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# toc

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Chicagoland Highlands, the newest golf course in the area is the site of our October meeting. No leaf rule needed.

PHOTO: Luke Cella

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Update  
Luke Cella

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FEATURE II  
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Vasculitis  
R. Brian Green, CGCS



I count nineteen mower stripes at the widest part of this tee on the 4th hole at Chicagoland Highlands. The hole from the tips is 250 yards with the berming on each side creating a chute that is only 30 feet wide at the narrowest point.

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## DATES

### 2013-14 MIDWEST EVENTS

- 10/7 Midwest October Meeting, Chicagoland Highlands Club
- 11/14 61<sup>st</sup> Midwest Turf Clinic, Medinah Country Club
- 1/22/14 January Meeting & Wee One Fundraiser, Seven Bridges
- 2/5/14 Midwest Hospitality Reception, Orlando FL

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Matt Harstad  
*Calumet Country Club*

# Changes Arriving Soon


My wife Lauren and I are approaching the biggest change we will ever face in our life. At least that is what everyone keeps telling us. We dated for four years before we got married, so getting married didn't seem to be that much of a change. Getting a dog was a big change in our lives. We never had a dog before, and now we had to be home at a certain time or find a "baby sitter" if we knew we would be gone too long to watch the pooch.

Now, we await the arrival of our first child in January (yes, we sort of planned it that way). And from what everyone tells us, our lives will never be the same, in a mostly good way. Thinking about this change excites me and terrifies me.

This coming change is full of unknowns and questions I keep asking. What kind of father am I going to be? How bad can the lack of sleep really be? (I'm told that it's pretty bad.) How am I going to juggle work and family time? Is the baby's head going to fall off if I don't hold it right? Am I going to puke the first few times I change a diaper? What if I pass out in the delivery room? This list goes on forever; each time I think I have no more questions, a new one pops into my head.

I know some of these questions will be answered in our class before the baby arrives, but most of them won't really be answered until I actually experience them. The more I think about it, the more comparisons I relate from becoming a father to becoming a superintendent. Little bits of the knowledge that I use on a regular basis are the concepts that I was taught during turf school. However, the majority of my knowledge of our profession are the items that I have learned through the experience of doing things and absorbing from what other people have done. I foresee that this is how it is going to go with the baby. There's only so much you can learn from a book, but the education that you get from actually doing it and learning from others is limitless.

I will never be able to answer all the questions, but I know I can find the answers to a lot of problems by talking to other superintendents. Something that has been talked about countless times before is the camaraderie that we have in our business. It is something that I believe is unrivaled in any other industry. Before and after we have the baby, there will always be someone to talk to about this life-changing event. Someone at a MAGCS meeting, at golf league, or even on Twitter, will always have had the same experience, or is even going through the same exact thing as Lauren and I and will have some input on ways to solve the problem. Or perhaps, if there is no solution, they'll just say, "yup, that's the way it is, you're going to have to deal with it."

Although I know there will be times that it will be tough to juggle being a new father and a superintendent, it has been done countless times before, so I know it can be accomplished. I'm sure that there will be times that I feel like it's impossible to get it all done, but I'm thankful that I will always have people in the industry to turn to for help. 



# Ten Years in Country EAB Update

Luke Cella, MAGCS

PHOTO CREDITS: LUKE CELLA

It has been ten years since the Emerald Ash Borer was discovered in the United States (Detroit) and a lot of work has been done from a research standpoint, but what does it all mean to golf course superintendents and other ash tree owners and managers?

On June 9, 2006, two ash trees in “The Windings” subdivision, near Lilly Lake in Kane county were positively identified as being infested with the Emerald Ash Borer (EAB), starting our battle with the bug in Illinois.

EAB, *Agrilus planipennis* Fairmaire (Coleoptera: Buprestidae), is identified as the causative agent in ash tree mortality and decline. No bigger than a penny, this green menace has wreaked havoc on millions of ash trees in the Midwest and if not controlled it could wipe out the ash tree species in North America. The adult beetles nibble on ash foliage but cause little damage. The larvae (the immature stage) feed on the inner bark or cambium layer,

which is the crucial layer between the bark and wood 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.

The Illinois Department of Agriculture, and its Emerald Ash Borer Program, believe systemic insecticidal treatments of ash trees, in response to or in preparation for Emerald Ash Borer infestation(s), can be a very useful component of a management plan. Insecticidal treatments can be an effective management strategy for high numbers of ash trees when integrated with the removal of known infested trees and continued monitoring of ash health, as a measure to potentially preserve and/or prolong the life of apparently yet unaffected ash trees. The department believes that by focusing treatment efforts on ash trees that are not showing signs and symptoms of EAB infestation, and are in overall good condition, and are desirable trees to preserve, there will be a better chance of successfully preserving those trees through a treatment program. The Illinois Department of Agriculture does not and will not endorse any specific treatment method, insecticide, company, or applicator.

Members of the Midwest have taken many different approaches to managing or not managing this bug.

**John Gurke, CGCS and Aurora Country Club**

We are not treating ash trees for emerald ash borer. We removed 27 ash trees last winter, 9 this season, with another 15 to 20 scheduled for removal this winter. We have initiated a reforestation program here at ACC whereby we solicit donations from members. They commit \$250, we purchase and plant a tree complete with donor plaque, if desired. This spring we had



33 donated and planted, with 6 commitments thus far for fall planting. To avoid the inevitable, we produced a list of desirable trees that we will plant, so we don't get the requests for 'Crimson King' Norway maples or other undesirable varieties. Of the 33 planted, 25 were oaks, with a mix of hackberry, ginkgo, and horse chestnut filling out the list. We also retain the right to plant where we feel is necessary, and not where the donor would like (unless the two agree).

#### Bob Lively and Flossmoor Country Club

"We treat them with chainsaws."

#### Chuck Barber and St. Charles Country Club

Here at St. Charles Country Club we have removed approximately 200 ash trees of various varieties. Many of these were large, specimen trees in very strategic locations. We removed the bulk of the dead or dying trees in 2011 and 2012. We transplanted a variety of trees from around the property from less strategic to more strategic locations to overcome the loss of those trees. The cost to remove the trees, debris, grind stumps, soil, seed, tree transplanting and labor was approximately \$30,000. One hundred percent of tree removals were done in-house and the stump grinding, tub grinding and debris hauling was contracted through various local companies. There are approximately two dozen ash trees that remain on property and all are infected to various degrees and will be removed in the Autumn of 2013 and the following winter.



*Tree removal companies are popping up all over as the EAB devastates neighborhoods. I fearfully watched as a neighbor had a large ash removed from their backyard this summer. It was a good reminder to hire responsible and reputable companies like the ones found in your membership directory.*

#### Steve Van Acker and Crystal Lake Country Club

Here at Crystal Lake we have a 150 ash trees. 100% are infected. 60 have been cut down in the past year, the 90 remaining will be cut down in the near future. The trees that looked the worst were cut down first.

#### Dan Dinelli, CGCS and North Shore Country Club

Chris Williamson, PhD, U of Wisconsin conducted a several year research project here at NSCC. Several chemistries proved effective as did various application strategies. The issue is that treatments will need to be on-going, at best every three years and up to annual applications depending on chemistry and application method. Like many locations, all our ash trees, Green, Blue, and White comprised 10% of our tree species on the property. We had the golf course architect review these trees and generated a priority of those that would impact playability. It ended up that very few did. We also have near 300 American Elms on the property, (susceptible to Dutch Elm Disease) requiring treatments every three years. With limited resources it was decided to keep treating elms and remove the ash, which we did last winter. I will miss the fall color of the white ash...but the green ash, not so much.

#### Justin Kirtland, Arrowhead Golf Club

We are treating 20 high profile, hole changing ash trees with Tree-age. We'll be cutting down 97 that are in bad shape over the next two years and re-planting about 30. The remaining 109 trees will be evaluated over the next 3-5 years and cut down as needed.

#### Dave Radaj, CGCS and Green Acres Country Club

We have ten high profile trees that we are treating at the Club. We've used Safari on an every other year treatment plan along with a Merit drench. The rest of our ash trees are only 25 years old or so and we've decided not to treat them at all.

#### Andy Dauksas, Glen Oak Country Club

We started doing Merit drenches around ash trees 3 years ago. Unfortunately, these trees are heavily infested right now and most will be removed. Several weeks ago, Nels Johnson treated with Tree-age injections to the remaining trees that show less damage. When looking at our ash population as a whole we found, surprisingly the white ash group shows no wood pecker damage or the tree suckering associated with the infection. Dr. Kris Bachtell explained that the EAB prefer the green ash because of the rougher bark (easier to overwinter) compared to the smoother barked white ash. However, he thinks EAB will eventually destroy the white ash once the green ash are gone.

#### Many Options Available

There are many different treatments options available to the professional land manager, if you choose to go that way. There is a great booklet on insecticide option that can be found at [emeraldashborer.info](http://emeraldashborer.info) It is written by scientists from our local colleges and universities and covers the growing number of effective chemical options, based on research and practical applications.

One of the largest questions or unknowns, if you choose a



treatment option for those highly valued trees, is how long will I have to treat? We know, as the pest moves into an area, the population of the bug will increase. After it has devastated a community of trees and the food source is in decline, the population of the bug will also diminish. If the pest moves out, because a shortage of food, some believe treatments could stop at some point in the future. However, scientists believe the pest will never go away – it may decrease but native ash seedlings and saplings found in forests, rights of ways and woodlots could be enough to nourish the pest for many years after the initial devastating wave is over. Because of this, treatments may have to continue, although application rates and frequencies may be lessened.

### Math Made Easy

If you are wondering whether to treat or remove your ash trees, there is very simple and clear-cut (ha-ha) cost calculator put out by Purdue University. It is designed for land managers, especially cities and urban areas, but works well for those managing smaller forests as well. To use it, you'll need:

The inventory of ash trees (including the general size and number).

- An estimate for removing the trees based on size.
- An estimate for treating the trees based on size.
- An estimate of replacing each tree that is removed if so desired.

The calculator creates a cost estimate using three options that are available (or a combination of these options):

- Treat ash trees with insecticides
- Remove ash trees
- Replace ash trees with resistant species

The calculator has a tutorial to go through, however it is pretty self-explanatory.

The tree inventory data is simply the number of ash trees on property based upon their trunk diameter as below:

Size Span (inches)	Number of Trees
1 - 3	<input type="text"/>
3 - 6	<input type="text"/>
6 - 12	<input type="text"/>
12 - 18	<input type="text"/>

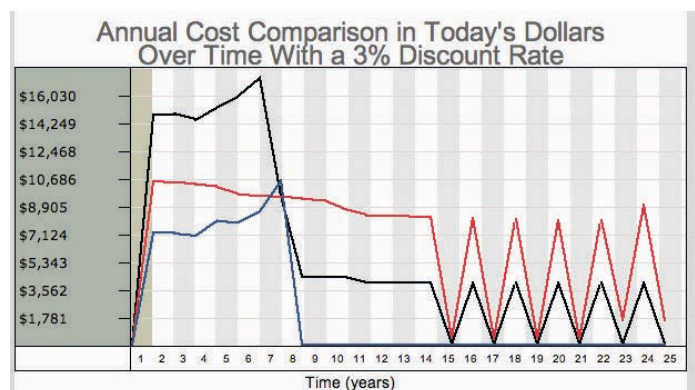
Next you'll answer a few questions based upon the extent of current infestation and how long it will take to remove those trees not planned for treatment (all trees will die or become too hazardous if not treated). After that, you'll enter information based upon treatments costs per tree and tree replacement cost and total removal cost.

The last set of data you will enter describes your management plan. You can select to remove all your trees, treat all or some, and build your own management plan by exploring the implications of removing, replacing or treating any combination of trees.


Option 1	Option 2	Option 3
Remove All	Remove All	Remove All
Replace All	Replace All	Replace All
Treat All	Treat All	Treat All
Remove Unsafe Ash	Remove Unsafe Ash	Remove Unsafe Ash
Replace Unsafe Ash	Replace Unsafe Ash	Replace Unsafe Ash
Replace >12	Replace >12	Replace >12
Replace <12	Replace <12	Replace <12
Replace <24	Replace <24	Replace <24
Save 50%	Save 50%	Save 50%
Treat 30% More to Buy Time	Treat 30% More to Buy Time	Treat 30% More to Buy Time
URBAN SLAM	URBAN SLAM	URBAN SLAM

*This is where the comparison occurs. You can select three different management options for your ash population. This criteria will be used to compare costs based on your selections.*

Once the data is entered you can select up to three options of action and the calculations will take place. Graphs will be spit out that compare your strategies and the costs associated with each. For a few minutes of work it creates a nice presentation that can be made to your membership or committee when deciding what steps to take.



*Treating 50% and removing the other 50% (black line) is the most costly option during the first 8 years. Removing all ash species (blue line) is cheapest way to go in the long run.*

In the ten years since the borer was discovered in the United States, much has been done to learn about the insect through studying its biology, insecticide treatments, cold temperature hardiness, developing traps and monitoring procedures, and studying transport and quarantine issues. Work continues looking at the cost and economics of the pest, possible biological controls, and ways to save and preserve the ash species. Unfortunately, most have given into this pest and have begun planting alternatives. 

## Recommended Ash Replacements\*

Common Name	Botanical Name
'Autumn blaze' Freeman maple	<i>Acer x freemanii</i>
Trident maple	<i>Acer buergerianum</i>
Hedge maple	<i>Acer campestre</i>
Miyabe maple	<i>Acer miyabei</i>
Norway maple	<i>Acer platanoides</i>
Red maple	<i>Acer rubrum</i>
Sugar maple	<i>Acer saccharum</i>
Shantung maple	<i>Acer truncatum</i>
Horse chestnut	<i>Aesculus hippocastanea</i>
Upright European hornbeam	<i>Carpinus betulus 'Fastigiata'</i>
American hornbeam	<i>Carpinus caroliniana</i>
Hackberry	<i>Celtis occidentalis</i>
Katsura tree	<i>Cercidiphyllum japonicum</i>
Yellowwood	<i>Cladrastis kentukea</i>
Turkish filbert	<i>Corylus colurna</i>
Hardy rubber tree	<i>Eucommia ulmoides</i>
Ginkgo	<i>Ginkgo biloba</i>
Thornless honeylocust	<i>Gleditsia triacanthos inermis</i>
Kentucky coffee tree	<i>Gymnocladus dioica</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Tulip tree	<i>Liriodendron tulipifera</i>
Amur maackia	<i>Maackia amurensis</i>
Dawn redwood	<i>Metasequoia glyptostroboides</i>
Tupelo	<i>Nyssa sylvatica</i>
American hophornbeam	<i>Ostrya virginiana</i>
Amur corktree	<i>Phellodendron amurense</i>
London planetree	<i>Platanus acerifolia</i>
Common chokecherry	<i>Prunus virginiana</i>
Callery pear	<i>Pyrus calleryana</i>
Sawtooth oak	<i>Quercus acutissima</i>
Swamp white oak	<i>Quercus bicolor</i>
Northern pin oak	<i>Quercus ellipsoidalis</i>
Shingle oak	<i>Quercus imbricaria</i>
Bur oak	<i>Quercus macrocarpa</i>
Chinkapin oak	<i>Quercus muehlenbergii</i>
Japanese pagodatree	<i>Sophora japonica</i>
Linden or Basswood	<i>Tilia americana</i>
Little-leaf linden	<i>Tilia cordata</i>
Silver linden	<i>Tilia tomentosa</i>
Elm hybrids	<i>Ulmus spp.</i>
Japanese zelkova	<i>Zelkova serrata</i>

\* Suggestions from Michigan State University Extension Bulletin E2925

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# SUPER-N-site

## Michael Heustis & Chicago Highlands Club

Billy Sharp, Chicago Highlands Club

PHOTOS: LUKE CELLA

Only a handful of Superintendents in the present day are able to watch their future course come together from beginning to end.

Michael Heustis, Superintendent of The Chicago Highlands Club in Westchester, IL, was fortunate enough to be brought in just as ground was being broken and soil was beginning to be moved and shaped into what would make up this undulated, challenging "Scottish-Links" style course.

In April of 2008, Michael was selected to become the



*Mike Heustis, Superintendent of Chicago Highlands and ever present Molly, his faithful Yellow Labrador, enjoy a cool morning this August.*



Superintendent of the future club by the trio of club owners which includes Tom Healy, John Baxter, and Joe Hills. Not only was this giant task because of the size of the property, but also this was the time in which the recession hit the economy hard. But after two years of hard work, cautious spending, as well as countless tweaks and changes, the 270 acre property was ready to be opened. What made this a unique project was the fact that the property was situated

*A bulldozer is one of the only sounds you'll hear on the property every once in awhile as the landfill is still accepting spoils from construction sites around the area. Eventually, it will close and trees will be planted secluding the property even more so (left).*





on a landfill which closed in the 1980's. As far as the course, the first year was a huge success for Michael and the staff, being awarded such honors as "Top 5 Best New Course of the Year" and the 9th hole was awarded "Hole of the Year" by Golf Digest.



The mission statement that Michael and the staff try to implement is for "Fast and Firm" conditions that make for a round of golf which is challenging, fun and unforgettable. Views of the Chicago skyline, sweeping fescue hills, and top-notch putting surfaces have helped the Arthur Hills designed course earn a great reputation in the Chicagoland area as an up-and-coming club that is regarded highly with the other prestigious courses in the area.

Michael is an Illinois native, having grown up in the Saybrook, IL area and has been involved with golf course maintenance since the age of 14. He started his career at Indian Springs Golf Club and worked there until 1997. From



*The flagstick for the 13<sup>th</sup> is extra long because of the hills that protect the green. There are a couple of cupping spots on the green that make it very tough to even see the flagstick from the teeing area.*





there, he attended Parkland College for two years and then transferred to The University of Illinois Champaign-Urbana to complete his degree in Agronomy. Shortly after college, Michael took an Assistant Superintendent position at Lake of the Woods Golf Course, which is a forest preserve course located in Mahomet, IL. After spending nearly 3 years there, he moved on to Peach Tree Golf Club in Atlanta, GA. In 2005, Michael volunteered for the Walker Cup which was being held at Chicago Golf Club in Wheaton, IL. Shortly after the event, he was offered the Assistant's position there at Chicago Golf, which he accepted and started in December 2005. After 2 years under the tutelage of Jon Jennings and a few interviews with the trio of owners at Chicago Highlands, Michael landed where he presently resides

Outside of the daily grind at the course, Michael is an active member of GCSAA, MAGCS, and the CAGCS. He has also volunteered at the 2012 Ryder Cup at Medinah, 2006 PGA Championship at Medinah and the 2007 Women's British Open at St. Andrews Old Course. Being a U of I alumni, he is also a huge fan of the Fighting Illini sports, and also attends many Chicago Cubs games as well. Most of Michael's family is located in central Illinois, which makes for a great get away as well as being able to visit relatives. He has one older sister, two nieces and one nephew who enjoy when Uncle Michael comes to visit. But they enjoy it even more when he brings his ten year old Yellow Lab "Molly." She has been with Michael since she was six weeks old and loves a good run on the course, but nowadays enjoys a spot next to his desk in the

