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AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

VOL. XLIV
ISSUE 6
NOVEMBER/DECEMBER 2015



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TABLE OF CONTENTS

THE PRESIDENTS MESSAGE
What the Heck is Networking Anyway? 4

WISCONSIN ENTOMOLOGY REPORT
Permissible Deviations from the Pesticide Label? 6

MADTOWN MUSINGS
It's Been a Year 8

WISCONSIN PATHOLOGY REPORT
Bigger and Better: A State of the Lab Update. 10

STUDENT ARTICLE
Turf Students and the Next Generation of Golf Course Superintendents 16

NOTES FROM THE NOER
What A Treat 18

MEMBER SPOTLIGHT
Ben Pease and Garrett Luck 24

TURFGRASS DIAGNOSTIC LAB
Fall Ramblings 28

STUDENT ARTICLE
A Journey Through Turf Management. 30

WISCONSIN TURFGRASS ASSOCIATION
Topics for Everyone in the Turf Industry at the Wisconsin Turfgrass Association Research Day – January 5th, 2016 34

CHAPTER CONVERSATION
Chapter Manager Updates 38

GCSAA
2015 Chapter Delegates Meeting 40

WISCONSIN SOILS REPORT
Golf Course Research Updates from Around the United States . . 46

EDITORS NOTEBOOK
Thank You El Niño 48

MISCELLANY
Sand Valley 52

EVENT SCHEDULE. 27

ABOUT THE COVER

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The great myth of our times is that technology is communication.

By American Composer Elizabeth Brown (Libby) Larson, 1950-

This quote by Larson can serve as a reminder to use normal verbal communication with our family, friends and associates in addition to the ease of e-mail, text and social media.

No technology can replace the value of one on one conversation and personal visits.

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THE GRASS ROOTS

is the bi-monthly publication of the Wisconsin Golf Course Superintendents Association. No part of the *THE GRASS ROOTS* may be used without the expressed written permission of the editor.

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What the Heck is Networking Anyway?

By **Jim Van Herynen**, Certified Golf Course Superintendent, South Hills Golf and Country Club


I am old enough to remember the days before cell phones, getting the first family microwave, BETA and VHS taping capabilities, cable television, vinyl records and 8-track tape players, and ultimately the internet. I vividly remember hearing about the World Wide Web and thinking to myself – no way. Well the day has come and we take all of this for granted now as technology continues to develop, improve and make our lives better? The question is, has it really? Of course it has in many ways but sometimes there is a down side to some of it. Most of us are married to high cable/internet bills and cell phones you have to have not only for you and your spouse but your children included, at an earlier age every year. We have everything at our fingertips and can communicate almost instantaneously anywhere we are. It truly is amazing, but are we forgetting something?

I realize I am starting to age myself but the term “networking” was not in most of our vocabularies years ago. As a matter of fact my old Webster dictionary I still use to this day does not even have a definition for it. But who uses a Webster dictionary anyway? Now we have Google and other options to find out anything we need to

know or we now simply ask Siri! So to define, according to Google, Networking is: The exchange of information or service amongst individuals, groups, or institutions; specifically: the cultivation of productive relationships for employment or business. Back in my day we called this socializing. Sometimes when I heard the term “networking” it made me cringe. It almost gives the connotation of having to do more “work”.

We are entering the time of year when networking becomes the norm and the options to do so abound. Let's use the Couples Dinner as an example. Recently, on November 7, 2015 the WGCSA along with many vendors, hosted the annual Couples Dinner in Appleton at the Paper Valley Hotel. We experienced more couples this year attending than many years in the past and it was delightful to see the numbers increase. We had a wonderful meal at Lombardi's Steakhouse followed by socializing (networking) at a few of the establishments along the famed College Avenue. After the evening was over I can personally say I increased my relationships with many of our members and their wives, learned quite a bit about the industry as we did talk turf briefly, but as

important, gained some friendships that I hope will evolve into something more special in the future.

When you hear the term “networking” make it into something that you do not have to do to succeed, but rather an opportunity to learn from your peers, build relationships and friendships, shake someone's hand and look them in the eye and empathize, agree, offer advice and feel an emotion or connection instead of relying on Google or Siri. I would love to get more members coming to events, going to the Couples Dinner, the Turf Symposium, the Spring Business Meeting, the Assistants Seminar and all of the other great offerings the WGCSA and the supporting vendors offer and maybe “network” a little more than you have in the past. You may be amazed how good you feel after talking one on one with people and share our common interests. What was once Webster's is now Google or Siri and what was once socializing is now networking and just because “networking” has the word “work” in it does not mean it has to be that way – please consider bringing back that attitude because coming to one of these events leads to socializing which is in essence, networking. 

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.
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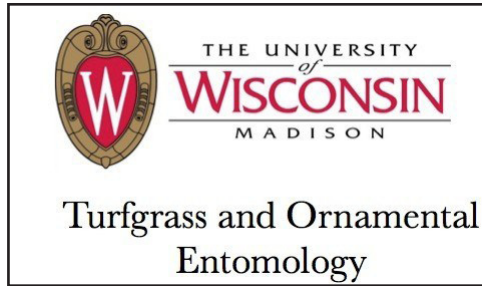
Permissible Deviations from the Pesticide Label?

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

The pesticide label is the law, it is a legal binding document! It is the pesticide applicator's responsibility to read and follow the label directions. However, there are permissible deviations that the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) allow. Specifically, FIFRA Sec 2. [136] (e)(1) states: "applying a pesticide at any dosage, concentration, or frequency less than that specified on the labeling unless the labeling specifically prohibits deviation from the specified dosage, concentration, or frequency."

This statement permits deviations from the pesticide label, however they are not to be taken lightly. So, how or where do you get information or data that aides you in making an informed decision to use a product (pesticide) a lower use rate or extend the manufacturers recommended application timing interval? Such information can have a profound impact or effect on your desired results or outcome.

There are numerous resources where one can obtain such information, they include everything from a close friend, colleague, sales representative, vendor, supplier, an internet site or blog, indus-

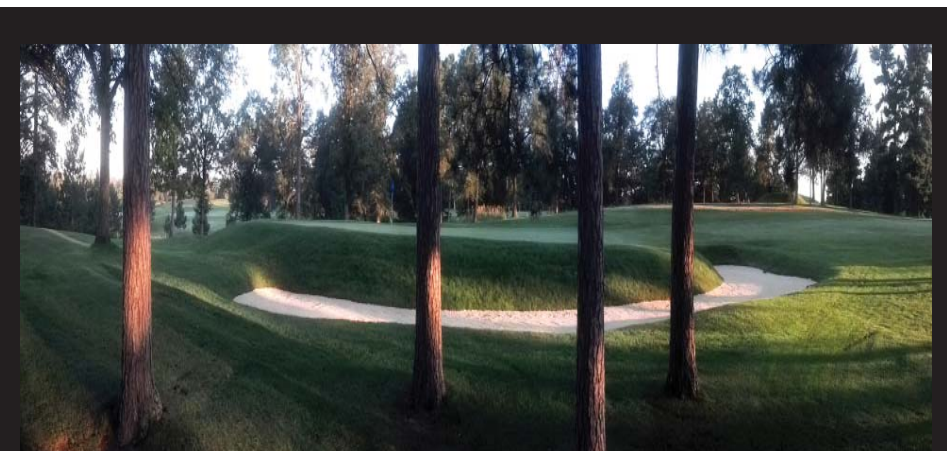


try magazine advertisement, marketing literature, etc. What source is "most" accurate or reliable? Is any of the information afforded to you inaccurate or not based on research? Does the source of your information provide you everything you need to know about the product, including the potential negative attributes or characteristics? The answers to these questions are critical as you make your informed decision to make respective permissible deviations from the pesticide label.

It is important to understand that not all information is accurate! So then, where is the best or ideal place to obtain the most reliable information regarding a product? This can be a difficult and sometimes contentious question to answer, and it likely has many different responses. One of the best places

to get the information that you need to make an informed decision is from university researchers, extension specialists as well as most independent researchers and consultants. Their goal is to provide non-biased research results and information. They strive to provide accurate information regarding the strengths, weaknesses and limitations of respective products. Ultimately, they are neither advocates or opponents of products, they merely provide valuable information, insight and awareness of respective products.

Another important consideration is to not rely on merely one set of data or an individual study (not just the good or successful ones, but the "bad" ones as well). Product variability exist, the performance or results can vary from one study to another. The next time you have to make an important product use decision, consider an university researcher, extension specialist or an independent researcher or consultant as they will provide you with valuable research results and information. The more informed that you are about a product, the greater the likelihood of success you will experience. ✓



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It's Been a Year

By Jake Schneider, LMD Production Manager, The Bruce Company

The title says it all; both in the literal sense of one year passing and in the phrase of exasperation.

My personality is a very planned out one. I enjoy structure, don't mind my daily routine—breakfast, work at 6:45, snack at 9, more work, lunch at noon, more work, head for home at 4, run/workout, eat dinner, and wind down for the evening with a beer and a book. In a nutshell, it'd be awfully easy to predict my whereabouts more often than not which, I suppose, would make me an easy target for crime. Similarly, I naively had a general plan for how life might transpire. Somewhere along the line, I forgot that the actions of the vast majority of this world are beyond my control.

By all accounts, things were going along quite smoothly from about as far back as I

can remember until the beginning of September 2014 and in the general trajectory that I had imagined. Although I was no longer on the career path of golf course superintendent that I had anticipated, my job change was a positive one. The finances were in order, I was happily married, we had recently purchased a great home next to Cherokee CC's twelfth tee, and my friends and family were doing well. After that, the wheels fell off; this is not unlike what happens to my golf game on approximately the second shot of the round, but the consequences were more altering.

Seemingly in the blink of an eye, everything changed. I eulogized my uncle who passed away from melanoma (wear your damn sunscreen) last summer, my marriage fell apart seemingly in the blink of an eye, and we sold the house after only a few

months of living in it. Quite frankly, I was lost and not sure what to do next. Thoughts of uprooting my Madison existence for a return to the Fox Valley or for a more drastic move to Denver floated through my discombobulated brain. During an eight month stretch, I sold two houses and moved four times, and the USPS address forwarding service was likely equally upset about the situation. More tears were shed from my eyes during a three month span than in the prior decade combined. Life was not going as planned. It's strange, but more than anything, I was embarrassed.

Although it wasn't easy, I soon decided that dwelling on the ifs and buts of the past would do no good for whatever might lie ahead, and just as quickly as everything seemed to go to hell, my fortunes began taking a u-turn.

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MADTOWN MUZINGS


One of my best friends who had also gotten whacked over the head by life and I got an apartment close to downtown Madison and, more importantly, fresh starts. In many regards, our lives came full circle as Dan, Lt. Dangle (cat), and I had co-habitated eight years prior. Fast forward a few months, and it's now just the cat and me living together as Dan moved onto greener pastures in the Appleton area. It's the first time that I've lived without another human, and Dangle's a mediocre roommate who contributes little to the household duties. Despite that shortcoming, 2015 has been awfully good and living alone isn't all that bad for someone who happens to be rather particular about many things.

My beloved Badgers got the ball rolling in the right direction with an unbelievable basketball season of which I split home season tickets for and watched from the

nosebleeds as they came up a few buckets short against Duke. Between that and getting season tickets for the Camp Randall experience for the first time since being a UW student, my live sports quota has been nearly filled. Further on the life experiences' front, I've been making it to more concerts and have reinvested in my passion for travel. I just don't seem to have enough PTO to fill my occasional vagabond tendencies. One such mini-trip brought me to Duluth for the Grandma's Marathon (which isn't just for grandmas) where I accomplished a fairly major life goal by qualifying for the Boston Marathon. However, as I soon found out, qualifying and getting accepted are two different things, and I now have the goal of actually running Boston. Last September, I would have told you that the words in this paragraph were pure fiction, and please don't take my happenings

as a display of braggadocio. More than that, it's a real life example of how bad can turn to good in the most unexpected ways.

So, yeah, I'm excited to see what 2016 brings and am in a far better place than I imagined could be possible when everything seemed to be crumbling around me. Such, I've learned at the ripe old age of 32, is life. For even the most calculated mortals, it's not a straight road but more of a meandering path with hills and valleys. Whether it's a divorce, the passing of a loved one, losing your job, or a myriad of other wrenches that this world may throw at you, the valleys can seem overwhelming at times, but the hills are always on the horizon. Cheesy, I know.

Among other things, may the New Year bring you consistent snow cover, timely rains, and cool temperatures (unless you're a soft goods salesperson). 



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Bigger and Better: A State of the Lab Update

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

Another winter has arrived in Wisconsin, and for many of us that means it's time to reflect back on the season that was and emphasize areas we excelled in and identify areas to improve. Looking back on my second year at the helm of our UW turfgrass pathology program, I am pleased by the progress we have made in a short period of time and truly excited about the directions and progress we are making. Of course none of this is possible without the support of the Wisconsin Golf Course Superintendents Association and so many of you individually, be it through Turfgrass Diagnostic Lab contract memberships, attendance at WGCSA Monthly Meetings (which support the TDL), hosting of research projects, or through simply providing us with feedback on things you like or areas we can address. We are humbled by your support, and always welcome your feedback.

Since it can be difficult to keep track of all the different things we are doing in the program, let me provide you with an update on some of what your support is helping to produce.

Snow Mold Fungicide Timing and Propiconazole Uptake

When should I apply my snow mold fungicides? It's one of the most common questions I get, and there are many different theories about what is best. Some superintendents go out on the same date every year, no matter the conditions. Others like to put their fungicides out at the absolute last second to avoid degradation of the fungicides by rainfall or warm temperatures. Still others like to put down products earlier while the plants are still growing to allow for uptake of the penetrant fungicides in the plant. Hoping to shed some light on optimal snow mold fungicide timing, we initiated studies this fall at Timber Ridge GC (Minocqua, WI), Greenwood Hills CC (Wausau, WI), and the OJ Noer Facility (Madison, WI) with a series of fungicide timings beginning 6 weeks before typical snow cover and progressing at 2 week intervals all the way up

until shortly before snow falls. We will then rate the timings that provide the best snow mold protection over all three sites and use weather data collected from each site to develop predictive models that can help determine optimal snow mold fungicide timing. In addition, this study is also looking at the impact of temperature on propiconazole uptake in creeping bentgrass in growth chambers at various temperatures to determine whether colder temperatures really do reduce the rate of fungicide uptake. This 2-year study is jointly funded by the Golf Course Superintendents Association of America and the Wisconsin Golf Course Superintendents Association.

Impact of snow cover and anti-transpirants on fungicide persistence

This study is similar to our recently completed (and recently published) study looking at the impacts of snow cover on the persistence of chlorothalonil and iprodione over 4 consecutive winters (**Figure**

1). There are three primary differences in this study, however. First, we are testing the impacts of snow cover on the persistence of propiconazole, which is an acropetal penetrant fungicide and could behave very differently than the contact fungicide chlorothalonil or the localized penetrant fungicide iprodione. Second, anti-transpirants such as Transfilm® are being touted as prolonging snow mold control under variable winter conditions, and we are going to test whether inclusion of Transfilm® in a tank-mix can prolong persistence of either propiconazole or chlorothalonil under snow cover or in the absence of snow. Third, we are using a different method of pesticide analysis (liquid chromatography/mass spectrometry) that should hopefully provide more consistent results than we observed in the previous study. This 3-year study is beginning this winter and is being partially supported by the WGCSA, Syngenta Professional Products, and PBI Gordon.



Figure 1: The previous winter fungicide degradation study provided important information regarding how chlorothalonil and iprodione persisted during the winter. The new study will expand on that with additional results on propiconazole and the impact of anti-transpirants.



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I would like to thank all of my customers for their support in making 2015 another successful year. I feel very fortunate to be able to work with so many members of the WGCSA. It's always fulfilling to have one of you mention my ads in the Grass Roots or mention my support for your organization. I'm proud to sponsor the WGCSA, NGLGCSA, WTA, Wee One Foundation and WPGA and look forward to many more years of events and getting to know more and more members. Good luck to all in 2016.

Peter Meyer



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Patch disease assay development

Root-infecting diseases such as take-all patch, summer patch, and necrotic ring spot can be some of our most frustrating diseases to manage. One of the most frustrating aspects of these diseases are how difficult they are to diagnose...for both the superintendent AND the diagnostician. With that in mind, we are currently working on developing highly accurate and fast molecular detection assays for each one of these fungi. These assays, termed loop-mediated isothermal amplification (LAMP) assays, have been used in medicine and other areas of Plant Pathology in recent years and are touted for their speed, accuracy, and the fact you don't need pricey equipment to conduct the assay. Hopefully within a couple years we will be able to positively identify whether your roots have a root pathogen or not within 30 minutes of arrival at the TDL for just pennies per sample! This improves our diagnostic efficiency and your ability to manage your turf. This 3-year study is being funded by the OJ Noer Foundation, which is unrelated to the OJ Noer Turfgrass Research and Education Facility.

Nitrogen rate and source impacts on dollar spot pathogenicity

Dollar spot is the number one disease most Wisconsin superintendents face, and nitrogen fertility is known to impact dollar spot development. Though dollar spot is known as a low-nitrogen disease, it remains unclear exactly what level of nitrogen is low enough to increase dollar spot. In addition, various nitrogen sources have been previously reported to impact dollar spot development. However, the effect was minor and more research is needed to clarify what this impact means for practical usage. Ron Townsend from the Chicago District Golf Association is conducting this research as part of a M.S. research project that began this past summer. This 3-year research project is being jointly funded by internal funds, the Chicago District Golf Association, the Illinois Turf Foundation, and the Midwest Association of Golf Course Superintendents.



Figure 2: Excellent dollar spot suppression was realized using lower toxicity fungicides when combined with scheduling based on the Smith-Kerns Dollar Spot Model.

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WISCONSIN PATHOLOGY REPORT

Pesticide impacts on microbial communities

The microbiome is essentially the community of various microbes that interact in a given environment. For instance, the gut microbiome is the microbial community present in your digestive system, and research is showing it has a huge impact on many factors related to human health. The phytobiome is the microbial community associated with plants, and has recently become an area of intense study. We are initiating preliminary research investigating the impacts that various pesticides have on the turfgrass microbiome using recently developed molecular techniques that allow for mapping of microbial communities with great detail. The goal of this research is to 1) gain knowledge of the impact that pesticides have on the turfgrass microbiome and 2) to develop methods that will encourage healthy microbiome development that may improve plant health. This research currently doesn't have any direct funding, but we are in the process of applying for numerous national grants with other collaborating universities from around the country.

Reduced-toxicity pest management strategies

This broad research and outreach program just completed its second year of testing, and to date has focused mostly on lowering the toxicity of fungicide programs for use on golf courses. However, new research evaluating lower-toxicity herbicide and insecticide programs is being conducted to provide recommendations across the turf pest spectrum. The results from this research will be widely disseminated to the industry in the coming years and will be the basis for a major extension initiative that you will hear more about in the coming months. New staff member Kurt Hockemeyer has been hired from the University of Minnesota to spearhead this effort and joined our team on November 30th. Internal funds are currently supporting these efforts.

Turfgrass Diagnostic Lab and Fungicide-Testing Program

It's no secret we have an active diagnostic and fungicide testing program...but both were extra active in 2015. Despite a relatively mild and stress-free summer for many in the region, Bruce Schweiger diagnosed a record 265 (at the time of this writing) samples at the TDL this year, breaking the previous record held by yours truly. But diagnosing samples is only part of what Bruce does, and his efforts on the phone and on his computer with so many of you in the state and throughout the country adds exponentially to the service level our program can provide. In addition, our fungicide-testing program has grown to be among the largest 3 or 4 university programs in the country in recent years. This is largely due to the efforts of Sam Soper, who manages the day-to-day operations of this huge program and keeps it running smoothly. Though Sam does more of his work behind the scenes, he is a critical piece to keeping our program running efficiently and providing all of you with up-to-date fungicide efficacy information on a range of diseases right in your own backyard.

More activity means more people...

With all this new research and outreach activity, more people are needed to get it all done! In 2015 we added several new faces to our program. Ron Townsend joined the lab as a M.S. student in September focusing on the dollar spot research described above. Ron comes to us from the Chicago District Golf Association, where he continues to work as their research manager. Michael Milli-



Figure 3: TDL Manager Bruce Schweiger was extra busy diagnosing a record number of samples in 2015, though you wouldn't know it from this picture at the lab mini-golf outing.

can, Ph.D. joined the lab in October as a postdoctoral researcher. Michael recently obtained his Ph.D. from Iowa State University, and he will be conducting the research on pesticide impacts on the turfgrass microbiome described above. Kurt Hockemeyer joined the lab in November as an Associate Researcher. Kurt was previously employed at the University of Minnesota and obtained his M.S. degree from Dr. Rick Latin at Purdue University. Kurt will lead our efforts on many of the reduced-toxicity pest management programs described above. Ron, Michael, and Kurt are all extremely talented and we are excited to have them join our program!





Figure 4: Lisa Reedich is the first Koch lab member to graduate, earning her M.S. degree in December! Best of luck to Lisa in her future endeavors!

...and sometimes it means saying good-bye.

I have realized that the most difficult thing about this job is saying goodbye to the people in our program as they move on to bigger and better things. Lisa Reedich joined our lab as an M.S. student in the spring of 2014, was awarded the Terry and Kathleen Kurth Distinguished Fellowship the following fall, and will graduate with an M.S. degree from the UW Molecular and Environmental Toxicology Center in December of 2015. Lisa did not complete a research project, rather focusing on writing an extensive review on the status of research conducted to date in urban pesticide fate. This review will serve as a basis for new projects to begin (in our lab and elsewhere) in the coming years. Lisa was my first graduate student as a faculty member, and I will always remember her for her positive attitude amid trying circumstances and her excellent writing and research capabilities. Good luck Lisa in your future endeavors!

Sam Soper currently manages our fungicide program, but he has been with me in some form or fashion for over 7 years! I first hired Sam in the spring of 2008

as undergraduate summer help, and he gradually took on more responsibilities and upon completion of his undergraduate degree from the University of Minnesota we hired him as a staff member to run our fungicide program. He performed exceptionally well in that position over the past several years, helping to develop it into one of the premier testing programs in the country. Sam was a favorite amongst nearly everyone in the lab, and his absence (from both a personal and technical point of view) will be difficult if not impossible to replace. Sam has decided to pursue other opportunities and careers and left our program at the end of December. Good luck Sam in your future endeavors!

Every superintendent knows that he or she is only as good as the people around them, and my position is no different. I am profoundly lucky to have the people in my program that work as hard as they do, and am also lucky to be able to count on your support year after year to fund significant portions of our program. I think 2015 was a better year for our program than 2014, and I think 2016 will be our best yet.



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Figure 5: Sam Soper has managed the fungicide-testing program in recent years, guiding it to become one of the preeminent testing programs in the country. Sam has decided to pursue other opportunities, and we wish him all the best in the future!

Turf Students and the Next Generation of Golf Course Superintendents

By Ronald Townsend, Graduate Student, Department of Pathology, University of Wisconsin-Madison

EDITORS NOTE: *This submitted article is eligible for the Monroe Miller Literary Scholarship, awarded each year to the author of a selected article.*

I believe it is well known throughout the industry that the number of students enrolled in turfgrass programs across the country has been dropping noticeably for the past decade. This has had an obvious trickle-down effect on the industry as a whole such as lack of intern staffing and assistant staffing and these effects may be only the beginning. Turf programs have seen a decrease in the number of students and this is causing programs to be terminated because of the lack of students. An article was written in GCM last year (Richman 2014) discussing how turfgrass programs are dealing with these issues, but what about the golf course superintendents? How are fewer students impacting them?

During my travels talking to various superintendents, there is a phrase superintendents keep repeating, “We can’t find

any interns?” Many superintendents rely on interns for summer help and as a pattern for safeguarding the industry with educated and trained people. Thinking back to my internships, interns were considered a valuable asset on a maintenance crew. While the summer hours

As a superintendent I once worked for put it “you could throw a dart onto a map of the United States and find a golf course to work at.”

were long and the holidays were few, it was nice knowing that I was making a difference in providing high quality standards to the golf courses where I interned. I graduated with eight other turf students, this is much fewer than those classes that graduated in the 1990’s. The question I keep thinking is where will the next generation of golf course superintendents come from?

The turf industry is facing challenges when it comes to drumming up interest in their programs. Looking back to the 1990’s and early 2000’s the turf programs were booming with students. Programs even had to wait-list students because of the sheer volume of incoming students (Richman 2014). Another problem facing incoming turf students are the entrance requirements such as grades and test scores to attend college these days.

Accompany this with the high cost of attendance this creates a problem. Why would someone go into the turf industry to make x dollars when they get such high grades and test scores. Administrators at education institutions need to realize grades are not everything. Each year entrance requirements have been increasing along with the cost to attend these colleges. Interns were the life blood of maintenance crews, in some cases because there were so many. Competition

for many internships at high level clubs were fierce. This created an environment for interns to push on another and prove who was the best of the bunch. I think this helped to mold many now golf course assistants and superintendents. This competition was also reflected in the classroom and continues to this day.

While the number of turf students has decreased I believe each turf program has a stronger and a tighter knit group of students. These students see each other every day and take the same classes with each other, so everyone knows each other. In my graduating class, we all knew each other, what courses, tournaments, and superintendents each person had worked for. Now with social media I think that each student is more involved in the industry than even realizing it. The wealth of information and discussion that is available on twitter and social media outlets is allowing the industry to share ideas with others across the world.

The golf boom in the 1990’s allowed for the major to take off with the additional golf courses being designed and built all over the United States. As a superintendent I once worked for put it “you could throw a dart onto a map of the United States and find a golf course to work at.”

Those days have come and gone now with more golf courses closing instead of opening, resulting in a smaller job market. Smaller job markets ultimately reduce the number of college students interested in pursuing a career in that field. For the most part, the golf industry is leveling out and actually improving in some parts of the country. The future of jobs in the golf industry and many other industries is going to face a surplus of job opportunities once the baby boomer generation retires. This cycle may have already begun as more and more assistant positions are becoming available – the step to a superintendent position is becoming ever closer for many.



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STUDENT ARTICLE

So what does the future of the golf industry and golf course superintendents look like? The ongoing battle with Mother Nature will continue to cause large problems for superintendents in the future. Sustainability is a hot topic in the industry and many believe that the industry is not sustainable. Superintendents are leaders in environmental sustainability and stewardship.

Many superintendents have changed their management strategies in order to reduce their environmental foot print. Future generations of superintendents will have to discover new ways to maintain high quality turf with fewer inputs. When the jobs begin to open, I think the future is in good hands. Students who are graduating now are doing so prepared to face the challenges which lay ahead. While there may not be as many, the quality is still there, it never left, and may even be stronger. I think we all need to take a step back and look at the situation and resources available to us. The sky isn't falling in the golf industry and yes there are some problems but it's not all doom and gloom.

The game of golf and the golf industry may never reach the heights that we were once accustomed to, but maybe that's not such a bad thing. The future is in good hands, the combination of great professors and superintendents for mentors are producing great turf students that will carry on the legacy of their predecessors. ✓

Reference: Richman, Howard. "Defending Their Turf." GCM Magazine Nov. 2014: n. pag. Web

The author is a graduate student under Dr. Paul Koch. From Columbus, Ohio he attended Ohio State for his undergrad degree in turfgrass science with a minor in plant pathology. He has interned at Kirtland Country Club (Willoughby, Ohio), Pinnacle Golf Club and Oakhurst Country Club (Grove City, Ohio) and Exmoor Coun-


try Club (Highland Park, IL).

Ron is currently working for the Chicago District Golf Association as the manager of turfgrass research. His research project is looking at the effects different nitrogen sources and rates have on controlling dollar spot of bentgrass putting greens.

After his graduate degree Mr. Townsend hopes to continue working in turfgrass research to provide help to golf course superintendents.



The Author Ron Townsend applying to a test plot at Cog Hill.

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What a Treat!

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

WTA members and friends were treated to an outstanding golfing experience on October 5, 2015. That is when the annual WTA Golf Fundraiser was held at Blue Mound Golf and Country Club in Wauwatosa.

Golf Course Superintendent Steve Houlihan and his staff had the course in outstanding condition, that is, if you like super true and NASCAR fast greens, which most of us do. I can't get over how fun those greens were! And the fairways, tees, rough, bunkers, and landscaping were second to none. Add to that the clubhouse, which you had to see to believe (pictured on page 22).

Participation was just short of a sold out field, at 129 golfers, and hole sponsorships were at an all time high. Please see the list of golf hole sponsors and thank them for making the day a success. Their contributions helped the WTA raise \$11,200 to support worthy turfgrass research initiatives well into the future.

The WTA definitely was a winner for the day but so were the 129 participants. They played a wonderful golf course on a spectacular autumn day in the low 60s with a mild breeze, overcast sky, and full autumn color. The course conditions, food, and hospitality were top notch, and everyone went home with a nice door prize. Many of those prizes were worth more than the cost of registration. A special thanks goes to the many generous door prizes donors who helped make the day even more memorable.

Many participants also went home with golf skill and other prizes. One of those other prizes was a drawing for an Apple iPad that was won by Todd King from Deer Valley Golf Course. Todd was also in the winning foursome for the day. His team with Peter Meyer, Dan Wubbels, and Jeff Ellingson carded a score of 61 in the day's 4-person best-ball tournament. Second place, with a 67, went to Aaron Goninen, Chad Grimm, Nick Strain, and Dave Tilsen. A random drawing for another team went to the 24th place team of Kevin Green, Omar Zaldivar, Chris Nicolas, and Reed Meier. Each of these individuals won a \$75 gift certificate to Blue Mound's pro shop. Also collecting \$75 were the following individual skills event winners:

- Longest Putt on Hole #1 – Chris Zugel
- Longest Putt on Hole #4 – Rob Johnson
- Closest to Hole on #7 – Kerry Anderson
- Longest Drive on Hole #10 – Scott Verdun
- Closest to Hole on #13 – Nick Strain
- Closest to Hole on #17 – Bill Schwantes

Congratulations to all the skills events, door prize, and random drawing winners. The day was surely a treat for everyone, and for the WTA. The WTA will continue to further its valuable research and education with the money raised. A special thanks goes to all the participants, door prize donors, hole sponsors, and volunteers. Other thanks go to the golf course, clubhouse, and pro shop staff, and the members of Blue Mound Golf and Country Club who graciously gave up their course for a day. The WTA was very fortunate to have everyone pull together to make this event a resounding success.



Our host superintendent Steve Houlihan poses with our friend and former superintendent Carl Grassl

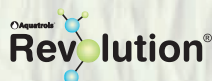


Kerry Anderson and Dr. Nangle sporting matching hats from the US Open



Each hole at Blue Mound was designed after a famous hole from around the world by architect Seth Raynor, this one of #17 at St. Andrews

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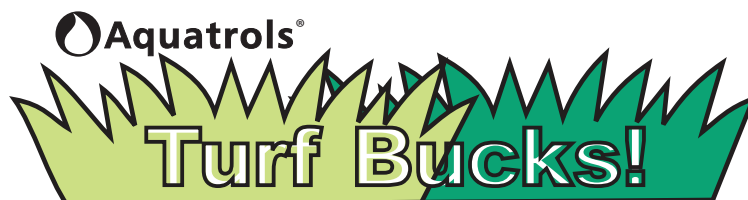
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Our host Golf Course Superintendent Steve Houlihan entered the golf business as a caddy at Merrill Hills County Club when he was 13. His years as a caddy peaked his interest in golf and he was fortunate to receive a Evans Scholarship so he enrolled at UW-Madison expecting to study landscape architecture design but at orientation the world of soil science called to him. Steve received his Bachelor's and Masters in Soil Science from Madison.

The fact that four of Steve's uncles are the well known golf course superintendents Jim, Pat, Charlie and Dan Shaw helped in his decision as he was able to see what they did in their careers.

Houlihan has worked at Chenequa Country Club, Blackwolf Run - River Course, Merrill Hills and now the Blue Mound Golf and Country Club where he has been for 5 years.

Steve and his wife Kate have two daughters, Aubrey who is 4 and Brynn who is 1 1/2.

Blue Mound County Club opened in 1926 and was designed by Seth Raynor as his only work in Wisconsin.

All Raynor courses share the same hole designs and concepts as Blue Mound. All the holes at Blue Mound have a historical background as 17 hole designs come from Scotland and one from

France from the late 1800's and early 1900's.

The incredible layout features a "road hole" "punchbowl" "biarritz", "redan" and so on. In his short design career Raynor is accredited with over 75 course designs.

The 200 acre Blue Mound has challenges for Houlihan and his staff with a lot of manual labor to take care of the nearly 100 sand bunkers that all need fly-mowing. In addition just over 10 acres of greens, tees and approaches are walk mowed.

The course is undergoing a restoration to bring the design back to original concepts with the help of Bruce Hepner. Trees have been removed, bunkers reshaped and putting surfaces have been returned to the original size.

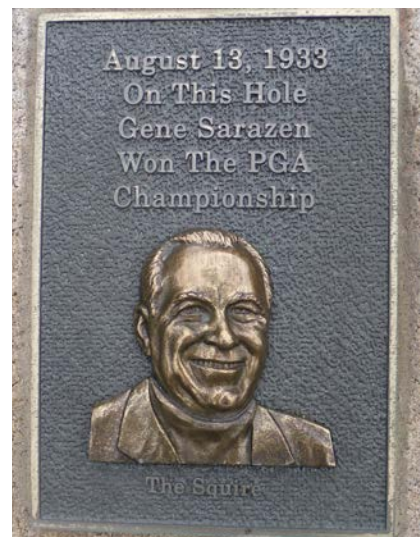
Steve considers himself fortunate to have a strong staff with two assistants, an arborist and a mechanic/foreman to help supervise, train and lead a summer staff of 15-18. Steve Spuhler serves as Mechanic while Josh Peterson and Ryan Fritsch are the Assistant Superintendents.

The course was a treat to play and the meals and service in the impressive clubhouse were second to none. Thank you for hosting us and thank you to those who participated. ✓

Member 9 With Steve Houlihan

1. **First Vehicle?** *Shared with my mom and sister, 1988 Pontiac Bonneville*
2. **Favorite Piece of Golf Course Equipment?** *Tough one... Walking Greensmower*
3. **18 Hole Handicap?** *No handicap established. I can shoot 75 to 85. In words of one of our member's... I'm a dangerous "18"*
4. **Current Vehicle?** *2012 Toyota Camry*
5. **Favorite TV Show?** *Survivor (have watched every season); nightly Netflix cartoon shows with my daughter, Aubrey*
6. **Favorite Pro Sports Team?** *Football all the way... NFC – Packers; AFC – Patriots*
7. **Favorite Main Course Meal?** *Cheeseburger grilled perfectly and some haystack onion rings*
8. **Pets?** *none, allergic to almost anything on Earth. Outside job? Hmmm.*
9. **Favorite Thing About Working In Golf Industry?** *A chance to prove yourself each day in making the course better. Immediate gratifications.*

NOTES FROM THE NOER



Left: Father/son duos of Brent and Rod Johnson with Steve and Tim Schmidt always come to support the fundraiser

Right: A plaque commemorating Gene Sarazen's 1933 PGA Championship win at Blue Mound over the Willie Groggin 5&4 in match play competition. Today the plaque is at the 5th tee but for the PGA it was the 14th hole.

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NOTES FROM THE NOER



Left: Do you think these guys had fun? (Dave Groelle, Dr. Ed Nangle, Bruce Schweiger, and Erich Lange)

Below Left: Mr. Smooth, Jim Van Herwynen, making another routine perfect hit

Below Right: 4. Chad Grimm develops some impressive club head speed

Below: The 9th Hole with the impressive lannon stone clubhouse in the background.



NOTES FROM THE NOER



Top Left: Aaron Goninen winds up for a winning swing

Top Right: The WTA thanks all participants for a successful event in 2015

Left: Former Blue Mound superintendent Carl Grassl with wife Barbara joined the many generous hole sponsors

Below: Mount Mary College looms in the background of Hole 7, a short downhill par 3 at 167 yards.



Ben Pease and Garrett Luck

By Josh Lepine, Certified Golf Course Superintendent, Maple Bluff Country Club

NOTE: As a WGCSA Board member, I want to thank everyone who participated in the Membership survey this past fall. The information and feedback obtained was invaluable. The requests for more member spotlight stories inspired me to start this column. I hope to randomly highlight a few members each edition from all geographic areas, facility types and membership classifications. It may take me 20 years to get to everyone in the directory but please be ready for that phone to ring and be prepared to share stories, photos and information about YOU!

Name: **Ben Pease**

Company Position: **Assistant Superintendent,
Cherokee Country Club**

Years as WGCSA Member: **11**

Membership Classification: **C**

18 holes with Ben Pease:

1. How did you get started in the turfgrass industry? My start in turf began at the age of 13 when a neighbor hired me to take care of their lawn. Over a few summers I grew my lawn care business to 10-12 clients, offering mowing, fertilization, aeration, and some light landscaping. Running this business taught me a lot about communication and customer satisfaction. I kept this business going through most of college. At 17, I got started in golf turf at Elm Creek Golf Links in Plymouth, MN. I worked there for 4 summers and learned a lot about golf course maintenance procedures, even night watering! Elm Creek was a family-run 18-hole public course, just this year sadly turned into homes.

2. What is the most rewarding part of your career? Planning, carrying out, and completing projects. I enjoy making improvements to the golf course and seeing those efforts benefit playability and aesthetics.

3. What would you consider to be your greatest career challenge? Being patient with opportunities that have come my way.

4. Which three adjectives describes you the best? Motivated, practical, and persistent.

5. Tell us about your family. My wife, Kara, is a neuro ICU nurse at UW Hospital in Madison. I have three younger brothers, one in Chicago and two in Minneapolis.

6. Any pets? One easy-going mutt, Santos L Halper. He is named after a pre-approved credit card that the dog in The Simpsons, Santa's Little Helper, once received in the mail. Santos has learned to chase geese, so he earns his keep.



Top: Ben and Kara at Blackhawk Country Club for a friend's fall wedding.

Bottom: Ben visiting Miller Park after Field Day.



MEMBER SPOTLIGHT

7. What drives/motivates you every day? I like to improve on my weaker abilities. It is a good day when I am able to challenge myself. Doing something challenging usually results in the biggest benefit to the golf course and my professional abilities. Plus, working outside most of the year, no matter the weather, is a big motivator.

8. Who Would You Admire? I admire people who have worked hard and achieved success as a result of their tenacity and talent. Two people that come to mind are Dr. John Stier and Bruce Springsteen.

9. Who is the person in history you'd most like to meet? I am fascinated by musicians and US Presidents, so probably Stevie Ray Vaughan or Ronald Reagan.

10. What's a fun fact that people don't know about you? I have completed three Ironman triathlons and many shorter triathlons. My fastest full Ironman (2.4 mile swim, 112 mile bike, and 26.2 mile run) was 11 hrs 41 minutes, done in Madison this past September. I placed 363rd out of about 2900 participants. There is absolutely nothing better than pushing yourself mentally and physically further than you thought was possible. Triathlon is a lot like turf management. Each year you follow a similar plan to achieve your goal, improving on it and incorporating new knowledge/technology to better the results, both at the whim of the weather.

11. What do you do in your spare time, favorite hobbies? See the above question/answer, training is 15-30 hours per week! In the off-season, I enjoy antelope hunting in Montana or weekend trips around Wisconsin.

12. If you could go anywhere in the world on vacation, where would you go? Month-long trip to Alaska, although there's not much golf up there.

13. What is the one thing you would like to learn/accomplish someday? I would really like to become fluent in a second language. It would open up travel opportunities later in life.

14. What is your favorite turf management related tool or technique? Computerized irrigation controls. I could manage with 20 year old mowers and carts if I had to but having modern, precise control of my irrigation system is essential for responsible turf management.

15. Favorites:

TV Show: The Simpsons

Movie: Goodfellas

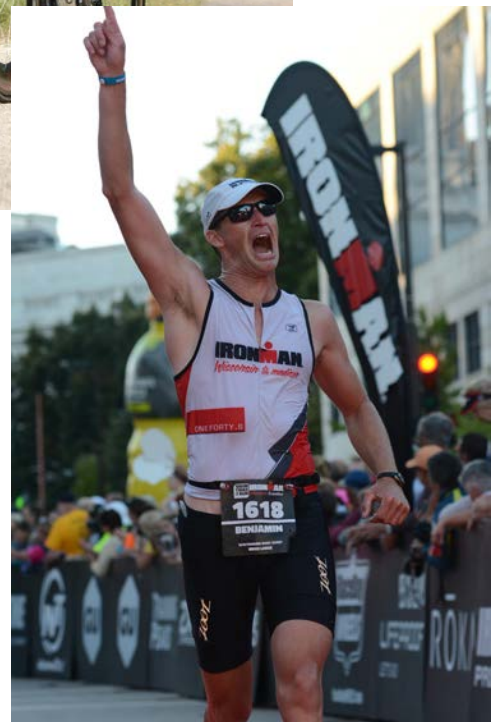
Food: Pulled Pork Brisket Sandwich, with cole slaw.

Sports Teams: Badgers and Packers

16. Do you golf? Handicap? Best shot or golf story? I golf but not often enough. My best shot was just this past summer, I knocked one in from about 80 yards out.

17. Top Bucket List Item? Visit as many National Parks as possible, compete in the Ironman championship in Hawaii, visit St. Andrews, and attend the Masters when I get my gold GCSAA card!

18. If you could provide one piece of professional advice, what would it be? Find a good mentor early on in your career and stay in contact with them. Their insight and guidance will be extremely valuable.



Top: Ben at the bike portion of 2015 Ironman Wisconsin, at about the 85 mile marker.

Middle: Ben rewardingly crossing the finish line, 2015 Ironman Wisconsin.

Bottom: Santos, the dwarf lab-basset, keeping geese off of the research greens.



MEMBER SPOTLIGHT

Name: **Garrett Luck**

Company Position: **Certified Golf Course Superintendent,
Hidden Glen Golf Club**

Years as WGCSA Member: **12**

Membership Classification: **A**

18 holes with Garrett Luck:

1. How did you get started in the turfgrass industry? I took my first real job at age 14 as a dishwasher at a local restaurant. I became really tired of the grease and smell. When I turned 16, I knew I wanted to work outside. I accepted my first job at Kettle Hills Golf Course in Richfield under Bob Belfield.

2. What is the most rewarding part of your career? I enjoy the relationships that form with co-workers, members, and others involved in golf.

3. What would you consider to be your greatest career challenge? My biggest career challenge to date has been developing a successful operation at Hidden Glen. It is very different than any club that I have ever worked at. The ownership, management structure, turf, and the style of golf course are all different. Thankfully I have two outstanding assistants and a great staff that are all aligned with the goal of making Hidden Glen the best it can possibly be.

4. Which three adjectives describes you the best? Balanced. Thankful. Fun.

5. Tell us about your family. Married to my wife Ann. My daughter, Taylor, is 17 and my son, Caden, is 14.

6. Any pets? MA Yorkie Poo named Beeker and a Black Lab named Ziggy.

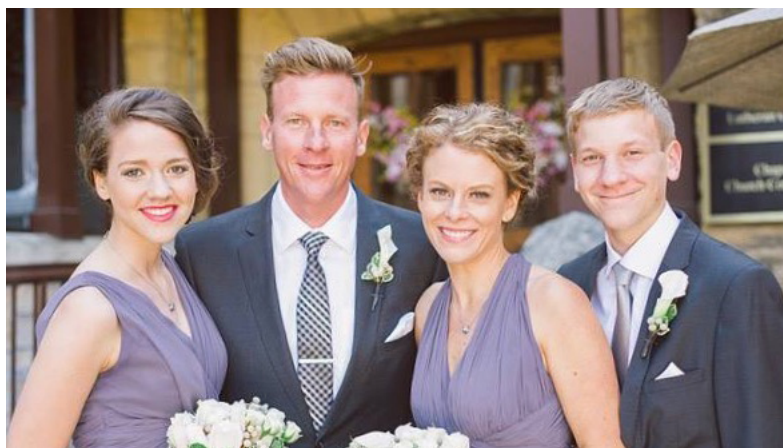
7. What drives/motivates you every day? The desire to be successful—whether that be at work or home.

8. Who do you admire? Easy question. I admire my wife. She is truly the most amazing person that I have ever known. I don't know how she is able to do all she does. She is always caring, thoughtful, and loving even while working at a very demanding job. She is the most complete person I know.

9. Who is the person in history you'd most like to meet? Jesus Christ



Garrett and Ann on Vacation in Puerto Rico.



Taylor, Garrett, Ann and Caden Luck

An advertisement for Pumpstation Professionals. The background is a scenic view of a golf course with green grass and hills under a blue sky. The text is as follows:

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MEMBER SPOTLIGHT

10. What's a fun fact that people don't know about you? Big Dave Matthews fan. My wife and I try to see him as often as we can.

11. What do you do in your spare time, favorite hobbies? I enjoy running and exercise—it's a good way to burn off stress. I enjoy trying new food and eating at new restaurants. I love taking vacations with my wife and family in the off season. I dabble in home brewing and coach freshmen basketball over the winter.

12. If you could go anywhere in the world on vacation, where would you go? Bora Bora

13. What is the one thing you would like to learn/accomplish someday? Run a marathon.

14. What is your favorite turf management related tool or technique? The entire Google platform—great way to collect, organize, and share data.

15. Favorites:

TV Show: Arrested Development

Movie: Rushmore

Food: Great Barbeque

Sports Teams: K-State Football and Milwaukee Brewers

16. Do you golf? Handicap? Best shot or golf story? Yes. 15. I was fortunate to be invited to play a round of golf with MLB hall of famer Cal Ripken Jr. at Caves Valley in Maryland. He stayed for dinner and talked baseball until late into the evening. It was a once in a lifetime experience.

17. Top Bucket List Item? Travel the world. See and experience places that I have never been. See my kids continue to mature and have wonderful lives.

18. If you could provide one piece of professional advice, what would it be? Stay hungry, be patient, and be prepared. We work in a very competitive business. Always look for every chance to better yourself professionally so you have the confidence and edge to get the job you want when the opportunity arises. 🌱



Garrett, Caden Taylor and Ann Luck at Caden's Confirmation.



Above: The Luck's on vacation in Arizona.

Left: Garrett with Cal Ripken Jr. at Caves Valley Golf Club

Event Schedule!

Wed & Thur December 2-3 - Golf Turf Symposium, American Club, Kohler

Tuesday January 5 - WTA Turfgrass Research Day (In Person or via Webinar)

February 6-11, 2016 - Golf Industry Show, San Diego, CA

February February 10 - WGCSAA Hospitality Room @ Bootleggers Sad Diego from 6:30-9:30

Fall Ramblings

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

Another year has come to a close and the lessons from this growing season are numerous. In the next issue I will have finished with the analysis of the sample submissions and lab activity and I will present the year in review. In the meantime I have a running ramble of things I would like to share with all of you.

The falls season is a very busy time around the TDL as Dr. Koch designs, prepares and we spray each trial. This year was no different as Dr. Koch continues to be the one of if not the leader in Snow Mold Research. We have yearly snow mold trials at Marquette Country Club, Marquette, MI, and Wausau Country Club, Wausau, WI. This year we have moved our Madison location to Cherokee Country Club in Madison, WI.

In advance many thanks to hosts Craig Moore, Randy Slavik and Eric Leonard. Dr. Koch also has snow mold timing studies being conducted at Timber Ridge Golf Club in Minocqua, Greenwood Hills Golf Club in Wausau and the OJ Noer Research Facility, again thank you to hosts Jay Pritzl and Scott Sann. I will let Dr. Koch at some later date explain this his newest snow mold study. Dr. Koch has also revived his winter degradation study at the OJ Noer Research Facility. We always attempt a *Microdochium nivale* trial at the OJ Noer but often we have very little pressure.

Last winter we attempted to cover the plots with a Green Jacket and placed heating cables under the cover to increase humidity and keep the soil from freezing solid. Since the heating cable were my brain trust I will take credit for the fact that it was an incredible failure. We received very little snow cover and the lack of snow and its insulation properties was too much for the heating cable to warm the soil sufficiently. When we uncovered the plot all we had was a very small lines of dead turf from the direct heat. So this year we are back to the drawing board



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with a few new ideas (ok one idea, that I maybe stole from a Turfgrass Manager in Wisconsin) and next spring we will see if we have found a system to increase disease and improve our snow mold research.

Three years ago I would have never believed that I would be spending my summer months devising systems and plans to create more disease on any turfgrass site. My entire career has been creating programs to lessen or prevent all disease. Research is a strange new world and it proves an "Old dog might be able to learn new tricks".

Over the past three years I have learned many new lessons working with Dr.'s Koch, Soldat, and Williamson. As long as I can remember I have tried to be very involved with the research of all the great UW-Madison Professors present and in the past. Thankfully I was asked to assist on finding off site properties for one the professors to do a research project or give me opinion of a new project. With all the contact I with the program I felt I had a clue as to the process and real expense it takes to run the research trials. Since my arrival at the TDL, I have had the opportunity to participate in many projects. I have also witnessed a few projects that have not gotten off the ground due to funding. What strikes me is the cost of conducting many of these projects, especially the cost to travel off property to run research trials. The funding needed for all this research are secured by the professors and this can be a long a difficult process for writing grants and proposals. Due to the mounting cost of

all projects, I want to thank the WGCSA and its members for all the support they give to the UW Turf Programs every year, it is appreciated. The moneys donated for research here are instrumental in keeping many projects going.

As my three years comes to an end I am proud to tell you that the OJ Noer Facility operates very efficiently. Staffing levels for each department is always kept to a minimum. The way we all accomplish our goals is through departmental cooperation.


A great example of how this co-operation occurs during the summer is: The Pathology project studying Brown Patch requires us to cover the plot with a 25 foot by 65 foot tent. Moving this tent to mow or apply treatments is an under taking. We found it take 8 young men or 7 young men and Tom Schwab and I to move this off the plot. The pathology department does not have this large a staff but every morning Tom Schwab's staff, the staff of Soil Science and the Pathology staff would convene at the tent and in 10 minutes remove from the plot. As the day comes to an end and everyone leaves for the day, the same groups would move the tent back. Unlike a Golf Course borrowing staff from the neighbor is easy.

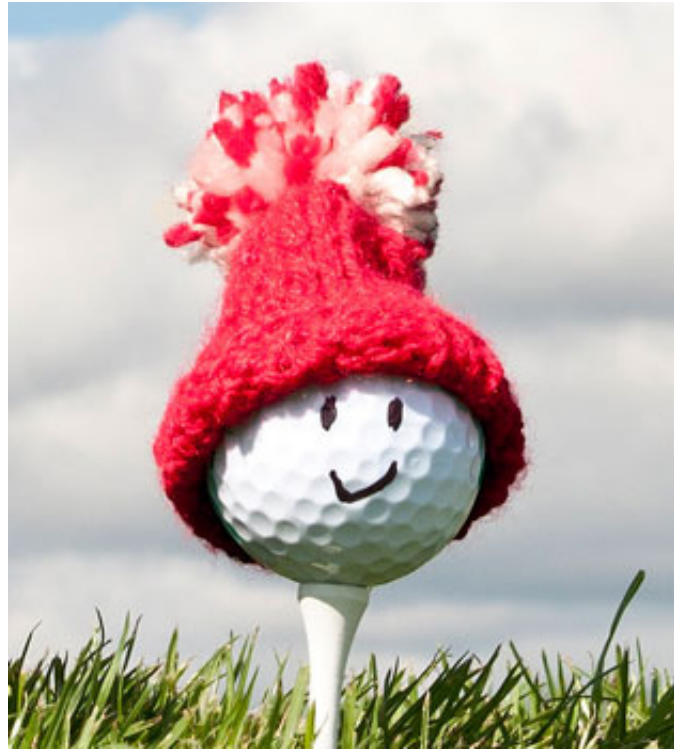
Another advantage the OJ has is the Superintendents in the Madison area are always there when I call and ask for help. They sharpened mowers, loan us equipment, send use a few staff members when we are in need and offer their properties for our off site research to reduce our cost associated with these studies.

TURFGRASS DIAGNOSTIC LAB

I know that the industry built the OJ Noer Research Facility and the support we receive from the various sources is staggering. We also receive support from manufacturers with product donations for weed control, fungicide programs, and Reinders and Toro support the OJ Noer with a New Triplex Greensmower, Workman, flex walking greens mowers every year, and a set of Turf Guards for monitoring research trials. During my tenure we have identified a few pieces of equipment that we need and vendors and golf courses have stepped up and found and donated these to us. As we improve some of our equipment it allows us to continue to maintain our research plots as close as possible to the conditions you strive for on golf courses.

I guess the key message is thank you to all that are there when we need assistance. The second part of this is please get involved in the WGCSA and WTA so you can see what it takes to run this first class research facility. There is much more going on behind the scenes than I had ever guessed. There are so many people that assist all of us daily that we would like to thank each of you but I will forget someone so I will not make a list.

THANK YOU EVERYONE FOR THE ASSISTANCE and DONATIONS. One more thank you to the staff at the UW for all the TRAINING and continuing EDUCATION that has been needed to bring me to a level that I can be of assistance to the Turfgrass Program. 



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A Journey Through Turf Management

By Nicholas Gmeinder, Senior in Turfgrass Management, University of Wisconsin-Madison

EDITORS NOTE: *This submitted article is eligible for the Monroe Miller Literary Scholarship, awarded each year to the author of a selected article.*

As a child I grew up competing in many sports including football, baseball, basketball and soccer, but I didn't find my niche until I started taking golf lessons. I remember my first time taking lessons at Songbird Hills Golf Club, when between taking hacks at the golf ball I admired the crisp look of different lengths of grass. Without knowing it, this was the first time I showed interest in the field of turfgrass. As I grew up my love for sports continued, but my passion for golf grew larger every day.

When I reached the age of 16 I got my first job as a grounds crew employee for Jim Shaw at Chenequa Country Club. I was given the wonderful opportunity to work alongside two of my brothers for my five year stint at Chenequa. While I was there Mr. Shaw provided me with a strong background in equipment usage and turfgrass management. His tutelage sparked my interest in joining the turf industry

which led me to search out universities with turfgrass management degrees.

Unfortunately I was not accepted into the schools I was hoping to get into directly out of college so I made the decision to spend the first 2.5 years of my college experience studying environmental science at Carroll University. I finally decided to transfer to the University of Wisconsin-Madison in the spring of my junior year. I am now nearing the end of my college career here at UW, and I can't help but reflect on my decision to transfer schools.

Attending Carroll was an amazing opportunity to broaden my environmental studies knowledge which only makes me that much better of a future turfgrass professional. After making the move to UW I quickly started looking into internship opportunities for the following summer. My advisor Doug Soldat was constantly emailing his students about opportunities around the country but none of those internships really caught my attention.

I instead called up the top 10 golf courses on the Golf Digest Top 100 courses in America which included Augusta National, Pine Valley, Oakmont CC, Cypress

Point and Pinehurst as well as Whistling Straits. I was not expecting a whole lot when I made those calls, but I received interviews with Augusta, Pine Valley, Oakmont, Pinehurst and Whistling Straits.

After completing phone interviews with Augusta, Pine Valley and Pinehurst as well as in-person interviews with Oakmont and Whistling Straits, I had my choice narrowed down to two. Whistling Straits was the obvious choice as it provided great pay, allowed me to play free golf every day and was only two hours from my home so I could see my family.

Oakmont did not provide those immediate benefits, but when I drove out to Pennsylvania in December their management team (Superintendent John Zimmers, U.S. Open Coordinator David Delsandro, Assistant Superintendents Scott DeLong and Heath Beckner) made me feel like I was part of a family before I was even hired. It's safe to say that I don't regret my decision for one minute as I am looking to head back out there to work the United States Open of Golf in May for my third year as an Oakmont employee.



Nicholas (Left), Simon (middle), and Alex (Right) Gmeinder empty out a pond on the 3rd hole at Chenequa in preparation for construction.



Nicholas Gmeinder posing with the United States Open Championship Trophy as he assists the USGA with the flight of their drone in preparation for the 2016 U.S. Open.

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STUDENT ARTICLE

The rigor of everyday life and the incredible operation at Oakmont is unlike any other. We have a crew of approximately 45 guys and every single one of them wants to be there. That allows us to put forth 150% efficiency every single day, no matter how tired we are. The knowledgeable management team prides itself on being a very hands on operation with boundless opportunities for hopefuls like myself.

While some internships consist of mowing greens and raking bunkers every day, Oakmont allowed me to cut the golf course wall to wall, spray greens, hand water, topdress and experience aerification, just to name some duties. When I get home from Oakmont for the school year, I have had the great pleasure to work with Josh LePine at Maple Bluff Country Club. My younger brother, Simon, and I give Josh a little relief to open and close the season, since so many employees leave for the colder months. This job is very special because Josh is very flexible with my school hours and trusts me with my seven years of experience to put me on projects without question of whether or not I can complete the task at hand.

I have been truly blessed to be in such great company at all three of these golf courses. I've learned and reinforced so many proper turfgrass management strategies and made a lot of buddies and contacts along the way.


I have been able to see three massive projects throughout my career: Complete renovation of holes 2 and 3 at Chenequa, renovation of the clubhouse and the 7th hole and chipping greens at Maple Bluff and the insertion of new drainage in every bunker at Oakmont along with reshaping of bunkers in preparation for the United

States Open. I have also gotten to experience three different management styles at three private golf clubs.

Throughout my tenure at Chenequa I was a veteran employee; I received this responsibility because many employees quit. This obviously left me open to some added scrutiny as does any job where you are a veteran employee with experience and talent in the field. Mr. Shaw provided me with a "tough love" kind of management style which was very helpful to me because I became aware of my surroundings more rapidly from my first to my fifth year there. Josh LePine has a very laid back management style which has been great for me throughout school because I can bring my experience from Chenequa and Oakmont and apply those methods at a slightly slower pace.

The management style at Oakmont is, "you'll get out of the job what you put into the job." I have thrived in this setting because I know that if I am constantly in contact with management while working and having downtime, I will receive many opportunities on the course, and I will learn more information. I can still remember a conversation I had with David Delsandro at the end of the work day during my first year at Oakmont. I was blowing off the practice fairways and David stopped me, pulled a weed from the ground and asked me what it was. This little test turned out to be a twenty minute conversation about goose grass versus crabgrass and how they were spraying for both of them. These kinds of conversations have stuck with me more than any college lectures.

I am honored to work in such a small, tight-knit industry where I have constant variability in my daily work life. I am

thankful to have worked with three fantastic employers over the past seven years, and I am looking forward to meeting many more incredible professionals. As I near the end of my college career I am excited for the opportunity to witness golf's greatest tournament and then enter into the real world as a 22 year old turfie! 

The Author is a Senior in Turfgrass Management at the University of Wisconsin Madison. His love of sports has propelled him into a career in golf course management. He hopes to use his degree and previous experience as a intern and student employee to help him as he enters the job market.



Nicholas Gmeinder and co-worker Carlton Henry fix a buried and clogged drainage pipe at Oakmont Country Club.

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Topics for Everyone in the Turf Industry at the Wisconsin Turfgrass Association Research Day – January 5th, 2016

By Aaron Goninen, Golf Irrigation Sales, Reinders Inc.


Editors Note: Aaron Goninen is a Wisconsin Turfgrass Association Board Member and Chairman of the Winter Turf Conference.

By the time you read this 2015 will be almost over and planning for the 2016 season will be well under way. Hopefully when you think about 2016 you will start the year out by getting some great education at this year's WTA Winter Conference. The conference will be held on Tuesday,

January 5th, 2016. Once again the event will be held on the shores of Lake Mendota in downtown Madison at the Pyle Center. The Pyle Center is located in the middle of the UW-Madison campus near Memorial Library.

If you are unable to attend in person the conference will be available by webinar. We have worked hard to make this an enjoyable experience, and think that most people are excited to have this as an option. In addition, talks will be archived so if work responsibilities, family obligations, or winter weather surprises us, you will be able to go back and enjoy the talks at your convenience. We started offering the webinar and archived talks to create flexibility in everyone's very busy schedules. It is a very unique opportunity to support turf research in a flexible format.

This year's event will present an opportunity to hear a wide variety of topics from experts in many fields. Our goal is to offer talks that will appeal to a large variety of professionals in the turfgrass industry. This year we have talks from our expert staff at UW-Madison, which includes Dr. Soldat, Dr. Koch, and Dr. Williamson. Each of them will be talking about the research they worked on in 2015 and their plans for future research. In addition to our professors we will be having Dr. Sam Bauer from the University of Minnesota speaking about weeds in sports turf. He will discuss specific topics both in golf and sports fields. Jeremy Nelson, a meteorologist and long range forecaster from Milwaukee, will be speaking about trending weather topics that affect all turf managers. Weather not only affects the way we manage turf, but it also affects our daily lives. Mike Boettcher, the manager of Miller Park, will be presenting about challenges he encounters managing turf at Miller Park and handling a wide variety of events. We will also have a very interesting presentation from Dr. Glen Stanosz on managing tree risk and liability. Most turf managers have trees in and around your property, and this should be a very eye opening topic. To get more information and to register online, go to www.wisconsinturfgrassassociation.org.

We hope that you will come out and support the conference in person or via webinar. The WTA, the faculty, and everyone affiliated with the OJ Noer Research facility truly appreciate the support of this event. On behalf of the Wisconsin Turfgrass Association Board of Directors I wish you a great late fall and holiday season. Thank you for your continued support. 



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Turfgrass Research Day Conference & Webinar

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- 8:00am Registration
8:30 Welcome and Scholarships
8:45 – 9:30 **Sam Bauer – University of Minnesota**
Weed Control Programs for Sports Turf
9:30 – 10:15 **Chris Williamson – University of Wisconsin Madison**
Strategies for Managing Earthworm Castings in Turf
10:15 – 10:30 Break
10:30 – 11:15 **Doug Soldat – University of Wisconsin Madison**
2015 Research Review
11:15 – 12:00 **Jeremy Nelson – WISN Milwaukee / Meteorologist**
Trending Meteorology Topics
12:00 – 12:45 Lunch
12:45 – 1:30 **Michael Boettcher – Milwaukee Brewers**
The Odd Couple – Turf Management at Miller Park
1:30 – 2:15 **Glen Stanosz, PhD – University of Wisconsin Madison**
Managing Tree Risk & Liability on Your Golf Course
2:15 – 3:00 **Paul Koch – University of Wisconsin Madison**
The Danger Lurking Below; How Patch Diseases Can Ruin Your Summer



Sam Bauer is an Assistant Extension Professor at the University of Minnesota. He received his Bachelors and Masters degree at the University of Minnesota-Twin Cities. His research and extension objectives revolve around practical management strategies to improve turfgrass on sports fields, golf courses and general grounds.



Jeremy Nelson received his B.S. degree in atmospheric and oceanic sciences from the University of Wisconsin-Madison. He is a member of the National Weather Association and the American Meteorological Society. From 2004 – 2006, he was voted “best local TV personality” by readers of Madison Magazine.



Michael Boettcher will be starting his 3rd season as the Director of Grounds with the Milwaukee Brewers Baseball Club. He got his start in the Sports Turf Industry as a landscape intern in 2004 with the Brewers under the supervision of Gary Vanden Berg. He received his Bachelors degree from the University of Wisconsin-Madison.



Glenn Stanosz is a Professor of Tree and Forest Health at the University of Wisconsin-Madison and privately consults as an International Society of Arboriculture certified arborist. His university research involves tree diseases caused by fungi, and he teaches disease biology and management to students in horticulture, landscape architecture and professionals in forestry and the green industry.

WISCONSIN TURFGRASS ASSOCIATION



Chris Williamson is a Professor of Entomology at the University of Wisconsin-Madison where he is an extension/research entomologist in urban landscape entomology including turfgrass. He received his B.S and M.S. degree from the Ohio State University. He received his Ph.D. in entomology from the University of Kentucky.



Doug Soldat is an associate professor and turfgrass extension specialist in the Department of Soil Science at the University of Wisconsin-Madison. He advises the turfgrass management students at the UW and teaches courses in the fields of turfgrass management and general soil science.



Paul Koch is an assistant professor in the Department of Plant Pathology as well as the Molecular and Environmental Toxicology Center at the University of Wisconsin-Madison, joining the faculty in January of 2014. His research has focused primarily on fungicide breakdown in the environment and snow mold diseases on golf course turfgrass.

Complete this registration form and mail with payment to **WTA / O.J. Noer Facility / 2502 Highway M / Verona / WI / 53593**. You may also go to www.wisconsinturfgrassassociation.org to register online. All registrations must be received by December 30th, if not, add \$10 per person.

If you are registering to attend via webinar, make sure your email is included. You will receive the link to the webinar via email by January 4th.

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Return with payment to **WTA / O.J. Noer Facility / 2502 Highway M / Verona / WI / 53593**. If you have any questions, contact Audra at 608-845-6536 or audra.anderson@wisc.edu. All registrations must be received by December 30th, 2015.

Chapter Manager Updates...

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

December, I know that many of you enjoy the month for many reasons. For superintendents and staff it is a time to have more “regular” hours. Barring any snowfalls most of you now get your entire weekends off. For the vendor companies and staff most of the busy early order times are done. The golf season is complete and the challenges of your work load become much more manageable. Many of you take advantage of our premier educational event of the year which now happens in early December. As I am writing this we are still taking registrations for our 50th Annual Turf Symposium. The event has been a cornerstone of the chapter’s educational event and with help of Milorganite we hope that it continues for another 50 years. December also ends with Christmas and New Year and I hope that all of you can spend time with your family and loved ones, many who do not get to see you as much as they would like during the growing season. I think we

can all reflect that the 2015 golfing season was a good one for most of Wisconsin and our member’s facilities.


December is a busy month for me. The WGCSA board has been planning and preparing for the Annual Meeting in which we present our 2016 budgets and plans for the next year. I am also busy with preparations of the new website, planning the Industry Partnership Program for our supporting vendor companies, and renewing our memberships.

I am happy to announce that we have our 2016 WI Hospitality Event planned for GIS-San Diego. We will be returning to Bootleggers from 6:30-9:30 Wednesday February 10th. This was a great venue for us several years ago and I am confident we members attending will have a great time catching up with your peers.

It is my hope that by the time you are reading this article our new website will be live. I look forward to your feedback and sugges-

tions on the new site. We have more flexibility to content and features than ever before so I you would like to see a new feature, links or content please let me or our leaders know.

In closing I would also like to thank our hard working board of directors. The time and dedication they spend helping all of us is very much appreciated. I would also like to thank our Chapter Editor David Brandenburg as well. Year after year and month after month David continues to organize, layout, and compose our Grass Roots magazine issues. We have had one of the premier chapter magazines for decades now. I hope we never take this huge member benefit for granted. If you see David give him a pat on the back and let him know you appreciate the late nights and early morning editing he does so well.

Merry Christmas to you and yours! 

Brett can be reached at 920-643-4888 or by email bgrams@wgcsa.com



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2015 Chapter Delegates Meeting

By Josh Lepine, Certified Golf Course Superintendent, Maple Bluff Country Club

The GCSAA Board, 2016 board candidates and 89 delegates representing 90 of GCSAA's 98 affiliated chapters, met at the Hilton Kansas City Airport and GCSAA Headquarters on October 27-28, for the 23rd annual Chapter Delegates meeting. I was proud to represent the WGCSA and was one of 27 first time attendees.

The Chapter Delegates meeting is an event that brings together representatives from GCSAA-affiliated chapters. Delegates carry the opinions of their chapter's members regarding initiatives and issues affecting the profession, the association and its members. As a Delegate, I'm responsible for communicating information I receive at the meeting to our chapter. I want to thank the WGCSA board and members for the opportunity to attend. Finally, this meeting is also the beginning of a new election year, as delegates get the opportunity to meet GCSAA board candidates and discuss their campaign platforms. We should all be proud that one of our own members and past Presidents, Mr. Jeff Millies, CGCS is a 2016 GCSAA Board of Directors candidate. The WGCSA supports Jeff in this honorable endeavor.

The following is a compilation of the key meeting outcomes provided by GCSAA.

PRESIDENTS BRIEFING

President John J. O'Keefe, CGCS, focused his presentation on GCSAA's key priorities. These key priorities include serving members, advancing the profession, advocacy and outreach, increased revenue opportunities and environmental stewardship.

Serving Members

- Field Staff Program- 9 regional representatives outreaching to 98 local chapters on a year round basis.
- Mobile App Offerings- Mobile apps are not the "future". They are here and now and what is needed to reach our membership. Priority to remain on cutting edge of technology.
- Board Outreach Program-this initiative sends non-officer board members to

regions and chapter meetings outside of their "home" region. The regions assigned to board members will change each year with the intent to meet members throughout the country and work with all 9 field staff representatives.

Advancing the Profession through relevant educational program offerings

- 380 hours of education available at GIS. Increased domestic and international offerings
- Webcast education in 2015 has had over 2,000 participant seats in live events with another 3,900 On Demand recording views.

Advocacy and Outreach

- GCSAA now has a full-time presence in Washington with recent hire of Bob Helling, Director, Congressional and Federal Affairs.
- 197 Grassroots Ambassadors- Goal to have all 535 members of Congress matched to an ambassador by 2020.
- National Golf Day is May 18- Annual event continues to bring golf industry's allied associations together to canvas Capitol Hill to tell golf's story.
- Media Opportunities continue on the Golf Channel and Sirius/XM satellite radio.

Increased revenue opportunities to fund member programs and services

- Collaborative efforts with USGA, PGA and PGA Tour have helped GCSAA continue funding programs and services that matter to the golf industry.
- Increased international efforts.
- Expanding digital offerings through new asset development creates new ways for industry partners to spend with Association.

Environmental Stewardship

- Environmental Profile Studies
- Development of Best Management Practices Planning Guide and Template
- Environmental Management Tools

CEO BRIEFING: GCSAA BUSINESS UPDATE

Rhett Evans, CEO briefed the attendees on the state of GCSAA. In 2015 the pro-

fessional membership numbers are holding steady and GCSAA has over 650 new equipment managers. 17,500 total members with 12,943 professional members: 1,377 CGCS, 4,813 Class A, 3,510 Class SM, 3,558 Class C. Compensation, average years in current position and maintenance budgets are all trending upwards.

GCSAA's financial position is on solid footing. GCSAA is funded 48% through industry support, 25% through member dues, 15% through user fees-education/conference registration and 6% through EIFG grants. Rhett advised that GCSAA is putting its resources to the areas outlined as Key Priorities for the Association. The Environmental Institute for Golf (EIFG), GCSAA's 501(c)3 philanthropic arm, continues to attract major donors as supporters of its work. It is also funded through Silent Auction at GIS and the Rounds 4 Research Auction. The EIFG awards funds to various GCSAA programs and services to include 375 scholarships, 17 research projects and \$420,000 in chapter grants.

ROUNDS 4 RESEARCH UPDATE

Since 2012, more than 50 participating organizations have helped raise \$433,000 for research, advocacy and education throughout the US and Canada. The new Auction dates will be April 1-10. 80% of the funds generated are directed to your chapter for research, education and advocacy.

Individual Wisconsin courses participate in the program but the WGCSA operates our own successful program with the Par 4 Research.

MEMBER STANDARDS

The multi-year review of member standards and classifications has resulted in a finalized proposal presented to and approved by the Chapter Delegates. The proposal will move forward for a vote at the Annual Meeting at the GIS in San Diego. The entire proposal can be found on the GCSAA website. I've included a two page summary. (Page 44&45)

Highlights include:

- A more inclusive definition of Class A has been crafted that will allow individuals to maintain their Class A status when they no longer hold a golf course superintendent job, but are still employed within the golf industry. They will still need to maintain ongoing requirements.
- The Superintendent Member (SM) classification will return to Class B. This provides a more logical listing of the professional membership classifications.
- Class A Eligibility will continue to be based on a sliding scale of formal education, Supt years of experience and continuing education. The scale is based on a combined formula of 20 points, with a set point value assigned to your level of formal education and a variable combination of continuing education and experience. Service points will no longer be a component of eligibility.
- Class A renewal requirements continue to necessitate a total of 5 points over a 5 year period. They have been enhanced to include a minimum of 3.0 education points rather than the current minimum of 2.0 education points. Service points for renewal will now be focused on golf-centric activities.
- Possessing a pesticide license or passing the GCSAA IPM Exam will continue to be a requirement of eligibility and renewal. GCSAA IPM Exam fee will be eliminated.

AFFILIATION AGREEMENT

GCSAA and chapters have an affiliation agreement document which outlines how GCSAA and chapters work together and serve as separate non-profit organizations. This document defines items both GCSAA and chapters need to be in compliance. An Affiliation Agreement Task Group consisting of 6 past Chap-

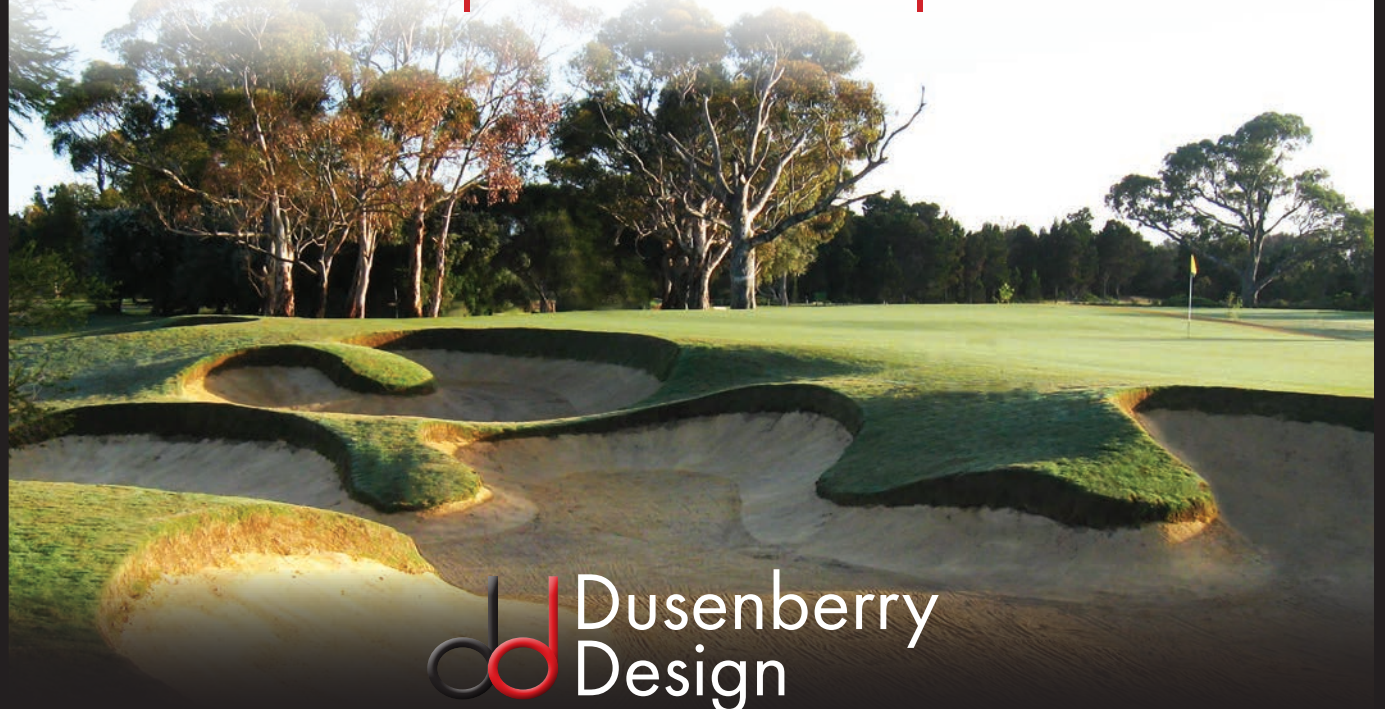


The Statue of Old Tom Morris welcomes visitors to the GCSAA Headquarters in Lawrence, KS.

ter Presidents and 3 Chapter Executives worked together over the past year to review the agreement. The task group agreed the document was in good standing but did recommend a few revisions:

- Eliminated the “term” of the agreement. Instead the agreement will renew annually unless changes to the document become necessary. This will streamline the process in years where no changes/revisions are necessary.
- A task group will be convened to review requests by either GCSAA or the chapters to make changes to the document.
- Changed wording in the document that is rooted in two-way communication. There were concerns that the affiliation agreement was focused on GCSAA’s needs compared to both GCSAA and chapter.
- Document went through a legal review.

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The new Affiliation Agreement has been approved by the GCSAA Board of Directors and has been sent to the Chapters on November 15th. Our WGCSA board will review the agreement at the Fall Business Meeting. I will have copies available for members to review. Chapters need to sign and return a copy by December 31st and agreement will go into effect January 1, 2016.

EQUIPMENT MANAGER TASK GROUP

A new Equipment Manager Classification was adopted at the 2015 Annual Meeting. The new classification was created to strengthen ties with equipment managers and recognize their vital role at a golf facility. In April of 2015, the International Golf Course Equipment Managers Association dissolved and reached out to the GCSAA. GCSAA welcomed 370 former members of IGCEMA and any new equipment managers for free for a current total of 654. Effective January 1st, 2016 annual dues will be set at \$95/year. The new Equipment Manager targeted education content will be accessible to and benefit all GCSAA members. An Equipment Manager Certificate program is established and future plans include enhancing this program.

GOLF INDUSTRY SHOW

The 2016 Golf Industry Show will be February 6-11, 2016 in San Diego, California. The schedule will be similar to 2015 with education Monday and Tuesday, Trade Show open on Wednesday and Thursday. No events scheduled on Friday, Feb. 12th. The GCSAA Golf Championships will be played on Avilara Golf Course, Torrey Pines, Maderas Golf Course, La Costa and The Crossing at Carlsbad. The opening session and reception will feature Old Tom Morris Award recipient Mr. Herb Kohler. 380 total hours of education will be offered along with 25 new seminars. The closing celebration will feature comedian/impressionist, Frank Caliendo.

GOVERNMENT AFFAIRS

Chava McKeel, director, government affairs briefed the delegates how the department now has 3 full time staff, a new name and a 5-year plan with the following strategic goals.

- Position GCSAA as a subject matter expert who is able to provide objective, knowledgeable responses to government



activities.

- Continue and expand building relationships with local, state and federal lawmakers and regulators.
- Provide regulatory compliance information for members to establish themselves as experts on managing risk at their facility.
- Expand knowledge of and participation in GCSAA's government affairs efforts amongst GCSAA members, chapters, executive team and board of directors.

Chava McKeel thanked our 197 Grassroots Ambassadors and encouraged chapters to find more interested leaders to help attain the goal of 535 by 2020. Special thanks to WGCSA members Jon Canavan, Jeff Millies, Harrison Beal, David Brandenburg and Mike Bremmer for taking the lead and becoming Grassroot Ambassadors.

ELECTION

Chapter Delegates had an opportunity to listen to presentations from candidates running for elected office. After the presentations, delegates participated in the "meet the candidates" session where we asked questions in breakout groups.

The 2016 GCSAA Board Candidates are:

- President: Peter J. Grass, CGCS
- Vice President: Bill H. Maynard, CGCS
- Secretary/Treasurer: Rafael Barajas, CGCS and Darren J. Davis, CGCS
- Director: (electing 3) Kevin P. Breen, CGCS; Jeffrey F. Millies, CGCS, Rory Van Poucke: and John Walker

Please contact me if you have any questions or concerns.

Josh LePine, CGCS
Maple Bluff County Club
Treasurer, WGCSA
608 249-3468 office





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GCSAA Member Standards

Class A Member Standards are important for defining who we are both individually and collectively, as superintendents in the golf course management industry. These standards frame each Class A member's professional identity.

Following input from many constituents over the past several months, beginning with the Chapter Delegates meeting last October, the GCSAA Board of Directors revised the Member Standards proposal. Highlights of the changes are outlined below. Additional details can be found at www.gcsaa.org/memberstandards.

Designated Classifications

The "Superintendent Member" (SM) Classification becomes "Class B."

Change to Class A Definition

Current Definition

To Qualify for Class A membership, an applicant shall have, at the time of application for membership, at least three years' experience as a golf course superintendent, be employed in such capacity and comply with all additional qualifications adopted by the membership.

Proposed Definition

Class A member is a golf industry professional; who possesses knowledge, skills and abilities through a combination of education, experience, professional development and environmental stewardship; and continues to fulfill ongoing Class A renewal requirements.

Class A Eligibility

Formal Education Value + Years Superintendent Experience + Education Points = 20

Formal Education Category	Formal Education Point Value	+	Years of Superintendent Experience	+	Education Points	=	Total Points Required
Bachelor's Degree or Higher in Turf/Plant Science	15	+	3 or more	+	Variable	=	20
Other Bachelor's Degree or Higher, plus Assoc. Degree in Turf/Plant Science	15	+	3 or more	+	Variable	=	20
Other Bachelor's Degree or Higher	14	+	3 or more	+	Variable	=	20
Associate's Degree in Turf	13	+	3 or more	+	Variable	=	20
Turf Certificate/Short Course	9	+	3 or more	+	Variable	=	20
Other Associate's Degree	8	+	5 or more	+	Variable	=	20
No Degree or Recognized Certificate	0	+	5 or more	+	Variable	=	20

A State Pesticide License or the successful completion of the GCSAA IPM Exam is required.

EXAMPLES:

Superintendent #1: I have a Bachelor's Degree in Turf (15 points) and have been employed as a superintendent for five years (5 points). I am now qualified for Class A status without needing any additional education points. (15 + 5 + 0 = 20)

Superintendent #2: I have no degree (0 points); however, I have been employed as a superintendent for 10 years (10 points). To qualify for Class A status, I must now acquire a minimum of 10 education points (10 points). (0 + 10 + 10 = 20)

Superintendent #3: I have an Associate's Degree in Turf (13 points) and have been employed as a superintendent for two years (2 points). I must now acquire one more year as a superintendent to meet the minimum threshold of superintendent employment, and I must acquire a minimum of four education points (4 points) to become Class A. (13 + 3 + 4 = 20)



Class A Renewal

- Requirements continue to necessitate a total of 5 points over a 5-year period.
- Education Points enhanced to a minimum of 3.0, increased from current 2.0 points.
- Service points for renewal focused on golf-centric activities.

Class A FAQ's

1. *What will be required to maintain Class A status?*

- A. Possess a valid pesticide certification license or pass the GCSAA IPM Exam.
- B. Attain a total of 5 points. Minimum of 3 education points over a five year period.

2. *How will Education and Service Points change?*

Only golf-centric service points will be eligible. Some Service Point categories will become education points and community service points are being eliminated.

3. *Which service point categories will now be education points?*

- Audubon Cooperative Sanctuary Program for Golf Courses completion
- Audubon Signature Program completion
- State environmental stewardship program completion
- Published education article in GCM
- Published education article in trade or chapter publication

4. *What will be changing in terms of "grandfathered" status?*

Class A status will be based on the new requirements for all members. Members "grandfathered" July 1, 2003 will have through 2016 to attain minimum eligibility requirements for Class A status, after which eligibility will be based on new requirements.

5. *What happens if I fail to fulfill the renewal requirements?*

You will be reclassified as a Class B member.

6. *How do I reinstate my Class A status?*

Fulfill the original renewal requirements plus an additional (1) education point and remain a Class B member for a minimum of one year.

PROPOSAL TIMELINE



Golf Course Research Updates from Around the United States

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

Each fall, about 200 turfgrass researchers come together to give brief research updates as part of the Crop Science Society of America Annual Meeting, which was held jointly with the Soil Science Society of America, The Agronomy Society of America, and the Entomological Society of America. This year the meetings were in Minneapolis, MN. I really enjoy attending these meetings to catch up with my colleagues around the nation and see what they've all been up to. I always bring back good, new information that I incorporate into my research and extension program. This year seemed particularly fruitful, and below I have highlighted some of the most interesting things I learned related to golf course management.

Iron and Nitrogen Impact on Pink Snow Mold on Annual Bluegrass

Oregon State University Master's student Clint Mattox gave an award winning presentation that highlighted the impact of nitrogen and iron sulfate on pink snow mold (AKA microdochium patch) on annual bluegrass putting greens. Oregon gets little lasting snow cover, but have conditions perfect for pink snow mold (I know some plant pathologists get bent out of shape when you call it pink snow mold because it can develop without snow, but they don't seem to have a problem with fairy ring when there are no fairies so I will stick with pink snow mold). Clint reported that high levels (~ 1 to 2 lbs/1000 sq. ft every other week) of iron sulfate coupled with low levels of nitrogen (0 to 0.1 lbs/1000 sq. ft. every other week) to or essentially eliminated pink snow mold compared to no iron and 0.2 lbs/1000 sq. ft. of N which resulted in nearly complete snow mold damage.

However, the high levels of iron sulfate resulted in low turf quality because the iron significantly thinned out the annual bluegrass stand. We have also observed this thinning after high iron sulfate applications on creeping bentgrass at the OJ Noer. I think Clint's work is exciting and could mean that iron sulfate applications

might be effective when made in the shoulder seasons for preventing pink snow mold – however, we need to keep a close eye out for thinning and the potential for iron layer formation in sand greens with gravel layers. Clint will be continuing this work as a Ph.D. student at Oregon State, and Dr. Paul Koch will be serving on his graduate research committee. I think his work will be useful to many of us in Wisconsin and I look forward to hearing more from Clint in coming years.

Sand Size Affects Topdressing Removed by Mowing

I found this to be a very nice piece of research by the Rutgers Team, including Dr. Jim Murphy and Dr. Bruce Clarke. The agronomic benefits of sand topdressing can hardly be overstated. Frequent application of sand dilutes thatch and organic matter, improves water infiltration, buries the crown thus protecting it from extreme heat and physical damage, and the list could go on.



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WISCONSIN SOILS REPORT

However, incorporation of the sand has become more challenging as our mowing heights decrease and denser canopies of newer varieties are planted. Therefore, it would be beneficial to identify a sand size class that incorporates into a turf canopy more easily. The USGA recommendations for sand size specify 60% of the particles must be coarse and medium sand, with less than 20% in the fine sand category, and no more than 5% very fine sand. Also, the coarse sand must be < 10% (preferably none). It's always been a standard recommendation to topdress with a sand that is identical or similar to the root zone sand. However, the Rutgers team has found that topdressing with a sand consisting of mostly medium-coarse sand (similar to a USGA root zone mix) result in 13% of the sand applied being mowed off, and most of the sand that was mowed off was in the coarse sand size fraction. Doing this will result in a higher proportion of finer sand entering the root zone with the larger sand simply damaging the mower. They also found that a mostly medium and fine sand could be applied at double the rate of a mostly medium and coarse sand without affecting the time and effort to incorpo-

rate the sand into the canopy. In addition, the mowers removed two-thirds less sand from the medium-fine sand treatment compared to the medium-coarse. It seems that finer topdressing sand has some significant advantages. However, this research was conducted on push-up greens only, but they will duplicate the research on USGA greens next season. I like this concept of identifying sands that can result in more sand in the canopy with less mower damage, but I worry about layering. This research has me wondering if we should be building our sand greens using a finer sand. A research idea for next year!

Clay Accumulation at the Sand-Gravel Interface in Sand Putting Greens

Finally, Glen Obear (my former MS student now working on a Ph.D. under Bill Kreuser at University of Nebraska) took home a first place award in the graduate student competition for his research update on clay layering in a sand-based green. You'll remember Glen for characterizing an iron layer at the sand-gravel interface here in Wisconsin, and he was at it again but this time he identified a clay layer at that sand-gravel interface that caused



DEPARTMENT OF
SOIL SCIENCE
University of Wisconsin-Madison

the putting greens to fail in a golf course in Mississippi. The course was constructed with Profile, an inorganic amendment made from clay. There were concerns that the Profile was breaking down and contributing to that layer. But Glen's research using X-Ray Florescence found that the clay did not originate from the Profile or from the clay subgrade. He concluded that the clay was likely present as a contaminant in the original root zone mix and had migrated to the sand-gravel interface over time. This demonstrates the importance of ensuring a very low clay content when choosing a construction sand.

These are just four of the dozens of turfgrass/soil science studies that caught my eye, and ones that I thought you would enjoy reading about. I have pages and pages of notes on these and other studies that I will use as we start planning out our research activities for 2016. Hope to see you at field day!

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Thank You El Niño

By David Brandenburg, Editor, The Grass Roots

If the recent weather is the result of El Niño is that a bad thing? We usually have golf playable days into mid November but this year November brought some of the best weather ever.

For many superintendents the problem was how to make fall fungicide applications or blow out irrigation systems with full golf courses.

A ringing cash register is a good problem to have in these times of increasing costs and less revenue.

I hope most managers can look back on the 2015 golf season with satisfaction and a renewed sense of an industry on the rebound for 2016 and beyond. I believe it was more than the above average weather improving rounds numbers. A improving economy and lower gas prices also played a key factor. With a election in fall of 2016 there is incentive to keep fuel prices low.

As I write this on Nov 21st prices hit \$1.99 in much of the state just in time for trips to deer camp and home for thanksgiving.

At the same time much of the state saw some snow with the lower quarter seeing substantial amounts. Hopefully it will melt to allow final cleanup and snow mold treatments.

Randy Carrick Passes Away



On page 36 of the May/June issue of *The Grass Roots* a story highlighted the struggles **Randy Carrick**, Superintendent at Glacier Woods Golf Club had with open heart surgery while his wife Tracie was receiving treatments for cancer. Brett Grams wrote how nice it was to be able to help the family financially through the Wee One



Hank Koss's 10 Year Old daughter Rachel harvested this 135lbs bear with a crossbow in Sawyer County.

Foundation.

Sadly Randy passed away at the age of 57 from a brain aneurysm on October 7th. Randy was a 18 year WGCSA member.

Randy is survived by his wife Tracie, sons Hunter and Noah, daughter Kasandra and step-son Adam.

New Overtime Rules

Are you aware of and ready for the new overtime rules that are scheduled to be handed down from Washington soon?

It has been written about a lot in the past few months but in the busy golf season turf managers miss the news in favor of watching the weather or casting for the big one.

This as many of the rules we follow do not come down from congress but are based on executive action and departmental rules. In this case the president asked the Labor Department to fix what they saw was a unfair labor practice causing low paid workers to put in more than 40 hours a week without extra compensation.

Under the 1938 Fair Labor Standards Act (FSLA) rules ensured covered employees would receive a fair days pay for a fair days work. Current rules allow workers with

the right supervision duties that make more than \$455 per week or \$23,660 per year to be considered a exempt employee. Exempt from overtime that is.

The proposed amendment raises the minimum to \$970 per week or \$50,440 per year. So regardless of supervisory duties if you make less than that amount you will be considered a hourly employee and eligible for overtime for any hours worked over 40 per 7 day period.

Current estimates are 4.6 million workers will go from exempt (salary) to non-exempt (hourly) when the rule takes effect. Many of those are in the golf and restaurant / clubhouse fields.

Experts in labor are saying this rule change is not a if, but a when, and expect it to take effect by Jan 1, 2016. Start preparing now rather than waiting for costs to get out of hand in 2016.

Options are to raise employees above the threshold, pay the overtime or hire more employees to make up for the hours above 40 the previously exempt employees used to work.

All the options are going to increase the cost of operating a golf course and greater oversight of employees duties.

EDITOR'S NOTEBOOK

Job Changes

Craig Sondergaard has moved from intern to Assistant Superintendent at Racine Country Club. Born and raised in Racine Craig attended UW-Parkside for a few semesters before receiving a associates degree in Turfgrass Science and Management from Penn State.



Above: Craig and Meagan Sondergaard recently celebrated their 2nd anniversary.

Below: Craig celebrated his new job and his first buck.



Nicholas Bannach recently joined Green Bay Country Club as Assistant Superintendent working with Superintendent **Ben Larsen** who joined the club in June.

Ben had been the Assistant Superintendent at Sunset Ridge Country Club near Chicago.

Nick had been the superintendent at Horicon Hills Country Club in Horicon which was previously known as Rock River Country Club.

Larsen has a Bachelors degree from University of Illinois at Urbana-Champaign while Bannach has his degree from Rutgers.

Nuptials

Eric and Jess Leonard were recently married. Eric is the Golf Course Superintendent at Cherokee Country Club and the couple resides in Madison.

Newborns

Zach and Bridget Reineking celebrated the birth of a baby boy on Sept. 30th. Zach is the Golf Course Superintendent at Erin Hills Golf Course.

Congratulations

Alexa Ferrie, daughter of **Brian Ferrie** was one of 20 students to receive a GCSAA Legacy Scholarship for \$1,500.

A Season In Review

From what I hear it seems most golf courses had a good year to make some revenue and please customers. We were able to open March 13th and were closed by snow Nov. 20th for a 253 day season.

It wasn't perfect and there were cold days, hot days and rain days but for the most part we were never flooded and entered 203 days that were playable for golf. A playable day is considered a high between 45 and 105 with less than .25" of rain.

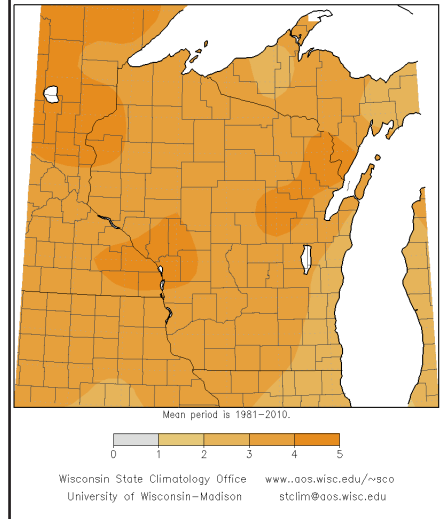
Not a record year but well above average and I believe the early spring got customers in the golfing mood and then they played all year long.

We saw a lot of new faces and faces we do not see that often which is a good sign for the future.

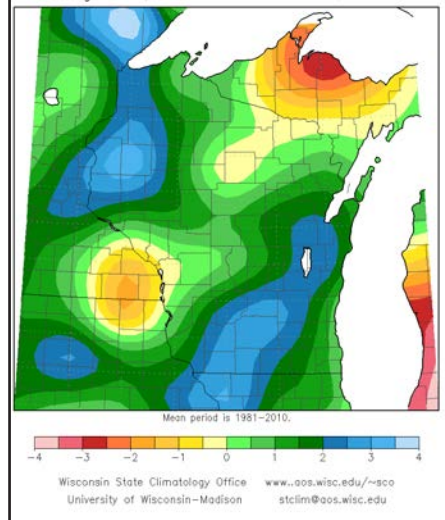
So 2015 is winding down and nearly gone. So much to say with so little space to say it.

I hope to see many of you at the Symposium and then the WTA Research Day followed by the national in Sand Diego and then before

Average Temperature (°F): Departure from Mean August 24, 2015 to November 21, 2015



Accumulated Precipitation (in): Departure from Mean August 24, 2015 to November 21, 2015



The 90 day graphs from the Wisconsin State Climatology Office verify a warm end to the golf season with moisture a little above the 30 year mean.

you know it the WGCSA spring education and business meeting will kick off 2016.

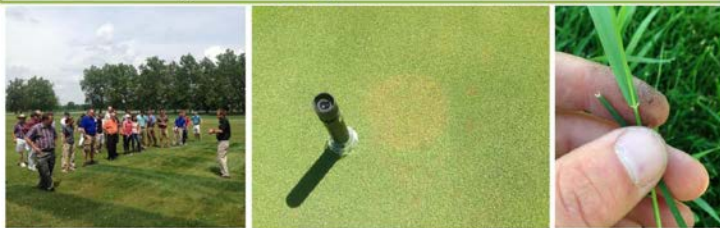
Most important I want to say THANK YOU to our writers who make *The Grass Roots* educational and one of the the best chapter publications.

And just as important, THANK YOU to our advertisers who cover the cost to bring the issues to your door.

And finally thank you Brett for handling the advertisers and contracts.

Merry Christmas and Happy New Year to all! 🌿

Register at: <http://z.umn.edu/2016glts>



2016 Great Lakes School of Turfgrass Science Online (For Professionals)

Online Program (Jan. 6th –Mar. 23th 2016)

- Live Wednesday night online sessions from 6-8pm (CST)
- 12 internationally renowned turfgrass science faculty from across the Great Lakes Region
- 24 hrs of in-depth training in turfgrass science and management

Questions about the class?
Contact: Sam Bauer (sbauer@umn.edu, 763-767-3518)

Class fee: \$495.00/person

Registration deadline: Thurs. Dec 31st, 2015

Register at: <http://z.umn.edu/2016glts>

Register at: <http://z.umn.edu/2016glts>

2016 Great Lakes School of Turfgrass Science Instructors

Without question, the strength of this new online school 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.



Sam Bauer, M.Sc.
Assistant Extension Professor
Extension Agriculture, Food and
Natural Resources
University of Minnesota-TC



Paul Koch, Ph.D.
Assistant Professor
Department of Plant Pathology
University of Wisconsin-Madison



Dave Chalmers, Ph.D.
Professor and Extension Specialist
Emeritus
Department of Soil and Crop Science
Texas A&M AgriLife Extension



Aaron Patton, Ph.D.
Associate Professor and Extension
Turfgrass Specialist
Department of Agronomy
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Kevin Frank, Ph.D.
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David Gardner, Ph.D.
Associate Professor
Department of Horticulture and
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The Ohio State University



Doug Soldat, Ph.D.
Associate Professor and Extension
Turfgrass Specialist
Department of Soil Science
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Brian Horgan, Ph.D.
Professor and Extension Turfgrass
Specialist
Department of Horticultural Science
University of Minnesota-TC



Chris Williamson, Ph.D.
Professor and Extension Specialist
Department of Entomology
University of Wisconsin-Madison



Ed Nangle, Ph.D.
Director of Turfgrass Programs
Chicago District Golf Association



Register at: <http://z.umn.edu/2016glts>

2016 Great Lakes School of Turfgrass Science Schedule

Live sessions will be held on Wednesday nights from 6:00pm to 8:00pm (Central Standard Time).
Participants will have the option to view the live or recorded sessions.

Session 1
Turfgrass identification, physiology and growth

Session 2
Soil science and management

Session 3
Selection and establishment

Session 4
Nutrition and fertility programming

Session 5
Mowing and additional cultural practices

Session 6
Abiotic stresses

Session 7
Irrigation

Session 8
Insect biology, identification and management

Session 9
Disease biology, identification and management

Session 10
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Email:
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Couples

Dinner



A good time was had by all!



Sand Valley

By David Brandenburg, Editor, The Grass Roots

I had read many stories and seen pictures of the 1700 acres of jack pine savanna type terrain on pure sand that is to be the site of multiple 18 hole courses in central Wisconsin. But until we actually pulled off the road and began up a sand road did I realize the incredible site that had been found.

Chapter Manager Grams and I were in Stevens Point to visit a possible printer for The Grass Roots and I thought it would be a good opportunity to see the property in person.

Superintendent Rob Duhm was gracious with his valuable time and served as our tour guide. Rob came to Sand Valley from the Kingsley Club in MI.

The first 18 holes will be designed by the team of Bill Coore and Ben Crenshaw.

Some holes are available for the founding members to play and the course will be open for public play in 2017.

Bill Coore has been very hands on with the design and often does the finish work on the greens with a sand pro himself.

Since the course has to be categorized to be discussed it will be considered a heathland course with heather or gorse mixed with heavy contours. Trees will be on the course but mainly away from the areas of play.


The second 18 hole course will be designed by David McLay Kidd and is in the routing phase. That course is scheduled to open in 2018.

The development should be another sign of a healthy golf economy for Wisconsin and the area around Rome. Lake

Arrowhead's 36 hole facility is just to the North, Bull's Eye Country Club and Northern Bay are 25 miles away while the renewed Sentry World is only 45 minutes away.

The courses are being built by Oliphant Golf while they will be operated by Kemper Sports. Craig Haltom, Vice President for Oliphant discovered the property and contacted owner Mike Keiser about the possibilities of the property.

Keiser's reputation with Bandon Dunes and Cabot Cliffs allowed him to bring 129 founding members on board before a blade of grass was seeded.

Best of luck to Keiser, the Oliphant and Kemper teams and to Rob Duhm and his staff as they build this golf destination on an amazing piece of property. 



Top Left: The fairway for the 10th hole was one of the last seeded for the 2015 season. The par 5 will play from elevated tees with yardages from 350 to 580 yards.

Top Right: 6th Hole as viewed from the 5th tee will play as a par 4 with yardages from 255 to 442 yards.

Right: Golf Course Superintendent Rob Duhm came to Sand Valley from the Kingsley Club in Kingsley, MI. In this photo he is standing near one of the range tees.



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Top: The par 3 5th hole plays downhill to a elevated green with tees from 125 to 170 yards.

Right: The par 5 4th hole plays uphill with yardages from 300 to 550.

Below: The 18th hole will play as a par 5 with yardages from 306 to 540.

Below Right: The 1st hole will play 230 to 325 yards from elevated tees.





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Key function: Opening soil pores

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- Reduces the surface tension of water
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