

A Sterling Career Comes to an End

By Monroe S. Miller

You never really expect the day to come when a person says he is going to retire, but then actually does. I am still finding it difficult to visit the O.J. Noer Turfgrass Research and Education Facility and not finding Tom Schwab there.

It is going to take a while to reconcile that; after all, Tom has been the manager of the Noer ARS Station for almost a quarter of a century. He came to the job well prepared. He earned his turf degree from the UW-Madison and I was fortunate to have him as a student intern at Blackhawk CC. He served as Assistant GCS at South Hills and at Cherokee. He advanced to the Superintendent's position at Monroe CC. I recall the summer evening that MCC hosted a WGCSA monthly meeting. I went down for dinner, and asked Ed Devinger, retired turf manager of Reinders Brothers, "How was the golf course?" Edie's reply, given while shaking his head, was "Those probably are the best greens I have ever played on." The key point to Ed's observation was that Tom managed the golf course on a very modest budget. Every dollar counted and few days passed when he wasn't pulling some trick out of his hat to make the course better. His ability to manage budgets was good training for the job at the Noer.

Schwab possesses many outstanding personal characteristics. Among the ones I treasure most are his honesty, integrity and humility. It is his humility that results in many not really understanding what he did and why he was so important to the success of the station. It was never about Tom; he was totally adverse to talking about himself or what he did. It was always conversation about the Noer or the research or the faculty or the profession. Let me tell you a few things about his operation you might not know.

The Noer Facility is highly visible. It is located on the very busy CTH M with thousands of cars passing each day. Turf is occasionally criticized (mostly unfairly) for pesticide use, fertility runoff problems and a number of other target issues. Tom managed the station and its visibility with great responsibility to perfection.

There are many competing interests at the Noer. Faculty are present and very confident in what they know and pretty certain in what they want and expect. Graduate students absolutely believe few know more than they do. Undergraduate students and employees can be challenging. The public uses the Noer, and a hiking path runs just outside the parking lot. He had his own staff to consider. Throw in WTA board members and officers who made sure that station got built and often have their own set of priorities, and you have a ton of potential problems. It was an incredible balancing act among all these parties that Tom managed for 22 years.

The Noer has been operating for 25 years. In the first three years of the station we had two different managers. Then Tom came along and gave it his best for 22 years. He provided continuity, stability and reliability for those two plus decades. That has been invaluable to the industry, the profession, and those who conduct turf research there.

What we came to expect under Tom's management was a facility that was neat, clean, organized and well-trimmed. These

were attributes fairly common at the golf clubs that employed him, and he brought them with him to the ARS. When you drove into the Noer, it was inviting. People felt welcome. There was always an enthusiasm in the air and a willingness to help.

Schwab's life work included participation in the various professional turf organizations supporting the Noer. Sod producers, sports turf people, lawn care operators, and golf course superintendents all know Tom and over the years appreciated his approachability and the contributions he made.

His job description did NOT include writing, editing and publishing THE WISCONSIN TURFGRASS NEWS. Immediately after he started I personally was able to pass that responsibility to him. You can take a look and see what this volunteer task contributed to the WTA. Frankly, there's no other like it.

A big responsibility Tom took on was the WTA golf outing fundraiser. Over all his time at the Noer he has been the constant for this event. He lined up venues, dealt with the hosts for everything from food menus to costs, publicized it, lined up a fabulous prize table and got some of us to sit with him in the Worf Classroom to handwrite thank you notes – no emails allowed! Over 22 years an estimated \$200,000 was garnered for turf research, money that went straight to our bottom line.

How about the NOERNET? Tom Schwab conceived, developed and then maintained it. The result has been hundreds of thousands convenient and fast communications not otherwise available. He pitched in on our website also.

PRESIDENT'S MESSAGE Holidays Provide Down Time

By Paul Huggett



Thanksgiving, Christmas, New Years, Valentine's Day, to almost Easter some years is a great season for a turfgrass grower! Generally, it is recharge time. A break from the daily tasks of growing and managing production crops to the change of meetings, symposiums and conferences. Both seasons provide a change of pace for rookies and to the veterans of the business. It seems like both seasons for me, are a sprint from start to finish with everyday counting. For our

business, we started getting ready for winter 2 months ago, beginning with equipment maintenance, employee training and purchases for next years' crop. It never seems soon enough. Time flies is always true in this fast-paced world.

One event that you can put on your list to help your next growing season as well as have an opportunity to compare notes with you peers, is the WTA Research Day at the Pyle Center on the UW-Madison campus January 10th, 2017. It is easy to get to with very little traffic because UW students are on break. Interesting turf topics as well as HR discussions will be relevant and noteworthy to place ideas directly into your work place.

The WTA has been working with the UW Agricultural Research Stations staff; Dwight Mueller, Philip Dunigan and Kimberly Meyer to get the O.J. Noer Facility manager position filled. This was recently vacated by the long-standing manager Tom Schwab, who retired in November. We are grateful for their support and guidance in the process.

We wish you a great winter season and look forward to seeing you and hearing from you soon.



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Year behind board member name, is the expiration of their current term. January is the month the term is up.

Who hasn't enjoyed our WTA Summer Field Day presentation? It was, as Tom said, "Our member/guest day." It was an opportunity for the station to shine, and it always exceeded what would reasonably be required of him. Field Day is a public display of the turf industry and Tom made it a positive and excellent display.

Most Wisconsin citizens are familiar with the Wisconsin Idea. It is the notion, developed and advanced by Professor McCarty, UW President Van Hise, and Governor LaFollette, that the boundaries of the UW-Madison were the boundaries of the entire state. Tom Schwab clearly understood this noble concept and exercised this element of his public service at the Noer Facility.

By the time this reaches the newsstands, a replacement will

have been hired. That individual has a big pair of shoes to fill and a lot of work to do to maintain what Tom is leaving.

Tom is smart. He is retiring in time to do the things he wants to do. You might look up and see him in an ultra-light aircraft, or you might see him on a golf course with his brother Chuck in the summer. He will be skiing in the winter, hiking or biking or playing volleyball or tennis in the summer. Or, maybe he will be the fiddler in a band! Who knows? One thing is for sure – there won't, for the first time in many years, be any grass growing under his feet!

Congratulations, Tom, for a life well lived. And thank you for a job well done!

Turfgrass Scientists Converge in Wisconsin to Develop Best Management Practices to Protect Pollinators in Turf

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

Around 60 university research scientists, extension specialists, graduate students and Green Industry stakeholders got together in Sheboygan, WI on August 21 and 22, 2016 at the Blue Harbor Resort and Conference Center for the 2016 National Turfgrass Entomology Workshop and Pollinator Summit.

The National Turfgrass Entomology Workshop is typically held every other year, give or take a few months, at various locations across the United States, previous locations include Geneva, NY, Columbus, OH, Gainesville, FL, Boise, ID, Phoenix, AZ and Omaha, NE. This meeting is an excellent opportunity for fellow entomologists that work on turfgrass insect pests to get together to discuss respective insect issues and exchange ideas. In addition, it is also an invaluable venue for graduate students to present their research to other university faculty and graduate students.

This year's National Turfgrass Entomology Workshop was guite unique as it also included the 1st National Pollinator Summit in turf. The objective of the pollinator summit was to discuss and dialog the latest issues regarding protecting pollinators in turf with the ultimate goal of developing a best management practices (BMPs) document for protecting pollinators in turf. Participants had the opportunity to hear Dr. Jonathan Larson (University of Nebraska) give a presentation on his research findings in mitigating the risk of insecticide exposure to pollinators when applied to turf. His work is the first of its kind in turf and will provide invaluable insight in the development of the BMPs for protecting pollinators in turf. Dr. Rick Fell (Virginia Tech) gave an excellent presentation on the various factors that play a role in bee health and colony decline. Dr. Fell outlined multiple factors affecting honey bee decline including parasitic mites (especially Varroa mites), pesticides (insecticides, fungicides, miticides and herbicides), pathogens (viruses, bacteria and fungi), queen failure and colony stress-movement (migratory stress), poor nutrition and environmental factors (cold temperatures). In addition to these outstanding presentations, Dr. David Held (Auburn University) moderated much of the pollinator session. He was instrumental in facilitating and creating an outline of the various factors and issues that will be included and addressed in the BMPs document. Several key

factors were identified and discussed and important gaps in research related to pollinators in turf were also recognized. Excellent dialog and exchange occurred among attendees. Thoughts and insights were openly conveyed furthering discussion regarding the development of BMPs for protecting pollinators in turf.

A few attendees volunteered to develop the initial draft of the BMPs document that will be shared with all attendees interested in providing their input and feedback. It is anticipated that the BMPs document will be published and ready for distribution in early 2017, the document will be likely be published in the respective Regional IPM Centers (https://nifa.usda.gov/regional-integrated-pest-management-ipm-centers) located regionally across the United States (Northeastern, North Central, Southern and Western).

The final day of the meeting was capped-off with a tour of Whistling Straits Golf Course. Many thanks and much appreciation go to Mike Lee, Chris Zugel, their staff and the Kohler Corporation for graciously providing everyone the opportunity to visit this spectacular golf course and property. The course was in impeccable condition, attendees were awestruck by the golf course, the property and the operations employed to attain the high level of excellence.



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Meet the Graduate Student in Soils

Benjamin Henke, Soils Department, University of Wisconsin Madison

My name is Benjamin Henke and I am a first year graduate student under Dr. Doug Soldat in the Department of Soil Science at the University of Wisconsin-Madison. I received my Bachelor's Degree in Horticulture at Iowa State University with an emphasis in Turfgrass Management. My wife Alyssa and I recently moved to Madison at the end of May to begin my master's degree this past summer.

My interest in turfgrass management came in the summer of 2013. That summer I worked on a privately owned property in Minnesota. This was my first exposure to fertilizing, irrigation work and all the other elements of turfgrass management. I enjoyed every minute of it, especially learning how to mow straight lines! After that summer, I enrolled at Iowa State to pursue my education. During my time at Iowa State, I was able to have an internship at Sporting Kansas City (SKC), a major league soccer team in Kansas City. Being able to learn how



managers take care of a professional soccer pitch was an amazing experience. As a huge soccer fan, I geeked out frequently. As my schooling at Iowa State was coming to end, I became interested in research. We visited Iowa State University's research farm and I was able to help a graduate student with his project. I found it fascinating and wanted to learn more on the craft of research. This is when I approached Dr. Soldat on what graduate school was like and what needed to be done to get accepted. After many discussions with him, I knew this is where I needed to be and I applied. I was ecstatic to find out I was going to be Badger (as I am a huge Badger fan) and couldn't be happier and more blessed.

I began my project at the beginning of June. I am working to see if a growing degree day model can be developed for six commonly used plant growth regulators on creeping bentgrass and Kentucky bluegrass fairways. I want to give turf professionals a better understanding on how these products work and how to use them properly on their turf. I am also looking ahead on how to expand this idea into further research to help understand more about how PGRs interact with turf. I am excited to share my findings and the results that will come from further research.



Turfgrass Research Day Conference & Webinar January 10, 2017

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Turf Research Updates From Around the USA

By 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 and the Agronomy Society of America. This year the meetings were in Phoenix, AZ, November 6-9th. I really enjoy attending these meetings to catch up with my colleagues around the nation and see what they've all been up to. The latest information often gives me new ideas to research and helps me develop more informational extension presentations heading into turf conference and education season. This scientific conference covers all areas of turfgrass science thanks to the ample support of the GCSAA chapters (like the WGCSA), state associations (like the WTA), and the USGA. Below I have highlighted some of the projects I felt Wisconsin turf managers could benefit from most.

Evaluating Cut Quality Testing Methods for Consumer Lawn Tractors

Grady Miller, a professor at North Carolina State gave a great presentation about how he used a local sod farm as a testing ground for evaluating the quality of cut for dozens of different mowers. The sod farm provided the expanse of uniform turf necessary for detailed comparisons of cut. Dr. Miller went to great lengths to describe how to collect data in a scientifically controlled situation allowing for detailed comparisons among the mowers. Surprisingly, there were large differences in performance among the mowers in the quality of cut which includes how the grass was discharged onto or mulched into the canopy. Dr. Miller concluded his talk without listing the rankings of the mowers because the purpose of the work was to set standards for evaluation. Dr. Jim Kerns provided the comic relief when he asked "So, are you gonna leave us all hanging? Which ones were the best?" Everybody laughed and Dr. Miller then explained that confidentiality agreements prevented him from divulging the results. However, this important work on setting the standards for evaluating cutting will certainly lead to improved performance from the manufacturers who choose to pay attention.

Iron-Cemented Layers Form at Soil Eh and pH Boundaries

Glen Obear and his advisor Dr. Bill Kreuser have advanced our understanding of the iron layer that Glen began studying here at UW-Madison. It appears that the layer is much more likely to occur when iron is applied to acidic sand root zones sitting on top of high pH gravel layers. In fact, he showed a time lapse video showing the formation of iron layer in a 48 hour period when an acid sand on top of a high pH gravel. When iron was applied to acid sand over acid gravel the applied iron drained through without forming a layer. I imagine Glen's work will eventually lead to changes in the way root zones are specified in the future.

Effect of Surfactant on Dislodgeable 2,4-D Residues from Athletic Field Turf

Researchers at NC State have been studying how pesticides "dislodge" or are picked up by cloth attached to a soccer ball on athletic fields treated with 2,4-D. Research like this is important for communicating how to minimize exposure to treated areas, which is always a hot topic but lacks data. The NC State folks reported that dislodgeable 2,4-D was low and decreased as time went by following application, but each morning when the grass is wet more 2,4-D was able to be dislodged than in the afternoon on dry grass. They reported that a non-ionic surfactant intended to improve 2,4-D efficacy was found to decrease the amount dislodged - a winwin situation.

The Influence of 2,4-D Formulation on Hard Water Antagonism

Speaking of 2,4-D, Dr. Aaron Patton and Geoffrey Schortgen at Purdue studied how hard water reduced the efficacy of various formulations of 2,4-D. This is relevant to Wisconsin as most of our water sources are hard (high in calcium and magnesium). They found that the performance of the ester and dimethylamine formulations of the herbicide decreased when tank mixed with hard water, while the ester formulations were unaffected. If you want to overcome this antagonism, they found you can do so by adding small amounts of ammonium sulfate, ammonium nitrate, or UAN. Urea and potassium nitrate are not effective for overcoming the hard water antagonism.

Fall Applications of Nitrogen and Potassium and Their Effect on Winter Hardiness of Annual Bluegrass

I've spent a lot of time and energy studying fall applied fertilizer at UW-Madison, so obviously this presentation caught my eye. My work has only been on bentgrass, which is a problem for the superintendents in the state who are growing mostly Poa. I've relied on the work at Rutgers University for recommendations on how to apply K to Poa systems. The Rutgers works suggests that keeping tissue potassium above 2% is best for optimum tolerance to anthracnose and ice damage to annual bluegrass. Katie Dodson and co-workers at Olds College in Alberta are also studying how N and K tissue levels affect the cold tolerance of annual bluegrass. Their findings suggest that tissue levels of 2.5 – 3% nitrogen and 2.25 – 2.75% potassium will result in optimum for cold tolerance of Poa. They found that going above or below these levels would decrease cold tolerance. I am happy to see more researchers working in this area and am hopeful that we are close to really fine-tuning a sound approach to K management on bentgrass and Poa systems. Bentgrass appears to be guite different. I have not had success getting bentgrass potassium levels greater than 2% even when I apply over 1 pound of potassium fertilizer every month. We have yet to see any differences in cold tolerance of bentgrass, which is famously hardy.

These are just five of the more than 100 studies that were on parade in Phoenix. Ron Townsend represented UW well with his presentation on how nitrogen rate and source affects dollar spot and I had the opportunity to present our findings about how potassium fertilization affects pink snow mold pressure. UW Soils Research Specialist Nick Bero reported the results of our long-term study on compost additions to lawns. Many of these studies and advances in turfgrass science would not be possible without the support of associations like the WTA. I hope you are able to find returns on the investments you've made over the years!

Revisiting Leaf Mulching, Lawns, and Snow Mold

By Paul Koch, Ph.D., Department of Plant Pathology, University of Wisconsin Madison

I was walking down to Russell Labs recently and noticed on the street the very uniform, and very large, piles of leaves in front of every house on this particular block (Figure 1). The petite woman on the left of the photo was even hauling a blue tarp of the leaves to the curb as if she were working on a prison chain gang...all at 7:30 in the morning on a weekday! This reignited in my own mind the debate over whether leaves should be raked to the curb and hauled away for compost or trash, or mulched into the lawn using a rotary lawn mower.

Raking the leaves to the curb provides a nice 'clean' look and prevents smothering of the turf under a pile of photosynthesisinhibiting leaves. But the benefits to mulching the leaves on the lawn far outweigh the potential negatives and include increased organic matter, improved soil structure, increased nutrient availability to the plant, and less phosphorus leaching into the gutter. Research conducted in the last 20 years supports these claims as well. Acosta-Martinez et al. (1999) found that mulching maple leaves into a perennial ryegrass stand increased total soil carbon, total soil nitrogen and slightly increased water infiltration. More importantly, the authors reported no negative effects of tree leaf mulching.

A study published in 2009 by Kowalewski et al. investigated the impact of leaves from different tree species, applied at different rates and particle sizes on spring green-up of Kentucky bluegrass and the number of dandelions present the following spring. They did not find an impact of tree species (Red Maple, Red Oak, Silver Maple, Sugar Maple) on green-up or dandelion count. However, spring green up increased and dandelion counts decreased when mulched leaves were added vs no mulch treatments, and the effect increased as the amount of leaves added increased. For example, dandelion numbers in August of 2004 were 36.8 per plot on the 'No mulch' plots, 21.3 per plot at the low rate of mulching (102 lbs per 1000 ft2), and 15.9 at the high rate of mulching (307 lbs per 1000 ft2) [Table 1]. It is unclear whether the decreased dandelions were a result of increased nutrient availability or some direct inhibition of the weeds, but regardless a 43% reduction in weeds is significant.

But what about snow mold? It's one of the most common negatives associated with leaf mulching, but in my brief search I couldn't find any research conducted on the impacts of leaf mulching and snow mold development. The most obvious influence that leaves would have on the lawn would be the trapping of moisture underneath, creating a beneficial environment for the snow mold fungi to grow and infect. However, if the leaves were properly mulched, the remaining leaf litter should filter down into the turfgrass canopy and not trap moisture underneath. If the leaf litter is so thick even after mulching that the turf is smothered, then a rake should be used to distribute or in some cases remove excess litter to the curb or to a compost pile.

Other possible attributes of leaf mulching that could increase snow mold development are increased moisture retention in the soil and increased total nitrogen availability as a result of increased organic matter. However, retention of soil moisture BELOW the turf canopy will have a lesser impact on snow mold then if it were trapping above and the release of nitrogen into the soil should be slow enough that it doesn't produce the lush green turf in late fall and early winter that is highly susceptible to disease. In my opinion, the benefits of mulching the leaves on site far outweigh the possible negatives...including the possibility of snow mold development.

Here are some tips for optimal leaf mulching I observed researching various trade articles and university blog posts:

- Mulch the leaves when dry...wet leaves mulch much less effectively
- Mulch more than once throughout the fall. The smaller the pieces, the easier they can filter into the canopy below
- Very deep leaf litter may still need to be raked even after mulching attempts. Areas that are smothered following mulching attempts should be raked or blown to re-distribute the leaf litter
- Fall fertilization not only helps the grass, but can also speed up the rate of leaf decay over the winter...presumably through increased microbial activity

References

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- Kowalewski, A., Buhler, D., Lang, S., Nair, M., Rogers, J. 2009. Mulched Mape and Oak Leaves Associated with a Reduction in Common Dandelion Populations in Established Kentucky Bluegrass. HortTechnology 19(2): 297 – 304.



Figure 1: A pile of leaves ready for collection in Madison, WI on a recent fall morning.

	Mean dandelion populations (plants/30 ft ²) ^z			
	9 June 2004	7 July 2004	3 Aug. 2004	1 Sept. 2004
Leaf species				
No mulch ^y	8.0 a ^x	21.4 a	36.8 a	38.3 a
Red maple	2.5 a	7.7 b	18.7 bc	22.1 b
Red oak	2.3 a	7.0 bc	17.6 bc	18.8 bc
Silver maple	1.6 a	9.3 b	20.9 b	21.4 bc
Sugar maple	2.6 a	4.2 c	19.1 bc	22.6 b
Sugar maple (HSC)w	1.9 a	8.3 b	15.2 c	17.1 c
Particle size (inch ²) ^v				
No mulch	8.0 a	21.4 a	36.8 a	38.3 a
0.4 to 1.0	2.1 a	7.4 a	17.8 a	20.1 a
≤0.2	2.2 a	7.9 a	18.8 a	20.4 a
Application rate (kg·m ⁻²)	v			
0	8.0 a	21.4 a	36.8 a	38.3 a
0.5	3.0 b	11.1 b	21.3 b	22.7 b
1.5	1.6 c	6.2 c	15.9 c	16.9 c

^aCommon dandelion plants per 30-ft² (2.8 m²) plot; 1 plant/30 ft² = 0.3588 plants/m². ^yNumber of replications (n) for the control = 12, n for all other treatments = 3.

⁷Number of replications (n) for the control = 12, n for all other treatments = 3. ⁸Means in a given column with the same letter do not differ using Fisher's least significant difference at P = 0.05⁸HSC = high sugar content.

"HSC = high sugar content. '1 inch² = 6.4516 cm^2 , 1 kg·m⁻² = 0.2048 lb/ft^2 .

Table 1: Effects of leaf species, particle size, and mulch application rate on mean common dandelion populations after one application of leaf mulch in Fall 2003 at East Lansing, MI. From Kowalewski et al., 2009.

Lab Happenings

By Bruce Schweiger, Turfgrass Diagnostic Lab, University of Wisconsin-Madison

As I write this article, most of the summer research projects are completed for the 2016 growing season. The many snow mold trials that Dr. Koch is conducting for winter 2016-2017 are ongoing. Here is a list of those projects:

Snow Mold Timing Study

O.J. Noer Facility, Verona, WI Greenwood Hills Country Club, Wausau, WI Timber Ridge Golf Course, Minocqua, WI

Snow Mold Product Trials Marquette Golf Club, Marquette, MI Wausau Country Club, Wausau, WI Cherokee Country Club, Madison, WI

Microdochium Trial (Insulating plots and covering with impervious cover)

O.J. Noer Facility, Verona, WI

Microdochium Trial on Sports Turf and Residential Turf Wausau West High School, Wausau, WI

Snow Mold Incidence of Fine Fescues Whispering Pines Golf Course, Cadott, WI

Winter Degradation Trial (In this one Kurt and I shovel snow off bentgrass plots during winter season)

O.J. Noer Facility, Verona, WI

Our bentgrass plots at the O.J. Noer Facility have been sprayed for snow mold, irrigation is blown out, and Tom is retired. As with many of you, the winter equipment repair season is here.

The Turfgrass Diagnostic Lab (TDL) had another record setting year. At the time of this article there are still samples arriving at the

lab. What I can tell you is it was the second year in a row where we set a record for number of samples being sent to the lab. The high numbers again this year was spurred on by the wet weather and the outstanding support the TDL receives from the turfgrass industry. Without that support the TDL would not exist. If we have not discussed the advantages of being a TDL contract member in the past please call me. TDL contract membership has many advantages to you as a turfgrass manager. Just think, every two weeks Dr. Koch and I will send you an update of the kinds of samples we are examining and some ideas of what we predict may happen in the next few weeks.

Root pathogens were not as prevalent this year due to the weather. For root pathogens, the decline in turf quality appears the worst after periods of high stress (heat, dry, windy) and this year many turfgrass managers did not see prolonged periods of summer stress. This allowed the turfgrass plant to survive, maybe slightly impaired but still able to perform.

On the other hand, we may not have had the extreme stresses to turfgrass, but the prolonged wet weather brought in an entirely different set of issues. In golf, the incidence of Basal Anthracnose was seen throughout the Midwest. Areas where there is poorly draining soil or just extreme moisture to create saturated conditions, Basal Anthracnose infected bentgrass crowns. The infections to the crown block ample water movement to the leaves for food production and transpiration. Even after plant protectants are applied the infection may halt but the damage to the crown has been done. The water movement will not resume normal function so the side effects of the infection can remain present for months. These plants actually never fully recover but the surfaces recover as these infected plants are replaced by new plants. Unlike Anthracnose on Poa annua, the leaves die and are replaced by new leaves, with Basal Anthracnose they do not grow new crowns. One key to Basal Anthracnose is normally the infection happens sometimes weeks or months before symptoms appear. In discussion with turfgrass managers they lament how they

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Happy Holidays!



Lab Happenings - continued

are applying good products for anthracnose control so this must be product failure. The key to this statement is they are applying good chemistries but may not be delivering these materials to the roots and crowns. Products that control anthracnose tend to be upwardly mobile, thus where they enter the plant they only move outward to the leaf tips. None of them are moving down to the crown, so the proper product should be applied and then watered into the soil to deliver them to the roots and crowns.

For general turfgrass, the majority of samples were creeping bentgrass or Necrotic Ring Spot. I will not spare you the long dissertation on Necrotic Ring Spot; I have done that many times. The extreme moisture in the spring was a perfect breeding ground for Necrotic Ring Spot. I have cases where people lived in their home for 25 plus years and never had issues, but this year it was devastating. These cases are frustrating for lawn care companies and the homeowner because someone must have made a mistake. Necrotic Ring Spot can be found throughout the state in almost every soil, it is just waiting for something to be out of balance and it can infect plants. Necrotic Ring Spot infects plants every year all around the Midwest, but in years like the past two, the balance is tipped due to the moisture. Once the damage is done we are left to re-seed the damaged area. I have heard from homeowners from three or four years ago, that once the lawn grew back they have not seen these issues again.

As for creeping bentgrass, it must also have been the extra moisture that allowed the patches to spread and become very noticeable. I am sure the bentgrass has been there for some time but this year it spread like wild fire. One homeowner told me that in years past his dog would lay in the few bentgrass patches in the summer to stay cool, they thought it was cute. This year those patches grew so much and were so dense that the mower would slow down when he mowed. The key question is always, what to do now? As we all know, bentgrass is hard to selectively control. I recommend two control options, Tenacity or Glyphosate. Of course the Glyphosate and dead grass never make anyone happy. They get really disheartened when I explain that they should spray an area 8-12 inches around the patch they see since the plant most likely has spread well beyond what they feel is the margin. We can then discuss Tenacity, which I have used very successfully, but the multiple applications, volume of product does tend to scare them off. If they have a landscape contractor they are more willing to use Tenacity. No matter which control option is used there is always dead grass involved.

One last disease note, it is mid-November and the reports of rust are everywhere. The mild fall and moist conditions are ideal for rust. This does appear to be an issue much later than normal, but it is Wisconsin what is "normal weather" anyway!

As I look into the future, one date stands out on my calendar, Tuesday, January 10, 2017. Yes the WTA Research Day! The chair of this committee is Aaron Goninen. Aaron has worked hard to organize a great program. The venue will again be at the Pyle Center on the UW-Madison campus. After a few years of technical difficulties, Aaron has worked diligently with the audio staff at the Pyle Center to upgrade the video portion of this event. If you have attended via webinar in the past and suffered through our growing pains you will really like this years' format. For those of you that do not want to travel to Madison I encourage you to sign-up and attend the webinar. The preview I saw of the new format was amazing and I felt like I was in the room, give it a try.

Not to take anything away from the education, Aaron and the Professors have put together and very impressive educational line-up. More details are in included in this newsletter. If it does snow, come back to the office to get warm and hear at least a few of the presentations or watch them later in the archives.

Lastly, I want to thank Tom Schwab for all the things he taught me over the last four years here at the O.J. Noer Research Facility. His dedication to the WTA and many other turfgrass organizations has been and will continue to be outstanding. Tom has always been in the background doing whatever he can to be helpful. Tom never asked for recognition, if anything he would hide from the spotlight. Members like Tom are hard to find and I hope someone reading this newsletter will step up and volunteer their time and skills to the WTA. They are great organization but as the saying goes we are only as good as the effort put forth by the membership.

Have a Happy and Safe Holiday Season. See all of you on January 10th!



All Smiles

By Tom Schwab, OJ Noer Turfgrass Research and Education Facility, University of Wisconsin-Madison

All our golf shots were different at the 2016 WTA Golf Fundraiser at Butte des Morts CC. One constant was the smiles everyone had on their face. What a fun golf course to play!!! Superintendents Tim and Steve Schmidt had the course in such fun playing condition that you couldn't help but have an enjoyable time. Then the perfect weather in the mid 60's, hospitality and service from everyone at Butte des Morts, great door prizes, and friendly attendance sealed the deal. I'll let the pictures tell the rest of the story.

A special thanks goes to the many donators of door prizes that allowed every attendee to go home with more than golf memories. Many of those door prizes were worth more than the cost of registration. Thank you, thank you donators. You really are appreciated.

Many attendees also went home with golf skill and other prizes. One of those other prizes was the annual drawing for an Apple iPad that was won by Chad Grimm from Blackhawk CC. Chad was also in the winning foursome for the day with a 2-under-par score for the 4-person best ball tournament. His winning teammates included



Aaron Goninen, Todd Martin, and Nick Strain. This is coincidental, but I just realized that the winner of last year's iPad drawing, Todd King, was also in the winning foursome when the WTA was held at Blue Mound CC. Sorry for getting off subject.

Another winning foursome for the day was for a randomly chosen place of 11th. That went to Jon Hegge, Joe Knudtson, Terry Allen, and Denny Reese. Then the hardest working winning foursome went to Bruce Worzella, Tom Bottensek, Mark Kienert, and Greg Kallenberg.

Other winners of the skills events went to:

Longest Putt #1 – Jeremy Dahl Longest Drive #6 – Joe Knudtson Closest in one #11 – Rick Weiterman Longest Drive #11 – Donna Wilson Longest Putt #15 – Steve Tatro Closest in one #17 – Jon Dippel

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 Butte des Morts 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.

Continued on page 10



Our hosts Tim and Steve Schmidt enjoying the round with friends Rod and Brent Johnson



Dan Quast being tested on the lightning fast greens of BDM



All smiles from Steve Tatro, Kristen Witkowski, John Jensen and Kerry Anderson

Door Prize Donor (Sorry if I missed your donation of	Company r stated it wrong. It was kind o	f hectic at registration.)
Ben LaBarre	The Legend Clubs	Callaway 60 degree wedge
Beth Duschack	Dow AgroSciences	Fleece jacket, backpack, thermometer
Bill Rogers	Evergreen GC	Foursome of Golf with Carts, and golf shirt
Bob Lohmann	Lohmann Golf Designs	Jacket, windshirt, sweater
Bruce Schweiger	SAS Management	Bike, calendar, dart board
Chad Grim	Blackhawk CC	
Chuck Schwab	Stoughton CC	Foursome of Golf with Carts, Jacket, shirts
Danny Quast	DHD	Golf Bag
Dave Busse	Rock River CC	Foursome of Golf w/ Carts, Titleist 12 pack
Dave Hoehne	SiteOne Landscape	2.5 gallon Spectator fungicide
Ed Witkowski	Pendelton Turf	\$200 Lowes gift certificate, beer
Gary Huenerburg	Burris Equipment	Jackets shirts
Jeff Rottier	Janesville CC	
Jeremy Dahl	Strawberry Creek	Two sweatshirts and hats
Joe Schneider	Janesville Riverside	
Joel Peterson	New Berlin Hills GC	
Jon Hegge	Evansville CC	Badger Football tickets, beer, other stuff
Kerry Anderson	Valent	two golf shirts and jackets
Mark Kienert	Retired	Bottle of wine
Mike Krupke	Insight FS	
Mike Lemke	Nakoma	
Mike Lyons	Lawsonia Links	
Neil Radatz	Hawks Landing CC	
Nick Strain	Control Solutions	2 x 12 packs beer and gift certificate
Peter Meyer	National Golf Graphics	Two \$50 gift certificates, Dozen ProV1 balls
Phil Davidson	University Ridge	Bunch of AmFam golf shirts, jackets, & hats
Phil Spitz	Syngenta	Two shirts, hats, and a vest
Rob Johnson	Waupaca Sand	
Rod Johnson	Pine Hills	
Scott Anthes	Brown County GC	
Scott Sann	Greenwood Hills	
Shawn Hilliard	Helena	Fishing lures, flash light, golf balls
Todd Fregien	ProGro Solutions	

All Smiles - continued



Aaron Goninen exhibiting his winning form on the uphill lie



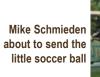
More smiles from Tom Wentz, Terry Kurth, Michael Ryan and Mike Skenandore



Peter Meyer preparing to let one sail



John Jensen; can he make it over the creek?







More door prizes



Cubby O'Brien takes a bit of turf with him, but he keeps his head down



Bountiful door prize table

CALENDAR OF EVENTS

2017		
Jan 2	Great Lakes School of Turfgrass Science	Online
Jan 10	WTA Turfgrass Research Day	Pyle Center, Madison
Jan 10-12	Northern Green	•
Feb 1-3	iLandscape Show	Schaumburg, IL
Feb 4-9	GIS	
Feb 10-12	WPT Garden EXPO	Madison, WI
Feb 20-23	TPI Conference	Tampa, FL
March 1	Pesticide Applicator Training	Oconomowoc, WI
March 8	Pesticide Applicator Training	Arlington, WI
March 15	Pesticide Applicator Training	Oconomowoc, WI
March 22	Pesticide Applicator Training	Oconomowoc, WI
March 29	Pesticide Applicator Training	Eau Claire, WI
April 5	Pesticide Applicator Training	Oconomowoc, WI
April 12	Pesticide Applicator Training	Green Bay, WI
April 19	Pesticide Applicator Training	Oconomowoc, WI

WTA Members -- If you have an important date you'd like to share with other members, Call 608-845-6536 or email audra.anderson@wisc.edu to include it in the next calendar.

Contact Telephone Numbers

GCSAA	Golf Course Superintendents Association of America	
Great Lakes	Great Lakes School of Turfgrass Science Online	763-767-3518
NGLGCSA	Northern Great Lakes Golf Course Superintendents Assoc	
Northern	Northern Green	651-633-4987
iLandscape	the Illinois + Wisconsin Landscape Show	630-472-2851
PAT	Pesticide Applicator Training (Turf and Landscape 3.0)	
STMA	Sports Turf Managers Association Conference	800-323-3875
TPI	Turf Producers International	800-405-8873
Wee One	Wee One Foundation Golf Outing	630-457-7276
WGCSA	Wisconsin Golf Course Superintendents Association	920-643-4888
WGIF	Wisconsin Green Industry Federation	
WPT	WPT Garden Expo	608-262-5256
WSPA	Wisconsin Sod Producers Association	
WSTMA	Wisconsin Sports Turf Managers Association	
WTA	Wisconsin Turfgrass Association	608-845-6536