

The GRASS ROOTS

AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

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TABLE OF CONTENTS

THE PRESIDENT'S MESSAGE
End Of The Year Thoughts 4

CHAPTER CONVERSATION
Thank You To Our Supporters 6

TURFGRASS DIAGNOSTIC LAB
2013 Learning What I Thought I Knew. 8

WISCONSIN SOILS REPORT
Mineral Deposits In Sand Putting Greens 12

WISCONSIN PATHOLOGY REPORT
The Next Chapter 16

MISCELLANY
Diamonds In The Rough 20

AN ARCHITECT'S OPINION
Devries Leaves Low Water Legacy at Reid Golf Club. ... 22

GCSAA
Chapter Delegates Meeting Outcomes 28

WISCONSIN ENTOMOLOGY REPORT
The Latest On The Emerald Ash Borer 30

BADGER STATE TURF CLIPPINGS
News and Notes From WGCSA Members 32

NOTES FROM THE NOER FACILITY
Worth The Wait: WTA Fundraising At Maple Bluff
Country Club 36

EDITOR'S NOTEBOOK
Potpourri Of Time And Weather. 42

EVENT SCHEDULE 44

WISCONSIN TURFGRASS ASSOCIATION
UW / WTA Field Day Set For January 14th 32

ABOUT THE COVER

The par 5 fifth hole At Maple Bluff Country Club, host of the 2013 WTA Fundraiser.

We need to do everything we can to build interest in golf for the next generation. We need to keep the game friendly and fun.

By Annika Sorenstam, Professional Golfer

This quote by Sorenstam from the 2013 PGA Merchandise Show can serve as a reminder to provide a product that can challenge low handicap players without making it too difficult for new players.

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THE GRASS ROOTS

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End of Year Thoughts

By Chad Harrington, Golf Course Superintendent, Autumn Ridge Golf Course

I am not sure this is my favorite time of year, but I definitely look forward to some of what late fall and early winter bring to our profession. Many of the superintendents in Wisconsin burn the candle at both ends during the golf season. We try to be everything to everyone, and unfortunately that dedication to the golf course can sometimes leave the most important ones in our lives getting the short end of that burning candle...including ourselves.

The recent weather change has afforded me to take the time for a few things that I have been putting off for a while. The first thing would be a knee surgery, that by no means was anything I was looking forward to and by default of the down time from a trip to the hospital, a little time to sit, with my leg up of course, and think about where 2013 had gone.

It seems like yesterday we were getting ready to usher in 2013. My first year in this position with our association has truly been a whirlwind. I look at all of the goals those of you who have served on this board have been able to accomplish during your time as leaders and I am honored and humbled to follow in

your footsteps and want to thank you for the groundwork you have laid for our association to follow. I, like I am certain many presidents of the WGCSA before me, have goals. One of my goals has been to attempt to work with our allied associations within our state to help enhance our presence and opportunities we may have as superintendents. Some of what I have found in conversation with many of the other golf oriented associations is that things are not easy at this time. I know that is preaching to the choir talking to all of you and at a time when other associations struggle to maintain membership; ours continues to be loyal and sound.

A few years ago, well at least I would like to believe it was just a few, under the Presidency of Mr. Dustin Riley the WGCSA Board of Directors went through a strategic planning session. I actually believe it to be four or five all day planning sessions with Steve Randall from GCSAA who help guide and organize the board thoughts into what we at that time were considered a list of long term goals and pathways for the WGCSA. Some of the items that we discussed

were matters of articulating into print what was the objective and mission statement of the aAssociation, but what took the longest was looking back at all of the great things we had done and where we had grown from and setting realistic goals and expectations for the future. One of the overwhelming sediments that came from all of the hours of conversation was that with our profession getting more and more time consuming to our lives, is that we would need help.

Our association hired Mr. Brett Grams as our Executive Director and he has done a fabulous job of guiding the WGCSA during an extremely turbulent time, he has done so in a very organized and fiscally responsible way. I urge all of you to thank Brett for his efforts. He has more than picked up the slack for items that could have slipped through the cracks he has afforded our association the ability to keep marking goals off of our preverbal checklist. That brings me back to being able to sit back with my leg up and think.

Our association is now at a point where we have discussed hosting another strategic planning secession and I have talked to Mr. John Miller, the GCSAA Regional Field Staff Representative, about sitting down with us again. We have discussed being able to do this between the first of the 2014 and our Spring Business Meeting. I ask each and every one of you to take a moment during this somewhat less hectic time of year in the golf world and ask yourself, "where do I want to see this association go in the next ten to twenty years". "What have we done well and what can we improve upon." I would love to hear from each of you as we start to assemble a new set of goals, a new set of standards, and a new set of priorities for the future of the WGCSA.

I hope that all of you had a great 2013 and even better 2014. I would also like wish each of you and your families a Very Merry Christmas and a Happy New Year and I look forward to talking to you soon. 



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Thank You To Our Supporters!

By Brett Grams, Chapter Manager, Wisconsin Golf Course Superintendents Association

Well I admit I have been spoiled by the recent warmer and longer falls of the past few years. So far the end of October and all of November have been quite cold, windy and wet. Every time I had plans to get away to woods for some hunting or in the yard to do some leaf clean up I was faced with less than ideal weather conditions. I hope all you had better luck with getting your fall projects completed than I did!

As most of you are winding down your golf maintenance season now is the time to start preparing for next year. The 2014 WGCSA Calendar has been completed. (Page 44) I am excited about our meeting sites for the season. We have a combination of familiar venues and other courses that we have not been to for quite a few years. I want to extend a big thank you to Scott Bushman who works diligently to confirm these sites many months in advance. The Education Committee is now working on bringing in speakers and identifying timely topics for our monthly speakers. I am happy to report

that Education Chair Kevin Knudtson has confirmed Dr. Nick Christians from Iowa State for our March 3rd Spring Business Meeting. This will be a great way to start off the education sessions for next year. In the coming weeks we will have the complete education topics and offerings for the upcoming year completed.

I am also happy to report that the 2014 WI Room at the GIS in Orlando, FL will be held Wednesday evening February 5th. Thanks to the continued and generous support of our Industry Partners we will again be hosting a complimentary evening for WGCSA members from 6 to 9 PM at the Brickhouse Tavern and Tap right on International Drive (down the street from the Convention Center).

This time of year is always a good time to review the past season and the WGCSA Leaders would like to thank all of the membership who attended our monthly meetings and educational events. We also would like to give special thanks to the vendor companies and Industry Partners who graciously support our association

and efforts. We simply could not provide all the meetings, educational events and of course this great magazine without their input and support! Please consider the sponsors of our association in your purchasing decisions. Please take the time to thank the companies that support us, let them know you are aware of this support when you can!

Good things continue happen throughout the state including UW Madison where we have just received a request for funding some new research. The WGCSA Board of Directors will be addressing these and other funding requests as we prepare our annual budget. I hope all of you will be able to attend the Fall Business Meeting that precedes our Turf Symposium in Kohler. Elections, budget approval, and other important chapter decisions are decided at this meeting. I hope you can attend and add ideas and provide feedback.

In closing I hope each member can spend some quality time with family and friends during the holidays. Take a break, you deserve it! 

WGCSA MISSION STATEMENT

The Wisconsin Golf Course Superintendents Association is committed to serve each member by promoting the profession and enhancing the growth of the game of golf through education, communication and research.

WGCSA VISION STATEMENT

The Wisconsin Golf Course Superintendents Association is dedicated to increase the value provided to its members and to the profession by:

- Enhancing the professionalism of its members by strengthening our role as a leading golf organization in the state.
- Growing and recognizing the benefits of a diverse membership throughout Wisconsin.
- Educating and promoting our members as leaders in environmental stewardship.
- Offering affordable, high value educational programs at the forefront of technology and service.
- Being key to enjoyment and the economic success of the game of golf.

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2013: Learning What I Thought I Knew

By Bruce Schweiger, Turfgrass Diagnostic Lab Manager, O.J. Noer Turfgrass Research and Education Facility

As you all know I made a huge career change last spring to become the Director of the Turfgrass Diagnostic Laboratory at the OJ Noer Research Facility. After spending over 35 years in the field as a grower, sales rep and general manager this was going to be different. I have had a long relationship with the TDL as a contract member for many years. Through the Gregos, Abler and Koch years I thought I had a good idea of what this new career was going to entail. Let me say it publically boy was I wrong. I never knew Gregos and Steve Abler could work so hard, but I knew Dr. Koch did (he is my new boss). When I started in spring the snow mold rating from the winter had not been finished yet due to the cold spring and the fact that the UP plots had snow cover until May 6th. My real initiation to my new job was the trip from the OJ Noer to Antigo Bass Lake GC to rate the cover trials, then on to Wawonowin Golf Course for snow mold rating and last but not least on to Brainerd, MN all in one day. After a very short night we were off to rate more snow mold plots at The Legacy Course at Gragun's. Then the long trip home in the mist. After lunch Dr. Koch decided to make use of the windshield time and have Sam and PJ (our two great technicians) read the data we had just collected to him as I drove down the interstate. Imagine listening to them reading 76, 66, 74, 69, and 72 and so on for three hours on the interstate in the rain. What had I signed up for, what happened to into work by 8 and home by 4:30 and hitting balls at the University Ridge Driving Range over my lunch hour? Well

those days never did appear. I never made it to the range at University Ridge to hit balls. I played 7 rounds of golf, and never got my boat into the water to fish until early September.

I had to learn turfgrass disease from behind a microscope and if I was lucky a few pictures that accompanied the samples. We have been over this in past articles. I want to tell you I had so much fun this summer talking turf with homeowners, landscape contractors, sports field managers, sod growers, golf course superintendents other turfgrass professionals. At the OJ Noer the Pathology department is in charge of the maintenance of each of our research plots. With the help of Tom Schwab OJ Noer Facility manager, and two fantastic technicians, Sam Soper and PJ Leisch, I was able to keep up on all our work. I need to take a quick moment to thank PJ and Sam; they were fantastic sharing their knowledge with me and teaching far more than I taught them this summer, THANKS GUYS!!!

What did 2013 have in store for me? I was lucky that weather created a slow start to the growing season and I was able to slowly walk into the job and with Dr. Koch's guidance keep up with the diagnostics. As spring passed into summer



Fig 1. Flooding at the Noer Center when as much as 15 inches fell on the area in a week.

part of the state was berated with as much as 15 inches of rain in a week. Flooding was being reported in many areas of the state and we were not spared at the OJ Noer as shown in **figure 1**.

The prolonged cold spring lead to an increase in root pathogens such as Summer Patch (*Magnaporthe poae*) and Necrotic Ring Spot (*Ophiostoma korrae*) in Bluegrass, and Take-all-patch (*Gaeumannomyces graminis* var. *avenae*) in bentgrass. Summer Patch and Necrotic Ring proved to be very active this summer. Many of confirmed diagnosis can be traced back to the extremely wet weather or just plain over watering with in-ground irrigation. It seems many homeowners and contractors feel irrigation systems are set it and forget it. As we have seen many times this does not work!

I learned that in diagnostics the present of a specific fungus does not automatically mean that the fungus is the causal agent. I was able to detect diagnose take-all-patch in many samples this summer but in most samples after careful examination and discussion with the golf course superintendent take-all-patch was not the issue.



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TURFGRASS DIAGNOSTIC LAB

2013 Turfgrass Diagnostic Lab Diagnoses

(2012 numbers in parenthesis)

Diagnosis	Professional*	Homeowner*
Take-All Patch	11 (10)	0 (0)
Abiotic	28 (53)	8 (21)
Microdocium Patch	0 (1)	0 (0)
Leaf Spots	4 (3)	2 (1)
Insects	0 (0)	0 (0)
Anthracnose (Foliar & Basal Rot)	15 (17)	0 (0)
Fairy Rings	2 (8)	0 (0)
Necrotic Ring Spot	1 (1)	7 (9)
Summer Patch	11 (15)	7 (16)
Brown Patch	1 (1)	0 (0)
Brown Ring Patch	0 (2)	0 (0)
Etiolated Tiller Syndrome/Bacterial Wilt	0 (1)	0 (0)
Typhula Blight	1 (1)	1 (1)
Weed ID	0 (4)	4 (20)
Dollar Spot	2 (2)	0 (0)
Pythium foliar blight or root rot	7 (7)	0 (0)
Other	12 (5)	2 (1)
TOTAL	96 (131)	31 (70)

Overall it was a low year for sample submission, which made my transition much easier. I am poised for a much more active year and let's hope that is in 2019 or beyond.

On the research side the Rust project that Dr. Koch is involved in presented a few issues we had to overcome. The plots where we planned to seed the bluegrass had a turf cover that needed to be re-

moved. After a couple of glyphosate sprays the sod had to be removed, but how were we going to accomplish that task. You are all way ahead of me, thinking just cut out the sod. The issue was the plot is 15,000 sq. ft. and that equates to a semi and half of sod. The only option was our Ryan sod cutter, this could take days. Well we overcame with the use of a commercial grade sod cutter (**Figure 2**). This

made for a few long days but we accomplished our goal and the plots were seeded mid-June. As you remember and saw in **Figure 1** we had 15 inches of rain at the OJ Noer and

our plots were completely underwater for 4 days. At field days the plots looked horrible, but with some tender loving care we finally had them established and started to collect data in late August.

As always, we would like to offer sincere thanks to our 2013 contract members listed on page 11. Quite simply, the lab would not exist without their generous support. We are well aware that more is asked of you every year, both at your own facility and in support of the associations that work on your behalf. In addition, we at UW and the TDL in particular rely on you to make our programs viable and successful. We do this knowing that every dollar in your budget, both personal and professional, is stretched to the limit and we work hard to make sure every dollar you send our way is managed in the most efficient way possible and that in the end it will make some aspect of your job easier in the future. We hope that no matter what the future holds, you will continue to support the UW and the TDL to the same degree you have in the past. If you aren't a contract member with the TDL, we urge you to join the 63 of your industry colleagues and help to make the TDL the foremost center for turfgrass diagnostics in the Midwest and one of the premier turfgrass centers in the country. We can't do it without your support. For more information, please visit the TDL's website at www.tdl.wisc.edu

Yes, it was a very exciting year and one full of new challenges and learning opportunities. I hope this past years was the same for you and your facility. I also hope we can continue to make every year challenging and a learning opportunity. I look forward to seeing many of you over the winter months and in the years to come. 



Fig 2. A commercial sod cutter was used to speed the process of removing 15,000 sq feet of sod to start with a fresh base for the Rust Project.

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Mineral Deposits In Sand Putting Greens

By Dr. Doug Soldat, Department of Soil Science, University of Wisconsin - Madison

On Halloween this year, graduate student Glen Obear dressed up as a very busy guy and stood up in front of a fairly large audience to defend his Master's research in Soil Science. In a few more weeks, he'll do the same thing for his Entomology degree under Dr. Chris Williamson. Many of you know Glen from his three years here as a graduate student in the UW-Madison turf program. Glen's given several talks at Field Day and other educational events. He's also visited many golf courses around the state to collect soil samples or evaluate on-course research trials.

Glen's work in Soils covered a wide range of topics revolving around the central theme of soil chemical problems in sand root zones. I won't attempt to summarize all of his findings, but will report on a few bits and pieces that I find very interesting.

The first time I met Glen, he was standing by my office door with a chunk of iron-cemented pea gravel from the bottom of a USGA green that he brought back from his internship in Hawaii. He wanted to know exactly what it was, how it formed, and how to get rid of it. He found answers from me and other professors unsatisfying, so I told him he might get the chance to research it himself as a graduate student. About two years later, that's exactly what he did. His graduate studies were largely funded by the USGA and Wayne R. Kussow Wisconsin Distinguished Graduate Fellowship endowed by the Wisconsin



Figure 1. Red iron and black manganese accumulating at the sand/pea gravel interface of a USGA putting green. (Image: Obear)

Turfgrass Association.

At first, we figured this iron cementation was a rare problem that was specific to the tropics because the only other case that we knew of was from a club in Vietnam. However, after randomly sampling greens from all over the US, Glen estimates that 25% of all USGA greens will show some evidence of iron cementation at the pea gravel/sand interface. Glen selected five of the most developed iron layers for further

study and found that the layers are indeed composed of iron and manganese oxides (Figure 1). The iron and manganese move down from the top layers of soil and horizontally from upslope areas. As a consequence, the iron layers are usually most severe at the lowest laying areas in putting greens.

Glen also identified a handful of cases where the iron layer developed in the root zone around a depth of three or four inches (Figure 2). In these cases there always was a textural discontinuity where the layer formed. A textural discontinuity is just a fancy way of describing the place where finer particles sit on top of coarse particles, or vice versa. For example, we normally find the layer right where the sand sits on the pea gravel, but have also seen it where fine topdressing sand sits on top of the original, coarser root zone mix. This finding highlights the importance of matching your topdressing with your root zone mix.

There is still a lot of work that needs to be done to figure out why these layers form in some cases and not others. We don't know how much iron fertilizers contribute, but if it were me I'd be very conservative with iron applications on my USGA greens. Also, we do not know if anything can be done to reverse the layer formation that won't also kill the turf. I expect Glen will continue to investigate this throughout his career.

While studying the iron layer, Glen was also investigating the influence of high bicarbonate water on sand root zone quality. It is thought by some that bicarbonate is a problem because after entering the soil, it will react with calcium to form calcium carbonate. If this occurs, some fear that the calcium carbonate will clog soil pores. A few prominent turf scientists have written about high bicarbonate water having the potential to cause "surface sealing of pores" which will reduce air and water infiltration. The solution to the supposed problem is to treat the water to remove the bicarbonate, or treat the soil to dissolve the calcium carbonate.

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WISCONSIN SOILS REPORT

However, I am quite skeptical of this being a serious issue because irrigation water in southern and eastern WI has some of the highest bicarbonate levels in the country. If bicarbonate was such a problem, you'd think we'd all be in agreement about it and solutions would be in place. This doesn't seem to be the case. Some folks treat for high bicarbonate and swear by the results, others don't and are perfectly happy with conditions.

So Glen attacked the issue from two fronts. He sampled USGA greens and irrigation water from all over the US and analyzed and compared the results. The hypothesis was that areas water high in bicarbonate will have soils rich in calcium carbonate. But this turned out to be false. Instead Glen found that if soil pH was less than 7, there was little chance of finding calcium carbonate in the soil. If soil pH was >7 , you may or may not find calcium carbonate in the soil. The implication here is that if you maintain soil pH below 7, there is no need to worry about bicarbonate in the water or the potential for pore clogging.

However, we really don't know if the high pH soils with calcium carbonate build up had a problem with reduced pore space. So Glen designed a greenhouse study where he irrigated bentgrass with pure water (no bicarbonate) and water nearly saturated with bicarbonate. After about three years' worth of evapotranspiration and no drainage, he found a small amount of calcium carbonate build up, but no evidence for clogging of pores. In fact, the pure water was found to have a higher degree of clogged pores. The exact reason for this is unknown, but we think it may have something to do with the pure water causing the peat moss in the soil to expand to a greater extent than happens with the bicarbonate water.



Figure 2. An iron layer is beginning to form at about four inches down because of a textural discontinuity where fine topdressing sand sits on top of the original root zone mix. (Image: Obear)

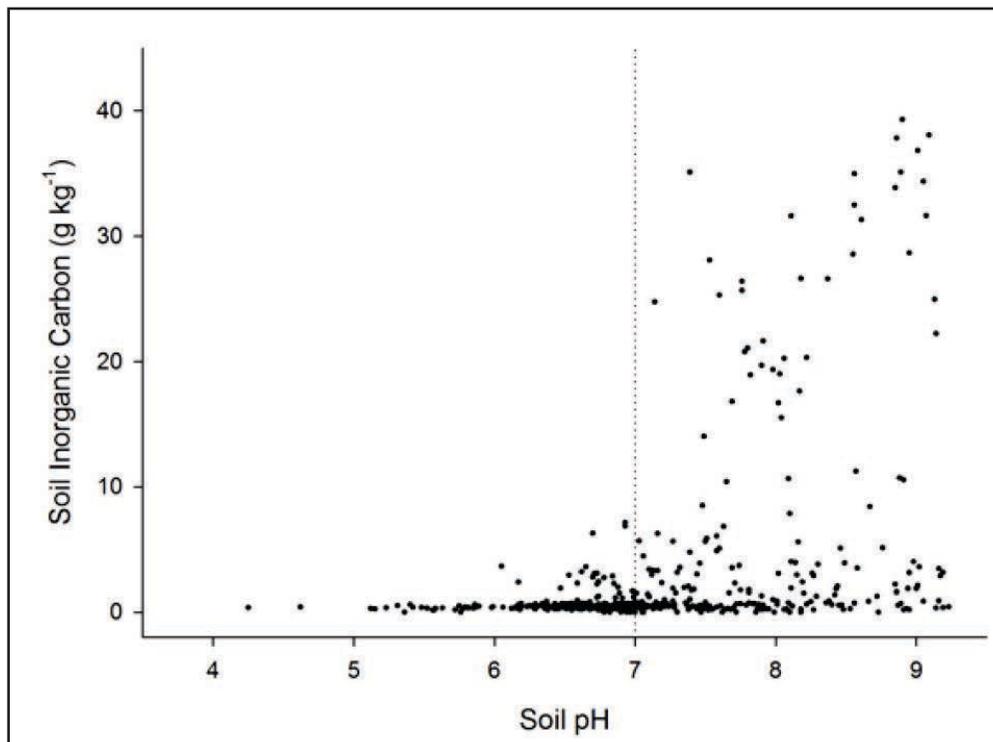


Figure 3. Soil inorganic carbon (AKA calcium carbonate) is really only found in soils where the pH is above 7. If your pH is below 7, you'll never have to worry about bicarbonate from the irrigation water precipitating.

WISCONSIN SOILS REPORT

Many of us have seen the white crust that develops on thin or dead spots on putting greens. Glen tested it at the O.J. Noer Research Facility and found that the white crust was indeed calcium carbonate. However, the calcium carbonate crusts we found were always associated with an algal crust. When the turf thins, the algae quickly fills in and forms a crust, and the high bicarbonate irrigation water reacts with the algae to form a white crust on top of the algal mat. So our hypothesis is that the white crust is often mistaken as the cause of the problem when it is simply an artifact of the algae and the water. The real problem is whatever caused the turf to thin so the algae could proliferate and form a mat (shade, compaction, scalping, heat stress, etc.). Like the iron issue, there is much more to learn about bicarbonate, but right now, we think you're much better off spending money to correct drainage and shade problems to prevent turf thinning rather than an acid injector to treat your irrigation water.

In May, Glen will be packing up and moving to Lincoln, Nebraska with his wife, Lisa, their son Eli. There, Glen will pursue his Ph.D. at the University of Nebraska with former Badger Dr. Bill Kreuser. I know Glen and Bill will do some really great work together and make us proud. We will be sad to see Glen leave Wisconsin, but are excited for him and his family on their new adventure. 🌱



Figure 4. A white crust of calcium carbonate is starting to form on top of the algal mat. (Image: Obear)

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The Next Chapter

By Dr. Paul Koch, Department of Pathology, University of Wisconsin - Madison

More so than most years, 2013 was a year of change for the University of Wisconsin's turfgrass program. We saw the departure of Dr. Jim Kerns, angst over whether his or Dr. John Stier's positions would be filled, questions over the future of the program, and even a change at the Turfgrass Diagnostic Lab as Bruce Schweiger was brought on to manage the day-to-day operations. As we close the book on 2013 and look towards 2014, I think it's safe to say

we can stop thinking whether our program will survive, and focus now on how it can thrive. Though this is not news to many of you, I am happy to report that I have accepted the position of Turfgrass Pathologist in the Department of Plant Pathology at the University of Wisconsin - Madison. I am immensely grateful for the opportunity to remain in Wisconsin and serve the turfgrass industry, and it is my great honor to step into the role that has been filled in the past so ably by Drs Worf, Maxwell, Jung, and Kerns (Figures 1-3). I look forward to working with all of you for many years to come, and am excited about the direction our program and our industry is headed.

Which begs the question, where are we headed? Will I be Kerns 2.0? Sadly, no, my golf game just isn't good enough (just kidding Jim). There will be differences, however, if only because the position is structured differently than the one Jim filled so well. In contrast to past turf pathologist positions here at UW, my position will have a teaching component, responsible for teaching the introductory and advanced turfgrass classes taught in the past by Dr. Stier. While I look forward to teaching these classes, it will likely limit the time available to make site visits and give seminars, especially during the fall months when class in session.

This, however, does not mean you will be underserved. Most of my position remains based in extension, meaning that the majority of my time will still be focused on interacting with you. In fact, both Bruce and I are developing new platforms to stay connected with you at all times whether you like it or not. Despite being massively technologically challenged, both of us have joined Twitter® (my handle is @uwpaul and Bruce's is @BruceTdlBruce) and are tiptoeing our way into the social media waters. Bruce and I will also be developing Facebook® pages for both the TDL and Turf Pathology in the coming months and periodic blog posts posted on the TDL website discussing issues pertinent to turfgrass managers. In addition, look for the development of a more mobile-friendly TDL website (tdl.wisc.edu) and hopefully the development of a TDL 'app' for your mobile device in the months ahead.

As important as connections are, the foundation of any faculty position at the University of Wisconsin lies with its research. With the support of you in the industry, we have been able to conduct research investigating rust development on Kentucky bluegrass, pesticide fate on golf course turfgrass, the impact of winter covers on snow mold development, and the ability of bentgrass seed to serve as a source of dollar spot inoculum. Moving forward, we will continue to be responsive to the needs of the industry and will rely on direct and indirect communications with you for developing research studies in the future.



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WISCONSIN PATHOLOGY REPORT

With that said, my experience managing the TDL for 8 years has made me aware of how little we really know about certain diseases important to us as turf managers in Wisconsin. Diseases such as take-all patch, necrotic ring spot, and gray/speckled snow mold will all receive renewed attention so that we can more efficiently manage these diseases in the future. In addition, we will continue to conduct research focusing on the environmental impacts on pesticide efficacy to ensure that every pesticide application made is effective to its full ability.

Ways to contact Paul:

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- Twitter: @uwpaul

With all this talk about where we're going, it's important to take a quick moment to discuss how we got here. With a low undergraduate enrollment, turfgrass faculty positions at UW (or any university for that matter) are not ones that are automatically refilled by universities looking to make the biggest impact with the fewest dollars. So it is no exaggera-

tion to say that this position would not have been refilled without the support provided by the Wisconsin Turfgrass Association, the Wisconsin Sod Producers Association, the Wisconsin Golf Course Superintendents Association, the Northern Great Lakes Golf Course Superintendents Association, and numerous other individuals and organizations who wrote letters of support to the college urging the position be refilled quickly. If you have doubted the usefulness of these organizations, or wonder what benefits you truly get from them, this is a perfect example the power these organizations have to initiate positive change for the industry. I, for one, am grateful for all they have done in working to get this position refilled in such a timely manner.

Let me close my first *The Grass Roots* article as turf pathologist by expressing my immense personal gratitude to all of you for your support over the past 8 years. As a 22-year-old kid with only a summer's worth of diagnostic experience, it took a couple years to be comfortable providing you with confident diagnoses. Your patience and continued support allowed me to grow personally and professionally, and I believe has pre-



The author Dr. Paul Koch speaking at the 2013 Wisconsin Turfgrass Research Day

pared me to take over as the turfgrass pathologist. In addition, the level of support I received from the industry for my candidacy for the turf pathologist position was humbling and overwhelming. I feel forever indebted to you in the turf industry for providing such support both now and in the past, and I will work my tail off to make sure we provide you the support you need to do your job. The UW turf team is now in place for years to come, and I can't wait to see what we can accomplish with your support. Time to get to work. 



Figure 1: The modern history of turf pathology at UW can be traced back to Dr. Gayle Worf (middle) in the 1980's doing much of the early work on necrotic ring spot. Dr. Doug Maxwell (left) and Dr. Steve Millett (right) conducted turf pathology research on gray snow mold in the 1990's and also started the Turfgrass Diagnostic Lab.





Figure 2: Dr. Geunhwa Jung brought conducted genetic-based research on gray snow mold and dollar spot in the early 2000's, and also convinced me to come to graduate school and manage the Turfgrass Diagnostic Lab. In hindsight, I'm glad I followed his advice.



Figure 3: Most recently, Dr. Jim Kerns brought an applied aspect to the position and a great ability to communicate with the industry. As my major advisor, I learned an immense amount from Jim.

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Diamonds In The Rough

By Bryan Bergner, Golf Course Superintendent, Westmoor Country Club

Dr. Martin Luther King Jr. once stated, "Life's most persistent and urgent question is, 'What are you doing for others?'" I came across this quote about a year ago and it made me ask myself what it was I was doing for others, and in particular, what I was doing for people in my own community that are in need of a helping hand. The answer, sadly, was not much. So, I decided I had to do something to change that. But what?

Months passed, and I struggled with finding a cause or an organization that really moved me to action. And, I had lots of excuses. Then, one night, as I sat at the dining room table working on my hiring plan for the 2013 season, my wife (knowing that I sometimes recruit high school students) asked me if I had ever tried to recruit grounds crew applicants from City of Milwaukee schools. I had not, for no reason other than it had not been done before. My wife pressed me on that and encouraged me to think more critically about not only my hiring plan, but about my participation as a superintendent within the larger community. You see, my wife is a lawyer, so her "encouragement" is more like an interrogation, which meant I was not able to get up from that table until I had good answers to those questions. But, sometimes that is what it takes, and because of her "encouragement," the "Diamonds in the Rough" internship at Westmoor Country Club was launched.

The concept was simple: commit several summer positions to high school students who come from disadvantaged circumstances, but who demonstrate an interest in achieving success despite those disadvantages. But finding those "Diamonds in the Rough" was not so simple. After developing the concept for the internship program, I spent weeks (unsuccessfully) canvassing guidance counselors, writing letters, and trying to make connections that could help me find my first "Dia-

monds in the Rough." By this time it was the end of February, so I was not only discouraged by the lack of progress but also anxious because I had to finalize my crew.

Just as I was about to give up, I connected with the Operation Dream organization in Milwaukee. Operation Dream is a non-profit that serves young males, ages 4-17, whose environments put them at particular risk and for whom similar organizations are out of reach due to poverty and lack of transportation. Like similar mentoring organizations, Operation Dream provides programming designed to build leadership, academic, and social skills. But unique to Operation Dream is a program called Operation Work, which is a hands-on, incentive-based program for young men ages 11-17 in which they learn the basics of work, employment and self-sufficiency. The fact is, many of these young men have never known a man who works, so the program helps them to develop the "soft skills" so many of us learned by simply growing up around good male role models. High school students in the Operation Work program are then encouraged to go out and find employment. This, of course, is where the Operation Work program dovetailed perfectly with my Diamonds in the Rough internship concept.

The Operation Dream staff prepared the candidates well for their first job interviews. They came ready to impress, with positive attitudes and well thought out questions. From those interviews, we hired two young men from the Operation Work program to join our summer crew — Antwan and Demetrius. The boys started with little knowledge



Antwan Powell mowing his 1st green at Westmoor CC.

of the game of golf let alone what goes into maintaining a high-quality golf course. Although Westmoor is only 14 miles west of downtown Milwaukee, from the perspective of these kids, it might as well be a different planet.

Even without a background in golf, Antwan and Demetrius came eager to learn. They learned how to mow greens and fairways and how to rake bunkers. We also worked on soft skills, such as the importance of a firm handshake and looking a person in the eye when you talk to them. The boys quickly became an integral part of our crew and that allowed them to develop a sense of importance and responsibility they were not always familiar with.

MISCELLANY

As the summer progressed, I watched as Antwan and Demetrius developed into confident young men capable of holding their own with the more experienced crew members. I found it particularly refreshing that the boys did not arrive with a sense of entitlement, which I have encountered so often with high school and college students over the years. Overall, the internship was an overwhelming success for the boys and for our crew.

Towards the end of the summer, as a way to celebrate the successful season, we hosted a golf outing for roughly 20 of the Operation Dream boys on our five-hole Little Links Course. With my guidance, Antwan and Demetrius prepared a Keynote presentation about their summer job experience at Westmoor, which they then presented to the Operation Dream boys at the outing. Watching Antwan and Demetrius confidently explain the intricacies of mowing a green and how great it feels to be responsible for an exceptional work product was one of the most rewarding moments of my career.

Antwan and Demetrius learned a lot this last summer; but, in all honesty, I may have learned more. They reminded me of the many things I've taken for granted in my own life — things that allowed me to get where I am today. I understand now that my skills as a superintendent do not just allow me to grow grass and improve the golf course. I can use those same skills, as we all can, to grow better people and improve the communities around us.

On a side note, Antwan was recently featured in the “It’s Aaron” video series with Green Bay Packer great Aaron Rodgers. I encourage you to watch the video on itsaaron.com and see what Aaron Rodgers has to say about Antwan and Operation Dream.



Demetrius Turnage mowing a fairway at Westmoor CC.



Operation Dream outing on the Little Links Course

DeVries Leaves Low Water Legacy at Reid GC

By Bob Lohmann, President, Lohmann Golf Design

Doug DeVries knows how to finish up on a high note. Doug has been the superintendent here at Reid Golf Course since 1981, and he'll retire from his position in the spring of 2014. After decades of dealing with flooding issues, he spent the last two years working with us to get that problem solved, while implementing some long-overdue course upgrades in the bargain.

"This has been in the works for five years and it's been pretty exciting to see it all come together," said DeVries, CGCS. "I did a renovation and grow-in back in 1977, but that was back-of-the-napkin stuff and we were always wondering where the money was coming from. This was a precision operation and it was great to be a part of it.

"We've already had two heavy rains and the system works just like it's supposed to — the water level in the new naturalized stream only went up about 12 inches instead of the 4 - 5 feet we used to experience in the concrete channel."

The stormwater-retention capability of golf courses is something that golfers, the larger community and even course managers themselves often fail to appreciate. It's not the most sexy, captivating notion in golf, but the project now concluded here at Reid may just change all that, and the details should be required reading for anyone who maintains or manages a golf course, public or private.

Reid GC is a municipal facility lying entirely within the Upper Fox River Watershed. Surrounded by urban development, the course for many years had already served a practical water management purpose in town: a concrete channel cut directly through a four-hole section of the course, gathering overflow from the course but also from the paved streets all around it, and ultimately delivering that water into the Fox River, which flows into Green Bay.

Two problems: First, not enough water was actually making it downstream efficiently, resulting in all sorts of localized flooding on course but mainly off course. Second, the water that did reach the Fox River did not meet new state standards for water quality.

It took two years, but the engineering firm AECOM and my firm, Lohmann Golf Designs — along with Doug, Ryan Inc. Central and several others — managed to solve this issue and upgrade the four affected holes, at basically no cost to the Appleton Parks and Recreation Department, which manages the golf course.



Top: East Pond during construction

Middle: Ponds and project in October after grow in.

Bottom: South Pond during grow in.

(Photos by Lohmann Golf Design)

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AN ARCHITECT'S OPINION

“Two things drove this project,” said Kelly Mattfield, the AECOM project manager who handled this job. “One component was putting in ponds at the golf course and naturalizing the channel within the golf course. The other was removal of total suspended solids and phosphorus from the stormwater, for compliance with the MS4 permit, and also for compliance with TMDLs at the new state and federal levels.”

Allow me to translate: MS4 is a clever acronym for Municipal Separate Storm Sewer System. TMDL stands for “total maximum daily loads” of anything that “impairs” water quality, be they suspended solids, bacteria, phosphorus, or nitrogen.

Long story short, AECOM was hired by the city’s stormwater division to sort this problem, and these engineers brought in Lohmann Golf Designs as consultants, because a) the golf course would clearly play a crucial role in this effort and would require significant renovation as part of the project, and b) we’ve handled a half dozen different stormwater retention projects on golf courses and thus have ex-

perience with the process.

Together, in work that finished this past summer, we naturalized the channel passing through the course and hugely expanded Reid’s retention capacity by creating four acres of new ponds — or for you engineering types, nearly 50 acre-feet of new storage, enough to handle a 100-year storm. The key word here is “naturalized”. By creating what is essentially a giant wetland, we also created a giant filtration system that cleans up that stormwater as it passes through the on-course system before heading downstream.

LGD has indeed done a ton of large-scale, stormwater retention projects: at The Bridges at Poplar Creek in Hoffman Estates, Illinois; at Deer Path GC in Lake Forest, Illinois; at The Traditions at Chevy Chase GC in nearby Wheeling. In each case, we increased retention capability and improved water quality through introduction of natural, wetlands-reliant filtration techniques. We also took the opportunity to greatly enhance course design as part of the process.

However, in each of the above instances, it was the course management entity

that instigated and ultimately paid for the project.

At Reid GC, the city’s stormwater division was acting to comply with state statute, so it footed the bill. The city’s Parks and Recreation Department operates on a completely separate budget. In essence, the golf course played a crucial role in enabling this communitarian effort — AND received significant design/aesthetic upgrades in the process, with no budgetary impact, save a few thousand for some grow-in materials. The stormwater division even factored in compensation for lost rounds and other pro shop revenues!

“Given the history of the course,” explained Pete Neuberger, project manager for the City of Appleton’s Engineering Department, “it’s unlikely that these types of monies would have been available for course enhancement if there weren’t this stormwater project as a source of funding.”

Is there any reason this sort of situation could not take place on any course where the surrounding community is battling stormwater-retention and water-quality issues? Does it even matter whether that

Hole 3 Before (Below) and after (Right) from the tee.

(Photos by Lohmann Golf Design)



AN ARCHITECT'S OPINION

course is public or private? Not in my view, and Kelly Mattfield agrees.

"This is the first golf project I've personally done, and it was great working with Lohmann because they've got so much experience doing this sort of thing," she said. "Wisconsin is kind of ahead of surrounding states in terms of water quality aspects. But the EPA is pushing TMDLs across the country. Some states have more TMDLs than others, but these and other new EPA directives will definitely result in this sort of situation [in other communities]."

"If golf courses have the room, and they are in the right spot in the watershed, this makes sense. It's a win-win for everyone."

DeVries couldn't agree more: "It would behoove superintendents to approach the appropriate stormwater entities because golf courses are perfect for this. We would never have made these improvements without this opportunity. Supers should be aggressive. Talk to the right people. Call the DPW at the city or county level. Wisconsin is real aggressive on this stuff, but every state has stormwater management at that level. Lohmann and Ryan would be resources, too, because they've done it all before."

What did we actually do to the golf course, aside from creating

water capacity? Quite a lot, actually. You can't drop four new acres of water hazard in a 4- or 5-hole stretch of golf course and not impact the layout significantly, visually and strategically.

"We couldn't simply treat this as a typical pond project," said Neuberger. "We knew we had to respect the golf course by doing a good job of fully integrating these stormwater ponds as golf course features. It was Lohmann's job to find a way to enhance the course, and they did that."

Here's what went down:

- On the five directly affected holes, we rebuilt four greens and the equivalent of four fairways, moving them to maximize spatial relationships and improve risk-reward strategies at the edges of all these new water hazards. As Doug DeVries noted: "This whole property is only 108 acres, including the practice facility. That's really tight. It was a real challenge, putting 4-5 acres of pond and making it work. Lohmann made it work." We also effectively preserved the original green contours thanks to a thorough mapping exercise prior to construction. We even recreated some coveted pin placements: On the front right portion of the original 11th green, for example, there had been a very steep back-to-front

pitch. We duplicated that on the new 11th, while expanding the overall size of the putting surface. On the 2nd green, we more or less copied the original while again expanding its perimeters and making it tie in properly to the new surrounds.

- Reid GC will never be lumped together with the Midwest's collection of Golden Age Designs, but it is an older course with some fun, long-standing grooming traditions. For example, they mow a unique, 10-15 foot collar around their greens. Accordingly, when we rebuilt and reshaped the new green surrounds, we kept the features low profile and expanded the bentgrass collars to enable continuance of this style.

- Agronomically, the notable thing about the Appleton project is how we rebuilt the greens. Testing on the original soil profiles revealed a 3-4 inch layer of top-dressing build-up. Below that were 6-8 inches of native topsoil. In short, we replicated that profile on the new greens, using a 6:3:1 mixture that matched the top-dressing mix — allowing these new greens to behave more or less like the old ones, in terms of required maintenance practices. We also grassed them to Putter bent, an older strain whose name superintendents are probably surprised to hear after all these years. But Putter's color best matched the color of the holdover greens and is expected to perform well at the higher cuts (.120 to .130), with the conservative top-dressing program that Reid employs. For these reasons, we purposely avoided the newer, more aggressive bents that tend to get puffy when left at elevated heights of cut.



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AN ARCHITECTS OPINION

An additional note on the greens construction: We've done similar soil matching elsewhere, deploying variations on this 6:3:1 theme. When watering in these new greens, however, we've found they are not equipped to absorb water like a USGA green might — after all, these greens are built with a heavier soil profile that retains moisture and has more limited ability to convey it like modern greens can, even with slit drainage installed in the subgrade. So the greens rely heavily on surface drainage, which exposes them to erosion potential while you're waiting for seed to germinate. Bottom line: They are tough to establish.

At Reid, we followed the advice of the USGA's Bob Vavrek, who recommended (several years back in a Green Section Record article: <http://gsr.lib.msu.edu/1990s/1999/990901.pdf>) that we use temporary, breathable covers for two weeks during germination. I know what you're thinking: That will overheat and suffocate the young plants! Not the case. These covers are breathable and never raised soil temperature more than 2 degrees, and that was during 90-degree July heat. Once the covers were employed, Reid's new greens came in like gangbusters.

- The removal of the old concrete channel is the last step in the reconstruction process, and that takes place this month. We are literally busting it up and burying it nearby. Good riddance. This project boasts enormous environmental and agronomic benefits, but there's no way around this fact: That channel was an eyesore. The aesthetic difference its removal will make at Reid GC — replacing it with an entire valley of wetland pools — cannot be understated.

The par-4 12th at Reid is a great golf hole whose basic routing was unaffected by all this work. You carry over the edge of a new pond to the top of a hill, then look right — across a valley — to a putting surface on the far hillside. Players used to fly that concrete channel with their approaches. Soon they will crest the hill and see a beautiful, winding, naturalized water feature. Yes, of course, that feature is part of a system that can now handle a 100-year storm, and the water exiting that system is 10 times cleaner. But the 12th hole will also be a more beautiful golf hole, and that should count for something. It's already counting for something.

"I'm excited to play more golf here at Reid in my retirement," said DeVries. "More time with grandchildren. More time fishing, but definitely more golf." 



Top: The concrete drain ditch would overflow during storms before construction.

Middle: The new natural stream takes the water without flooding.

Bottom: The natural stream to the left of the soon to be removed concrete ditch.

(Photos by Lohmann Golf Design)



AN ARCHITECTS OPINION



Top Left: Hole 11 During grow in

Top Right: Hole 11 after grow in

Left: Hole 12 before construction

Bottom: Hole 12 after construction
(Photos by Lohmann Golf Design)



Chapter Delegate Meeting Outcomes

By David Brandenburg, Editor

EDITORS NOTE: The following was condensed from the GCSAA Chapter Delegate Outcomes and GCSAA.org

83 Delegates representing 88 of GCSAA's 99 chapters met with the GCSAA Board of Directors and 2014 board candidates, at The Oread Hotel and GCSAA Headquarters on October 1 -3, for the 21st annual Chapter Delegates Meeting. Thirty-three of the delegates were first-time attendees including Wisconsin's Jon Canavan.

GCSAA President Patrick R Finlen gave a snapshot of the association starting with evidence GCSAA is in a good position.

- Financially strong
- Offers quality programs and services.
- Delivers value to golf facilities.

However challenges exist.

- GCSAA continues to lose members.
- Needs to diversify revenues.

Finlen went on to discuss the importance of continuing education as members positions have changed. Our responsibilities to our clubs are broader and deeper requiring efficiency and utilizing technology. Regulatory pressures are increasing and although agronomics are important so are skills in business, leadership and communication skills.

Overall golf is contracting in the United States but growing worldwide leading to GCSAA programs and services to be in demand internationally. The contraction of golf here has led to reduces membership numbers and association revenues.

President Finlen finished with the GCSAA's priorities.

- Enhance the association's technology road map – 24/7 access to programs and services; mobile applications; simplification of business processes
- Full implementation of field staff
- Enhance resources to conduct advocacy efforts on behalf of members in

regards to government relations and marketing

- Enhance education programming and membership classifications to remain relevant in the marketplace
- Explore revenue opportunities: new GIS partners, licensing and association services to chapters upon request
- Be prudent in exploring programs/services that expands GCSAA contribution to growing the game worldwide

Next up J Rhett Evans, GCSAA's CEO gave a State of The Association.

GCSAA will move from 16 committees to 9 committees and 20 task groups to engage more members in the associations future.

The financial picture is good despite the declining membership and industry contraction. GCSAA is funded by:

- 47% Industry Support through advertising, sponsorship, exhibit space.
- 27% Member dues
- 15% User fees for education, conference registration and tournament fees.
- 7% EIFG grants and lease space.

Evans shared how GCSAA puts that money to work.

- The associations education, publications and conference and show contain the most expense but also

generate most of the revenue for GCSAA.

- Marketing and branding initiatives are aimed at promoting the profession in the marketplace.
- Chapter services continues to increase as field staff are put into place.

Evans gave a progress report on some of the key priorities of the association.

- GCSAA TV has had 500,000 views in 140 countries in 3 years
- Best annual membership retention rate in 5 years
- Implementation of the Bayer Plant Health Academy and Melrose Leadership Academy
- The development of the new GCSAA App
- 300 scholarships granted annually
- 21 new research projects
- 130 case studies depicting environmental success

The programs was turned over to Vice President Keith Ihms, CGCS who presented the GCSAA Rounds for Research generated \$175,000 in bids from 787 rounds of golf sold. 51 organizations participated and 80% of the money is returned to the organizations.

GCSAA headquarters is 20 years old and is going through improvements and renovations. Work included the roof, parking lot and sidewalks at a total cost of 2.1 million. Rather than take money out of reserves where it has been earning 6.5% it was borrowed at 3%.

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The delegates then broke into groups to discuss 4 membership related questions.

1. The groups consensus was membership classifications should be simplified and the value of being a class A member needs to be communicated to employers, golfers and the public.

2. The majority of groups thought membership standards should be enhanced to highlight business, communication environmental and leadership skills.

3. The consensus was to encourage non class A members to want to achieve class A status employer groups need to see the value of Class A superintendents and actively seek this as part of the hiring decision.

4. The majority thought changes to classifications should take place as soon as possible.

Candidates up for election at the Conference and Show are:

- President - Keith Ihms
- Vice President - John O'Keefe
- Secretary/Treasurer - Peter Grass and Bill Maynard
- Director - (Electing 2) Rafael Barajas, Mark Jordan and John Walker

Remaining on the board to finish two year director terms are Darren Davis, and John Fulling. Pat Finlen will serve at Past President in 2014.

Watch for full candidate details in Golf Course Management Magazine or at GCSAA.org. Feel free to contact Chapter Delegate Jon Canavan if you have any questions or comments.

On Friday November 22 GCSAA announced that Greg Lyman, Director of Environmental Programs and Jeff Bollig, Senior Director of Communications are no longer working for the association. No explanation was given for the changes.

Also announced was the hiring of Matt Shatto and J.D. Dockstad. Shatto will serve as Chief Operating Officer to replace Richard Konzem who resigned in June. Matt most recently served as the city administrator for North Kansas City, MO.

Dockstad will serve as the new Chief Business Development Officer. J.D. most recently served as the Director of Commercial Facilities for the city of Mesa, AZ. Both men will start Jan. 1st.

The GCSAA Conference and Golf Industry Show is coming Feb. 1-6, 2014 in Orlando. With the educational events shortened to Monday-Thursday to allow members to get home on Friday or join their families for fun in Orlando.

GCSAA members can attend the CMAA Conference Feb. 4-8 and Expo Feb. 7-8 at the Marriott World Center In Orlando at no charge with their badge.

More information, the complete brochure and travel information can be found on the association website.

GCSAA has a new mobile app for iPhone and Android users. It will consolidate GCSAA news, social media feeds, GCSAA TV and association information. 

The Latest On The Emerald Ash Borer

By Dr. R Chris Willismson, Department of Entomology, University of Wisconsin-Madison

Hopefully by now you have heard about or are familiar with the emerald ash borer (EAB), *Agrilus planinipennis* Fairmaire. EAB is an exotic, invasive insect that is native to Asia. It was first discovered in the United State in the summer of 2002 in the Detroit metropolitan area, and it has be theorized that it had been there for about a decade before it was found. The initial discovery in Wisconsin was in August 2008 near Newburg, WI, it is thought to have been here since early 2000. Since then, EAB has been found in over 20 other counties in Wisconsin. The primary culprit for the movement/distribution of EAB is by way of the movement of EAB infested firewood, this is not to say that EAB can not moved by other means such as adult flight, infested nursery stock or other ash products.

The larval stage is the most destructive life stage, EAB larvae feed in the cambial area destroying conductive tissues such as xylem and phloem that are critical for the movement of water and nutrients within trees. EAB larval feeding typically occurs from June-October. Ash trees are initially attacked by EAB adult females in mid-to-late May through early June, they lay their eggs in the upper canopy of the tree, as the population density increases over time, the trees are colonized lower on the trunk in the bole of the tree. EAB is predominantly host specific, it prefers ash tree from the *Fraxinus* genus. Unlike the bronzed birch borer and the two-lined chestnut borer (two closely related metallic wood boring beetles that are native to the U.S.) EAB does not have a preference for stressed over healthy trees, and tree size does not influence the likelihood of attack; EAB will attack ash trees ranging in size from 1/2->50 inch DBH.

Numerous insecticide efficacy (performance) trials have been conducted since EAB was first discovered in the United States. Several research scientists from Michigan, Ohio, Indiana, Illinois and Wisconsin have evaluated various in-

secticide chemistries to determine their performance under a variety of situations including various tree sizes, different ash tree species, insecticide rates, application timing, application technologies (i.e., trunk injections, soil drenches, soil injections and basal bark sprays) and tree settings (i.e., urban landscapes, golf courses, city terraces, woodlots and forests).

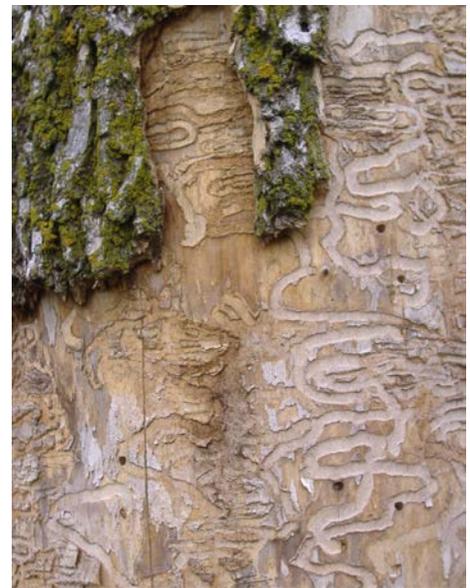
To this end, there are currently three active ingredients of insecticides that are labeled for control of EAB, they include: 1) dinotefuran (Safari) applied as a basal bark spray or a soil drench or injection; 2) emamectin benzoate (Treeäge) applied as a trunk injection; and 3) imidacloprid (Merit, Xytect and others) applied as a soil drench or injection or as a trunk injection. The various trunk injection application technologies that exist include: 1) ArboJet Tree IV, Quik-Jet and Viper hydraulic ; 2) ArborSystems Wedgle; 3) Mauget; and 4) Rainbow Scientific IQ Tree Infuser.

Research results indicate that insecticide treatments are effective when applied at the appropriate application rate and timing! Spring insecticide treatments of imidacloprid performed better than fall applications at the 1X rate. However, a 2X rate of imidacloprid will provide comparable control to the 1X rate in the spring. Also, level of EAB infestation and tree size play a critical role in the success of an insecticide treatment. Ash trees with > 40-50% upper canopy decline should NOT be treated with an insecticide as the likelihood of survival is quite low.

Safari (dinotefuran) provides good control when applied as a basal bark spray or soil drench when applied in May through mid-June. Imidacloprid soil drenches and Treeäge trunk injections are more effective on larger ash trees (i.e., > 15 inch DBH).

Annual treatment applications of the neonicotinoids (imidacloprid and dinotefuran) are necessary, Treeäge at the low

label rate will provide two years control and up to four years control at the highest label rate. The bottom line is that ash trees that are not treated with an insecticide will succumb to EAB feeding damage and ultimately die. For more information regarding EAB insecticide treatments, visit the following website: www.entomology.wisc.edu/emeraldashborer.



Above: Damage from EAB larvae interferes with water and nutrient movement.

Below: Adult Beetle



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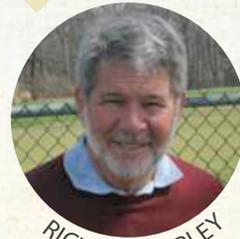
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BRUCE CLARKE

Join me at the 2014 Expo for a discussion on putting greens including managing collars and green speed.



RICHARD HURLEY

My opening keynote at the 2014 Expo will help you jumpstart your year with new leadership techniques and teamwork strategies.



JOHN KENNEDY

Take a look back at 2013 with a golf course "year in review."



BOB VAVREK

Have you considered the significance of plant/soil/water interactions? I'll explain why it's so important.



DOUG SOLDAT

Let's dive into the latest in turf insects and control options.



CHRIS WILLIAMSON

Want to learn about turf management at Target Field? Join me for a first-hand perspective.



LARRY DIVITO

What is "Maintenance Weed-Free Gardening", and how do you do it? Join me at Expo to find out.



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News and Notes From WGCSA Members

By Matt Kinnard and The DHD Team

It's once again that time of year for Tweet in Review. This is where I take the year's best tweets, twitter shout-outs and twitpics and compile them here, as a year in review.

@jerrykershasky (Jerry Kershasky)

Jan 13: WTA Turfgrass Research Day Tues, 1/15. Webinar. Check out presentations at <http://www.wisconsin-turfgrass-association.org> Grn drainage impeded by algae+bicarbonate?

@hawksnr (Neil Radatz)

Jan 31: Another interesting week. a record high, 1.5 inches of rain, 6 inches of snow, and now some extreme cold weather in the next 2 days.

@stein_william (Bill Stein)

Feb. 3: Can't beat flying out of Rhinelander. Airport security you can tolerate! Off to Golf Industry Show.

@trapping9 (Dave Brandenburg)

Feb. 4: #GIS13 dang nice outside but dragged myself inside for 'Successfully Managing Insect Pests.' Did I mention it is nice out?

@jerrykershasky (Jerry Kershasky)

Feb 5: I have attended many GCSSA Seminars over my 39 year career, Greens Aeration & Water Management by the Numbers is one of the best #GIS13

@jerrykershasky (Jerry Kershasky)

Feb 10: Thanks to all who shared their turf research, knowledge and experiences with me @GIS13 in San Diego! Time to put it to work in Madison, WI

@ogcsuper (Dustin Riley)

Feb 19: Another warmup, rain and significant snow melt followed by snow and cold temp. Rollercoaster winter. Spring might be ugly for Poa in WI.

@ogcsuper (Dustin Riley)

Feb. 19: Since Jan, we've had (4) 40+ degree temp drops following rain and snow melt. Worst of: 58 dg + 2" rain & snow melt; then -8 2 days later.

@ogcsuper (Dustin Riley)

March 15: What would you rather have, June in March ('12) or Jan in March ('13)? No warm up in the forecast either. #stircrazy

@jerrykershasky (Jerry Kershasky)

March 19: Ice did not start forming until late Jan, so with bent greens I should be

good to late April with gas exchange.

@hawksnr (Neil Radatz)

March 20: Well what more can I say it is certainly not the same as last spring, in that the course was open for play and we mowed the green 3 times already.

@czugel (Chris Zugel)

March 23: I saw my first robin of the year. You know what that means? Wisconsin is done in the #NCAA

@trapping9 (Dave Brandenburg)

March 24: Never thought I would plow greens but trying to move the snow to speed melting of 2+" of ice.

@trapping9 (Dave Brandenburg)

April 7: My 25th time to open a golf course tomorrow. First time I have had to move a snow bank to get golfers to the first tee.

@bryanbergner (Bryan Bergner)

April 13: It's amazing how much pink sm affects tall fescue compared to bluegrass rough. Less maintenance than blue?? Not at all

@suwa0015 (Lee Suwalski)

April 15: First golfers of the year and they are upset they can't play the nine they want! #really? (45 hole gc probs)

@jmillies1 (Jeff Millies)

April 24: Course is finally partially open today. Pines 1-9 and modified 9 holes. Lower holes still flooded, this is the latest we ever open

@creeksupt (Matt Kregel)

April 24: 100% chance of a rain/snow mix tonight. Just lovely! I like rain. I guess at this point what's wrong with a little more.

@stein_william (Bill Stein)

April 25: Still about 18" of snow to burn off. Crazy.

@trapping9 (Dave Brandenburg)

April 30: My lunch at club: 1st golfer-Course is in great shape, 2nd-Boy winter was tough on the place, 3rd-Who killed all the trees? Gotta lovem all!

@ogcsuper (Dustin Riley)

May 6: An employee for over 20 years needs



@ridgewayccturf (Steve Blake)

April 10: Lots of branches down on the course from the ice storm. Very dangerous to even be outside right now with all of the flying debris.

to take a leave for med reasons. He is heart broken and disappointed he's letting the crew down. Sad.

@bryanbergner (Bryan Bergner)

May 13: Holy Frost!! Fwy topdressing and flymowing on hold

@creeksupt (Matt Kregel)

May 23: I cannot imagine why anyone would want to play when it's 48 and winds are 25 - 35 mph but in case you do there are no cart restrictions.

@suwa0015 (Lee Suwalski)

May 24: Frost delay this morning

@creeksupt (Matt Kregel)

May 25: We have FROST this morning! On Course maintenance has been delayed. First tee time TBD. Great start to summer and holiday weekend.

@jerrykershasky (Jerry Kershasky)

May 26: Mental note: don't let cup changer take water soften treated water to water cup plugs, TDR probe reading 83%. 30 higher than coyote urine

@trapping9 (Dave Brandenburg)

June 2: Spring 2013. Through May we have 31 golf playable days. 31 behind 2012, 10 behind the bad 2011. Saving on pumphouse electric costs.

BADGER STATE TURF CLIPPINGS

@brlabarrt (Ben LaBarre)

June 22: never stimp greens, only test with putter. they roll true and occasionally run fast.

@jerrykershasky (Jerry Kershasky)

June 25: Raining very hard now 4+” and counting in 4 days. That’s about 5-6 weeks of greens irrigation water with high soil temps. NotGood4Roots

@suwa0015 (Lee Suwalski)

June 28: Last yr I could not keep enough water in my irrigation pond, this yr I might have to start pumping water out just to keep it in the banks!

@creeksupt (Matt Kregel)

July 5: Hottest day this year so far is 90°. Last year by this date we had 22 days 90° or warmer including two days over 100° I like this year more.

@stein_william (Bill Stein)

July 7: when your days are so long and nights so short that your electric cart isn’t charged in the morning.

@jerrykershasky (Jerry Kershasky)

July 7: Between coyotes pissing on greens, moles tunneling, turkeys pecking, deer

stumping, geese crapping I have had enough of wild life, glad no moose

@trapping9 (Dave Brandenburg)

July 14: A shirtless young man, a buddy and a pretty girl were hightailing it off the golf course at 5:05am. Musta been bird watching.

@hawksnr (Neil Radatz)

July 18: You know its hot when your jolly ranchers melt in your pocket. dead calm here text book dollar spot on fairways. Nothing else right now

@czugel (Chris Zugel)

July 18: So far today, I’ve almost ran over a deer a fox and a family of turkeys. All while driving my cart. It’s like a Disney movie out here!

@jerrykershasky (Jerry Kershasky)

July 30: Bruce Schweiger, new manager of UW TDL says get on Twitter. Plain and simple, if you’re not, you’re missing out

@czugel (Chris Zugel)

July 30: Assistants, interns and other staff are in Madison for WTA Field Days. I’m left to run the crew by myself. I see a self imposed time-out...



@brlabarrt (Ben LaBarre)

July 15: unfortunately this was my tire. Gotta work on the drive by grab. #fumble



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BADGER STATE TURF CLIPPINGS

@ogcsuper (Dustin Riley)
July 31: Irrigation report revealed 71% less irrigation in 2013 vs 2012. Only 2.9 mil gallons for year or only 1.5" water/acre applied. #timelyrains

@hawksnr (Neil Radatz)
August 13: We will start organic matter management tomorrow tees and approaches only no greens. (Is this a euphemism for aeration?? HaHa!)

@suwa0015 (Lee Suwalski)
August 26: 8:30 shotguns on both courses this morning = great Monday said nobody ever

@stein_william (Bill Stein)
August 29: Kaboom! There go another 35 solenoids and another satellite and another 100 man hours fixing bunkers. Love rain-hate storms.

@creeksupt (Matt Kregel)
Sept. 10: Just another typical September Day. Aerating tees and fwys, top dressing after and brushing in. Did I mention it was 96 with 25mph winds?

@trapking9 (Dave Brandenburg)
Sept. 21: It's not often I can change cups by moonlight but it works today.

@czugel (Chris Zugel)
Sept. 23: Maple Bluff WTA outing. Course is tight. It's also in perfect shape! Amazing course.

@stein_william (Bill Stein)
Sept. 25: A 1.1 million dollar lighting system keeps turf growing longer in the late

fall, shorter day period. (On a Lambeau Field Tour)

@ogcsuper (Dustin Riley)
October 9: Favorite comment for 2013..."there are too many ANTS in #14 bunker." Previous leader in the Clubhouse was "we have bees in our Native Area"

@ogcsuper (Dustin Riley)
October 9: Favorite comment for 2013..."there are too many ANTS in #14 bunker." Previous leader in the Clubhouse was "we have bees in our Native Area"

@hawksnr (Neil Radatz)
October 12: Haven't had a frost yet and course in great shape Enjoy your round.

@creeksupt (Matt Kregel)
October 22: Heavy frost this morning. Winterizing the irrigation system today. Earliest date for this and perhaps going to be the coldest. What gives?

@czugel (Chris Zugel)
October 24: I've got a guy on the staff that calls in to work because ghosts keep him up at night. While I doubt the excuse I applaud the creativity.

@trapking9 (Dave Brandenburg)
Nov. 14: I never cared for mowing tees and 33 degrees with snow on the edges isn't helping. #lastmow

@trapking9 (Dave Brandenburg)
Nov. 15: Is anybody in Wisconsin not spray-



@suwa0015 (Lee Suwalski)
September 30: Million to one shot Doc.!
#Seinfeld

ing snow mold products today? Finally less wind.

@hawksnr (Neil Radatz)
Nov. 15: finally completed snow mold app on fairways today, only greens and tees second app to go not looking good until Tuesday more wind and rain

This year's best Tweeter Award goes to Dave Brandenburg, for his quality and sheer volume of tweets. A very close Runner Up this year is Jerry Kershasky. Best Individual Tweet goes to Chris Zugel for his 'Ghost' tweet. Congratulations Dave, Jerry and Chris. Tweet On!

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BADGER STATE TURF CLIPPINGS

Career Moves

Earlier this year **Randy Swonger** and his wife Sheri became golf course owners. They purchased Stalker Lake Golf Course in Dalton, MN. Before embarking on his dream of owning his own golf course, Randy was the superintendent at Trout Lake GC in Woodruff, WI for many years. Congratulations to the Swonger family on your new endeavor.

Taking Randy Swonger's place at Trout Lake is **Brian Tameling**. Brian grew up only ten minutes from Trout Lake and is happy to be back near his hometown, now, with his wife and two young boys. For the past six years Brian was the superintendent at Wolf Hollow GC in Lena, IL and also served as the President of the Northwest Illinois Golf Course Superintendents

Association. Congratulations on your new job Brian!

Just Got Married

Mike Rzadzki, Assistant Superintendent at Kettle Hills GC, married his bride, Sarah, September 28th in an outdoor ceremony in Sheboygan Falls. The couple honeymooned for a week in Washington State where they went crab fishing on the Puget Sound, hiked Mt. Rainier and kayaked on Lake Union in Seattle. Congratulations Mike and Sarah!

Awards

Renee Rioux, a Ph.D. candidate in the former Kerns lab in the Department of Plant Pathology at UW – Madison, recently received the 'Turfgrass Breeders

Association Award for Best Oral Presentation' at the American Society of Agronomy's Annual Meetings on November 6th in Tampa, FL. Renee's presentation was titled 'Culture-based and molecular detection of Sclerotinia homoeocarpa in commercial creeping bentgrass seed' and will be the subject of an article in the January/February issue of *The Grass Roots*. Congratulations Renee!

Please pass along any significant news or happenings around the state to Danny, Mike or me. We want to spread the good news. You can also email me at m.kinnard@sbcglobal.net or call at 920-210-9059.

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Worth The Wait - WTA Fundraiser At Maple Bluff Country Club

By Tom Schwab, Manager, O.J. Noer Turfgrass Research and Education Facility, University of Wisconsin-Madison

It's been 28 years since the WTA Golf Fundraiser last visited Maple Bluff Country Club. Superintendent Tom Harrison hosted the 4th ever WTA fundraiser there on September 30th, 1985. I still remember that fun golf event despite the cold weather and occasional snowflakes that fell. Superintendent Josh LePine made up for that weather this year when he hosted the 34th edition of the fundraiser with weather in the low 70s, slight wind, and clear blue skies.

Everything was first rate in addition to the weather. The course could not have been more enjoyable or in more fabulous shape. The greens were lightning fast, the fairways thick and tight, bunkers consistent, and everything else proved a perfect example of great course management. Josh, his crew, and everyone at Maple Bluff went all out to make our experience the very best.

There were 134 participants this year. Ten more and the course would have been maxed out. That along with more Hole Sponsors than ever before helped push the fundraising to a record of over \$13,000. The ultimate beneficiary of those funds is the turf industry. All the funds raised support the Wisconsin Turfgrass Research Sustainability Fund at the University of Wisconsin-Madison. Over the WTA Golf Fundraiser's long history, proceeds have gone directly to support turf research and more recently to fund the Wisconsin Distinguished Graduate Fellowships in Turfgrass Research. Beginning three years ago, proceeds have gone to the Turfgrass Research Sustainability Fund that was created to support ever more turfgrass research initiatives.

It should be mentioned that a big contributing factor to the record fundraising was Maple Bluff Country Club giving up their course for a very low fixed cost. We thank the membership for being so kind and hospitable.

The day was not all about raising research money. It was full of fun events too. The main event of the day was a four person best ball golf tournament.

The event winners were:

1st Place: Joel Peterson, Chad Kirchen, Tony Herrera, Brandon Correll
Middle Place: Bob Lohmann, Todd Quinton, Matt Lohmann, Grant Rundblade

Hardest Working Place: Tim Rebholz, Dave VonBehren, Matt Berger

Other golf winners in the Skills Events:

Closest to Hole #6	Tony Hudzinski
Closest to tree #7	Brandon Burns
Longest Drive #9	Grant Rundblade
Closest to Pin #11	Patrick Reuteran
Closest to pin in two #16	Mike Lyons
Longest Putt #18	John Bailey

There were other fun events both on and off the course. The most significant was a drawing for an Apple iPad tablet with Wayne Horman taking home the prize. Additionally there was a door prize giveaway where every participant took home something, many prizes being worth more than the registration fee.



Team Bremmer, Goninen, Grimm, Strain readying for battle. (Photo by Tom Schwab)



Team Burris being carried by the purple man. (Photo by Tom Schwab)



Brother Chuck attempting to keep his ball dry on the 6th. (Photo by Tom Schwab)

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NOTES FROM THE NOER



Mike Moschkau spending a day at the beach. (Photo by Tom Schwab)



Mark Livingston tries to get er back in play. (Photo by Tom Schwab)



Beth Duschack putting on a clinic for her foursome. (Photo by Tom Schwab)



All smiles from team Riley, Van Herynen, Bartosh, and Brandenburg. (Photo by Tom Schwab)



Representing Lawn Care, team Kurth can play some mean golf. (Photo by Tom Schwab)



Thanks for the wonderful golf course conditions team Maple Bluff. (Photo by Tom Schwab)



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NOTES FROM THE NOER

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Top: The Par 3 205 yard 6th hole

Below: The Par 4 382 yard 18th hole
(Grass Roots Photo)



Marathon man Jake discusses business with WTA president Paul Huggett. (Photo by Tom Schwab)



Our host Josh LePine, in red, chatting with another WTA Golf Fundraiser host Chad Grimm. (Photo by Tom Schwab)



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Potpourri Of Time And Weather

By David Brandenburg, Golf Course Manager, Rolling Meadows Golf Course

My 25th year as a golf course superintendent has come to an end. It seems like 15 years rather than 25. That might be because each year seems to go by faster and faster.

Thinking back there have been great years and good years and years full of challenges but I can count on one hand the number of days I did not wake up excited to go to work.

I have learned a lot about grass, golf and business but most of all about people. Of course there is plenty I do not know yet so I will not stop learning any time soon.

There is one lesson I keep learning over and over. I do not think it is because I am a idiot but because I look for the good in people and especially in employees. I need to fire faster not only for my own sanity but to improve the workplace for all the other employees who play by the rules and do a good job.

Overall in 25 years I have had great employees and have only needed to get rid of 10 or so employees but it is still a agonizing decision no matter how frustrating the employee is. Usually it is for not coming to work on scheduled days and amazingly most of the employees did good work when they did show up. As much as I agonize over the decision I feel instant relief when the employee is let go and the entire staff seems happier knowing they do not have to make up for the bad employee.

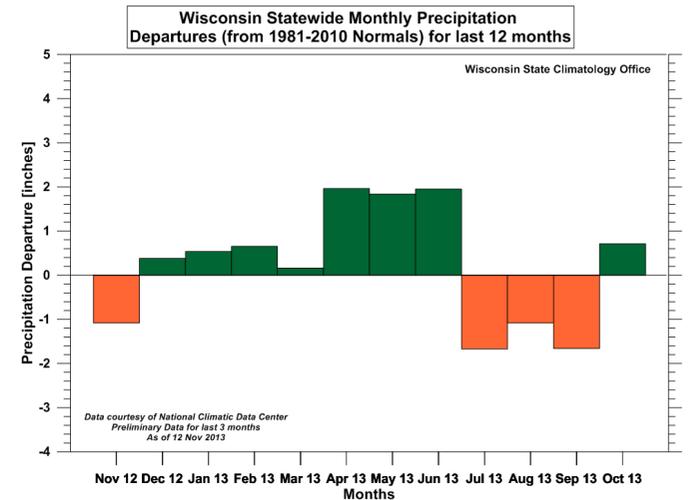
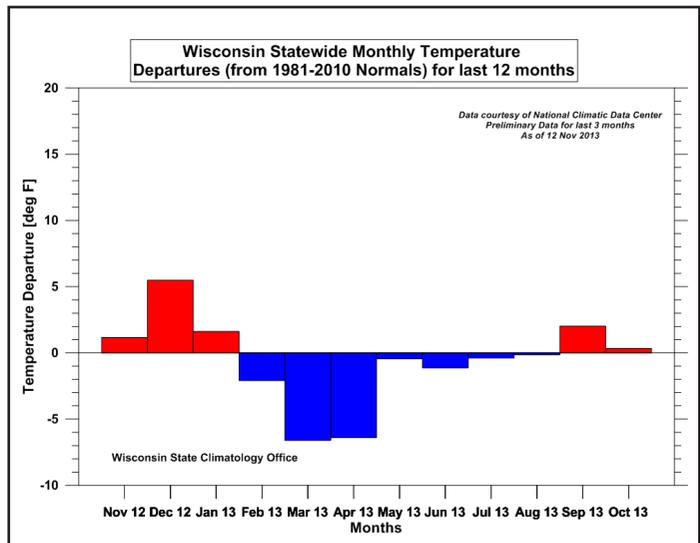
So 25 years gone and 23 to go until I retire to run a laser cutting hover mower on someone elses golf course.

This year like most offered different challenges and different weather. I suppose there is no "normal" weather and there probably

never was.

Our minds easily remember mild springs, warm summers, colorful falls and cold winters with snow from December through March. But in reality the weather is always changing and most years in the past had cold spells and hot spells and dry spells and wet spells.

For most golf courses this season ended abruptly and without complaints from the hard core golfers about staying open a couple more days. Wednesday was cool but playable and Thursday it snowed and by Saturday the ponds were covered in ice.



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The National Climatic Data Center graphs show spring was cooler and wetter than the 20 year average.

School of Turfgrass Management

January 21st - January 23rd, 2014 (8am - 6pm)
Madison, WI—Dane County Extension Office
5201 Fen Oak Dr, Ste 138, Madison WI 53718-8827

Providing Knowledge & Technical Expertise in the Art & Science of Turfgrass Management

About the School

The School of Turfgrass Management provides three days of intensive, in-depth training in the biology, ecology, and cultural management of turfgrass. Technical information will be presented in lecture settings on the basic applications of turfgrass management applicable to golf course management, lawn care, athletic field management, and sod production. The knowledge will be integrated into hands-on case studies where attendees will work together to solve problems related to the lecture material.

The Goal

This School is designed to provide a basic foundation of turfgrass training for individuals with no formal education in turfgrass management or for those who desire a refresher.

Who Should Attend

Turfgrass managers and horticulturalists of all skill levels will benefit from the information presented in this school.

Registration

For complete registration information, please visit:

www.turf.wisc.edu



www.turf.umn.edu



Instructors

Without question, the strength of the School of Turfgrass Management lies within the depth and experience of the turfgrass faculty. This program allows for extensive interaction with researchers and educators having national and international recognition.

Doug Soldat, Ph.D.

Department of Soil Science
University of Wisconsin-Madison

Brian Horgan, Ph.D.

Department of Horticultural Science
University of Minnesota—Twin Cities

Chris Williamson, Ph.D.

Department of Entomology
University of Wisconsin-Madison

Paul Koch, Ph.D.

Department of Plant Pathology
University of Wisconsin-Madison

Bruce Schweiger

Department of Plant Pathology
University of Wisconsin-Madison

Sam Bauer

Extension
University of Minnesota—Twin Cities

Deadline is January 3rd, 2014

Registration is limited, so we encourage you to register early. Persons who register after the school is filled will be placed on a mailing list for the next session offered.

For questions about the school, please contact:

Doug Soldat, 608-263-3631, djsoldat@wisc.edu

Sam Bauer, 763-767-3837, sjbauer@umn.edu



EDITOR'S NOTEBOOK

With the late spring and cool fall leaves seemed to hang on later than normal so we are hoping for a few decent days without snow to mulch leaves, mark drains but I am not sure this snow is ready to melt.

The days to spray winter fungicides in November were few and far between because of wind and rain or the masses of golfers trying to get in one more round on the couple nice days. I was glad we were able to finish before the snow fell.

The days to play golf in 2013 were interfered with by Mother Nature. In Fond du Lac our season was 226 days. 41 less than 2012 and 20 less than the 4 year average.

Disappointingly we had only 163 golf playable days (45-105 degrees and less than .25" rain) which was 52 less than 2012 and 31 less than our 4 year average.

Not only did our season start later than normal on April 8th we basically tread water for 63 non-playable days.

It is likely payments from Imprellis herbicide damage have helped a lot of golf courses survive and make investments in their

properties over the past few years.

Nationally golf has a turned a corner economically but there are still areas that struggle due to less participation, rising costs and increased competition. In the past 12 months there have been at least 4 major courses throughout the state sold at a substantial discount after being foreclosed on by banks.

	2010	2011	2012	2013	Average
March	13	0	13	0	7
April	24	15	24	11	18
May	26	27	25	20	25
June	25	23	29	20	24
July	25	23	29	27	26
August	29	29	28	29	29
September	27	23	30	25	26
October	22	23	24	23	23
November	15	12	13	8	12
December	0	0	0	0	0
Total	204.25	174.5	215	163	189

DAYS OPEN	252	237	267	226	246
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Coming Events!

Tues and Wed Dec 10th-11th, Wisconsin Golf Turf Symposium, American Club, Kohler

Tuesday January 14th, WTA Turfgrass Research Day, Pyle Center, Madison

Feb 2-7, Golf Industry Show, GCSAA Conference, Orlando FL

Wednesday February 5th, Golf Industry Show Wisconsin Room 6-9pm, Brickhouse Tap, Orlando, FL

Wednesday February 17th, Assistants Seminar, Whispering Springs GC, Fond du Lac

Monday March 3rd, WGCSA Spring Business Meeting, South Hills CC, Fond du Lac

Wednesday March 5th, Northern Great Lakes Spring Symposium, Wausau (Hospitality on March 4th.)

Tuesday April 22nd, April Golf Meeting, Strawberry Creek, Kenosha

Monday May 12th, May Golf Meeting, West Bend CC, West Bend

Wednesday May 28th, Super/Pro, Fox Valley GC, Kaukauna

Monday June 23rd, WGCSA Tournament Meeting, Brown Deer GC, Milwaukee

Tuesday July 29th, UW - Summer Field Day, OJ Noer Facility, Verona

Tuesday August 11th, Joint meeting w/Northern Great Lakes Chapter, Brown County GC, Green Bay

Monday September 15th, Wee One Fundraiser, Pine Hills CC, Sheboygan

To Be Determined by WTA, WTA Fundraiser

Saturday October 4th, Couples Outing/Party, Wild Rock GC, WI Dells

Tues and Wed Dec 9th-10th, Turfgrass Symposium, American Club, Kohler

EDITOR'S NOTEBOOK

Foreclosure is never easy for golf courses employees or customers but can bring new investment into a tired operation.

According to newspaper reports this fall will mark the end of operations for **Maple Grove Country Club** near Lacrosse and **Hudson Golf Club** in Hudson.

Hudson Golf Course opened in the 1950's and sits on 140 acres and received a lot of play from the Twin Cities area. The owners have said it is no longer financially feasible to operate as a golf course and hope to have the property rezoned from residential to commercial.

Maple Grove has been a staple of the golf community for 84 years. The course had over 1000 members in 2000 but only 100 in 2013. Maple Grove features a banquet facility that can seat 1,100, a indoor pool, tennis courts and the 180 acre golf course.

Having been through a foreclosure in a previous position I know it is a uneasy feeling and I wish the best of luck to the families and employees of struggling golf courses everywhere.

Old Hickory Golf Club in Beaver Dam has made moves to survive into the future when

the shareholder membership and board of directors voted to sell the course to a private investor.

The 193 acre course opened in the 1920's and expanded to 18 holes in 1968. According to the Beaver Dam Daily Citizen the course had 400 members in 1991 but is down to 150 currently.

A closed auction was held November 22 with only qualified bidders participating. The club had one "stalking horse" agreement to sell the club but could attempt to obtain a higher sales price through the auction.

In a move to protect the club into the future bidders had to keep the property as a golf course, honor all booked events and infuse capital to make improvements.

Although course closings will outnumber openings again in 2013 there are plans to begin a possible multi-course development 15 miles south of Wisconsin Rapids. The 1,500 acre site is being looked at by Mike Keiser who owns the 5 course Bandon Dunes complex in southern Oregon.

Keiser is expect to close on the sand covered property on December 17th and is expected to name a architect for the first 18 holes soon

after. According the Milwaukee Journal Sentinel article by Gary D' Amato Madison based Oliphant Companies will build the courses.

The site features sand up to 100 feet deep and 60-80 foot sand dunes. The project should increase Wisconsin reputation as a golf destination and bring more travelers to Central Wisconsin.

In other positive golf news Rob Schultz of the Wisconsin State Journal reports that changes at the 4 Madison City Golf Courses have been well received and financially successful during the first year

Despite the poor weather the courses move to eliminate contracted golf professionals to manage their golf courses worked out and the courses turned a profit and play was up 1% through October.

With the city operating carts and concessions service and pricing has been consistent and complemented by long time customers. The Madison courses were some of the few left with cart and concessions contracted over to golf professionals. And although I am sure the pros holding those contracts worked hard to serve the golfers there comes a time too much revenue is



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EDITOR'S NOTEBOOK

left on the table by the course owner and things have to change.

Despite programs to encourage family golf, junior golf, women's golf and to programs to encourage current golfers to play more our best bet for the immediate future is the baby boomers.

According to the National Golf Foundation 36 million baby boomers will reach retirement age in the next 15 years and 7.3 million of them golf. Hopes are the boomers will contribute 50 million more rounds of golf each of the next 15 years.

Best of luck to all courses and staffs as we move through this winter and have hopes for a nice spring in 2014.

Speaking of the Madison Golf Courses **Ray Shane**, Golf Programs Supervisor recently retired after 23 years of working for the city of Madison. Shane was unique in the fact he was a Class A PGA Professional as well as a Golf Course Superintendent and switched hats often during his years. Congratulations Ray!

Tom Van Valin the 32 year superintendent at Rivermoor Golf Club passed away on September 3rd. Tom is survived by his wife Pat and children Terri (Dan) Rossiter, Todd (Andrea) Calloway, and Josh (Grace) Van Valin.

Madison based **Laser Link Golf** has sold its reflector business to Prestige Flag of San Diego. Prestige will take over all manufacturing and distribution of Laser Links SmartStick, Smarty and other reflector products.

Laser link will continue the manufacture and sale of distance measuring equipment.

Eagle One Golf a manufacture and distributor of golf course products has acquired Western Golf. Western Golf products are sold to 38 countries including thousands of courses in North America.

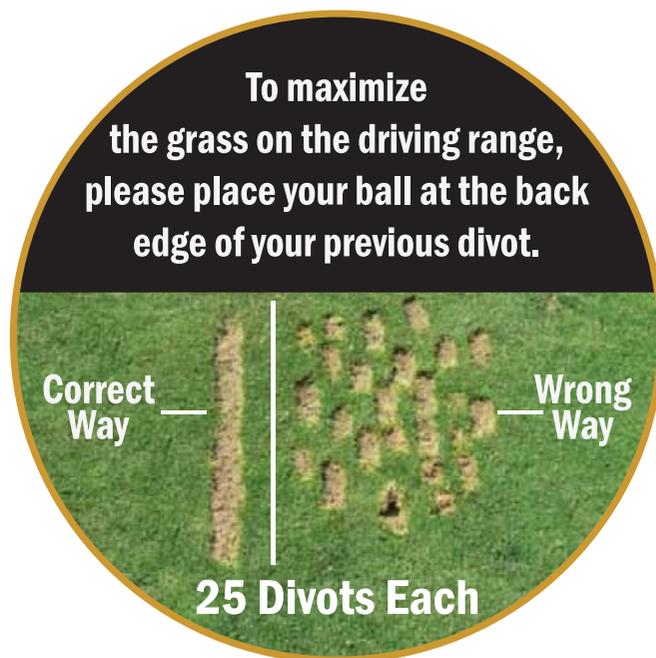
Another year is in the books as I go to print with my 36 issue as editor. I want to thank the advertisers of *The Grass Roots* who pay for layout and printing of one of the few chapter magazines



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Steven Hammon, Golf Course Superintendent at Traverse City Golf & Country Club in Michigan has this sign posted on his driving range to educate golfers on the proper way to take divots while practicing. According to published USGA reports the scattered method (wrong way) can take out 50% more turf than the line method (right way). Single lines are easier to fill and heal faster than large destroyed areas.

remaining in print. We are lucky to have found a great partner in Park Printing to print, bind and distribute *The Grass Roots* to keep costs down.

I receive a number of digital only magazines and find them difficult and bulky to read. I pick the titles that interest me and ignore the rest and I believe many readers do the same if they even open the e-mail.

We are lucky to have a chapter publication we can easily find on our desks, lunch room tables or the magazine rack at home. The advertisers in these pages make it all possible so be sure to thank them for their support of your education.

A recent National Golf Foundation survey of media preferences has shown core golfers overwhelmingly prefer print golf magazines. Since most golf course superintendents got into this business because we liked to play golf it only stands to reason we prefer print as well.

I also need to thank our writers and especially the professors, students and university staff who make *The Grass Roots* worth reading. Many of the chapter publication I receive may have one educational article in them and the rest is association news. Association news is good but only when coupled with the latest research and education.

Enjoy the slower off season and I wish all of you a Merry Christmas and Happy New Year.

UW / WTA Field Day Set For January 14th

By **Dr. Doug Soldat**, Department of Soil Science, University of Wisconsin - Madison,
Monroe Miller, Executive Director, Wisconsin Turfgrass Association

Last year the UW Turf Team and the WTA held the first annual Turfgrass Research Day on the UW-Madison Campus. The event shined a light on the tremendous amount of work that happens at UW (thanks in no small part to the support of the WTA), and introduced you to many of our graduate students who too often work in the shadows of their advisors. The focus of this annual event will be to provide relevant and cutting edge information to help you do your job better. Improvements in technology will allow us to provide this content online, so if you can't make it down to Madison on January 14th, you can log in to your computer and watch from the comfort of your office.

This year, we have put together a particularly strong educational program for you. We are elated to announce that Dr. Geunwha Jung will be paying us a visit and giving an update on his excellent work on fungicide resistance. I'm sure it will be a special moment for Geunwha to watch

his former student Paul Koch make his first presentation as an Assistant Professor at UW. Dr. Koch was recently offered the position vacated by Jim Kerns, and we couldn't be happier about it. Paul will be discussing rust control and management,



a disease that has been increasing in severity around Wisconsin lately.

Other guest speakers include Dr. Jim Brosnan from the University of Tennessee and Dr. Ed Nangle from the Chicago District Golf Association. Dr. Brosnan is an up and coming weed scientist who will have something for everyone (golf, sports, lawn) in his presentation about new herbicides for weed control in cool-season turf. Dr. Ed Nangle was recently hired by

CDGA to replace Dr. Derek Settle, who's been a regular at our Field Day the past several years. Dr. Nangle earned a Ph.D. from Ohio State University, and will be discussing the negative impacts of shade and associated management strategies.

In addition to the distinguished lineup of guest speakers, you'll hear the latest and greatest from the UW-Madison Turf Team, including an Emerald Ash Borer control update from Dr. Chris Williamson based on a long-term study he just concluded. New TDL manager Bruce Schweiger will provide a look at the years behind and ahead, and two top grad students, Renee Rioux and Mark Garrison, will provide summaries of their respective work on dollar spot and the carbon footprint of turf maintenance.

It's hard to predict what Mother Nature has in store for us on January 14th, but you can bet that the UW/WTA Research Day will be well worth the price of admission. We hope to see you there!

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WTA Turfgrass Research Day Conference & Webinar

Tuesday, January 14th, 2014
Pyle Center

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The WTA and UW–Madison Turf Program welcome you to the 2014 Turfgrass Research Day. You may attend in person at the Pyle Center or attend via webinar. If you choose to view the talks via webinar, you will receive the link by January 13th, 2014. For driving and parking instructions, visit <http://conferencing.uwex.edu/maps.cfm>. If you have any questions, feel free to contact Audra at ajander2@wisc.edu or 608-845-6536.

SCHEDULE

8:00am	Coffee and Donuts	1:30	Shade: Causes, Impacts and Fixes <i>Dr. Ed Nangle, Chicago District Golf Association</i>
8:30am	Welcome/Introductions/Awards/ Announcements	2:00	What's Up With Dollar Spot? New Insights on an Old Foe <i>Dr. Renee Rioux, Plant Pathology, UW – Madison</i>
8:45am	Control and Management of Rust <i>Dr. Paul Koch, Plant Pathology, UW – Madison</i>	2:30	Break
9:30am	Microbiology of Turfgrass Soils <i>Dr. Doug Soldat, Soil Science, UW – Madison</i>	2:45	The Carbon Footprint of Turf Maintenance <i>Dr. Mark Garrison, Nelson Institute for Environmental Studies, UW – Madison</i>
10:15	Break	3:15	New Herbicides and Strategies for Weed Control in Cool-Season Turf <i>Dr. Jim Brosnan, University of Tennessee</i>
10:30	Fungicide Resistance: Failure or Reduced Efficacy? <i>Dr. Geunhwa Jung, Plant Pathology, University of Massachusetts</i>	4:00	Question and Answer, Adjourn
11:15	Insecticide Management Options for Emerald Ash Borer <i>Dr. Chris Williamson, Entomology, UW – Madison</i>		
12:00	Lunch – provided		
1:00pm	TDL Update: The Year in Review and the Road Ahead <i>Bruce Schweiger, Turfgrass Diagnostic Laboratory, UW – Madison</i>		





2014 WTA Turfgrass Research Day Attendee Registration Form

Please submit the following registration form by Friday, January 10th, 2014 to WTA / 2502 Hwy M / Verona / WI / 53593

Company _____

Mailing Address _____

City/State/Zip _____

Phone & Fax number _____

Email address _____

Attendee Names (Only if attending at Pyle Center)

**Registration prices are before the January 10, 2014 deadline.
 After that date, and/or if you plan to register on-site add \$10 per person.**

Webinar Only - WTA members \$25 each X _____ = \$ _____

Webinar Only - Non WTA members \$40 each X _____ = \$ _____

Attendance at Pyle Center \$40 each X _____ = \$ _____

2014 WTA Membership Dues X \$125 = \$ _____

Total amount enclosed \$ _____

You may pay by check or credit card. If paying by check, please make the check payable to WTA and return to 2502 Highway M / Verona / WI / 53593. If paying by credit card, fill out the information below and mail to above address or fax to 608-845-8162. You may also register online at www.wisconsinturfgrassassociation.org.

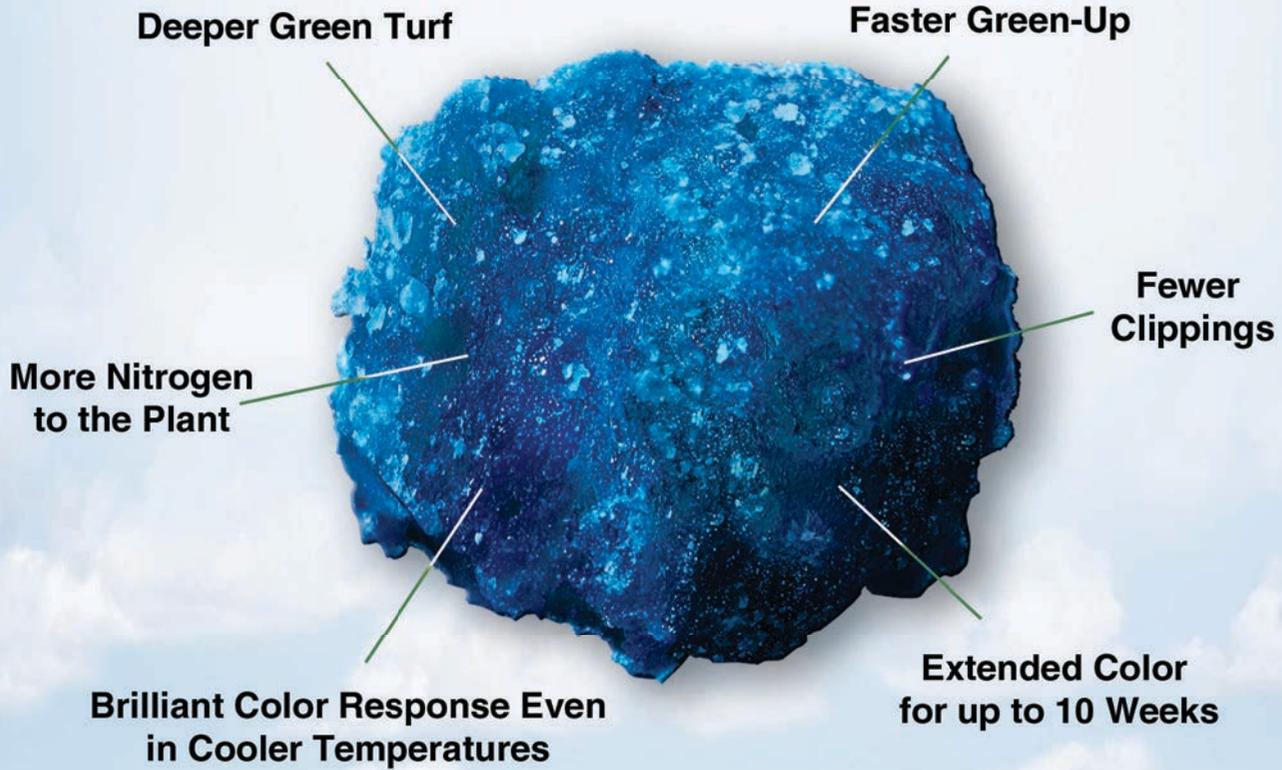
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