The GRASS ROOTS

AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

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ABOUT THE COVER

Golf Courses have seen unprecedented changes due to the Covid-19 Virus. Story on page 36.

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Never let your head hang down. Never give up and sit down and grieve. Find another way. And don't pray when it rains if you don't pray when the sun shines..

By American Major League Baseball Player Leroy Robert "Satchel" Paige, 1906-1982

This quote by Paige can be motivational during this time of trials and the unknown. It can also be a reminder to pray at all times, not just in bad or good times.

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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PRESIDENT'S MESSAGE

What Is The New Normal?

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

To school, no sports, no human contact, no large gatherings or events, no TP or milk at the store? It takes a global pandemic to bring us back to the stone ages. Back to a time where we hunted and gathered, lived in small groups and didn't have many distractions as survival was the #1 priority.

As I write this states are beginning to close restaurants and bars. Saint Patrick's Day is tomorrow and I won't be getting any green beer at the local watering hole. Schools are called off until early April and our club is deciding when and if we will open the golf course once the weather turns in the next two weeks. With social distancing a # 1 priority to slow the COVID-19 spread and many other activities limited or eliminated, I can see a possible uptick in golf. Unless the government locks down all non-essential travel and activities, I see the golf course as a potential safe haven, escape from the stress of major life

disruption and change.

Hopefully by the time you are reading this we are through the worst of it but as fast as things are changing I see a potential for many months of disruption. I worry how we will gain new club members as prospective members are shifting priorities from which club they want to join in Madison to how can I work from home, home school my kids and keep my family safe and healthy?

Times like these remind us of what is important in life. Family, faith, friends, food, health and happiness. I hope our golf courses can be recreational area where friends and families can enjoy some health and happiness.

At this point it is too early to make a call on our WGC-SA events for 2020. Please stay tuned.

God bless you all in these stressful times. We will get through it. We will persevere. Things will be back to normal.



GOLF COURSE SUPERINTENDENTS ASSOCIATION OF AMERICA

WGCSA MISSION STATEMENT

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

WGCSA VISION STATEMENT

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

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













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EQUIPMENT MANAGEMENT

From The Ground Up: A Look Into the Equipment Manager Educational Sessions

By Tim Mitchell, Assistant Equipment Manager, Sand Valley Golf Resort

Being relatively new in the golf industry, I am trying to find any way I can to acquire information that will help me improve my quality and quantity of work. I started at Sand Valley in Rome, WI in May of 2016 as a crew member on a hydro-mulcher planting the grass. Once I found the mulcher had plenty of quirks and needed to be repaired and maintained frequently, I took it upon myself to make sure my machine was always running smoothly. With that in mind, I recently met my current Manager, Austin Wright, who had begun to trust me with his tools and would drop off anything that I needed and then drive off to 'put out other fires'. From that day on, Austin was determined to get me in the shop and get my feet wet. I had never taken a class

on any equipment, much less golf course equipment. Little did I know, this opportunity would change my whole career path.

Walking into a golf course maintenance facility will change the way you think about what you do every day at work. Every shop is special in its own way and has gone through growing pains and breakthroughs. When I walked into the shops at Erin Hills Golf Course and Westmoor Country Club in Wisconsin, I immediately scanned the rooms for ideas I could take with me and use at our shop at Sand Valley. On the other hand, I also looked for ways to improve their shop with ideas that I had discovered. All in all, the Wisconsin Golf Course Superintendent Association (WGCSA) gives you the chance

to do that plus more!

After processing the layout, flow, and tools the facilities use, I started to ask questions to the other technicians who traveled many distances to attend the Equipment Manager training provided by the WGCSA. They were also trying to communicate any tips and tricks they have learned to make day to day life easier in their shop. Not only does this help with your operation, but networking also connects you to all the right people you may need in the future. Someone might have run into the same issue you are having, or someone might have the perfect job opening you have been waiting for. Just getting your business card and your name out can significantly help with many opportunities and guidance.



The group at Erin Hills stopped for a group photo.





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EQUIPMENT MANAGEMENT

After chatting, handing out business cards, and sharing ideas, the WGCSA introduced the speakers and which skills they would be educating us on. This day, it was Kurt Tewinkel from Foley Grinders; Tod Blankenship and Chris Langley from Bernhard Grinders.

They trained us on grinder and reel setup as well as dull versus sharp cutting units. This included the history and science behind how and why reels function. They also explained the best ways to maintain proper setup to effectively perform their task.

At Erin Hills, we were briefed on Foley Grinders by Kurt Tewinkel, which went into how their grinder technology played into quality of cut and then they trained how to properly setup and grind with the machines that Erin Hills provided. Along with seeing the machines in action, there were other stations that included a cutting unit workstation demonstrated by local Equipment Managers. Lastly, we finished the morning session with a shop

Any Equipment Manager, Technician or Superintendent that hasn't participated in these educational seminars should become a member and take full advantage! No matter how many you go to, you will always learn something, whether its from an instructor or a fellow technician.

tour by Tim Roddy, Erin Hills Equipment Manager.

After that session, we drove over to Westmoor Country Club to begin the second portion of the training. We moved into the Bernhard presentation by Chris Langley, which went into the history and agronomic affects of reel technology and grinding.

Finally, we were trained on the proper usage and setup of Bernhard Grinders. Like the morning session, there was also

a cutting unit workstation where the importance of leveling your cutting units was discussed with local Equipment Managers. We completed the educational session for the day with another shop tour provided by John Neimiec, Westmoor Equipment Manager.

Any Equipment Manager, Technician or Superintendent that hasn't participated in these educational seminars should become a member and take full advantage! No matter how many you go to, you will always learn something, whether its from an instructor or a fellow technician.

I've only been to three so far and I have heard positive feedback from other technicians that the tips and tricks we exchanged helped them with their operation and made their quality better and their job easier! All these experiences and opportunities have furthered my education more than I could have ever imagined. I will continue to attend WGCSA Equipment Manager Educational Seminars.

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EQUIPMENT MANAGEMENT

Right: Education at Erin Hills was led by Kurt Tewinkel with Foley Grinders along with tips from local equipment managers and a shop tour by Tim Roddy, Equipment Manager at Erin Hills

Below: Education at Westmoor was led by Chris Langley with Bernhard Grinders, tips from local equipment managers and a shop tour by John Neimiec, Equipment Manager at Westmoor CC







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TURFGRASS DIAGNOSTIC LAB

The Hockemeyer Snow Mold Prediction Model: Not really but just for fun

By Kurt Hockemeyer, Turfgrass Diagnostic Lab Manager, O.J. Noer Turfgrass Research and Education Facility

Every winter my thoughts are often focused on how much snow mold we will get once the snow melts. Dr. Koch and I are always hoping for lots of snow mold for our research studies. We talk with the superintendents of the courses where our studies are located and they give us updates: How deep is the snow?, Is the ground frozen?, Ice cover?, When did you get permanent snow cover?, etc. Then we speculate about how all those conditions may or may not be conducive to snow mold development. Sometimes we get it right and we give ourselves a high five. Oth-

er times we are wrong and we blame the Ohio State football team because we can.

This got me thinking that maybe it would be fun if I published my thoughts on how much snow mold we will get in each of our 4 research locations this winter. Once the snow melts and we rate all of our plots, I will do a follow up article grading myself on my predictions. At that time I should have some more data that can give some insight into why I may have been right or wrong. So let's get into it. My prediction scale is as follows:

Prediction Scale	% Snow Mold in Non-Treated	Description
Snow Mold Utopia	75-100	Just about absolute perfect conditions for snow mold infection for a long time. Early snow cover, deep snow, all winter long.
That's a lot of snow mold	50-75	Might have been a short period where snow mold conditions were not ideal resulting in slightly less snow mold infection.
I've had better snow mold	25-50	Decent amount of infection, but Dr. Koch would not tweet a GIF of an excited puppy if he saw a picture of it on Twitter.
"Baby Bear" snow mold	10-25	Just the perfect amount of snow mold. Enough that you feel like your snow mold app was worth it, but not a single sclerotia more.
What's snow mo'u'ld?	0-10	So little snow mold infection you can't even spell it right.

Table 1. Monthly weather summary in Marquette, MI according to NOAA

Marquette	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Avg Monthly Temp	25.3	20.4	20.3	16.5
Departure from Normal	-5	1.9	6.7	1
Snow Total for Month	29.4	48.6	51.6	27.7
Departure from Normal				
(in liquid inches)	0.85	2.95	0.77	-0.79
Lowest Snow Depth	0	19	24	32
Greencast Soil Temp 3/6/20				28

Marquette, MI - Prediction: Snow Mold Utopia I feel pretty confident in my prediction for Marquette, mostly because I can pick "Snow Mold Utopia" every single year, and I would probably be right 10 out of 10 years. Table 1 summarizes monthly weather observed there this winter according to NOAA's website. But let's break it down. They last had open turf in late November. Since then, the shallowest the snow cover has been was 19 inches on December 30, 2019. Even though average monthly temps are around 20F, there is plenty of snow cover to insulate the ground and keep soil temps from dipping too low. I believe there will be at least 75% infection in the nontreated control plots in Marquette. Snow typically melts up there sometime in April.

Table 2. Monthly weather summary in Rhinelander, WI according to NOAA.

Minocqua	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Avg Monthly Temp	25.7	19.6	18.8	14.6
Departure from Normal	-4.6	2.8	6.6	-1.8
Snow Total for Month	17.1	25.5	22.9	4.5
Departure from Normal				
(in liquid inches)	0.54	2.06	0.69	-0.55
Lowest Snow Depth	0	7	10	14
Greencast Soil Temp 3/6/20				24

Minocqua, WI - Prediction: I've had better snow mold In my opinion this will be the most interesting prediction this winter. I don't think infection this year will be as high as in years past. The turf was last open in late November. In early November though, there was some bitter cold temps without any snow cover. This has been reflected in the soil temps in Minocqua according to Greencast. Minocqua has consistently had the lowest soil temps according to Greencast all winter long. So I'm going to go out on a limb and say that there will be 25-50% infection in the nontreated control plots in Minocqua. We will see once snow melts sometime in late March or early April.



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Table 3. Monthly weather summary in Wausau, WI according to NOAA

Wausau	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Avg Monthly Temp	27.9	21.5	21.2	17.8
Departure from Normal	-4.6	2.5	6.6	-1.3
Snow Total for Month	9.6	22.8	19.3	11.3
Departure from Normal				
(in liquid inches)	0.43	1.39	0.64	-0.3
Lowest Snow Depth	0	5	9	15
Greencast Soil Temp 3/6/20				30

Wausau, WI Prediction: That's a lot of snow mold It's been a few years since we have had significant snow mold infection in Wausau. So I think we're due for a higher infection year. The cold early November that occurred in Minocqua also occurred in Wausau, but the temps may not have been as extreme, because soil temps according to Greencast are significantly higher, sitting at 30F today. And with plenty of snow cover, I at least feel confident that Wausau will have more snow mold infection than Minocqua. It may be a bit of a reach to expect greater than 50% infection, but this article is for fun, so why not?



Table 4. Monthly weather summary in Madison, WI according to NOAA

Madison	Nov 2019	Dec 2019	Jan 2020	Feb 2020
Avg Monthly Temp	31	30.1	26.1	23.1
Departure from Normal	-5.2	7	7.3	O
Snow Total for Month	7.6	2.9	18.8	13.3
Departure from Normal				
(in liquid inches)	0.24	-0.22	0.51	-0.51
Lowest Snow Depth	0	0	O	5
Greencast Soil Temp 3/6/20				32

Madison, WI Prediction: "Baby Bear" snow mold & That's a lot of snow mold

I get to put down 2 predictions for Madison because we have 2 distinct snow mold trials. One trial we covered the plots with insulation frames and a Greenjacket tarp, so I expect a ton of soil insulation and a ton of snow mold infection, somewhere between 50-75%, in my opinion. The other trial was left completely uncovered except for natural snowfall. Snow cover did not come to Madison until the middle of January, but we didn't really have terribly cold temps during the open turf period in November and December. So I think this trial will hit the "Baby Bear" level of snow mold, somewhere between 10-25%. There is technically a third trial that is only covered with an Evergreen tarp, but I think this trial should perform similarly to the uncovered plot, simply because the Evergreen tarp doesn't insulate as well as the Greenjacket since it is breathable. It should be slightly higher only because we inoculated the plot with the Microdochium fungus.

Thanks for coming along on this silly and fun article. I will revisit these predictions once all snow mold trials have been rated. Stay tuned.

Kurt Hockemeyer, Turfgrass Diagnostic Lab Manager 608-845-2535, hockemeyer@wisc.edu tdl.wisc.edu

NEW LAB ADDRESS:

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With the coronavirus the lab workers will be working at home as much as possible so call ahead before dropping off a sample.

Figure 1. Snow mold revealing itself in Madison under the receding snow cover in early March 2020.

TURFGRASS DIAGNOSTIC LAB

2020 Event Schedule!

April 29 - (Wednesday) WPGA/WGCSA Super Pro - Wild Rock GC, WI Dells

May 4 - (Monday) National Golf Day GCSAA - Washington DC

May 12 - (Monday) WGCSA May Meeting - Abbey Springs, Fontana, WI

June 9 - (Tuesday) WGCSA June Meeting - Lawsonia, The Links, Green Lake

July 21 (Tuesday) - WTA Summer Field Day - O.J. Noer Research Facility, Madison

August 17 - (Monday) Joint NGLGCSA/WGCSA Member Guest - Waupaca CC, Waupaca

September 14 - (Monday) Wee One Fundraiser - Pine Hills CC, Sheboygan

September 25 - (Friday) Equipment Managers Meeting - Location TBD

TBD - WTA Golf Classic - TBD

TBD - Couples and Guest Evening - TBD

Dec 10 and 11 (Thursday-Friday) 55th Golf Turf Symposium - American Club, Kohler NEW DATE
January 5, 2021 - (Tuesday) Winter Research Day - Madison

Visit our website at www.WGCSA.com for the most up to date calendar and registration forms.

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2020 Spring Business and Educational Meeting

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

South Hills Golf and Country Club was once again our host for the Spring Business and Educational Meeting. Unlike last year, when the pool deck was being replaced we did not have any construction equipment to excitedly watch behind the speakers but we did receive a pretty good snowfall we could dejectedly watch during the morning session.

The education committee once again had interesting topics planned starting with **Chris Zugel**, Director of Maintenance of the Kohler Courses, discussing "2020 Ryder Cup" preparations. The event is expected to bring 40,000 people to the area with a economic impact of 135 million dollars.

The Ryder Cup will use 4,000 volunteers, including 107 helping in the maintenance department to prepare the course.

Chris started his talk with a history of the Whistling Straits property, which served as a army base hosting anti-aircraft gun training. The staff still finds old road beds and old military shells when digging. The Ryder Cup is different than most pro golf events in that the number of players is small but there is double the number of press members with all the American networks and also all of the European networks, each with their own trucks, stages and towers.

The Ryder Cup is also different because the staff has to do maintenance activities between morning and afternoon rounds with 40,000 spectators standing on their usual routes of travel. Normally, maintenance is done on a nearly empty property early or late in the day.

The staff will go out to mow in the morning then will stage/hide the equipment in multiple out of site areas with easy access back to the golf course for midday mowing. After midday mowing the equipment will again be staged in hiding until the evening mowing starts after which it can return to the maintenance facility.

I find it fascinating that the main blacktop walk road onto the golf course for spectators is buried in soil and seeded over when the course is not hosting a major golf event. During the pro events it looks like a perfect new blacktop road. The wide bridge deck is even removed.

It is hard to imagine but 1.3 million square feet of plywood will be used to support tents, stands and other spectator areas during the Ryder Cup. It takes months to set up and then months to take down.

Zugel's talk was a good history lesson about the property and a look into the preparations for the world stage of golf.

Second on the agenda **Dr. Paul Koch**, Assistant Professor of Plant Pathology at UW-Madison, discussed a new program at the UW.

Through the Farm and Industry Short Course Program (FISC), a Turfgrass and Grounds Management program is being created in both a 1 year and 2 year format, each with shortened semesters to allow students to work later on a golf course in the fall and earlier in the spring. It would be practical for a current year-round employee wanting to further their education to take leave or even better to be supported by the club with pay to attend the program.



Chris Zugel discussed preparations he and the Whistling Straits staff are undertaking to prepare for the 2020 PGA Ryder Cup in September.



Dr. Paul Koch gave a presentation highlighting the New UW Turfgrass Short Course program to meet the needs of today's aspiring turf professionals.



SHORT COURSE

Paul suggested that a student right out of high school take the 2 year program while a student with experience in golf may be able to take the 1 year program. If the student later decides to move on to a higher degree the turf courses will transfer to a future BS degree.

Some of the courses offered include Turfgrass Nutrient Management, Pest Management, Irrigation and Drainage and Plant Science.

Although tuition will be \$5,000 a year the average scholarship is \$3,000. Housing on campus is estimated at \$5,500 for a full service dorm with

cleaning services however with a 4 day a week class schedule commuting to Madison would be possible from a lot of places.

More information can be found at fisc. cals.wisc.edu.

The third talk was by **Arthur Fonk,** Environmental Specialist, WI Department of Trade and Consumer Protection. Yes, DATCAP! One might wonder why the heck we would invite a regulator from a regulatory agency to give us a talk but Mr. Fonk was very informative and down to earth.

He started by saying any question asked today would not lead to an agency visit and most of their work comes from citizen complaints.

Environmental Specialists have a wide range of tasks with inspections, complaint investigations and providing compliance assistance to producers of feed for fish, cattle and every other animal you can imagine, fertilizer manufactures, retailers and users, pesticide retailers, wholesalers, storage providers, haulers and users along

with worker protection inspections.

Art explained typical violations he sees are for drift or over-spray which are label and rule violations. Not wearing or having PPE equipment is also considered a label or rule violation, while not posting the proper signs is a rule violation.

Fonk described how the first thing he does when he receives a complaint is look at the product label because as we all know the label is the law!

The lack of or undersized mix load pad, which is rarely needed by golf courses, and can be avoided by mixing at multiple sites on the property as long as they are 1/4 mile away from each other.

Backflow prevention and violations of maximum use rates per year are also common violations.

If we are asked by a resident or customer what we are spraying Art suggested we only provide the label as the SDS sheets may only confuse the consumer. It is easier to add the SDS (MSDS) if pressed for it later.



The inspections and enforcement bureau of agrichemical management has 14 staff members spread throughout the state with Art Fonk covering Ozaukee, Milwaukee, Racine and Kenosha counties. He has visited a few golf courses and so far has been impressed with the professionalism and proper practices he has seen on the golf courses.

Fonk reminded the group most golf course applicators do not need to be certified unless they use restricted use products but it does not hurt to be certified. At the same time application records do not need to be kept for non restricted use products but it is a good policy to keep them.

He closed with a question and answer session and when asked said the use and placement of mouse poison is the number one violation cited across the country.

After lunch and the business meeting, Matt Dusenberry, Principal of Dusenberry Design, gave the fourth talk on Playability in Golf Design and Maintenance. After 16 years of traveling the globe as a Senior Design Associate for Greg Norman Golf Course Design, Matt started his own firm 7

years ago and likes staying closer to home and is now based out of Milwaukee.

He defined playability as "an enjoyable golf experience for players of all abilities" and went on to simply say playability=player enjoyment.

Dusenberry discussed how variety provides for a memorable golf round and better courses provide width for the higher handicap player but that width is also used by better players to position their shots for lower scoring.

Playable holes provide for multiple lines of play including a ground game around bunkers or hazards for the higher handicap players.

Variety includes keeping long holes long and short holes short and multiple tees allow for many skill levels to enjoy a course.

Matt discussed that open approaches to the green complex allow a ground game for higher handicap players without making the game too easy for the good player who still has to fly the ball in the air to the target to score.

Dusenberry encourages walking with short green to tee walks and moderate green speeds to keep pace of play acceptable and spent a good deal of time discussing using interesting ground features in addition to, or even in replacement of bunkers, to provide for a aesthetically pleasing layout.

In summary playability improves player enjoyment and pace of play which in turn increases participation or rounds and increases revenue.

In a practice started a few years ago to shorten the day, the association business meeting was held as most of us were finishing our lunch and before the final speaker.

The meeting included the normal business with Chapter Manager Grams updating on membership, financials and the Par4 Research program. Preliminary reports show income was \$152,315 and expenses \$135,124 for a annual profit of \$17,191 however \$15,000 of that will be carried over to support the BMP Initiative.

President Lepine discussed the progress on the BMP Initiative and, although the draft is later in the year than we wanted, he felt confident it would be completed in the 2020 calendar year.

Golf and Arrangements Committee Chair, Brian Bonlender presented the event calendar for 2020. The calendar



Art Fonk, Environmental Specialist with DAT-CAP gave a interesting presentation titled "Who is DATCAP, What does it do for golf courses.



Matt Dusenberry, Principal Dusenberry Design gave a valuable talk titled "Playability in Golf Design and Maintenance."

can be found on page 13 of this issue. Scott Anthes presented an update on our Scholarship and Research programs including letting us know Travis Miller, winner of the James R. Love Award, sent us a thank you note.

Selected to receive scholarships to the Great Lakes School of Turfgrass Science Online Program were Ryan Lower, Alex Meetz, Anthony Wegner and Michael Leih. The recipients will be reimbursed their complete registration fee upon completion of their certificate.

Scott also presented Michael Bekken, Graduate Student, and Research Assistant at UW Madison with the Monroe S. Miller Literary Scholarship for his student written article in the November / December issue of *The Grass Roots*.

Ben LeBarre gave an update on the work of the Education Committee and asked for ideas on what members wanted for future events.

Government Regulations and Environmental Committee Chair Trim Schmidt gave an update on current issues including H2B Visas, the Coronavirus and National Golf Day held on May 5&6. For "The Good of The Association" GCSAA Field Representative Shane Conroy announced that the national association will be introducing health insurance plans which will be made available to members in most states. With rising health costs, insurance is near mandatory to protect families from financial ruin in the event of even common health problems.

It was a good day for education, networking and association business.



Michael Bekken (Left) received a check from Scholarship and Research Chair, Scott Anthes for being selected for the Monroe S. Miller Literary Scholarship for having the best student written article in *The Grass Roots* Magazine. Michael penned the article "Perceptions of Golf Course Resource Use: Why Efficiency is so Important" in the November / December issue.





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25 and 50 Year Members in 2020

By Garrett Luck, Certified Golf Course Superintendent, Hidden Glen Golf Club

25 Year Members

Jeff Barlow, CGCS: Jeff started in the Golf Industry in 1989, working at Waupaca Country Club at the age of 16 for Donald Petersen. He continued his employment at Waupaca Country Club until 1994 working for Kris Pinkerton for 3 seasons and Brett Grams for 2 seasons. Upon graduation from UW-Madison in 1995 Jeff worked a short stint at Stevens Point Country Club for Jeff Bottensek, before taking an assistant position at Bull's Eye Country Club in Wisconsin Rapids. Jeff worked for Mark Kienert for 5 years before accepting the superintendent position at Waupaca Country Club. This season Jeff will be starting his 20th year at Waupaca Country Club.

Brian Ferrie: Brian's first job on a golf course was in 1985 in his hometown of Cresco, IA at Cresco Country Club when he was 15. His first assistants job was at Beaver Hills Country Club in Cedar Falls, IA in 1990. In 1993, Brian accepted an assistants position at Crow Valley Golf Club in Bettendorf, IA. In 1995 he was hired by Marc Davison as his assistant at Green Bay Country Club. In 1998 Brian was hired to oversee construction and grow-in Horseshoe Bay Golf Club in Egg Harbor, WI where he remains today.

Chad Harrington: Chad began his career in the golf industry as a high-school student in 1987 as the night waterman, moving irrigation heads on a non-automated system at Waushara Country Club in Wautoma where he worked seasonally on the Grounds Crew at Waushara CC while attending Ripon College. In 1992, after college, he was offered a full time assistant superintendent position at Waushara and was involved in the course's expansion to 27 holes. In January of 1996, Chad moved to Valders, WI to become the Superintendent of Autumn Ridge Golf Club during its construction. A position he has held ever since. In Chad's own words, he was "demoted" to General Manager/Superintendent in 2002 and considers himself lucky to have had the same assistant superintendent for 20 years. In November of 2006 Chad was nominated and elected to the WGCSA Board of Directors and served actively on the Board until 2014, serving as President from 2012 to 2014. On July 1, 2017 he and his wife purchased Autumn Ridge Golf Club. Chad would like to thank the WGCSA and its members for their support and impact they have made on his life.

Linc Lautenbach: Linc got his start in the golf industry while on the grounds crew, at Alpine Golf Course in Door County in 1985. In 1994 he moved to Cecil, WI and began working at Golden Sands Golf Course as the superintendent. In 2001, Linc became part owner of Golden Sands.

Josh LePine, CGCS: Josh began working in the golf in-

dustry at Stoughton Country Club while attending both high school and college. While enrolled at UW-Madison, as he obtained his degree in Soil Science, he interned at Winged Foot Golf Club in Mamaroneck, NY, later assuming the role of apprentice superintendent. Later Josh became the superintendent at Bristlecone Pines before moving back home to the Madison area as superintendent at Maple Bluff Country Club.

Jamie Mick: Jamie received his degree from UW-Stevens Point in American Studies. In 1922 he was hired by Scott Schaller as the crew foreman at South Hills and became his assistant in 1995. Jim VanHerwynen took over as superintendent in early 1996 and kept Jamie around, mostly for comic relief, ever since. Jamie's words, not mine.

Cubby O'Brien: Cubby received his B.S. from UW-Madison's Turf Program. Highlights of his 35 years in the turf industry include over ten years working on a number of golf courses in both Illinois and Wisconsin. For the last 25 years, Cubby has been a soft goods distributor sales representative in Wisconsin. This October will mark his 10 year anniversary with Reinders.

Not Able to Attend

25 Year Members

David Janhke, CGCS, Washington County GC, Hartford Thomas Johanns, Bemidji Town & CC, Bemidji, MN Jake Renner, CGCS,

Bruce Livingston, CGCS, Mascoutin Golf Club, Berlin

50 Year Members

Paul Delfosse, (Retired) Brown County GC, Green Bay Jack Soderberg (Retired) Western Lakes GC, Pewaukee

Congratulations to all these members.





Jeff Barlow, CGCS, Waupaca CC



Brian Ferrie, GCS, Horseshoe Bay GC



Josh LePine, CGCS, Maple Bluff CC



Linc Lautenbach, GCS, Golden Sands GC



Cubby O'Brien, Sales Rep, Reinders



Jamie Mick, Assistant GCS, South Hills G&CC

WISCONSIN PATHOLOGY REPORT

Leaf Spot, PGR's and Pink Spots

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

ifferent seasons bring different management programs, and I'm guessing many of us can guess the season based purely on the application of certain products. For example, if a police detective came to me and said the only thing he knew about the murder of a superintendent is that he was spraying Instrata at the time the deed occurred, I could pretty confidently say the murder occurred during late fall or early winter in preparation for snow mold (this time range would be wholly unhelpful in an actual investigation). Conversely, if someone just said Subdue MAXX it's likely they're applying that in July or August. While plant growth regulators (PGR's) are applied throughout the entire season, if someone said 'Proxy/Primo' that person is probably talking about seedhead suppression in the spring. However, PGR use in the spring can cause discoloration based on the type of grasses present and the environmental conditions during and shortly after the application. This discoloration is often pink or red in color and can be mistakenly diagnosed as leaf spot (Figure 1).

Before we talk about how PGRs can lead to mistaken





Figure 1. Irregular patches of discolored turf in the spring are often mistakenly diagnosed as leaf spot, but in many cases are cold-temperature responses to PGR applications.

cases of leaf spot, let's quickly review leaf spot diseases on turf. There are many different types of leaf spot, but on golf course turf the primary leaf spots are Drechslera leaf spot and Bipolaris leaf spot. These two were formerly grouped together as Helminthosporium leaf spot, and both can cause circular or irregular pink or reddish discoloration that may eventually lead to turf thinning (Figure 2). Drechslera leaf spot typically occurs on bluegrasses (both annual and Kentucky), perennial ryegrass, and fine fescues. Bipolaris leaf spot on cool-season turf mostly occurs on creeping bentgrass, especially older varieties of bentgrass (the old Washington and German vegetative bents are particularly susceptible). In addition, Drechslera typically likes cool and wet conditions (59-64°F), while Bipolaris typically prefers hot and wet conditions (85°F and higher). As you might expect, Drechslera is more commonly observed in the spring and fall while Bipolaris is more commonly observed in the summer.

It's actually pretty rare for us to see leaf spot on bentgrass during the spring, but every season we get numerous reports of leaf spot on bentgrass in April and May because of circular pink or red-colored patches of turf. In nearly every one of these cases when a sample is submitted we can't find any evidence of leaf spot (which is not typically a hard disease to diagnose microscopically because of their characteristic spores (**Figure 3**) on the symptomatic turf.





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WISCONSIN PATHOLOGY REPORT



Figure 2. Bipolaris leaf spot occurring on an older stand of vegetative bentgrass following warm and humid conditions during the summer.

In addition, these red-colored patches almost always appear on greens that have recently received one or more PGRs targeting annual bluegrass seedheads. Also, there is

typically a drop in temperature with overnight lows dipping close to or below freezing in the week following the PGR application. Finally, the greens in question are almost always an older cultivar (i.e. Penncross).

So if leaf spot isn't the problem, what is causing these circular patches of red-colored turf? Though I haven't conducted a research study on the topic, I believe that the discoloration is a PGR response to cold temperatures that only affects certain segregated clones of older bentgrass cultivars. It's common for older cultivars like Penncross to segregate out into individual circular clones, and these clones can be remarkably different in the cases of disease resistance, traffic tolerance, color, and growth rate.

To summarize, I believe the pink/reddish color is due to PGRs applied in cold temperatures that severely limit the growth of certain clones. This causes them to turn a pinkish color that is oftentimes mistakenly identified as leaf spot. The good news is that I've never seen any long-term damage from these pink clones during the spring. Once the temperatures warm back up the plant metabolizes the PGR, regains its normal growth pattern, and the pink color rapidly dissipates.



Figure 3. Leaf spot diseases are typically rather easy to diagnose when a microscope is available because of their characteristic cigar-shaped spores, such as this Bipolaris sorokiniana spore.

Figure 4. Numerous 'clones' of bentgrass are often present on a putting green, especially older cultivars such as Penncross. These clones are most visible in the spring and fall following frosts and large swings in temperature, but they also demonstrate unique responses to a number of different biotic and abiotic stressors throughout the season. This picture is from a blog post by Dr. Peter Dernoeden for Genesis Turf on February 4th, 2016 (https://www.genesisturfgrass.com/news-event/view/dr.-petes-turf-tips/).

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ASSISTANT'S AVENUE

20/20 Vision: Looking into the Future

By Alex Panzenhagen, Second Assistant Superintendent, University Ridge Golf Course

This year's assistants seminar was held on Tuesday, February 18th at Whispering Springs Golf Club in Fond Du Lac and included multiple speakers as well as a panel of newly promoted superintendents. It included a variety of topics, such as information on GPS sprayers, updates on the status of Wisconsin's development of Best Management Practices (BMP's), information to assist assistant superintendents with professional development, an update on the status of *The Grass Roots* magazine, and a panel of newly promoted superintendents who discussed questions about what the transition into their new jobs has entailed.

The day started with a presentation from Joe Etten Account Executive for Reinders of the greater Chicago area. His presentation focused on the new exciting world of GPS sprayers. The presentation began by talking about how the sprayers function, then transitioned into the multitude of different GPS systems that run sprayers based on the location of the golf course at which its operated.

He also touched on some of the benefits of GPS spraying such as avoiding unnecessary overlap, the easy programing of different coverage areas (i.e. greens, tees, approaches, etc), and how sprayers can save the location when the tank needs to be refilled. In conclusion Mr. Etten talked about the savings and risk minimization associated with each of these points.

The next presentation was about the chapters BMP's and was given by WGCSA President and Superintendent of Maple Bluff Country Club ,Josh LePine. It was mainly focused on what BMP's are, why they should be implemented, and a timeline as to when we should expect Wisconsin's BMP's to

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WGCSA President Josh Lepine gave an update on the Chapter BMP (Best Management Practices) policy that the chapter is working on with guidance from our UW Professors, State Agencies and the industry.

be completed and published. If everything goes according to plan, we can expect the final WGCSA approved guide to BMPs to be published by late this fall.

Our third speaker was Jens Arneson, head of the WGCSA Assistant Superintendents Committee and Assistant Superintendent at Maple Bluff Country Club. The main aspects of this presentation were on how the role of assistant has changed over the years, as well as growing yourself professionally and personally en route to becoming a superintendent. A few of the main topics discussed were programs sponsored by the GCSAA such as the Assistant Superintendent Certification Series and the Excel Leadership Pro-



Joe Etten, Reinders, gave a look into the exciting world of GPS guided sprayers to reduce product usage and increase accuracy.



Jens Arneson, Chair of the Assistants Committee, spoke on the role of the assistant and how the Excel Leadership program helped him in his position at Maple Bluff Country Club.

ASSISTANT'S AVENUE

For the final presentation, we had the pleasure of hearing from David Brandenburg editor of *The Grass Roots* magazine and Superintendent at Rolling Meadows Golf Course. Throughout his presentation, Mr. Brandenburg talked about the history of the magazine, how special it is for us to have our own publication, and where the publication can be accessed. To cap everything off he spoke about the need our publication has for more authors and articles.

The last event of the day was a Q&A session with some newly promoted superintendents from throughout the state and sur-

rounding areas. The panel included Brian Chasensky, Adam Suelflow, Alex Benson-Crone, Craig Sondergaard, and Craig Smith. One of the most unique parts of this panel was that each of these men made the jump from assistant to superintendent within the past couple years, giving them fresh perspectives on what it was like to make the transition. This entire session was quite interesting as these men were able to touch on questions such as how they knew when they were ready, what they did to prepare, some of the main differences between lower and upper management positions and many more.



Left to Right Brian Chasensky, Shreacres, Lake Bluff, IL, Adam Suelflow, Wisconsin Club, Milwaukee, Alex Benson-Crone, Blue Mound G&CC, Wauwatosa, Craig Sondergaard, Racine CC, Racine and Craig Smith, Chicago Golf Club, Wheaton, IL

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Soils Questions From the Floor

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

The final talk at the 2020 WTA Research Day (January 5th, in Madison) was called "Ask the Turf Docs" session. The goal was to allow attendees to ask whatever was on their minds and facilitate some good discussion. But, we had so many great talks (and subsequent discussion) prior to the "Ask the Turf Docs" session that we ran out of time. However, the moderator, Jens Arneson and the WTA board had wisely generated a list of questions to kick start things. For this article, I'll attempt to answer some of those questions that pertained to golf turf.

Can you discuss topdressing sands vs sands being used for filling aeration holes? Should they always be the same? Is it ok to incorporate courser sands into holes?

This is a great question. And one that we don't have

a lot of research to draw upon for an answer. Water movement is strongly dependent on the sizes of the pores between the soil particles. When you choose a different sand, it will affect the flow of water. The primary purpose of an aeration channel is to speed water infiltration when there is excess water on the surface. They only do this effectively when they are open to the putting green surface. After they close up, they do very little to enhance water infiltration. Check out the screenshot (Figure 1) from the YouTube video called "Water movement in the soil". It shows water infiltrating much faster and deeper in the soil with the sand channel open to the surface on the right side of the screen than the one with a closed channel on the left side of the screen.

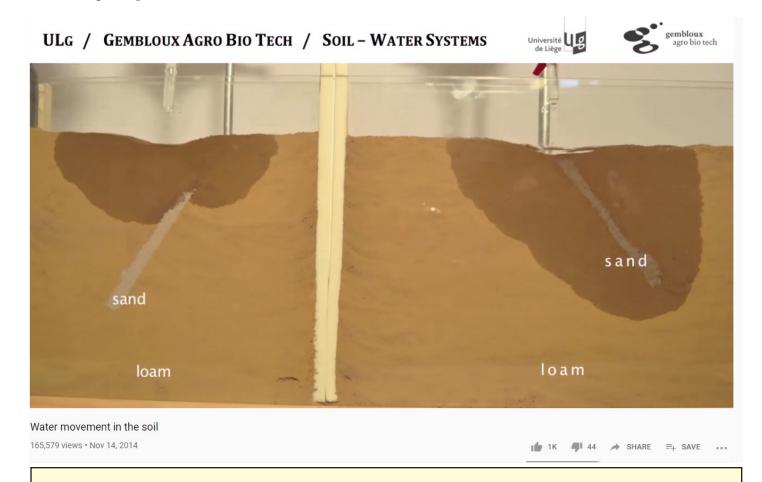


Figure 1. I bet you won't regret spending 16 minutes watching this video on soil water flow: https://www.youtube.com/watch?v=ego2FkuQwxc.

Root zone sand should have a wide variation of sand sizes for stability. When most of the particle sizes are similar, the sand particles can't compact as well as when you have a mix of larger and smaller sand sizes. The most common way to evaluate the gradation of the sand is the coefficient of uniformity. This is a calculation (that I won't get into here) on particle size where a higher number means there is a wider range of particle sizes than a lower number. The new USGA recommends that sands should have a CU of 2 to 3.5. So if your root zone has poor stability because of a low CU, filling aeration holes with a sand with a higher CU may increase the root zone stability.

Despite the recent research results coming out of Rutgers that says no ill effects have been observed while topdressing with sands finer than the original mix, I still think it is important to try to match your topdressing sand size with your root zone size to prevent possible long term issues associated with layering. I'm not too concerned with the vertical layering that filling holes with a different sized sand would create. That said, this is an area where more work is needed.

What are some ways to help release nutrients tied up in a heavy clay soil?

I hear this a lot regarding phosphorus, but for other nutrients too. Here's a typical statement: "The soil test says P is high, but it's tied up by the calcium in my soil, so I need to add more". Incorrect. No. Wrong. If your grass is purple, then you need to add phosphorus fertilizer. If your grass is green, then the phosphorus availability is meeting plant demand. Keeping

pH near or below 7 will maximize the availability of the greatest number of nutrients, but some nutrients are more available at high pH (calcium and magnesium) and some are more available at low pH (iron). The fact is that nutrient deficiencies (other than N) are exceedingly rare in turf, and it's not something you should worry about. If you suspect a nutrient deficiency, let me know so I can take a look and diagnosis it. I'm running short of examples for presentations on nutrient availability.

Can you discuss Humates and their benefits or negatives in the soil profile?

Humates are a naturally occurring class of small organic molecules in the soil. There are many humic and humatebased products on the market. The research (done by me, Dr. Kussow, and researchers around the US) mostly says application of humates can result in minor improvements to turf quality in sands with low organic matter. The benefits of humic acid products to other soils (normal organic matter levels) are not clear or consistent. One thing that perplexes me is how golf course superintendents get excited when a product that does not contain nitrogen gives a response that looks like a nitrogen response. These slight improvements in turf quality that I've seen from humates can easily be obtained by increasing the N rate by 0.1 lbs/1000 square feet. If you aren't happy with your color, growth, or quality, skip the biostimulants and add a bit more N to the tank the next time you make an application.





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What is Best management practice for managing organic matter accumulation without aggressive cultural practices? What are the effects of products like Worm Power and Bio SI?

The best practice for controlling organic matter that does not involve sand is to decrease your N rate. Think of organic matter as the balance of your bank account. Fertilizer is income to the bank, and clipping removal is spending. Over time, if your spending exceeds your income, your balance will decrease. There is not enough evidence that chemical applications can make a difference in soil organic matter levels. It is possible, but not something that I can recommend at this time.

What is the future of turf research?

Well, I certainly can't speak for all the aspects of turf science. But from my corner of it, I think data-based decisions will be a big part of the future. It's really not all that new. It probably started in the 1920s with soil testing. These days, in addition to soil testing, you probably use weather data to generate dollar spot prediction models and schedule PGR apps. Some superintendents are using growth models to guide N fertilization (we are working on a growth model ourselves). At some courses, drones are collecting reflectance data that is being used to fine tune irrigation zones and identify spots that need more nitrogen. All of this will continue to make your operation more efficient, and more and more technology will creep into your operation. Courses that aren't using these data-driven methods now, will wonder how they got by without them twenty years from now. Technology is great, but it is only useful when there is good research to interpret the numbers. That's my job security – helping you understand the numbers to make your operation more efficient.

Can you discuss the new turf educational opportunities available to the industry? Specifically the Great Lakes School of Turfgrass Science, GreenKeeper University and UW's Farm and Industry Short Course?

Let's start with the online opportunities. The formerly inperson week long Wisconsin/Minnesota short course that was started by Dr. Frank Rossi in the 1990s typically had ~ 30 students. The goal of that program was to serve as a refresher for experienced industry professionals and be an entry point into turfgrass education for people lacking a formal education in the field. However, enrollment fizzled out circa 2012 for reasons unknown. In response, Dr. Brian Horgan, Sam Bauer, and I moved that to an online format and renamed it as the Great Lakes School of Turfgrass Science (GLSTS). We invited turfgrass educators from all over the northern US to teach in the program on their area of expertise. It runs 12 weeks and each week covers a new topic. Students participate in live online lectures or watch

a recording of the lecture at their leisure. That program is going strong in its eighth year, and averages 75 students annually. While people from Wisconsin and Minnesota make up a strong core of the enrollment, we draw students from all over the world. Many of the GLSTS alumni have asked about additional, more advanced online learning opportunities, so we developed GreenKeeper University (GKU) this year to fill that need. The GLSTS and GKU represent an avenue for people to get a good, affordable turfgrass education online. They don't provide a credential (associates, or B.S., etc.), but they do expose students to the information that will help them grow as professionals and become better turfgrass managers.

Now on to the in-person instructional opportunities. The educational landscape has changed since I started at UW-Madison in 2006. Our formerly robust 4-year degree program has seen drastically lower enrollment. I see this as a result of the rising costs of education, and floundering job prospects in the industry. However, I feel we have reached a turning point, and I am seeing more and better opportunities for college educated turfgrass managers. However, the four-year degree is still a limiting option for many. To that end, we have recently introduced one- and two-year certificates in turfgrass management as part of the UW's Farm and Industry Short Course which runs from October -March. These certificates provide high quality, face-to-face instruction for an affordable cost. More information about the turfgrass science options at UW-Madison can be found at www.turf.wisc.edu.



Can you discuss Silicon use on golf turf? Rigidity, turgidity and general stress tolerance? Does research back up the claims?

I haven't done any work with silicon products. However, after reviewing of the work done by others in this field, I conclude that these products can reduce the severity of certain diseases, including dollar spot (but not nearly to the degree that iron sulfate can). The commonly held belief that they improve wear tolerance is only weakly supported by data, and there is no good evidence that silicon products can speed up your greens.

Many products now contain various L Amino Acids. Does research back up the claims of chlorophyll production, energy production and anti-stress compounds?

The theory behind this makes sense. Plants take up nitrogen as ammonium and nitrate and eventually convert those to amino acids which are used like building blocks to assemble proteins. Converting nitrate and ammonium to amino acids requires energy, so what if we supplied the plant with amino acids directly? There are certain barriers

that need to be overcome. First, plants haven't evolved the ability to assimilate amino acids directly, so you have to be able to get them into the plant. If you don't, then soil microbes will convert the applied amino acids to ammonium and nitrate and you are back at the starting gate. Second, there are about 20 different amino acids. The plant requires these in different amounts. If you don't supply the correct amount, then the plant will have to disassemble them and start over.

All that said, there is some evidence that applying amino acids can benefit bentgrass. Dr. Isaac Mertz recently completed his Ph.D. at Iowa State under Dr. Nick Christians studying amino acid applications to bentgrass. He found that applying amino acids of a particular type and a particular ratio along with urea could increase bentgrass density and tissue N content compared to urea alone. The forms and ratios of amino acids make a difference, so make sure that the amino acids you are using are validated by research data. Here is a link to Dr. Mertz's research article on amino acids and bentgrass growth: https://journals.ashs.org/horttech/view/journals/horttech/29/6/article-p833.xml

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EDITORIAL

Mental Health

By David Brandenburg, Editor, The Grass Roots

I will start by saying I am not a mental health expert, but I follow industry trends and stories and would like to think after 30 years in the golf business I have learned some things about people. I will also emphatically say if you think you need help and need to talk to someone do it. You have a lot of options, a family member, friends, a pastor, a professional or if needed the suicide helpline at 1-800-273-8255. The helpline is monitored 24/7 for free, confidential support.

The American Foundation for Suicide Prevention estimates that suicide is the 10th leading cause of death in the United States. In 2017, the foundation estimates 47,173 Americans died by suicide, and there were 1.4 million attempts, though the numbers might well be under-reported. In simple terms, a lot of us need help at times.

Mental health has been a popular issue on social media, other golf turf publications and even a story in *Golf Digest* by Ron Whiten in the September 2019 issue titled "The Growing and Surprising Mental-Health Challenge Facing Golf Superintendents." It is a interesting read and I encourage you to look it up.

The story highlights the challenges of five, seemingly successful and normal golf course superintendents. I say normal and I mean normal not just in the golf business but normal in life. Everyday average people.

Normal is having feelings of stress, anxiety or even depression. Different people deal with these feelings in different ways. For some people stress is a motivator, for others a thrill. For some it is a short term annoyance and for others it is a weight around their neck that can lead to anxiety, depression and thoughts of suicide.

For those that may want to seek additional help to cope with lifes stresses, you are not alone, nor should you be ashamed, worried or think there is something is wrong with you.

Again, I am not an expert, but I can say find help. That help can be talking, finding a hobby, or for many in our population they need an anxiety or anti-depressant medication to help their minds and bodies cope with all that life gives us.

Our industry friend Pat Jones just finished a long career as Editor of *Golf Course Industry* magazine and in his column titled "Penultimate" (Meaning next to last as it was his second from last column), Pat discussed the good things he has seen in his 15 years with Golf Course Industry including he was glad there is more attention being paid to mental health.

He then, perhaps unfortunately, went on to say the anxiety we feel as golf course superintendents is self induced and being a superintendent is not the most stressful occupation



in the world.

Jones suggested we bring it on ourselves with "This whole notion that turf heads are a society of mad monks who live and breathe every moment to produce perfect conditions needs to go away. Passion is great. Obsession? Not so much."

Fortunately he followed that up by saying "Here's my advice: if you feel overwhelmed, talk to someone, go for a walk or workout, try some mindfulness, get some anti-depressant medication ... DO SOMETHING instead of just bemoaning how tough it is."

But then he took a step back and upset many by saying "Also, the idea that an article in Golf Digest somehow validates everything is bullshit. I love and respect Ron Whitten, but that piece did more harm than good."

Pat had left is editors job at Golf Course Industry to join Harrells as their Customer Experience Director and in fact had started the Harrells job months before this column was published after turning over his reigns as day to day editor to Guy Cipriano while continuing his monthly "Parting Shots" column for the rest of 2019 as "Editor in Large".

Shortly after the column came out, Jones was no longer the Customer Experience Director at Harrells and although a public announcement was not made it was widely suspected that column had to do with his departure from Harrells. In my opinion, I may have said some of the same things as Pat but would have chosen a different way to say it. I was doubtful his column led to his dismissal at Harrells. After his dismissal I reached out to Pat, he responded and encouraged me to share my original email to him with all of you. In our correspondence I found out his column did in fact cause his dismissal due to negative feedback.

Again, I am not an expert in mental health outside of knowing a lot of people need help and receive help in many different ways. If you think you need help, ask for it from a friend, family member, pastor or doctor. Do not be ashamed.

EDITORIAL

My original email to Pat Jones in response to his dissmissal from Harrells and his "Penultimate" column in Golf Course Industry.

Pat,

Good luck in your job search. I am sure you will find something soon given your iconic stature in the golf industry and your talents working with people.

On another topic as I read your article "Penultimate" I had to agree that it is good more attention is being paid to mental health so those who are struggling know they are not alone. I have a gift of living and forgetting and do not dwell on past negatives but others are not so gifted and they need help.

I also agree this is not the most stressful occupation in the world. Police, Fire, First Responders, Doctors, Our Military and others have more stressful and more important positions. I will say we do have unique positions that easily become 24/7 jobs that take over our lives. We are judged by todays conditions, todays weather and todays golfers experience. You become friends with your customers, you play golf with them, they become like a second family. But when mother nature or budgets or employee challenges throw you a curve ball things change. I will relate this story to you.

Steve Spears was the 17 year superintendent of St. Germain Golf Course in Northern Wisconsin where in good winters they deal with feet of snow on unfrozen ground and in bad years ice covered turf. Steve and I were presidents of our respective chapters around the same time so I got to know him a little bit.

In spring of 2012 he related to me to me the challenges of the year before with wide spread ice damage, cold spring, no growth until Memorial day. He explained to me at a conference break how golfers he considered his closest friends avoided him and they wouldn't make eye contact. They didn't complain to him about course conditions but they treated him like a leper. He explained how horrible he felt to be turned on by his community and how he would not wish that on anyone. Our conversation time was short and I offered some simple consoling words and we parted ways. In spring of 2013 facing the same ice damage on a low budget course with a 4 to 5 month growing season he took his own life, his superintendent friends said he just couldn't go through it again. In that 10 minute break could I have said something profound to change Steve's

I am disappointed Harrells fired Pat for his column, especially given the status he has in the industry and the fact he could have apologized and restated his points in his next column.

I still agree with Pat that being a golf course superintendent is not the most stressful occupation but no doubt about it, it is stressful.

It doesn't matter if you're a teacher, a policeman or a service member serving overseas, the take home point is we all have stress. Many "normal" people struggle with that stress and in turn suffer from anxiety and depression. What matters is we get help for ourselves and we way of thinking? I doubt it, but I wish I had.

I know my career is my life. I am okay with that. I also know that our customers are our customers, they talk to me because I am here, they are not my friends, they are my acquaintances. Some like me, some don't, that's how it works. I provide a service to them by providing a product. When I am gone someone else will take my place.

Back to your article, It is not the most stressful, but it is stressful. A little stupid when you consider our jobs, our livelihoods rely on us keeping grass alive and healthy in unhealthy environments. Our main challenge is we cannot hide our errors or problems from the customer. One broken sprinkler out of 1,000 and half a green is looking bad, everyone sees it, everyone notices it. One stuck sprinkler out of 1,000 and customers that day complain of overwatering. A mower has a hydraulic leak and leaves streaks down the turf, every customer sees it and is disappointed by it.

I hear their conversations in the golf shop, at the bar, in the locker room, it's not pretty. People are dicks sometimes. Not just golfers but people everywhere. I do not take what they say personal.

We have put unrealistic expectations on ourselves but so has the game in general. XYZ Country Club has the fastest greens, newest carts, firmest fairways, softest tees, perfect bunkers, shiny carts, invisible staff, bacon on their burgers etc.etc., why can't we?

No club or golfer wants less, they all want more and expect us to deliver more. The problem is we run out of more. In my first year my current boss said "The people you do the most for, like you the least. Because one day you cannot do anymore and then they are disappointed." That is a true statement but we still do more when we can, and explain why we cannot when we cannot.

I know you upset a few people by saying the Golf Digest article did more harm than good. I can't say one way or another if it harmed us. In hindsight if our profession was going to get that many pages in Golf Digest I would have highlighted what goes into producing a golf course along with the challenges golf courses face and a mention of the stress it puts on staff and their families. I agree, if you need help, get help, if you don't like your job, get a new one, if you don't like your career, start a new one.

I look forward to your last column of love and wish you the best of luck.

offer help to those we see struggling. There is not a week that goes by that I don't think of Steve Spears and wish I could have helped him. I wonder how his family is, and how they are coping 7 years later.

No problem is too big to get help for. Some of us simply need to take a minute and breath while others need serious professional help. No matter where you fall on the stress, anxiety or depression scale, remember you are not alone and you are pretty normal. If you feel overwhelmed, ask for help. Ask for help from whomever you want, just ask for help and remember it is a normal thing to do.

MUSINGS

Bottomline Communication

By Jake Schneider, Seasonal Worker, Trondeheim Golfklubb, Norway

Twas struggling a bit to come up with La topic for this issue when inspiration struck thanks (?) to a home contractor who seems to have lost interest in taking our money. Melissa and I met with said individual when we were back in Madison over the holidays to discuss a fair amount of remodeling that we were hoping to have completed on our newly-purchased home prior to moving back to the States. While I fully understand that the logistics of such work might scare off some potential contractors, the initial meeting went well, and we were told that more information about the design and estimating process would follow. But, a few months and several messages later, nothing. Given my love of instant results, I don't typically respond well to such interactions. A few months ago, we were having similar issues with our financial advisor, but after a come-to-Jesus discussion, he has been much more prompt in his responses.

"Jake, how do these boring stories about your first-world problem have any relation to golf course maintenance?", you might be asking. Well, I guess that it got me thinking about the evolution of customer service as it relates to being a golf course superintendent. While my relative youth (which seems to be increasingly invaded by wrinkles and gray hair) doesn't offer great perspective, I strongly hypothesize that the role of the superintendent as a customer-facing representative has greatly increased especially over the last 20 years. While exceptions certainly exist and there are undoubtedly anti-social reasons why some people choose to be out on the course and not behind a pro shop desk, most greenkeepers no longer have the luxury of anonymity.

When I started my role as assistant

"Jake, how do these boring stories about your first-world problem have any relation to golf course maintenance?", you might be asking. Well, I guess that it got me thinking about the evolution of customer service as it relates to being a golf course superintendent.

superintendent at Blackhawk CC, I was given the dubious honor of formulating club communications. You may have heard of guy who had this job before me. His name was Monroe Miller, and he edited this very magazine for a few hundred years and won a handful of awards along the way. Safe to say, he was competent in intraclub communications, too, and could write a mean newsletter article and give a helluva speech. But, due to changing technology, things changed rather quickly after Monroe retired. Added to the mix were e-blasts and blog posts, and in more recent years, an increasing number of superintendents have started using Facebook, Instagram, and Twitter to reach their clientele.

Although it seems as if the popularity of blogs has waned, the Blackhawk membership enjoyed learning about the daily practices and decisions that were being made regarding course maintenance. The blog was a terrific vehicle to inform them about the intricacies of managing golfing surfaces and to demonstrate competence. In my opinion, educating the clientele about the turf-related happenings both engaged them and minimized second-guessing. Such, I suppose is the result of clear communication in most aspects of life.

After my time at Blackhawk was over and I reluctantly started being

more involved in the snow operations at The Bruce Company, we were constantly inundated with customer concerns and questions before, during, and after removal events. It was maddening. Shortly thereafter, we implemented a system that allowed us to send an e-blast in which we would include information about both the forecast and our action plans. Updates were then sent as the weather invariably changed. Once we started sending these preemptive messages, complaints plummeted even though our on-the-ground services remained unchanged, and we started receiving a lot of thank-you-for-the-information replies. It really was an astonishingly easy and cheap improvement.

Proactive and responsive communication can much more easily help to overcome performance deficiencies not only in terms of business, but it can also create happier employees which, in turn, is usually good for business. More than ever, people value and have largely come to expect quick responses, and in my opinion, it's the manager's responsibility to both adapt and to set realistic expectations. So, as the 2020 golf season gets underway, it might be worth evaluating your communication practices; changing them just might make your life a little bit easier.

Laughter On The Links

Wife: You spend too much time thinking about golf! Do you even remember the day we got married?

Husband: Of course I do! It was the same day I sank that 45-foot putt.







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NOTES FROM THE NOER

THE WTA, WHO?

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

The Wisconsin Turfgrass Association began with nine dedicated turf managers realizing that to solve local turf problems, research had to be done locally. The year was 1981 and the primary goal was to fund research at the University of Wisconsin-Madison to study turfgrass problems that were plaguing Wisconsin golf courses, sod farms, cemeteries, commercial grounds, and home lawns. The second goal was to disseminate research findings to turfgrass professionals in order to help them manage healthier turfgrass and care for the environment. Many of the problems investigated in those early years continue to be investigated today. Many new problems join the list because turfgrass management is constantly changing.

Why should you join the Wisconsin Turfgrass Association? Your \$150.00 annual membership dues go to sup-

Why should you join the Wisconsin Turfgrass Association? Your \$150.00 annual membership dues go to support turf research and education in Wisconsin.

port turf research and education in Wisconsin. This helps all turf managers keep on top of the best ways to perform their jobs more efficiently and successfully. WTA support includes constructing the O.J. Noer Turfgrass Research and Education Facility and establishing four Distinguished Graduate Fellowships. We also improved fungicide recommendations, analyzed nutrient runoff data, discovered better ways to grow turf in the shade, and investigated many new weed management strategies. There is much more research that the WTA funds each year. So become a member today and know that

you are supporting all turf managers through this great organization. Some studies conducted with WTA funding include:

- Comparison between turfgrass and rain gardens to manage urban runoff.
- Assessment of different inorganic amendments to improve putting green construction mixtures.
- Improvement of soil testing and soil test calibration for growing turf in Wisconsin.
- Determination of optimum timing and rate for late fall fertilization, from both an in-the-field and a growth chamber design.
- Turfgrass irrigation conservation through rooftop harvesting of precipitation and subsurface watering.
- Dr. Wayne Kussow's work on nutrient loss in runoff from lawns was important for helping to control bad legislation. While laws and regulations eventually came, they are more science-based and reasonable because of those efforts.
- The growing degree day modeling for PGR application has revolutionized the way that people use them and led to better turfgrass health.
- Our potassium and phosphorus soil test calibration work has led to decreased use of those nutrients and aside from the cost savings, has allowed superintendents to keep bentgrass healthy while discouraging the invasion of annual bluegrass.
- The grass evaluation data that is collected every year ensures turf managers have access to the best grass species and cultivars for our region.



NOTES FROM THE NOER

- UW has been a world leader in snow mold research since the days of Dr. Gayle Worf. This includes product testing, fungicide degradation, pathogen biology, etc. I would argue more research has been done on turfgrass snow molds at UW than any other University on the planet.
- The Turfgrass Diagnostic Lab (TDL) is the premier turf diagnostic facility in the Midwest and one of only 2 turf-specific diagnostic labs in the country.
- UW has one of the largest fungicide evaluation programs in the country, providing up-to-date, region specific information on new products immediately at the hands of turfgrass managers.
- The Smith Kerns dollar spot model has been adopted for dollar spot management all over the world. We're actively working on additional disease predictive models for various snow mold applications.

- Dr. Gayle Worf was essential in identifying the true causes of 'Fusarium patch' in the 70's and 80's and figuring out that it was actually being caused by a root disease that was later named Necrotic Ring Spot. Once we knew what was actually causing the issue, we could do something about it.
- Currently we have multiple projects investigating the turfgrass microbiome, with great potential for improved control of turfgrass diseases and increased soil health with a greater understanding of the microbes associated with turf.
- Helped fund the new storage facility at the O.J. Noer Facility.

In this age of computerization, I fear that when the WTA went to an email reminder system for dues submission, some of these emails were lost in the inbox. You know the story:

"I need to do this." Late fall or early January

The next reminder, "Oh yeah I have

not done this"

The season begins in earnest and the WTA Membership slides off the schedule and the WTA loses a member. This year the WTA will be sending you multiple letters in an effort to return the WTA membership to an acceptable level. Please take a few minutes to renew, rejoin or become a WTA member. Be a member to show your support of the work done by Dr. Koch, Dr. Soldat, Kurt Hockemeyer, their staff and graduate students. Remember the Doc's are always there when you need them!

It is easy to join and you can pay online with a credit card. It is this easy, go to www.wisconsinturfgrassassociation. org, click on the Members Only tab, drop down to the Renew Your Membership for 2020 and then complete the form. You will get a receipt of payment after you hit the submit tab.

Do not forget the Summer Field Day (July 21st), Fall Golf Classic (early October) and Winter Research Day (January 5, 2021).



Virus Changes the Golf World

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

I am sure no one could forecast what we are seeing as I write this on March 18, 2020. We have been through the swine flu, bird flu, SARS, and Ebola without much fuss or issue in the United States.

We were warned, articles were penned and stories read on the news about those pandemics but for the average person those items did not have the effect epidemics of old such as measles, polio and other flus had. For the most part the average American ignored these warnings and were no worse the wear for it. This time it is very different.

This Coronavirus or COVID-19 is reported to be dangerous especially for those with other health problems or just age. If the virus is allowed to spread rapidly our health system and hospitals would be overwhelmed as has happened in other countries.

We quickly went from simple warnings to a complete shutdown of schools, sports and churches. The new rule Monday was restaurants could only have 50 people or 50% of their capacity and the rule 24 hours later was no people at all in restaurants effectively ending all banquets and clubhouse activities.

Things are changing rapidly, and by the time this issue is printed and in your hands who knows what the rules and limitations on our lives may be. Could we see a complete shelter in place order such as Spain or San Francisco Bay? Yes we could.

"Social Distancing" as it is called, is being forced upon us for our own good. At this point it looks like this pandemic will easily go into May and perhaps beyond. For the golf business it will mean a loss of daily play, tournaments and outings.

If we have a choice between over-reacting or widespread serious illness and death most will take over-reacting but we are a population used to doing our own thing in our own time and we do not adapt well to interruptions in our daily lives.

In the meantime in states where golf is still allowed course maintenance staffs are pulling in ballwashers, coolers, rakes and even the flagpoles to reduce touch points and the possibility of spreading the virus between customers.

Staff members are working split shifts to keep numbers lower especially at check-in / check-out times and always use the same equipment to reduce cross contamination.

Carts are issued to each player and being sanitized with professional products or being eliminated entirely.

In the spirit of social distancing golfers are being spread out on the range to reduce exposure.

The keys we are trying to teach our golfers are:

- If your sick, stay home.
- Wash your hands frequently.
- Don't touch things.
- Don't touch your face.
- Use social distancing to protect yourself. Register for golf by phone and spread out in the clubhouse.
- We are in this together and can get through this together.

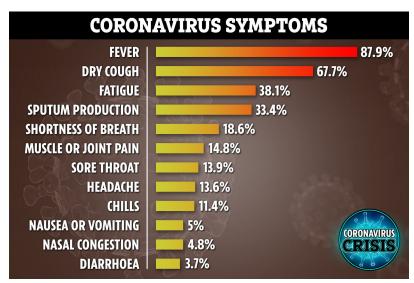




Left: Tim Jenkins, GCS at Cherry Creek in Michigan, is trying the plugged cup to keep golfers from having to touch the pole but still putt to a hole.

Bottom Left: The common symptoms of Coronavirus. But not everyone has symptoms at all and some are just carriers of the virus and give it to family, friends and coworkers.

Bottom Right: Jason Haines, GCS at Sunshine Coast G&CC in Roberts Creek, British Columbia, is trying to keep the cup above the soil to reduce the golfers touches with the pole.











We Need You!!!! At the recent Golf Industry Show, GCSAA had a nationwide picture of Grass Roots Ambassadors positions. As you can see from the right picture we can use a WGCSA or NGLGCSA to cover the relationship with our 3rd and 8th Congressional Seats.

District 3 covers the "mid-west" part of the state and is currently served by Ron Kind who was first elected in 1996.

District 8 covers the "mid-east" part of the state and is currently served by Mike Gallagher who was first elected in 1996.



CURRENT WI GRASS ROOTS AMBASSADORS

Senator Baldwin - Jon Canavan
Senator Johnson - Harrison Beal
Congressman Steil - (District 1) - Jeff Millies
Congressman Pocan - (District 2) - Jens Arneson
Congressman Kind - (District 3) - Vacant
Congresswomen Moore - (District 4) - Mike Bremmer
Congressman Sensenbrenner - District 5) - Patrick Reuteman
Congressman Grothman (District 6) - David Brandenburg
Congressman Duffy (District 7) - Todd Clendenning
Congressman Gallagher - (District 8) - Vacant

If you are interested in serving in one of the open positions or taking over a filled position please contact Chapter Manager Brett Grams.

The ambassadors create relationships with members of Congress and the Senate to become a source of information for the member and their staff's on golf course issues.

They also remind and inform the members of current issues and how they affect the golf industry. Current priority issues include WOTUS, H-2B, Preemption and Glyphosate.

Ambassadors do not need government experience and will be trained by GCSAA staff.



Above: Congratulations to Joe Kuta who recently retired after 33 years as the Certified Golf Course Superintendent at Hartford Country Club. Joe is a 40 year WGCSA member and is shown here when he hosted a monthly meeting in 1989.

Previously to Hartford CC Joe worked at Lake Windsor CC.

WGCSA Creed as penned by Bill Douglas, North Shore Country Club 1975.

We, the members of the Wisconsin State Superintendents Association, depend upon the unity, as well as the professionalism of our membership, to cultivate and maintain superior golf turf as well as golf atmosphere.

The knowledge that is gained through continued education and experience should be openly shared with mutual trust and camaraderie among fellow members.

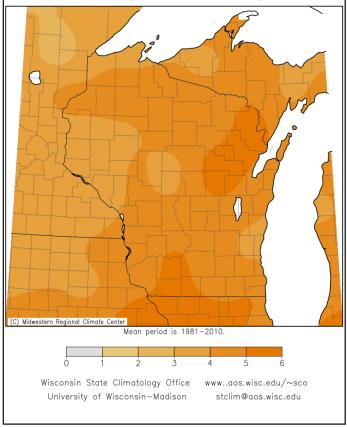
To strive for further and continued knowledge and excellence in all phases of golf course maintenance is our ambition. The proud legacy of our profession depends upon the pride and integrity which each individual takes within himself.



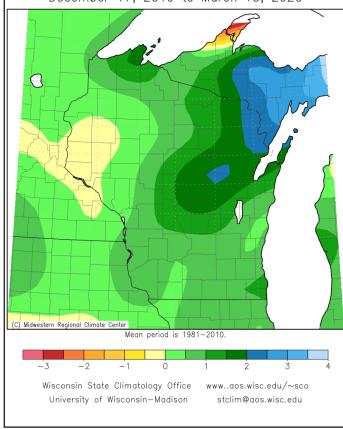
Congratulations also to Mike Rzadzki who took over for Joe Kuta at Hartford CC. Mike was previously the Golf Course Superintendent at Kettle Hills GC.



Average Temperature (°F): Departure from Mean December 17, 2019 to March 15, 2020



Accumulated Precipitation (in): Departure from Mean December 17, 2019 to March 15, 2020



The 90 day departure from mean temperatures and precipitation from the Wisconsin State Climatology Office show we had a warmer and wetter 90 day period throughout the state. Most turf mangers are hoping for a warmer and dryer next 90 days as we begin to open our golf courses for the 2020 season.

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Turfgrass Diagnostic Lab Update

A note from Paul and Kurt at the Turfgrass Diagnostic Lab:

We have been instructed by the university to work from home as much as possible over the next several weeks to help limit the spread of the Coronavirus. If you plan to submit a sample to the TDL over the next several weeks, please email Kurt Hockemeyer (hockemeyer@wisc. edu) or myself to let us know a sample will be coming. This is good practice at any time, but especially important now when we might not be at the lab every day.

The Noer Center also has a new address after the road construction so send samples to 2502 S. Pleasant View Rd., Verona, WI 53593.

Field Day Schedule

8:00am - 9:00 Attendee Registration/Trade Show open

9:00 – 9:30 Welcome Session & Honored Guest

9:30 - 11:00 Lawn Care & General Turf Tours

11:00 - 1:30 Trade Show Only time

12:00 - 1:15 Lunch

1:30 - 3:00 Golf Turf Tours

Lawn Care & General Turf 9:30 - 11:00

- · Summer Seeding Solutions
- More Glyphostae alternatives
- · Robotic Mowers for Sports fields and himelawns
- · Plant Growth Regulators for sports turf
- · Sodding Solutons, Prep and Maintaining
- · And More

Golf Turf 1:30 - 3:00

- · New Products for dollar spot
- · Robotic Mowers for golf course fairways
- · Iron sulfate for dollar spot control
- · PGR affects on putting green traffic
- Wisconsin Golf Course Resource Survey update
- · New putting green fertilization strategies



O.J. Noer Turfgrass Facility Directions 2502 S. Pleasant View Rd Verona WI 53593 phone 608-845-6536

From Madison Beltline US-12 & 18
Take Mineral Point Road exit
Go West on Mineral Point Road 0.7 mile
to Pleasant View Road roundabout
Exit roundabout going South on Pleasant View Rd
Continue 2.5 miles to O.J. Noer Facility

Registration Includes



- *Donuts & coffee in the morning
- *Wisconsin style lunch
- *Morning and afternoon turf education
- *Become a brand new WTA member & get free admission to Field Day.

Contact Audra for details at audra.anderson@wisc.edu or 608-845-6536.

cut here and return registration form with payment

Wisconsin Turfgrass Association

Summer Field Day, Tuesday, July 21st, 2020

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