this reason some people will want to choose to treat their trees indefinitely.

7. When should treatments begin? The DNR recommends treating trees when the nearest known infestation is 12-15 miles away. With the recent discovery in Black Wolf, the City of Fond du Lac is now within this radius, and the City is moving forward with treatment options.

8. Are there any other means of protecting trees from EAB? Chemical treatments—and to a lesser degree biological approaches (parasitic wasps)—have been effective in protecting trees from the EAB. We do not plan to introduce parasitic wasps at this time, as they have only been shown to save about 20% of exposed ash trees, and the long-term impacts of the wasp itself are not fully known. However, assuming that preemptive removals and chemical treatments are not sufficient to bring down the ash population to a manageable level once there is a full infestation, wasps may be used to save as many untreated trees as possible.

VII. Budget

1. What is the City's current and proposed budget for tree operations? Several City budget accounts are used for tree operations. In 2013, approximately \$100,000 was spent to hire contractors to prune some trees, and remove others (along with their stumps). Another \$25,000 was used to plant new trees at those sites. Although not tracked separately, City crews also prune and remove trees. The proposed budget for 2014 continues these programs, and adds another \$100,000 specifically for more ash tree removals.

2. Why would new trees be replanted? Trees offer many benefits to our community, including energy savings, asphalt cooling, carbon sequestration, and stormwater management. They also have been found to increase property values, business success, and the quality of life in a community. A recent analysis by the DNR showed that Fond du Lac receives over \$1.7 million in benefits each year from its urban forestry canopy.

3. What is the cost for planting a new tree? Contracted tree planting expenses range from \$110 (bare root, certain species) to \$250 (ball & burlap, certain species) per tree.

4. What is the cost of removal of a tree? Removal costs vary greatly based on size, condition, obstructions, etc. An average tree costs between \$300 and \$500 to remove by contract, including the grinding of the stump. Stump grinding by itself costs about \$70 each.

5. What was the impact of the 2012 drought on tree health? Many trees died in 2013 because of the previous summer's drought. Funds that had been intended to remove ash trees and pay for replacements had to be used to remove hazard trees of other species. In 2013, over \$13,000 that had been intended to plant new trees had to be used instead to remove hazard trees.

6. What are some grants or other outside funding sources that may be used? The DNR offers a \$25,000/year urban forestry grant. Even though this focuses more on management and planning initiatives than operations, the City will be pursuing this grant consistently. The American Transmission Company offers up to \$5,000 for replanting trees in communities where they remove trees under their power lines. And Community Development Block Grant funds may be used to replace trees in areas with a high number of properties with low to moderate income.

VIII. Replanting Plan

1. Will the City replace all ash trees that are removed? Replacement of all of these trees—and eventually a tree in every good planting site on our streets—is the long-term goal of the City. However, during the “crisis mode” an EAB infestation, we will likely focus on

removals. Stump grinding and tree replacement may be reduced or delayed during these next several years.

2. How will sites be selected for replanting? As we are planning to remove more trees than in the past—but are not able to increase our budget for replanting—some sites will not have new trees planted right away. The following standards will be followed to prioritize the sites selected for new trees:

- a. Only plant a replacement tree if the property owner wants one.
- b. Do not plant a replacement tree if the site is not appropriate for one (terrace too narrow, too near another tree, over or under utility lines, blocking signs or streetlights, etc.).
- c. Only plant one replacement tree even if two are removed from a terrace.
- d. Place the highest priority on properties that paid directly for the removed trees. This mostly impacts subdivisions constructed over the past 25 years, many of which are south of Pioneer Rd. and east of National Ave.
- e. Trees removed under current street projects have the replacement costs for those trees already budgeted, and will not have to compete for these replacement dollars.
- f. A cost-share program may have to be implemented in the future, when a full infestation leads to removals on a larger scale and replacement funds are more limited than ever. Under such a program, new trees will only be provided when a property owner pays a share of the expense or plants a tree on their own.

3. Will I have a say in what type of tree is planted? If we implement a cost share program, yes, you will have more say in the location and species of tree. Obviously, this selection will have to meet certain guidelines.

4. If I'm willing to pay a share of the cost, can a replacement tree on my terrace move up in priority? Yes. The City has had a cost-share program for several years, and we could look to expand this in the future. Residents who wouldn't otherwise qualify for a replacement tree could join this program and pay 50% of the expense. This program would not be limited to ash tree replacement.

5. What if my terrace is too narrow to support a tree? To encourage trees in our neighborhoods and throughout our community, we will look at planting trees on private property—usually just behind the sidewalk—in areas with narrow terraces. The tree will become the property—and responsibility—of that property owner.

6. Can I plant my own tree in the terrace? Yes, within guidelines established by the City. The tree will have to be at least 1.5" caliper, and of an appropriate species for the location. A no-cost planting permit will be required to ensure that the trees and planting procedures meet these standards.

7. What goal does the City have to encourage tree diversity? The City's goal is to eventually reach a point where no tree species comprises more than 10% of the urban forest. This will

avoid the dramatic impact that Dutch Elm Disease and now the EAB would have on a community.

8. Why isn't even more variety encouraged? Terrace trees have to be carefully selected to ensure that they have the hardiness for our climate, road salt, narrow terraces, physical damage, etc. The City Arborist has compiled a list of several species of trees that are appropriate for these locations. This also may mean that some trees native to Wisconsin are not good candidates for terrace planting. It is unfortunate that the list can't be longer!

9. Will these diversity goals include not planting entire streets with the same species? Although it makes tree-planting contracts slightly less streamlined, we have a goal of increasing diversity *within each block* so that future bugs or diseases won't wipe out trees from entire blocks.

10. What is the City doing to avoid conflicts between trees and sidewalks? While trees do create more expense and hassle for residents and city crews alike, we are making every effort to plant the right tree in the right space to minimize these conflicts. Efforts include making sure that the terrace is wide enough to accommodate a tree, planting only low-growing trees under power lines, planting trees away from sewer and water lines and signs and streetlights, avoiding trees that have shallow roots to heave sidewalk, etc.

IX. Other Steps

1. What is being done to protect the remaining canopy that we will have? The "training" pruning that our crews perform on young trees gives them the best chance to remain healthy and strong for decades. Our Engineers are constantly looking for ways to minimize the impact of street and sidewalk work on our trees. Steps may include retaining a wider terrace as part of a street reconstruction project, cutting roots (instead of tearing them) when replacing sidewalk, and penalizing contractors that damage trees during their City projects.

2. What can I do to be involved in meeting the challenge the EAB will bring to our community? Come to the October 28th DNR meeting for more information. Sign up to adopt your boulevard ash trees. Plan to treat the ash trees on your private property. Share this information with people you know who might have an interest. Feel free to contact the Public Works Department at 920-322-3472 or jskiff@fdl.wi.gov for more information.