

EMERALD ASH BORER 2008



Photo Credit: Dan Dinelli

Because of the speed with which new information is dispersed in the Information Age, the content of this article may be old news before it arrives in print. Nonetheless, the nature of the news regarding Emerald Ash Borer (EAB) makes it worthy of a few words. My attendance at a seminar devoted entirely to EAB in mid-March provided a few startling facts about potential controls. It also left me largely convinced that, while we are going to lose a great number of trees in the years ahead, we may now have the tools to preserve key trees in the landscape.

The seminar was organized and emceed by Edith Makra, the Community Trees Advocate at the Morton Arboretum. It featured an impressive list of researchers and entomologists. First among the presenters was Dr. Deborah McCullough, Professor of Forest Entomology at Michigan State University, and someone who has been involved with the EAB phenomenon since the insect was first discovered. She reviewed the life cycle of the insect and discussed its spread. She offered an explanation of why an infestation may be present in a particular location while the appearance of the infested trees remains unchanged. Apparently, it takes three years for the population to reach critical numbers within an infested tree, and during the three "build-up" years, only bark-stripping will reveal the presence of the borer. However, in Year Four, the tree will decline and die quite rapidly. For this reason, we have, to this point, seen a relatively small number of trees actually succumb to the activity of EAB. This year will almost certainly change the situation, and we will likely witness the death of a significant number of trees.

Later in the day, Dr. McCullough was featured again, in tandem with another researcher, Dr. Leah Bauer of the USDA Forest Service. Biological controls, centering primarily on parasitic wasps, were discussed. Research results in this area, while potentially encouraging, are somewhat limited. Further, for the wasps

to play a significant role in controlling EAB, the populations would have to be multiplied many times, and this process takes time. At present, the most effective biological control appears to be woodpeckers, but the woodpecker population cannot possibly consume enough insects to markedly slow the spread.

From biological controls, the topic shifted to chemical treatments, and it is in this area that truly encouraging news is emerging. It has been known for at least two years that MERIT®2F (imidacloprid) is an effective pesticide. Most local tree-care companies are offering MERIT injections or soil drench applications as the approach to protecting key trees. Recent research has added some new compounds to the arsenal, including dinotefuron, marketed



as Safari® (Valent Chemical Co.), and the newest, emamectin benzoate, marketed as TREE-äge™ (Syngenta). Safari in combination with PentraBark™, a surfactant, has been approved as a trunk spray. Its systemic action has shown 94% effectiveness, both on larva and feeding adults. This spray combination can also be applied via injection or soil drench, but the most cost-effective and fastest method appears to be the trunk spray.

The other compound mentioned above, emamectin benzoate, has been labeled for use in several Midwest states, but not yet in Illinois, although approval is highly likely.

(continued on page 13)

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By JOE FERT

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Syngenta has licensed its application exclusively to Arborjet, using their microinjector, which makes it a bit cumbersome when attempting to treat large numbers of trees in a short time. However, the results are irrefutable: 100% control. While there is only one year of research results, the outcome was the same in every replication. Obviously, testing will continue in 2008, but it appears that TREE-äge could be as close to a “silver bullet” as anything we have seen to date. In fact, those are the words of Jim Bowes, the spokesman for Michigan’s EAB programs, and one of the people who has been involved in the evaluation of the compound.

The situation, then, is perhaps not as dire as we had been led to believe when we first learned of the impending invasion. We now appear to have the tools to chemically protect trees of particular importance. This will be an ongoing process, requiring annual or biennial applications. For professionals, who are familiar with regularly scheduled preventive spray or injection programs, this is a manageable scenario. Unfortunately, the great majority of our ash tree population is not under the management of professional arborists, so it is inevitable that we will experience the loss of thousands of trees in the coming years.

With that in mind, we as nurserymen are trying to anticipate what our list of ash replacements should include, without over-emphasizing one genus. Diversity has become the key word in any discussion of urban forestry, and to that end, we offer the following list of under-used species, as alternatives to ash:

BOTANIC NAME	COMMON NAME
<i>Acer miyabei</i> 'Morton'	State Street Maple
<i>Aesculus glabra</i>	Ohio Buckeye
<i>Catalpa speciosa</i>	Northern Catalpa
<i>Celtis occidentalis</i>	Common Hackberry
<i>Ginkgo biloba</i>	Ginkgo
<i>Gymnocladus dioica</i>	Kentucky Coffeetree
<i>Larix deciduas</i>	European Larch
<i>Ostrya virginiana</i>	Ironwood
<i>Quercus imbricaria</i>	Shingle Oak
<i>Quercus muehlenbergii</i>	Chinkapin Oak
<i>Taxodium distichum</i>	Bald Cypress
<i>Tilia tomentosa</i> 'Green Mountain'	Green Mountain Silver Linden
<i>Ulmus carpinifolia</i> 'Morton Glossy'	Triumph Smoothleaf Elm

Globalization has implications at every level of our life and culture. We are witnessing one of its most negative effects. The EAB ordeal will test our management skills, but the research community has made remarkable progress in a very short time. The ultimate outcome, while not exactly pleasant to contemplate, may not be the catastrophe we originally anticipated. -OC



Photo Credit: Dan Dinelli

The left image above shows the Arborjet system directly placing protectants into the tree.
The image on the right show an application being made to the trunk of an ash tree.

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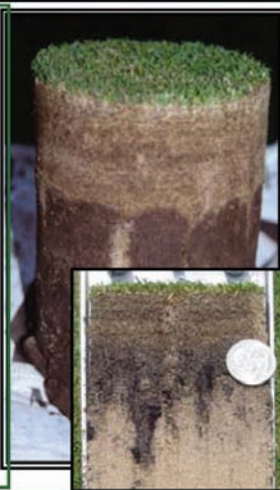


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MIDWEST BREEZES

Charles Anfield, CGCS, *Heritage Bluffs Golf Course*



"Out with the old...in with the new".

I walked into Tim Anderson's impressive, brand spanking new shop at Naperville Country Club to interview him for this article, WOW. Tim walked up shortly with his face bandaged up, looking like he had been in a fight. He explained that he had recently been to the doctor and had a few patches of skin cancer "burned off". Tim said, "I go in once a year and he usually finds something". No big deal, this guy is a cool customer.

The 12,000 square foot shop is state of the art. It was relocated and rebuilt from the old central location on the course to a new area in the southeast corner of the property. Tim had visited many existing shops in the Chicago area to get some ideas. There is more than adequate space for equipment, parking, tools, storage, office areas and break room. The break room has six microwaves, a stove, icemaker, cabinets, refrigerator and a flat screen television! Wireless computer, telephones and security cameras are located throughout the facility. The pesticide wash pad, fertilizer and storage area are all indoors. Tim calls it the Environmental Center. If you know Tim, everything in the shop design was no accident (his desk and office are meticulously organized). Everything was all thought out to the last detail. Cost's were analyzed and budgeted under the leadership

of Mr. Tierney, a member and Project Coordinator. The goal was to do it right the first time, despite extra costs. Their mantra was "what is it going to take to get the project closest to the end-point they want".

The changes started before Tim was hired for the Superintendent Job in January of 2005. In the fall of 2004, a vote was put forth to renovate the clubhouse and bunkers. It was voted down. In 2005 the club met again and looked at four possible options for renovation of the golf course that Arthur Hills/Steve Forrest Design & Associates had put together for the club. Numerous meetings were held and plans were debated among the members. Finally, a vote was held and passed for a complete redesign.

The club started earth work on the ambitious project in July of 2006. Wadsworth construction had the task of shaping the design. The course was closed. The goal was to improve an aging Tom Bendelow design and make better use of the land. The new technology of the golf playing equipment had made the course outdated. It had become a narrow, tree lined, target short course infested with poa annua. The bunkers were out of place and in desperate need of an overhaul. There was concern

(continued on next page)



Views of Naperville Country Club's new shop.

(L) An image from the Chicagoland Shop Tour this past winter from the storage area above the offices.

(R) I wonder where they keep the line trimmers in this place, I can never find one!

among the membership that this project was needed to retain and attract new members.

Steve Forrest was the lead architect on the project. He spent countless hours walking the course trying to find the best routing within the site. In some ways, this is a tougher task than starting fresh on a new site. Over 90 acres were disturbed with dirt moving on the small 124 acre site. The only areas left untouched were some of the existing tree line areas. The old design was a par 71, it became a par 72. He was able to keep some of the old holes, create new holes and somehow make it all fit together to look like an 80 year old golf course. He was also able to pick up 400 yards of distance. The design included a new irrigation system, new USGA A-1 greens, bunkers relocated and rebuilt with Best sand. The fairways were newly shaped and contoured, new drainage installed, over 150 trees removed and relocated with a 100" tree spade. The new course has five sets of tees and a greatly improved driving range and practice area. Leibold Irrigation did the irrigation installation. Tim was very complimentary of the company's ability to stay organized, remain on task and work with the other contractors.

The front nine was opened in June of 2007 and the back nine in September of 2007. It has been met with rave reviews. Long time PGA Professional Jim Arendt said the membership has been very happy with the results. The course has always had great elevation changes and when you get on it, it becomes very difficult to figure out where the old holes were. The course changes include a #8 hole that is a 604 yard par 5 called "Forever", enough said. The par 3 #17 hole plays 230 yards to a freaky peninsula green and it is called "Anxiety". Good stuff.

It's really impressive to think about all of the challenges the club had to go through to make the changes. It was a battle at times and the outcome was uncertain. Tim showed me a section in his office for the permitting paperwork required for such a project. He had to write numerous detailed reports outlining the scope of the work. The Dupage County had restrictions on the work around the watershed that runs through the middle of the property. The club had to demonstrate a positive impact on the area. Changes included expanding the watershed, rerouting the floodplain, increasing the wetland and slowing water flow off site. The County will monitor the watershed for five years. In order to make the project happen, the club had to deed the watershed to the County. The weather presented challenges for Tim as well. Heavy rain events washed out newly shaped and seeded areas creating delays and expensive setbacks.

Tim is a fighter. Don't let his quiet demeanor fool you. He has persevered throughout the project all the while serving the MAGCS as President. Try that one on for size. Now he just wants to get into a maintenance mode and increase the level of manicuring on the course. The course still has some construction scars that need to grow in. Tim was just the right guy in the right place at the right time to make it all happen. He had to work with all of the different people attending countless meetings all the while overseeing the project from top to bottom. He may be a little beat up, scarred and tired from the project but no big deal, Tim Anderson, CGCS can go the distance and come up a winner. -OC



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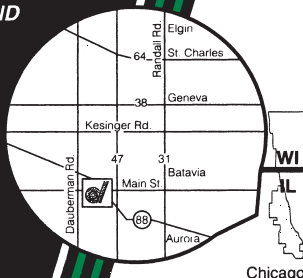
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Ted Soenksen, *Wilmette Golf Course*



Equipment: John Deere walking greens mower model 220B

Problem: It suddenly developed a vibration and audible metallic chatter. It happened first time out in March after being completely serviced last winter.

The clutch engage lever would release because the machine vibrated so badly. The forward motion would abruptly slowed down on an incline, yet reel continued smoothly, and engine lugged a little but not die.

After taking belt cover off, it was seen that the brand new brake assembly installed in November failed. The adhesive did not hold the brake lining to the band leaving the lining free to chatter and lock up at will.

Solution: Replace brake band, and always keep one in stock.

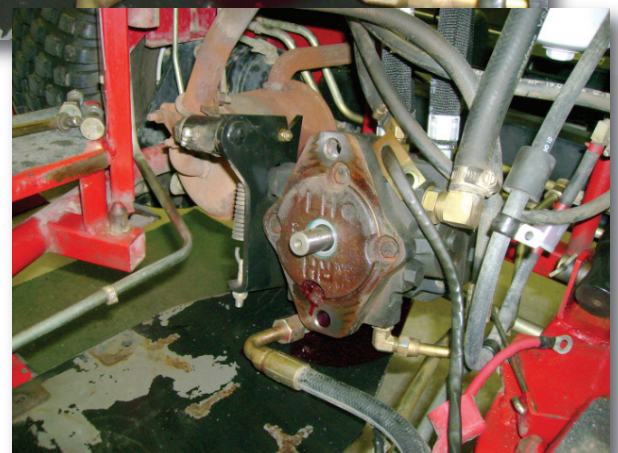
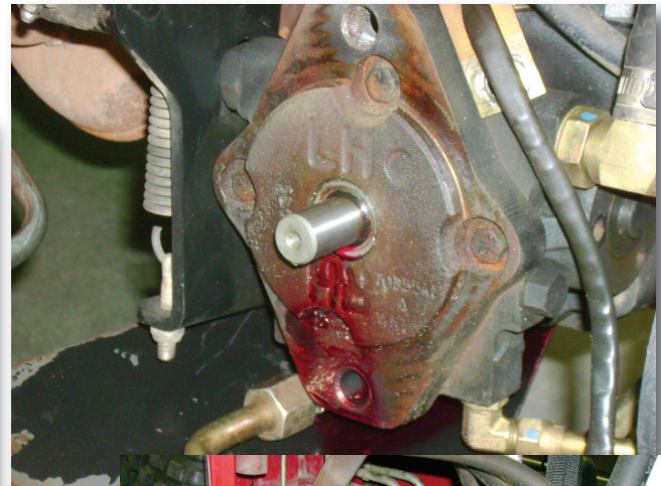


Equipment: Toro Sand Pro (or any other piece of equipment with hydraulics)

Problem: Hydro pump output seal was damaged when reinstalling engine. While repositioning engine coupler assembly, accidental damage occurred to seal with a screwdriver. Unfortunately, the leak was noticed after engine installation was complete and test start up.

Solution: Though, I did not actually cause the damage, it was still my error in not watching over a helper that was doing the work. Never pry against a shaft seal with screwdriver or similar tool to slide the coupler or pulley assembly to for alignment.

-OC



THE BULL SHEET

John Gurke, CGCS, Associate Editor



June 2008

We offer a warm welcome and hearty handshake to the following new members of the Midwest Association of Golf Course Superintendents:

Matthew Leinen, North Shore Country Club, Assistant
Alan Hoogstraat, Ravisloe Country Club, Assistant
Joseph Meier, Prosource One, Associate
Adam Lencke, Calumet Country Club, Assistant
Matt Hurley, Standard Golf Company, Associate
Charles Lundquist, Biltmore Country Club, Assistant
Ryan Dunbar, Green Acres Country Club, Assistant
Scott Fisher, Arthur Hills/Steve Forrest & Associates, Associate
Mike Green, Flowtronex, Associate
Ryan Reuter, Oak Brook Hills Marriott Resort, Assistant
Mike Schiller, Olsen Distributing, Associate
Jim Wallace, Medinah Country Club, Assistant
Arne Nordenson, Bittersweet Golf Club, Regular
Grant Neff, George Dunne National Golf Course, Assistant
Matt Reifert, Butler National Golf Club, Assistant

Congratulations to Nazira and **Larry Collins** (EC Design Group) on the birth of their first child on Saturday, May 3rd. Emmitt Laurence Collins was born at 3:32 pm, weighing 8 lbs., 3 ozs., and 22.5" long. Larry will be needing that iPod he so expertly wrote about last month to drown out the late-night new-baby noises.



Emmitt Laurence Collins

DATES TO REMEMBER

June 2 – MAGCS monthly meeting at Royal Melbourne, **Dave Groelle, CGCS** host. The Dom Grotti, Class C, and Senior Championships will be (were) contested at this event.

June 5 – Assistants Shop Talk at Arrowhead Golf Club in Wheaton, IL.

June 9 – Penn State Alumni Golf Outing at Old Elm Club, **Ed Fischer, CGCS** host.

June 10 – CAGCS monthly meeting at Ruth Lake Country Club, **Dan Marco, CGCS** host.

July 7 – John Buck Annual Scholarship Outing at the Highlands of Elgin, **Brad Legnaioli** host.

July 15 – Midwest Regional Turf Foundation's Turf Field Day at Purdue University in West LaFayette, IN. Call 765-494-8039 or visit www.mrtf.org for specifics.

July 17 – Iowa Turfgrass Field Day at the Iowa State University Turfgrass Research Station in Ames, IA. Call 800-605-0420 or go to www.iowaturfgrass.org for info.

July 19 – MAGCS Kane County Cougars Game and Family Picnic at Elfstrom Field in Geneva, IL. (Tickets are on sale now at magc.org)

July 24 – CAGCS monthly meeting at Exmoor Country Club, **Kurt Galisdorfer, CGCS** host.

July 28 – MAGCS Scholarship Outing at Geneva Golf Club, **Ed Braunsky, CGCS** host.

Jason Wolf has been promoted to the superintendent at Whisper Creek Golf Club in Huntley, IL, a Billy Casper Golf managed property. Jason was formerly at Indian Boundary, Chick Evans and Highland Woods golf courses. Jason received a certificate in turfgrass management from Mundus Institute in Phoenix.

We mentioned last month that Reinders Inc. had added more than 35 combined years of experience by hiring **Tim Keating** and **Bruce Woehrli** as Territory Managers for their Soft

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