

The GRASS ROOTS

AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

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ABOUT THE COVER

Jeff Barlow, The 46th President of The Wisconsin Golf Course Superintendents Association.

Does thou love life? Then do not squander time; for that's the stuff life is made of.
By American Ben Franklin,
1706-1790

THE GRASS ROOTS

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It's Time To Step Outside The Box

By Jeff Barlow, Certified Golf Course Superintendent, Waupaca Country Club




Wow, it seems only a short time ago I recall a phone call on my way into work from Brian Zimmerman. I had met Brian when we were both students at UW Madison, and I was wondering why he would be calling me at this time. As we spoke a little bit, he asked if I would consider joining the WGCSA board. As I tried to come up with a number of excuses and explain to him it wasn't for me - I didn't have enough time, hunting, coaching, and kids - he somehow was able to convince me to give it a try. After hanging up the phone, I'm thinking to myself, "what am I getting into?". Well, I have lasted long enough to be elected as President of WGCSA. Thank you everyone! It truly has been a rewarding experience to be a part of a strong, close knit association that continues to move forward. The Board works well together, and continues to work hard on behalf of its members. Having Brett Grams as Chapter Manager for a numbers of years has maintained continuity, when it seems Board members continue to change. I feel we are a strong and diversified board and the association will be in good hands for the foreseeable future.

Being a part of the WGCSA Board has propelled me even further outside the box, as my experience drove me to pursue a position in our local town government. I decide to run for Town Supervisor in 2017 but lost by only a few votes. After all the campaigning and hard work it was deflating. As it turns out, one month into the new term there was a resignation and I was appointed to fill the remainder of the term. I am cur-

rently seeking my third term and am running unopposed. Although I'm uncertain whether I'm doing a good job or the fact nobody wants to do it (Laughing). There is quite the contrast being a part of both boards. There is much more research, fact finding, statutes, ordinances, laws, meetings and the amount people to deal with in town government. With that said, it truly has been rewarding helping people and learning how government works.

The WGCSA Board is currently planning for 2021. The symposium committee has met and is in the process of working to once again offer this great educational opportunity in the fall. The Golf and Arrangements committee continue to work and finalize monthly events and our Class C and EM committees look to continue to offer educational opportunities as well. Our BMP has been completed and uploaded to GCSAA. A big Thank you to Josh LePine, all committee and stakeholders involved with this project. This was no small task. Furthermore, the committee continues to work on a BMP website.

As 2021 begins, I look forward to leading and working with WGCSA Board members, WGCSA Members, Professors, industry partners and other allied associations keeping golf heading in the right direction. I encourage every one of you to participate in the events that are being offered. I encourage everyone to promote the WGCSA in 2021, for all the efforts put forth in 2020 and perhaps we can sign up new members/courses.

As I conclude my first President's Message, I encourage everyone to step outside the box, you might just find something else you like! 

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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New GCSAA App

By **Shane Conroy**, Great Lakes Regional Representative, GCSAA



I would like to remind all off you about GCSAA's new mobile app, GCSAA Now. Along with providing GCSAA news and information, the app allows you to download documents, interact with fellow members, view events taking place in your area, as well as update your membership info to

name a few.

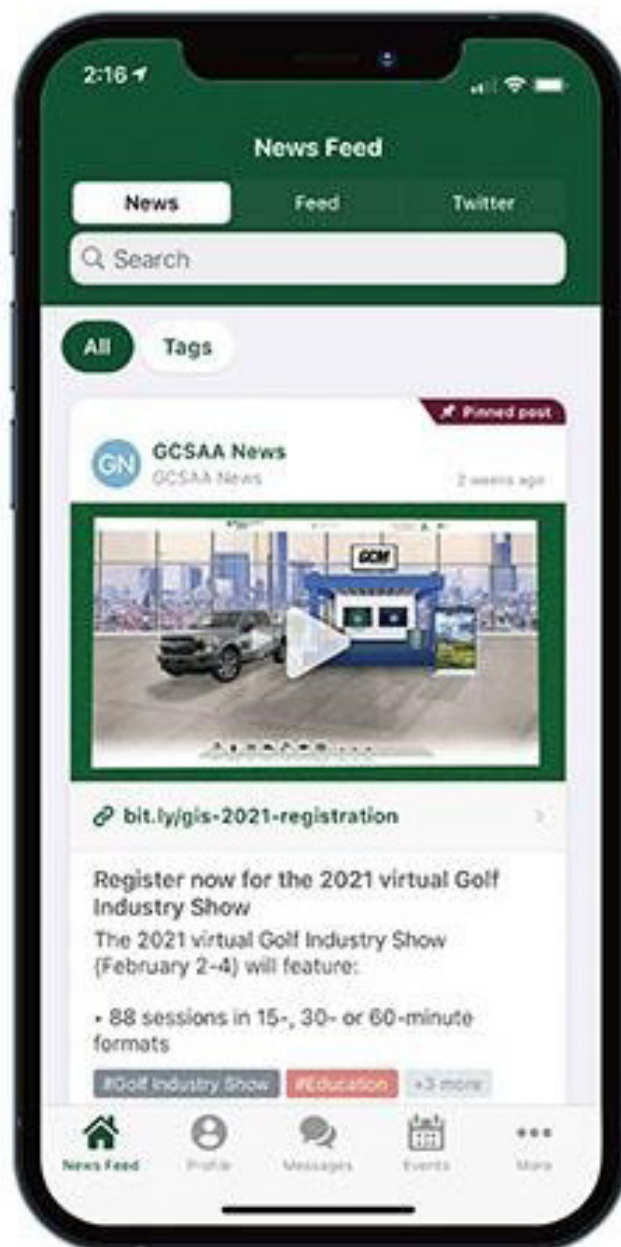
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- Have easy access to membership documents and other information in the Resources section.

Once you download the app, use your gcsaa.org credentials to log in.

I wish you all the best as we head into another season and I look forward to seeing you at your course or a WGCSA event soon!

Shane can be reached at 800-472-7878 or sconroy@gcsaa.org.



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2022 Event Schedule!

Mar 2 - (Wednesday) WGCSA Spring Business Meeting - South Hills CC, Fond du Lac, WI
Mar 4 - (Thursday) WGCSA Equipment Managers Seminar - Bristlecone Pines, Hartland, WI
April 28 - (Wednesday) WPGA/WGCSA Super Pro - Legends at Bristlecone, Hartland, WI
May 18 - (Wednesday) WGCSA Brewer Game and Tailgate - American Family Field, Milwaukee, WI
June 20 - (Monday) WGCSA June Meeting, Wisconsin Club - Milwaukee, WI
Aug 2 - (Tuesday) WTA Summer Field Day, OJ Noer Research Center - Madison, WI
Aug 22 - (Monday) Member Guest Meeting, South Hills CC - Fond du Lac, WI
Sep 12 - (Monday) Wee One Fundraiser - Pine Hills CC - Sheboygan, WI
Oct - (TBD) WTA Golf Classic - Oneida Golf & CC, Green Bay, WI
Dec 3 - (Sat) Couples/Guest Evening - Appleton, WI
January 11-12, 2022 56th Golf Turf Symposium
Feb 4-9 2023 - GCSAA Conference and Show - Orange County Convention Center, Orlando, FL
Jan 29-Feb 1 2024 - GCSAA Conference and Show - Phoenix Convention Center
TBD -
Assistants Seminar

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

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Chasing a New Mark

By Jake Schneider, Seasonal Worker, Trondeheim Golfklubb, Norway



From what I can remember, I never had any significant issues with my parents during my formative years.

While I wasn't a huge fan of the midnight curfew when my other friends were unburdened by the same constraint, they basically always seemed like reasonable adults who loved and supported me endlessly, and while the curfew would no longer be an issue because 10 pm is a late bedtime these days, it's pretty obvious that my mom and dad would still do just about anything for the 37-year-old baby of the family. As the parental lottery goes, it's become more obvious as I've grown older that I hit the jackpot.

"I spent a lot of time hanging around my dad on the farm especially during the summer months. Although I did have to help with stone picking and with calving chores, it was a pretty carefree existence."

Due, in part, to my mom returning to the workforce when I was near the kindergarten age, I spent a lot of time hanging around my dad on the farm especially during the summer months. Although I did have to help with stone picking and with calving chores, it was a pretty carefree existence. Playing with my cousins, managing the cat herd, selling sweet corn, and running errands with my old man made the days quite a bit cushier than

the average farm kid's life. Getting a new jackknife and a pack of Starbursts at Schomburg's Hardware Store during a trip to town was as close to nirvana as I could get back in the day.

Because of the size and structure of our family farm, my dad fortunately had more free time than your typical farmer, but that isn't saying a whole lot. He did somehow manage to find the time and energy to attend all of my extracurricular activities, was very involved in church organizations, and always enjoyed fishing. But, the family still worried that he needed to develop more hobbies for his retirement years. So, we bought him a starter set of golf clubs, and for about 10 years, they collected dust in the upstairs cedar closet.

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MUSINGS


Ever since he drove my 15-year-old self to my first job interview at North Shore Golf Club, my dad half-jokingly said that he was going to cut grass at a golf course when he retired. Like any self-respecting Midwestern male, he took great solace in mowing our yard, and I'm pretty sure that my mom thinks that he drives around with the blades disengaged half the time. Lo and behold not long after retiring, he put his words and passion into action and got a gig mowing fairways at Hickory Hills Country Club near Chilton. Coincidentally, his work partner ended up being Ralph Satzner who was a long-time technician for Horst Distributing, and between the prodding of Ralph and some of my dad's other friends, the golf clubs came out of the closet after a decade of hibernation.

Part of the reason that I think he was

a bit hesitant to take up the game is that his right wrist is fused as a result of falling from a silo when he was a young buck, but since getting started, he hasn't stopped and the wrist might give him some weird sort of advantage. That first summer, he generally played once per week, and in 2021, he's already up to three leagues per week along with still mowing fairways and helping to run the local St. Vinnie's Store. Needless to say, he's been doing just fine staying active in retirement, and he's also become a pretty good golfer much to both my delight and chagrin.

Although our respective rounds played have been trending in the opposite direction as I've played about 60 holes over the last two years (excuse number one), it's remarkable how quickly he has improved for guy just north of 70 years old who has a

fused wrist and a disintegrated rotator cuff. This past fall, we played 18 holes at Hickory Hills, and he legitimately beat me by a few strokes. Prior to the round, I thought that he may have been embellishing or using faulty math when he told me that he was regularly shooting in the high 40s to mid 50s, but that turned out to be wishful thinking for my own fragile ego.

Well, it's on, Mark! Determined to get my game back and beat my old man, I've been taking lessons at the indoor golf center in Trondheim this winter. Two months in and things are starting to slowly improve and become more consistent, but there is plenty of work ahead to ensure that I pummel the amazing man that I call dad upon my return to Wisconsin this June. We shouldn't have bought him new golf clubs this Christmas... 

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Talent and Passion and Finding the Sweet Spot

By Tony Rzadzki

Editors Note: Tony Rzadzki is a former WGCSA Member and contributor to The Grass Roots, who now spends his time as a seasonal member of the staff at The Bull. He is father to Michael Rzadzki, Superintendent at Hartford Golf Club.

Many of you may not know me; it's been a while since I have written anything. I have been delightfully enjoying my semi-retirement. It has been twenty years since I moved to Sheboygan Falls and many things happen in that long of time. One thing that has recently happened to me was that 'still small voice' of God nudged me. He said, "you need to bring joy to others. Try to put a smile on every face that you encounter." I have always liked to write, and I try hard to listen to the Lord, so, here goes.

I have been leading a bible study about a book entitled, *Whisper...How to hear the voice of God*, by Mark Batterson. It is amazing that much of what he wrote goes hand in hand with many of the day to day decisions encountered during the long golf season. One of his thoughts has compelled me to share them (his

thoughts) with you. "Life is too short not to love what you do, so do what you love. The key is finding the place where gifts (talents) and desires (passion) overlap. God-given gifts are what we're best at. God ordained desires are what we're most passionate about. And the place where those gifts and desires overlap is the sweet spot."

Don't wait for people to be friendly, show them how.
Henry James.

I can state with almost absolute certainty, given the nature of our careers, that most of you have found that 'sweet spot'. I have found over the years this boundless passion in every Superintendent that I know. It is an awesome trait that I am not sure exists in any other occupation and I believe is a high hallmark of integrity, talent and passion that drives us to get up at 4am...and do it again and again for an entire season of golf. It does get overwhelming. But, from every course that I had the privilege to maintain, there was a neighbor, another Greenskeeper fighting like hell

just as I was, yet ever willing to help me out at the drop of a hat. Wow! In what other profession do you find this wonderful comradery?

I cut my teeth a long time ago in the very competitive market of Chicago at the Evanston Golf Club. The north shore private clubs were always vying for new members and it goes without saying, golf course standards were very, very high. But, as competitive as the clubs were trying to coerce new membership, all of the Greenskeepers were in the same boat trying to put out the best product possible given their situation and budget constraints provided. Living on the edge of green speed, height-of-cut, localized dry spot, poa checking out and late July humidity affected everyone at the same time. We all had many of the same problems, but the network of knowledge was unsurpassed...and... nothing you could ever obtain from a college textbook. Problems were varied but real, but timely and proven experiences managed day to day by very talented men faced these challenges... pursuing their passion. God, to some degree now...I miss those days.

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GUEST PERSPECTIVE

Once my Superintendent career was underway, I will never forget how easy and fortunate it was to call any one of the 'titans' of our industry at any time for any favor or advice. Danny Quast, Bruce Williams, Oscar Miles, Roger Stewart, Carl Hoppman or Mike Nass and many others were always there to lend a hand whenever needed.

In 1995, when I moved to Wisconsin and began growing in Bristlecone Pine, in less than a week Jim Shaw befriended me...just like that. Carl Grassl, DQ (again), Bruce Schweiger, David Swift, Wayne Otto, Mike Lee, Dennis Robinson and John Turner...all of them too, were always there. I think I talked to Bruce almost every day...for two years...twenty years ago. Thanks Bruce.

All of these men mentored me at one point or another during my Greenskeeper life. All of these men showed up, during the good times and the trying times. But the measure of a man is how well he succeeds...after he fails. When the chips were down all of these men and many others were there. They were generous, diligent and cheerful and very glad to help out.

I know that I am speaking to the crowd, for I know this warm friendship exists to this day. I just want you think about and remember your 'neighbor' especially in...can I say...these more daunting times given the past golf season. If last year's deluge of golfers raiding our greens is an indication of what we probably will endure this year...many of you will be stressed out. So when your phone rings and it's your neighbor, give him your ear and a few minutes. That breath of fresh air you may provide or your neighbor's steam venting can revive his passion to fight another day. And when you need that break from the madness...pick up the phone or take a day away



Mike and Tony Rzdzki at graduation!

from the course, but just know that someone nearby has your back and has probably experienced exactly what you are going through.

My first boss, mentor and true friend, Walter Fuchs Sr. taught and gave me the foundation of my career. I remember after completing my first week at Evanston that I knew what I was going to do with the rest of my life...and I am still doing it...over forty years later. He helped me develop my talent. I guess that became my passion.

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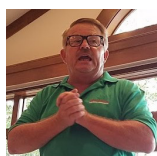
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Thank You Notes

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



The 2020 season came to the official end December 12th at the O.J. Noer Facility. It was our second snowfall but the wet, heavy 6.5 inches that has not melted. Due to Covid-19 and other issues, the O.J. Noer Facility entered November way behind on maintenance and projects from the Fall schedule. Although the complete Fall list of work did not get accomplished, the weather in November did cooperate enough so the majority of projects were buttoned up and a sigh of relief was let out as the snow fell.

As it was around the whole state, this past year was full of challenges at the O.J. Noer Facility. As I look back on 2020, I feel very good about the work that was completed and appearance of the O.J. Noer Facility for most of the

year.

Due to Covid-19 and other related issues the maintenance staff at the O.J. Noer Facility was on the low side. The Noer Facility employed only two summer staff members which were only allowed 20-25 hours per week, mid-May until mid-August. In a previous article I discussed the early departure of the O.J. Noer Facility summer staff and I was getting behind on the maintenance. Audra Anderson, who has been working remotely since March, offered to help. I was able to convince upper management to allow her to work one day per week on property and assist in mowing. Thankfully Mike Peters, my supervisor, was able to obtain approval. Those six hours per week made a huge difference. Without her help, our greens aerification, fairway verticutting and other Fall projects would not

have been completed.

The O.J. Noer Facility has always been able to count on many people and companies for its success. As the Covid-19 pandemic exploded in the Spring, John Jensen of Reinders called to assure me that they would again be lending the O.J. Noer Facility a Toro Greensmower and a Toro HD Workman with remote hydraulics to operate the trafficker for Dr. Soldat and his research. I cannot express our gratitude for these two pieces of equipment. At that time there was no way to predict that Reinders would step up again with a piece of equipment. In a conversation with John Jensen in late August, I mentioned my lack of labor for the Fall season. I explained to him I was having a major labor issue and I was falling behind in mowing and much more.

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NOTES FROM THE NOER

You hear this every year, but the O.J. Noer Facility is successful due to the generosity of others. I am sure I have forgotten someone and I apologize to them. The O.J. Noer Facility is your research facility and we appreciate any and all of your help.

A day later John called and said Reinders will send a Toro 5900, a 16-foot-wide mower to the O.J. Noer Facility for the Fall. This meant that the 62" John Deere Lawn tractor that was used all Summer, would be replaced with a much more efficient mower.

This arrival of the mower and Audra's extra work got the O.J. Noer Facility through the Fall season. FYI, once Audra was comfortable with the Toro 5900, she referred to it as her mower. She only allowed me to use it to mow in reverse to mulch leaves. If you have been here the Noer Facility does not have many leaves!

In talking with Mike Werth of Advanced Turf about the cancellation of the Am Fam Senior Golf Championship at University Ridge Golf Course, I asked him to price out a fairway fertilizer application. We discussed a few products and a decision was made. A few days later I was very surprised when Mike returned with my fairway fertilizer and donated the entire application. Thanks Mike and Advanced Turf!

Due to the nature of the research on putting greens the fertilizer program is normally urea. With the short staff issues, I reached out to Tony Grapsas from Jay-Mar in Plover. We talked about a few sprayable options and he offered to donate all the 20-0-0 liquid urea for the entire season. We made arrangements for me to pick it up from the plant in Plover. Due to Covid-19 and the University travel regulations, I was not allowed to leave the county. When I called Tony to fill him in on my predicament, he offered to ship all the product to the O.J. Noer Facility for free! Thank you, you saved the day!

Once again, the O.J. Noer Facility was in need of gen-

eral fertilizer. I reached out to E.C. Grow for some product. Joe Ernst and E.C Grow donated all the fertilizer I required for the general grounds. Thank you, Joe and E.C. Grow!


Now with no help, how was I going to spread this fertilizer? Mike Krupke and Insight FS came to the rescue with their application business. They applied all the fertilizer for us. Speedy, accurate and I never broke a sweat, all the better. Thank you, Mike and Insight FS!


In the Fall I received a call from Dave Berg at Reinders. He let me know they had broken bags of greens fertilizer in the warehouse. Dave said if I could use them, they would ship what they had to their Madison store. This fertilizer was very useful for our mid-October greens application. Reinders to the rescue one more time.

Phil Davidson and the crew at University Ridge continue to support the O.J. Noer Facility. Without Phil allowing me to borrow equipment, there are countless projects at the O.J. Noer Facility I would not be able to undertake or the projects would take too long to be completed.

The University department that oversees the running of the O.J. Noer Facility, is the Agricultural Research Stations (ARS). Most of my counterparts are growing corn, soybeans, livestock, vegetables, etc. The nearest station is the West Madison Ag Research Station (WMARS) on Mineral Point Road. If you have ever been at the O.J. Noer Facility, you have seen the huge TV tower to the north. That tower is on the WMARS property. Janet Hedtcke is my counterpart at WMARS and she is extremely helpful! They plow my snow, mow down my large no mow area, fix drainage in Schwab Creek, lend me trenchers, bring over real end loaders, the list could go on forever. The O.J. Noer Facility will be forever in her debt.

You hear this every year, but the O.J. Noer Facility is successful due to the generosity of others. I am sure I have forgotten someone and I apologize to them. The O.J. Noer Facility is your research facility and we appreciate any and all of your help.

Now on to 2021! If you or your property has a used piece of equipment that is in good shape and is not valued very high on trade, give me a call, maybe we could use it. The O.J. Noer Facility is not a massive property. The equipment you cannot rely on could be perfect for us. An example would be a fairway mower. We mow two acres three days a week, 6-7 months a year, for a total of less than 170 acres per year. If your mower mows 12 acres three times per week, your use over 3.5 months would be our entire year. This equipment, like me is old but hopefully not worthless yet! OK, that can be debated. As we navigate through 2021, it will bring its own challenges and changes like each year before it. The O.J. Noer Facility staff is looking forward to actually seeing many if you in person this year. 



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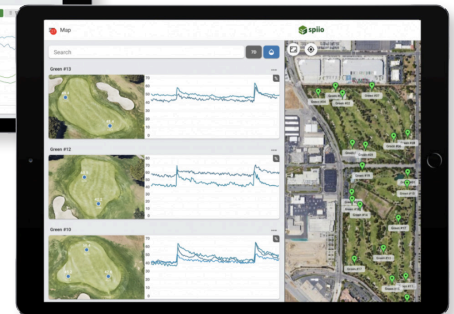
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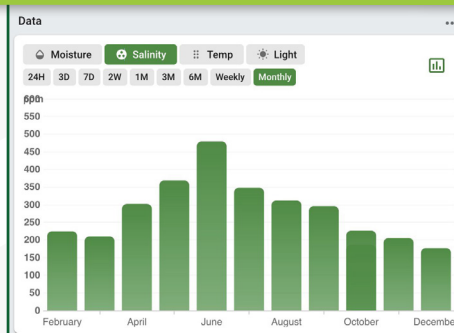
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Take a Moment to Reflect on Turfgrass Research

By Garrett Luck, Golf Course Superintendent, Hidden Glenn at Bentlydale Farms




I generally am not able to understand an issue unless I get my hands dirty and fully immerse myself in it. In fact I may not even give thought to a situation unless compelled. At work this is true whether it is identifying and solving an irrigation problem, helping to troubleshoot an electrical issue with a piece of equipment, or figuring out the best way to accomplish a renovation project. However once made aware of a topic, I need to devote time to review and process, before taking action. The same can be said in my time on the WSGCA Board and most recently as chairman of the Scholarship and Research Committee. Prior to holding this position, I was aware that turfgrass research was being conducted at the UW-Madison and led by two professors, Dr. Doug Soldat and Dr. Paul Koch, who are leaders in their respective fields. I had even been to a couple Field Days at the O.J. Noer Center and heard them speak, but I don't know that I really ever got my hands dirty or immersed myself in the importance of their work. That changed during our first Scholarship and Research Committee meeting.

While discussing the research portion of the committee's responsibility, a committee member asked, "Are the professors open to suggestions for research?" That was a good question and one that I did not have a definitive answer to. What better way to find the answer than go directly to the source? I reached out to Dr. Soldat and Dr. Koch in order to gain their perspective. I was encouraged by their eagerness to talk and more than pleased with their response. In addition to their thankfulness for the support that the WGCSA has provided over the years, they enthusiastically supported the research ideas supplied by the membership.

Over the past ten years the WGCSA has contributed an average of nearly \$35,000 annually to the University of Wisconsin Turfgrass Program. This funding includes scholarships for students, building projects at the O.J. Noer Turfgrass Research Center, financial support of the Turfgrass Diagnostic Lab, and the funding of research projects. While the professors receive funding from multiple sources, the WSGCA has funded between \$10,000 - \$30,000 on research annually over the last ten years. The amount varies each year depending on the financial needs of the research being conducted.

The golf course maintenance industry has changed im-

mensely over my career. A significant amount of this change has been driven by research. Turfgrass research is ever-changing and ever evolving. Groundbreaking research can eventually lead to wide scale change that becomes commonplace in our industry. Earlier in my career I remember making weekly or biweekly insecticide applications on closely mowed turfgrass areas throughout the summer. Now I can't remember the last time I made an additional insecticide application on putting greens, tees, or fairways following a preventative, early season application that was made at a much lower use rate than previously possible. Thank you research. Even closer to home is the research conducted on growth regulators at the University of Wisconsin under the direction of Dr. Soldat that began in 2007. While seemingly trivial at the time, one now rarely considers a growth regulator application without taking into account a growing degree day model. Thank you research. The same could be said for Dr. Koch's work on snow mold fungicides. I don't know about you, but I feel very confident that I am able to make the best possible choice when deciding what products to use to prevent snow mold based on the extensive research done by Dr. Koch. Thank you research. I think Dr. Soldat summarized the cumulative effect of research well when he remarked, "It's going to be beneficial to focus on the big picture and realize that funding research is an investment. It's not the performance of the individual stocks, but rather what the entire portfolio returned at the end of the time horizon." The benefit that turfgrass research has on the environment, labor, equipment, and the bottom line on an annual basis is profound. Thank you research.

Now it's time to get your hands dirty and give some thought to research. We would love to hear your ideas. Is there a topic that has interested you in the past that could use further research? Is there something that could benefit the environment, conservation, or economical concerns? Is there a practical research project that you have in mind that could help drive your decision making process in the near future? Let us know. The university professors welcome fresh ideas and the challenge that comes with developing a research project that achieves a set of goals. Feel free to contact any WGCSA Board Member or Chapter Manager Brett Grams. I can be reached directly at gluck@hiddenglengolfclub.com. We'd love to hear from you. 

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MEMBER SPOTLIGHT

Dominic Frese

By Josh Lepine, Certified Golf Course Superintendent, Maple Bluff Country Club and
Ben Labarre, Golf Course Superintendent, The Legend at Bristlecone

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

Name: **Dominic Frese**

Company Position: **Golf Course Superintendent at Meadowbrook Country Club**

Years as WGCSA Member: **6**

Membership Classification: **B**

18 Holes With Dominic Frese

1. How did you get started in the turf-grass industry? I've been intrigued by growing grass on a golf course since my first time on a golf course when I was 14. Officially started in the industry in Iowa as a turf consultant for Floratine Central Turf Products

2. What is the most rewarding part of your career? Even with the labor challenges we all face, it is most rewarding to see a crew member better themselves as an individual through their experience at Meadowbrook. I always hope their development as a crew member assists them through life's challenges.

3. What would you consider to be your greatest career challenge? Changing the culture of my club was the hardest thing so far. Any tree I take down, seems to be interpreted as though I am creating a links course out of a parkland style club. My response: The only thing I've ever found at the end of a chainsaw is sunlight!

4. Which three adjectives describes you the best? Committed, fun-loving, adventurous

5. Tell us about your family. Married to Michele, she grew up on a holstein farm in Kenosha and currently practices medicine as a Nurse Practitioner in Kenosha, Waukegan, Bannockburn, Zion and occasionally Antioch. We met at Champs in Lake Geneva just by happenstance. Currently have 2 boys Avriel(3) and Asher(2). Irish twins that make life absolutely awesome, if I'm not

screaming at them. Working on 3? I don't know, always working on it! We don't want to limit our boys' abilities so everything pretty much goes, as long as they learn from their mistakes, are respectful to others and don't kill themselves. So far they are still alive. We love to spend time at Lake Michigan, power wheels in the back lawn, ride bikes and swim in whatever puddle we can find. There isn't a day that isn't challenging but each one seems to be more valuable than the last. Currently training them not to tackle each other by the neck and eyeing up a couple 50cc honda motorcycles. The neighborhood is going to love that I'm sure.

6. Any pets? My wife had just purchased 2 mange ridden Lab/Ridgeback mutts 2 months before we met a little over a decade ago. A whole lot of ivermectin and probably more love than they deserved, they're still kicking. Chasing squirrels and rabbits every chance they get. Time has only slowed them physically but definitely not mentally. Last winter they were sprinting as fast as they could after a couple of deer on the course, went a couple hundred yards before they decided to give up.

7. What drives/motivates you every day? Mainly my crew motivates me, if I can help them out, better their lives and stance in our world, I feel as though I've had a successful day/month/year.

8. Who Do You Admire? My fellow superintendents, thank you for all your help guys and gals! That's no b.s. either. I feel blessed to be in an industry that is as open as ours.

9. Who is the person in history you'd most like to meet? Any of our founding fathers would be on the list for me. I'd like to have a conversation in regards to whether or not we have turned into the country they imagined almost 250 years ago.

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MEMBER SPOTLIGHT



Left: The Frese family, clean for about 5 minutes of the day!

Top: They prefer the drivers seat but for now, Avriel and Ashere just love to ride in trucks.

Bottom: Dominic's better 3/4's, Michele.



MEMBER SPOTLIGHT

10. What's a fun fact that people don't know about you? I wanted to be a dentist a long time ago. Don't think that's in the cards anymore.

11. What do you do in your spare time, favorite hobbies? If I'm not at the course, chances are you'll find me on a mountain bike, playing golf, trading stocks and losing money or snowboarding if it's the winter. Kids really put a damper on free time!

12. If you could go anywhere in the world on vacation, where would you go? Hawaii, specifically the island of Kauai

13. What is the one thing you would like to learn/accomplish someday? I would like to learn how to drive the speed limit.

14. What is your favorite turf management related tool or technique? Chainsaw

15. Favorites:

TV Show: Seinfeld, Dexter, Game of Thrones

Movie: Tommy Boy, Inception



Dominic and friends enjoying a good Gopher stomping!

Food: Red meat, don't care what kind

Sports Teams: Packers, Bulls, Yankees, Hawkeyes, Manchester United

16. Do you golf? Handicap? Best shot or golf story? I don't play enough golf, handicap 15. I got a hole in one the day after my grandmother passed away. Playing with my dad on a cold November day, layer upon layer of clothes. I'm sitting on the 5th hole of New Hampton Country Club, teeing up my ball. I just say, "Hey Grandma, if you are listening, I could really use some help right now getting a hole in one." Just things we say right, well turns out she was listening. She stroked an 8 iron about 150 yards, landed about 4 yards short of the cup and rolled right in. I just started balling. Tears streaming down my face, I looked at my dad and said, "No effin' way, Grandma Agnes just gifted me a hole-in-one!" One of the most vivid memories in my life. It's still the only reason I play this game. On occasion I'll remember that day when I'm having an off day, somebody poked me or things on a project are hitting the fan. It calms me and reminds me that what we do has a great impact upon the patrons to our offices. Cup here cup there, tee marker 1 yard short or 1 yard long, that shot doesn't go in. Everything matters all the time.

17. Top Bucket List Item? Swim with a great white shark.

18. If you could provide one piece of professional advice, what would it be? Do what you know is right. With the onslaught of advice we get from golfers, they rarely know what is best for the course. You do, it's your course. There's a happy medium somewhere. 🌱

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Making Old Bunkers New Again

By Elliot Dowling, NorthEast Region Green Section Agronomist

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Bunkers are often a source of golfer frustration but, whether you like them or not, bunkers are an integral part of golf and a feature that is not likely to go away any time soon. While bunkers can add strategic and aesthetic value to a golf hole, they can also be a source of dissatisfaction due to their placement, appearance or condition.

Bunkers are arguably the most dissected and disagreed upon feature of a golf course. The way a bunker should look and play is seemingly always up for debate. Simply put, there is no perfect or ideal bunker. There are opinions aplenty about sand color, sand firmness, the best type of sand, and how the bunkers play at the course down the street – which always seems to be better than your course. Because so many factors vary from course to course, there will always be the great bunker debate over how they should look and play.

If golfers are becoming restless with the current condition of the bunkers at your course, they have probably asked

how the bunkers can be improved. The answer to this question is not always simple, and certainly varies from course to course. Before you consider an expensive renovation project, evaluate your bunkers and decide what ails them. This evaluation process may reveal that bunker condition and playability can be improved without expensive renovation efforts.

Evaluating Bunkers

There are several criteria that can be used to evaluate the functionality of bunkers. Before undertaking a renovation of any sort, it is important to have a clear understanding of what the problems are to guide the path toward improvement. In some cases, expensive renovations have been avoided by properly evaluating bunkers and only correcting what is needed to solve the issue. To properly evaluate your bunkers, answer the following questions:

- Do the bunkers drain after a moderate or heavy rain?
- Is the sand contaminated with soil and debris?
- Does formerly white sand have a tan or off-color appearance?
- How does the landform around each bunker look? Does it funnel water into or away from the bunker?



If your bunkers have issues, an effective solution may be less expensive than you think.

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- Are exposed edges leading to increased soil contamination?
- Is it too costly and time consuming to maintain a crisp edge around the bunkers?
- Do the bunkers have steep sand or grass faces that are difficult to maintain?
- Can your current bunkers be maintained for a reasonable amount of money and time?
- What is the main source of golfer complaints about the bunkers?
- Do golfers say that the bunkers play too firm or too soft?

These are questions that must be answered about bunkers before deciding on the best way to improve what you currently have.

Solutions for Common Problems

Most golf courses will look to the easiest and most cost-effective way to repair or improve anything on the course, bunkers included, and rightfully so. Spending too much money on things that aren't necessary could put the facility in a poor financial position.

To determine the least-expensive or most-efficient way to improve the bunkers, use the list of questions above to identify the key issues. Once the main problems are determined, choosing the best path forward is easier. The following sections discuss several of the most common issues with bunkers and some options for addressing the problem.

Sand color is not a good indicator of quality. There are tan sands that deliver comparable performance to white, engineered sands for a much better price.

The sand is contaminated

but the bunker drainage system works fine

When bunker sand is contaminated with soil or organic material the bunkers often drain slowly or hold water, playability can be poor, or the appearance could be better. If your bunkers have a drainage system and you have determined that it still functions properly by flushing water through the pipes, changing sand could be all that is necessary. Simply remove the contaminated sand and replace it with a new sand that has desirable physical characteristics.

Selecting the appropriate sand is strictly up to the facility. For example, some facilities want bright white sand and are willing to pay a premium price to have that sand shipped across the country to their location. While this is a fine solution if you have the money and are willing to spend it on sand, many facilities try to choose a sand that can be found closer to home for a more reasonable price.



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Depending on your location, white sand could be available for a reasonable price. However, a local source for sand could be tan or brown, which is completely acceptable as long as the sand performs and plays as desired. Color is just for looks and has no impact on the actual quality of a sand. Like most things in golf course management, there are specific criteria for determining a good bunker sand. Understanding these criteria will help you decide on a sand, which could be tan, that is a significant upgrade from what you currently have at a price you'd rather pay.

The bunker drainage system is not functioning properly

One of the most common bunker issues is improperly functioning drainage. Drain tile can become clogged or crushed and lose its functionality. In the absence of functioning drainage, bunkers will remain wet and likely play firmer than desired. With heavy rain or irrigation, water may pond in bunker floors and require significant labor costs to restore normal playability.

Superintendents can confirm if a drain pipe is blocked and slowing water movement by flushing water through the bunker drainage system or with the use of a camera and pipe snake. If the pipe is clogged, there are companies that use high-pressure water to blast through blockages and clean the perimeter of drain tiles, flushing away debris and returning the pipe to its original performance. This is the easiest method, albeit potentially expensive, to clean existing drains without digging.



Sand color is not a good indicator of quality. There are tan sands that deliver comparable performance to white, engineered sands for a much better price.

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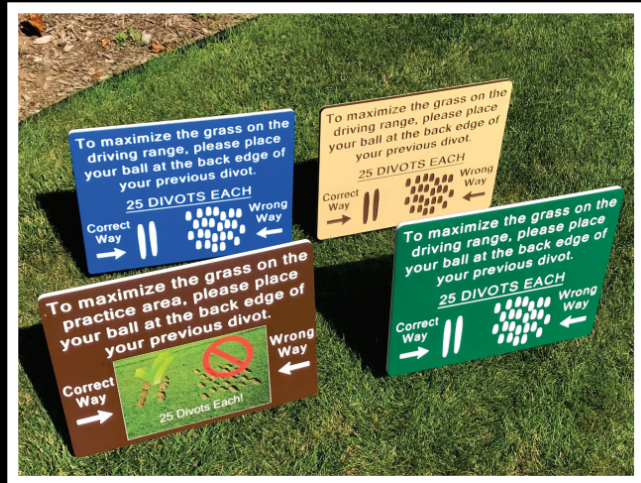
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Clogged bunker drains cause serious issues. Companies can find and clear drains for you, or you can locate the clog and address the issue yourself.

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In most instances, without internal drainage, bunkers will perform poorly regardless of sand quality. On the other hand, bunkers with a functioning drainage system will still perform poorly if the sand does not meet minimum guidelines with its infiltration rate, which should be no less than 30 inches per hour.

An important feature of bunker drainage design is including a cleanout port on the high side of the bunker. Exposing a pipe to the surface and covering it with a drain cap will allow a hose to be placed into the drainage tile to flush sediments or other obstructions from the pipe to improve functionality. A cleanout port also allows you to test whether your bunker drainage system is functioning properly if the bunker begins holding water.

Architectural changes are needed to preserve what you have

Some courses are in the fortunate position to have both functioning drainage and clean sand, with no glaring issues yet. In this instance, sand contamination from sediment or organic debris is most likely what will initiate future bunker issues. Although it is impossible to keep all contaminants out of bunkers – e.g., grass clippings and tree debris – looking at the architecture of the bunkers can help extend their life expectancy.

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Soil is likely to break away from an exposed soil bunker edge, especially during rain. Soil that falls from the edge contaminates the sand.

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A specific area to consider is the edge or lip of the bunker. Many courses maintain a crisp vertical edge that requires several labor hours per bunker every month to maintain. Labor concerns notwithstanding, an exposed soil lip is an obvious source of contamination. Exposed bunker edges can easily deposit soil into the sand through rain, foot traffic or maintenance practices – like the edging required to maintain that sharp edge.

Slight architectural changes can reduce the amount of contamination that falls into the sand from the bunker edge. Rather than an exposed soil edge, wrap sod over the edge to cover the soil. This will reduce the amount of soil and rocks that fall into the sand. You can also rake the sand to cover the exposed edge, which will limit the amount of soil or debris that can enter the bunker.

In some instances, water moving into the bunkers from the surrounding topography is the source of contamination, not the bunker edge. Adjusting surface grades and drainage can deflect water around the bunkers, rather than through them, and reduce the number and severity of washouts that

accelerate contamination and failure. Adjusting the shaping around bunkers does not need to be very invasive or expensive. In fact, very minor and seemingly simple modifications are all that are necessary to make a significant improvement in many cases.

The bunkers are failing but you don't have the resources for long-term solutions

Many courses recognize that their bunkers are failing, leading to playability concerns and dissatisfied golfers. However, because of limited resources they are not able to replace the sand, install drainage or make architectural changes. There are still things that can be done in these situations to improve bunker performance.

One of the more popular methods to clean existing bunker sand is using a sand sifter. There are several effective options available to perform this process, ranging from more expensive machines to less expensive hand tools. The mechanical option is more efficient but certainly comes at a premium price when compared to hand tools.

If cleaning sand is not an option, either because the sand is too contami-

nated or because the process will be too time consuming, adding a layer of new sand on top of the current sand can provide some relief – although very short-term relief and with mixed results. This method always appears to be the easiest and most cost-effective method to temporarily “fix” poorly performing bunkers. However, it is important to understand that adding a new layer of sand never actually fixes the problem but simply buries the problem deeper. Yes, this could buy you time, but how much and to what level of improvement is difficult to say.

“It is important to understand that adding a new layer of sand never actually fixes the problem but simply buries the problem deeper.”

There is rarely enough sand added on top to make a big difference and a very light layer of sand is hardly enough to correct any problem. Money is often wasted by taking this approach because your investment in new bunker sand is almost immediately contaminated by the old sand, reducing its usefulness very quickly. If you continue adding new sand for several years you might realize you spent a lot of money achieving very little when that same money could have been spent on a more long-term solution.

If your bunker sand is so contaminated that it has started to look and play more like soil than sand, replacing the sand is inevitable. Until total replacement is possible, superintendents have found success using long tines on a mechanical rake to loosen the existing sand. This approach is best if performed on a routine schedule because mechanically loosening sand will not be very effective as a one-time procedure. Plan on loosening the sand at least once per week, if not more frequently, depending on the level of contamination.



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The difference between lined (left bunker) and unlined bunkers is tremendous. Investing in liners yields more reliability and a longer life expectancy for the sand.

A somewhat more expensive option is using a venting machine like the Air2G2™ to loosen sand particles. Other options to consider are applying wetting agents to the sand to break surface tension and improve infiltration or applying materials to break down surface algae that is negatively impacting performance. In theory, this will help return a white color to the sand – if applicable – and improve water infiltration, but the results have been inconsistent in many cases.

The bunkers need to be completely rebuilt

The principal purpose of this article is to help diagnose and remedy bunker issues with the most cost-effective measures possible for your facility. That said, it should be mentioned that if you want to fix bunkers in a way that has the longest life expectancy and highest chance of success then a total rebuild could be exactly what you need. Based on current technology and field experience regarding bunker construction, installing a liner – either a durable liner or a sod liner – is a good idea to keep native soil and rocks from migrating into the sand.

In my opinion, sand selection is less of a concern than a reliable liner. A sand that is manufactured and white or a tan color will play equally well if it meets the same performance standards. On the other hand, keeping as much soil and organic debris out of the sand as possible will extend bunker life expectancy. Moreover, liners can reduce the severity and frequency of washouts following heavy

rains, saving labor hours and maintaining cleaner sand. Ultimately, installing a durable liner to reduce sand contamination from the subsoil and keep sand on bunker faces will extend the life expectancy of your investment.

There is no doubt that liners, drainage and new sand will improve bunker performance and reliability, but they come at a premium price. Some courses feel that a total bunker renovation is their best choice and they might be right. Other courses, however, feel that correcting one factor outlined above – like drainage, sand or architecture – will fix their bunker problem without investing the same resources required for a total rebuild.

Conclusion

Bunkers are often a target of golfer complaints and superintendent disdain, but that doesn't need to be the case long term. There are ways to address many common bunker issues – some more costly or time consuming than others – without necessarily performing a full-scale renovation. There are also many ways to improve bunkers with in-house labor and equipment. Don't be so quick to dismiss poorly performing bunkers and assume that the only fix is wholesale renovation. Use a checklist to determine the exact issue, or issues, and work through those issues to produce better playability and easier maintenance. A USGA agronomist can also help evaluate bunker issues and work closely with you to develop a customized plan for the course. 🌱

The Hockemeyer Snow Mold Prediction Model v2.0

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



This article I am going to do something a little bit silly and a little bit fun. Dr. Koch and I every year talk about how much snow mold pressure we will have at each of our snow mold study locations. We look at all the environmental factors like snow depth and length of snow cover. We talk to the superintendents on whose golf courses our stud-

ies reside and get their opinion. I thought it would be fun and interesting to publish my thoughts on our snow mold predictions. 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	Percent Snow Mold in Nontreated	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.

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TURFGRASS DIAGNOSTIC LAB

Marquette, MI

Prediction: That's a lot of snow mold (50-75% disease in nontreated plots)

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

Marquette	Nov 2020	Dec 2020	Jan 2021	Feb 2021 up to 2/11/21
Avg Monthly Temp	36.1	24.2	20	8.4
Departure from Normal	5.8	5.7	6.4	-5.4
Snow Total for Month	10	25.4	18.2	7.7
Departure from Normal (in liquid inches)	-0.4	-1.17	-0.97	-0.2
Lowest Snow Depth	0	1	8	14
Greencast Soil Temp 2/12/21				6.8

Normally, our final snow mold app in Marquette goes down right around Halloween. That's because they usually get permanent snow cover soon after that in early to mid-November. This year permanent snow cover came much later, in late November. But even then snow depth was minimal, around an inch or two until some snowstorms in

late December.

But it looks like super cold temps didn't arrive en masse until after deeper snow arrived. So I don't think snow mold pressure will be too negatively affected. I could foresee disease being higher than 75%, but I'll go with 50-75% as my final prediction.

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TURFGRASS DIAGNOSTIC LAB

Minocqua, WI

Prediction: I've had better snow mold (25-50% disease in nontreated plots)

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

Minocqua	Nov 2020	Dec 2020	Jan 2021	Feb 2021 up to 2/11/21
Avg Monthly Temp	36	21.6	17.9	2.4
Departure from Normal	5.7	4.8	5.7	-11.6
Snow Total for Month	2.3	8.4	8.1	12.1
Departure from Normal (in liquid inches)	0.76	-0.66	-0.45	0.58
Lowest Snow Depth	0	0	3	6
Greencast Soil Temp 2/12/21				7.2

November and December were warmer than normal but snowfall was well below normal also. There was not significant snow cover until January. This means that the soil would not be insulated from any super cold temps that might naturally shut down any snow mold fungi.

But much like Marquette, it doesn't look like the super cold arctic air didn't arrive until some deeper snow arrived. So some early unfavorable snow mold conditions might inhibit fungal growth a bit, I'll say 25-50% disease.

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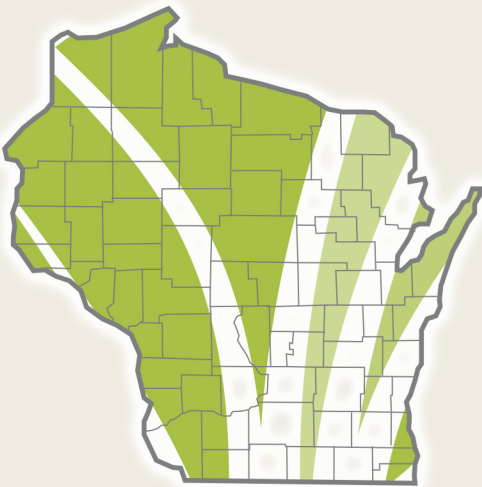
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TURFGRASS DIAGNOSTIC LAB

Wausau, WI

Prediction: What's snow mo' u'd? (0-10% disease in the nontreated plots)

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

Wausau	Nov 2020	Dec 2020	Jan 2021	Feb 2021 up to 2/11/21
Avg Monthly Temp	37.4	24.1	19.8	4.7
Departure from Normal	4.9	5.1	5.2	-12
Snow Total for Month	2.1	5.5	5.7	9.2
Departure from Normal (in liquid inches)	0.59	-0.88	-0.4	0.41
Lowest Snow Depth	0	0	3	6
Greencast Soil Temp 2/12/21				13.8

Even now, Wausau doesn't have a ton of snow cover and we're right in the middle of a huge arctic blast. So far in February, Wausau's average temps are 12 degrees below normal. That's a massive departure from nor-

mal. I think these arctic temps combined with relatively shallow snow depths are going to combine for very little snow mold pressure in 2021. I'll pick the lowest category, 0-10%.

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Laughter On The Links

A golfer tried three straight times to hit a golf ball over the inlet of water between him and the green. But each time the ball splashes into the drink. In utter frustration the golfer said, "Caddie, take my clubs on in, I'm going to jump into the water and drown myself." The caddie replied, "I doubt that, sir. You couldn't keep your head down long enough to drown!"

"Caddy, why do you keep looking at your watch?" asked the curious golfer. "It's not a watch, sir. It's a compass"

The only problem with golf is that the slow people are always in front of you and the fast people always end up behind you.

TURFGRASS DIAGNOSTIC LAB

Madison, WI

Prediction: I've had better snow mold (25-50% disease in the nontreated plots)

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

Madison	Nov 2020	Dec 2020	Jan 2021	Feb 2021 up to 2/11/21
Avg Monthly Temp	42.1	26.3	21.9	6.3
Departure from Normal	5.9	3.3	3.1	-14.5
Snow Total for Month	2.2	13.5	17	6.8
Departure from Normal (in liquid inches)	-0.54	0.61	0.04	-0.06
Lowest Snow Depth	0	0	5	10
Greencast Soil Temp 2/12/21				22.8

We had some pretty good snow cover in Madison starting in mid-December and it's been pretty deep ever since then. And aside from the current arctic blast temps have been above normal. So I think these two things are going to combine for warm soil surfaces underneath the deep snow cover and we'll have quite a bit of snow mold this year in Madison. Of course this would happen a year after I give a presentation about how we don't get snow mold in Madison very often anymore. Maybe

Mother Nature heard my talk and decided to prove me wrong. As a snow mold researcher, I'm perfectly OK with that.

Keep an eye out for my follow up article later in this issue of *The Grass Roots* magazine where I revisit my predictions and compare them to how much snow mold we actually got at each location. Stay warm.

Kurt can be reached at 608-845-2535, ho64ckemeyer@wisc.edu and tld.wisc.edu

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Wisconsin Turfgrass Association In-Person Summer Field Day 2021

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



After a year with no in person turf education, WTA Summer Field Day came back to the O.J. Noer Facility! It was beginning to feel like we were not going to be granted permission to host Field Day but on July 20th there were professors, researchers, attendees and

vendors on the Noer Facility property. I want to applaud the WTA Board for not giving up on the day and hanging in there while we waited for the UW-Madison College of Agricultural and Life Sciences to approve the 2021 Summer Field Day plan. While it included a few modifications from past Field Days, the most important part was fulfilled; supplying education for people live and in person at the O.J. Noer Turfgrass Educational Facility. This is what Summer Field Day is all about.

If you missed the day, things were a little different. The vendor area was moved closer to the building. Keeping the trade show close to the daily announcements, the food, creating a space to meet and greet friends and customers created a positive feeling. Morning coffee and donuts were served by Gaylord Catering staff instead of helping yourself. A few people liked being served and a few others felt it curbed their donut intake, since the guy handing out the donuts was possibly counting the number of donuts they ate!

Gone was the tent, tables and chairs for lunch. Hopefully they will return next year. There were chairs positioned around the property, but most people headed for the shade. It was a hot day. Our standard lunch buffet was not part of the approval, so the Gaylord staff served the food in a bag that was had everything you needed for a delicious lunch. Although it was not as nice as the buffet, it met our needs. As the day ended, I told a few people I hope this is the last interruption from Covid-19 for future Summer Field Day's.

The key Summer Field Day element is not about tents, donuts, and lunch, it is about research, which the professors did not disappoint. Dr. Soldat was short staffed, but you would have never known. Dr. Koch, is fresh off the birth of his second son, did his customary great job. Dr. Koch might have been enjoying a few hours of newborn free time.

As the attendees moved around the property making stops at the various plots the discussion was lively and questions were plentiful. Everyone I talked to missed hearing from and visiting with Dr's. Soldat and Koch last year. They enjoyed Virtual Field Day and Happy Hour with the Docs, but nothing replaces in-person discussion with the professors, researchers, friends and colleagues.



Dr. Doug Soldat addresses the crowd.

Topics:

- Efficacy of Organic Options for Crabgrass Control
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- PGR's, Mowing Height and N Fertility
- Wetting Agent Evaluations
- Nitrogen Rates on the Microbiome
- Controlling Dollar Spot with Cultural Practices
- Smith-Kerns Dollar Spot Model Upper Limit

Attendance was down from years past, 168. That could be lingering effects of Covid-19, a busy summer, labor shortage or other factors. One thing that did not disappoint was the support from our vendors. We had more vendors this year than in 2018 or 2019. The WTA is fortunate to have such loyal vendor backing. We are hoping next year we can get our attendance numbers back in the upper 200's to make our vendors dedication to the WTA a better value.

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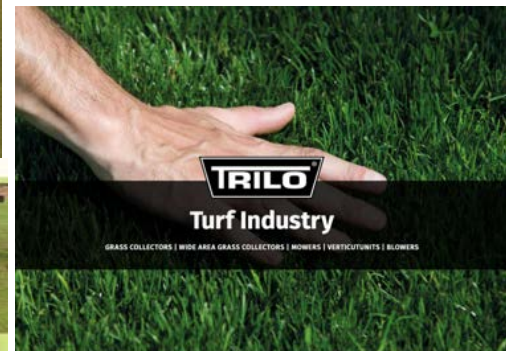
SPECIFICATIONS			
Model	Working Width	Working Depth	Required Power
TCT	4-12"	Up to 48"	40-60 HP

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The attendees and vendors listen to the announcements.


NOTES FROM THE NOER

From the Noer perspective I was concerned about Summer Field Day. I have not been able to find someone to hire for my last Noer position. The one person I have for the season accepted the job but had a vacation planned for Summer Field Day week, so he was gone. My remaining summer staffer works two jobs, which requires him to leave the Noer Facility at 11:30 each day. I was worried about setting up everything on Monday and getting everything taken down Tuesday. Dr.'s Koch and Soldat said they would get their staffs to help. Late Monday morning the rental company called with an issue and the table and chairs would be

very late and would not arrive until mid-afternoon. This meant the student help would be gone. Within ten minutes of sending both staffs home the chairs arrived. I was in for a very long afternoon. Then Dr. Soldat and Kurt Hockemeyer came to my aid and we set-up all the table and chairs together. Tuesday take-down I had received commitments from the WTA Board to help take-down. Tuesday after lunch Kurt sent his two staff members to help me. A little later Plant Pathology's downtown staff also pitched in to help. By the time the tours were completed around 3:00 all the table and chairs were stacked waiting for pick-up.

A huge THANK YOU to Dr. Soldat and the entire Plant Pathology staff!

Audra and I have gone through the registrations and are already making plans to make sure some of those regulars we count on are well informed for next year. With our wrap-up we will be identifying the numbers from each area of turfgrass management to help the WTA marketing committee focus their efforts next year.

If you missed the day, you missed alot! Thank you to those that attended, and we look forward to seeing many of you at Nakoma Country Club in Madison on Monday October 4th for the WTA Fall Golf Classic. 



Above: WTA President Brad Debels greets the attendees.

Right: Mike Peters, Director of the Agricultural Research Stations gives updates to the group.

P is for Purple

By Doug Soldat PhD, Department of Soil Science, UW-Madison



This spring, a handful of the research putting green plots at OJ Noer were showing some pretty impressive signs of phosphorus deficiency. The OJ Noer research facility gives us the opportunity to push grass to its limits. About ten years ago, we demonstrated that ‘A4’ creeping bentgrass grown on a non-amended sand showed signs of phosphorus deficiency between 5 and 7 ppm Mehlich-3. The current University of Wisconsin guideline for “low” soil P is 25 ppm Mehlich-3, and the PACE Turf MLSN guideline is 21 ppm Mehlich-3 for phosphorus. Soil testing guidelines tend to err on the conservative side, meaning that thresholds that are selected are typically above the true thresholds where a nutrient becomes limiting. This explains why I routinely am able to

maintain my research greens at levels far below the MLSN or UW soil testing guidelines for P, K, and other nutrients.

Soil testing guidelines are general, not site specific. A good analogy is with soil moisture management. In general, sand greens wilt around 10% soil moisture. Depending on the species or cultivar being grown, soil organic matter level, and the root depth, they might wilt at 7% or maybe 13%. We can say that ideal moisture targets are about 15-20% in the morning for most greens, but we also know that those wilt points and morning targets are specific to a course, and change from situation to situation at an individual course. You could use those guidelines I listed above, but it’s better for you to make your own observations and set your own guidelines based on the response of your turf and your goals for putting surface performance.



Figure 1. This is the A53 root zone. You can see the strong dark purple coloration here. A few years ago, I sprayed liquid phosphorus fertilizer in the shape of the letter “P”. That “P” is still visible but has a line of green turf running through it. The cause of the green strip is unknown. This is a sand root zone of unknown composition and age. The cultivar is ‘V8’ bentgrass.

WISCONSIN SOILS REPORT



Figure 2. This is the B5 root zone. Darker colored, P-deficient bentgrass is in the foreground, and greener, healthier turf is in the back ground. This is an 80/20 root zone mix with 'Focus' creeping bentgrass.



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Just like you use a soil moisture probe and your observations to determine ideal soil moisture levels, you can use your eyes and a soil probe to determine the optimum soil P level at your property. Soil P deficiency symptoms are very visual and look somewhat like wilt. Grass with less than optimum tissue P will turn darker green and even purple. This effect is most noticeable in the spring. Complicating matters, however, is that some cultivars will turn purple in cold temperatures regardless of the plant's phosphorus status. This effect is related to the reason deciduous tree leaves turn color in fall. It can't be corrected with fertilizer applications, and the effect will go away as soil and air temperatures increase. However, large expanses of purple turf in the spring is a potential sign of

phosphorus deficiency. When you observe such an effect, it's best to grab soil samples from purple and non-purple areas and send them to a reputable soil testing lab for Mehlich-3 soil analysis. When the numbers come back, you should see slightly lower P levels in the purple turf, and higher soil P levels in the green turf. Keep your P levels around the result from the green turf and it should be smooth sailing.

I had the opportunity to practice what I've been preaching this spring when I observed large areas of purple grass on four different root zones (Figures 1 – 5). I sampled to a depth of three inches from the purple grass on each root zone, and then collected another sample to the same depth from green grass on that same root zone. I sent the samples off for test-

ing, and Table 1 shows what I found. These root zones were built at different times and had different types of bentgrass growing on them (see figure captions for more information). However, we observed broad similarities in the soil P levels underneath purple turf. The lowest sample had 4.0 ppm and the highest sample was 6.7 ppm. The lowest soil P level underneath green grass was 8 ppm, and the greatest was just under 20 ppm. These results show that keeping Mehlich-3 soil P > 7 ppm in the top three inches of a bentgrass green on a sand root zone is not likely to show signs of phosphorus deficiency. However, don't take it from me, if you see some purple bentgrass next spring, take a sample from purple and green areas and see if your results match mine. ✓



Figure 3. This is the B6 root zone. It is the root zone that we used to establish critical Mehlich soil P concentrations in earlier research, it has low organic matter and the cultivar is 'Penn A4'. In that study we found that turf turned purple below 6 ppm. This time, the purple spots averaged 6.7 ppm, and the green spots were nearly 20 ppm. It is unclear why there is so much variation between the green and purple in this root zone.

WISCONSIN SOILS REPORT

Putting Green	P status	Mehlich-3 P (ppm)
A53	Purple	4.0
A53	Green	9.3
B5	Purple	6.6
B5	Green	12.5
B6	Purple	6.7
B6	Green	19.6
B7	Purple	5.5
B7	Green	8.0

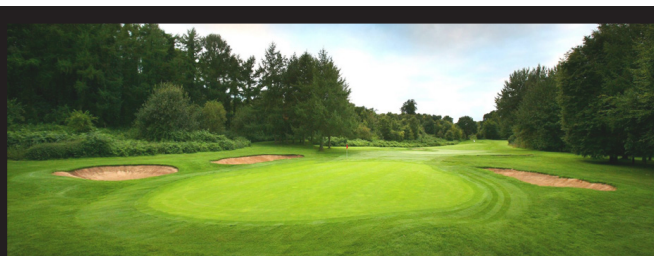
Table 1. Five root zones at the O.J. Noer showed visual P deficiency symptoms in late April 2021. Soil below both green and purple turf was tested for Mehlich-3 P. P deficiency symptoms were observed only when soil P was below 7 ppm, confirming our earlier research results.



Figure 4. This is the B7 root zone in April 2021. It is one of the oldest root zones at the OJ Noer and was seeded with 'Penncross' bentgrass in the 1990s. This is the most dramatic coloration I've ever seen. Purple grass had 5.5 ppm Mehlich-3 soil P, and green grass had 8 ppm P.



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Figure 5. This is B7 again, but the picture was taken in summer 2021 from the exact same spot. The soil P levels are the same. You can still see the darker P-deficient turf on the left, but the color differences are much less dramatic. This shows the effect of warm air and warm soils on phosphorus nutrition.

GCSAA Advocacy Focus

By Shane Conroy, Great Lakes Regional Representative, GCSAA



This season has seen a bit of everything – and then some. As days continue to grow shorter, I hope you and your teams are finding an appropriate work/life balance and making the most of this challenging season.

As you have undoubtedly stayed busy on the course, I want to relay some of the advocacy areas GCSAA has been focusing on off the course.


Recently, House lawmakers, led by Rep. Henry Cuellar (D-TX-28), introduced bipartisan bill HR 3897. HR 3897 aims to enhance access to H-2B workers, which are crucial to not only golf, but many seasonal industries across the country. GCSAA has blog post and action alert on the Advocacy Hub page of GCSAA.org which can be utilized to send a message to your members of congress in support of the Returning Worker Exemption. A new one-pager is available for download when communicating with your members of congress.

Additionally, the EPA and the Army Corps of Engineers (Corps) have revealed their intention to alter the 2020 Navigable Waters Protection Rule (NWPR). Since taking office, it seemed likely the new administration would address this issue in some way. This announcement is the first official declaration that the NWPR will be “remanded” back to the agencies – meaning they will attempt to replace it their own rule. The final rule will be shaped by future discussions, and until then the NWPR law is still in effect across the country.

Furthermore, a new FIFRA bill was launched last year that would overhaul the Federal Insecticide Fungicide, and Rodenticide Act (FIFRA). The GCSAA government affairs team has yet to see bill text, but they have had two meetings with staff from Sen. Booker’s office who are indicating they will be lead author in the Senate this year. Once the GA team has seen the bill, more information will be shared. There is a one-pager discuss-

ing this bill in greater detail available for download on GCSAA.org.

Finally, switching gears, the Golf Industry Show has a new name, the GCSAA Conference and Tradeshow. “The GCSAA Conference and Trade Show rebranding is not about changes to the event but is based on the strength of the GCSAA brand,” says GCSAA CEO Rhett Evans. “As GCSAA’s brand recognition has grown over the years, it makes sense to have our premier event share in that. Along with our partners, we’ll still feature opportunities for collaboration and team building among superintendents, architects, builders and more.”

The new name will debut at the 2022 GCSAA Conference and Trade Show, February 5-10 in San Diego and is part of a strategic effort to bring all GCSAA entities under the association name. The announcement comes on the heels of the rebranding of the association’s philanthropic organization to the GCSAA Foundation in May. 

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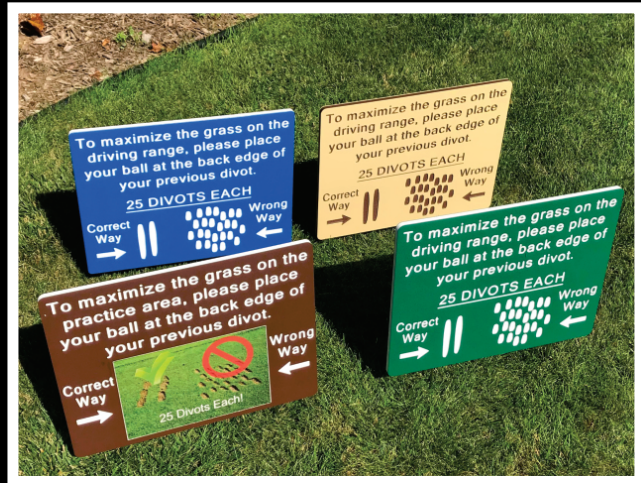


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The Bizarro Snow Mold Year

By Paul Koch, PhD, Department of Plant Pathology, University of Wisconsin - Madison



Author's note: This article originally appeared in the September 2021 issue of Golf-dom and is being reprinted here with their permission. The original article can be accessed at (<https://editions.mydigitalpublication.com/publication/?m=59649&i=719440&p=68&ver=html5>) and is being reprinted here with their permission.

As us Seinfeld (or comic book) fans know, the Bizarro World is the exact opposite of the regular world. As Jerry so eloquently states, Bizarro Superman is 'Superman's exact opposite...up is down. Down is up. He says 'hello' when he leaves, 'good bye' when he arrives.' While maybe not quite as dramatic, the winter of 2020-2021 was a bizarro snow mold year. Places in the north that typically get hammered with snow mold had barely any at all, while their opposites further south that haven't seen significant snow mold in ten years were hammered (**Figure 1**). What led to this difference in disease? How could Chicago have more snow mold than northern Wisconsin? What can we learn from this moving forward? Let's look at the conditions that led to this contrast through the lens of two case studies...a generic course in Chicago, IL and a generic course in Wausau, WI.

Snow mold galore in Chicago

The lack of snow mold over the past decade in much of the southern Great Lakes had become so normal that many courses no longer applied snow mold fungicides on their tees or fairways. Last winter looked like it would be much the same, with Chicago's December temperature 5.2°F higher than average and snowfall more than 5 inches below normal (**Figure 2**). In fact, during a 'Happy Hour with the Turf Docs' webinar in early January I stated that snow mold probably wouldn't be much of an issue this year. Nostradamus I am not.

Then the switch flipped. The temperatures remained above average, but not warm enough to prevent a wave of storms from dumping snowfall after snowfall on the region. Chicago's January 2021 snowfall was 11.1 inches higher than average and February 2021 snowfall was 12.5 inches higher than average. A brutal cold snap hit much of the country in mid-February, but the deep snowpack in the region meant that temperatures at the turf surface would have stayed at or slightly above freezing for this entire period. When the snow finally melted off in March, snow mold was evident on just about every non-treated turf surface in the region.



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To summarize what happened in Chicago and much of the southern Great Lakes, warm fall and early winter temperatures led to limited hardening of the turf. Then came a deep and insulating snow pack in January that prevented the February cold snap from affecting fungal growth at the turf surface. Even though it was a relatively short winter, the conditions were perfect for snow mold to develop across the area.

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Figure 1: Snow mold pressure in southern Great Lakes locations like Madison, WI was severe in 2021.

TEMPERATURE GRAPH

°F

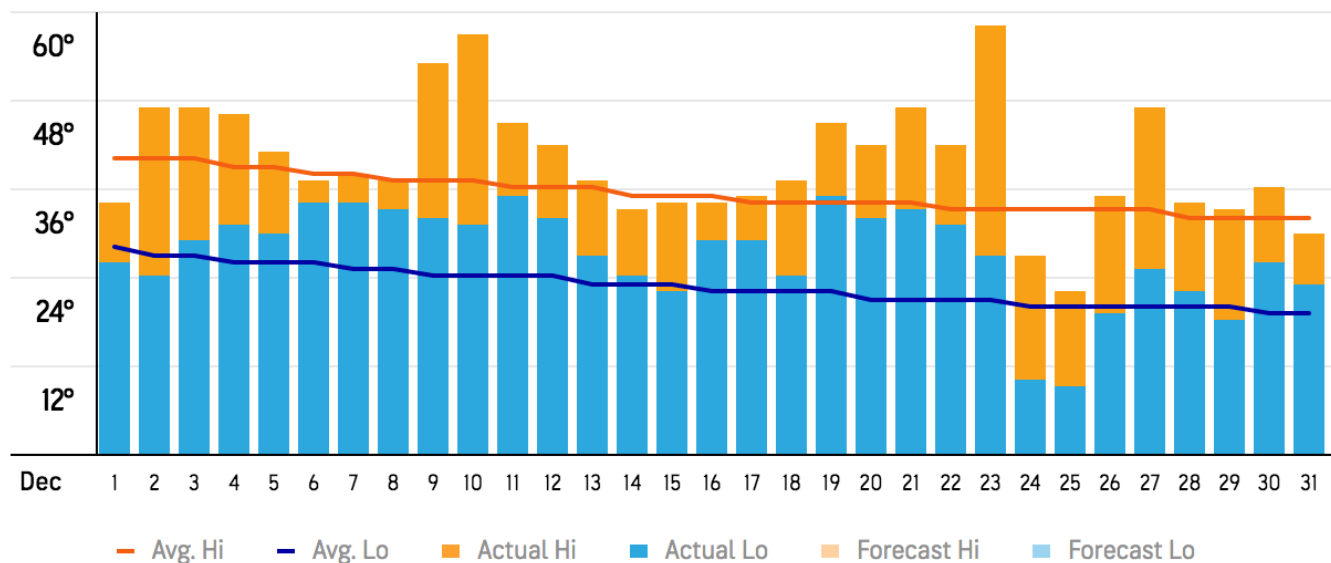


Figure 2. Chicago's December 2020 temperatures were well above average, preventing turf hardening and making it more susceptible to snow mold. Graph taken from Accuweather.com.

WISCONSIN PATHOLOGY REPORT

Not a trace of snow mold in Wausau

Four hours to the north, in Wausau, the winter started out much the same as Chicago. Temperatures in December and January were 5.1°F and 5.2°F above average, respectively. December snowfall was 8.4 inches below normal and January was 7.8 inches below normal. Just like in Chicago, there was unhardened turf susceptible to fungal infection if a deep snow cover were to arrive. But the snow never came in Wausau and other parts of the northern Great Lakes. This lack of snow cover was critical once the February cold snap arrived in mid-February. These frigid conditions froze out

the turf and the snow mold fungi along with it. One of our snow mold research sites is at Wausau Country Club, and in the winter of 2019-2020 the non-treated control plots averaged over 70% disease. In 2020-2021, there wasn't a lick of snow mold on the plots (**Figure 3**).

In short, the winter in Wausau and much of the northern Great Lakes started out much the same as the southern Great Lakes. But the snow machine never kicked on in January and February, and as a result the February cold snap killed off most of the snow mold fungi and prevented snow mold from developing.



Figure 3. What a difference a year makes in Wausau, WI. Nearly 100% disease on the non-treated control in 2020 (left), and nothing at all in 2021 (right).

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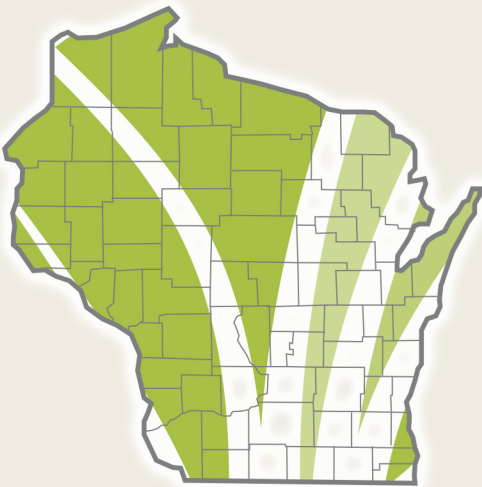
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What did we learn and how does this affect next year?

Two years ago I thought warmer winters from climate change would lead to less snow mold. But the reality is more complex. Fall and winter temperatures have increased, which has generally decreased fall and early winter snowfall totals, but has also decreased the level of plant hardening prior to snow cover. This means that when snow does arrive, the plants are more susceptible to snow mold. If temperatures continue to warm to the point where snowfall is rare even during the middle of winter then snow mold severity may decrease across the region. Right now all these warmer winters are leading to is more uncertainty about when and where snow mold will develop.

The timing of the cold snap(s) are important. Snow mold fungi like cold temperatures, but not freezing

temperatures, and you can think of a big cold snap that freezes the soil as a fungicide application that kills back snow mold fungi. If that February cold snap had hit Chicago in early January, before the deep snow cover was present, then there would have been very little snow mold development.

Should those places that got nailed with snow mold last winter treat for it this winter? Well, that depends. On the one hand, we know that a snow mold outbreak one winter tends to increase potential for snow mold the next year because of increased fungal inoculum. On the other hand, this was the first time in 10 years that many in the region had seen snow mold, so what are the chances of that happening two years in a row? My recommendation is this; if you and/or your management felt the level of snow mold damage this spring was

unacceptable then plan to treat preventatively next fall. If everyone was ok with it, continue to leave it untreated.

Lastly, and not suprisingly, snow mold fungicides work (Figure 4). Despite the heavy pressures across the southern Great Lakes I heard very few cases of disease breakthrough on treated areas. And you don't have to break the bank to get good snow mold control in low to moderate pressure environments...several solid fairway snow mold options exist for under \$5,000.

Despite the spotty snow mold development across the region, our own snow mold research from last winter still provided excellent product evaluation results on pink snow mold (*Microdochium nivale*) from our Madison, WI location and on gray snow mold (*Typhula incarnata*) from our Marquette, MI location.





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Figure 4. Despite the heavy snow mold pressure in certain areas, fungicides still provided excellent disease control.

Other sites we tested include Wausau CC in Wausau, WI, Giant's Ridge GC in Biwabik, MN, and Cragun's Legacy Course in Brainerd, MN. I urge you to look at these freely available results at our website to find treatments that work best for your situation. (<https://tdl.wisc.edu/2020-2021-snow-mold-fungicide-research-reports/>).

Acknowledgements

Our snow mold research program wouldn't work without a talented and committed group of people. First and foremost is Kurt Hockemeyer, who manages Wisconsin's Turfgrass Diagnostic Lab and directs our field product evaluation trials. This year we partnered with Professor Eric Watkins and Andy Hollman at the University of Minnesota on snow mold research at two sites in Minnesota, which was a success that we hope to continue next year. Lastly, the incredible superintendents who host our research and let us get

excited about killing grass at their courses: Aaron Hansen at Wausau Country Club in Wausau, WI; Jay Pritzl at Timber Ridge GC in Minocqua, WI; Craig Moore at Marquette CC in Marquette, MI; Matt

McKinnon at Cragun's Resort in Brainerd, MN; and Jeff Simondet at Giant's Ridge GC in Biwabik, MN. Thank you to everyone for making our snow mold research successful year after year. 🌱

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Silver Linings

By Jake Schneider, Local Bum, Madison



It seems as if the golf course maintenance world is trending an every-decade wave of making the most out of a bad situation. We probably don't want this to continue, but getting a piece of coal that turns into a sparkling diamond makes the best out of a not-so-good situation.

Circa 2010, I can vividly remember sitting around the break room picnic table at Blackhawk CC and discussing the early soft goods order with Chad Grimm and our sales rep. It was there where we were introduced to the latest-and-greatest herbicide at the time, and based on the literature, it seemed like the real deal. However, when I was reading through the label, I noticed that it was (luckily/unluckily?) not labeled for prostrate knotweed. Being a small-acreage course with minimal cart paths, we had loads of perfectly-compacted soil for knotweed to make its presence known, and it was one of the primary weeds that we needed to address. Given this combination of factors, we decided to pass on this newly-developed herbicide, and as such, my name is still said in hushed tones around Blackhawk.

I may be exaggerating that last part a wee bit, but it was impossible not to play the "what if" game regarding our non-purchase of Imprelis. Ok, I'm not saying that the ensuing Imprelis debacle was a good thing for the perception of the golf industry in general, but for some courses, it did have its financial perks that arrived at a rather opportune time after the Great Recession. What most likely would have happened in our case would have been the death of a number of Norway spruces and several gigantic white pines. The settlement money from DuPont would possibly have been used to pay down debt and get a start on the long-awaited bunker renovation. Oh, the things we could have done.

As we watched other golf courses get new irrigation systems and update their clubhouses, we took solace in the fact that we were able to get our knotweed under control. That, my friends, is sarcasm. Yes, I'm fully underplaying the black eye that this fiasco gave the industry and the extra headaches that superintendents incurred from the aftereffects of Imprelis, but for some, a bad situation turned out pretty darn well.

Fast forward almost ten years, and some of the same storylines came into play when a rather well know virus named COVID-19 started making its way around the globe. The spring of 2020 started with great uncertainty

for almost everything, and the golf world in Wisconsin was no exception. At first, government mandates dictated that courses wouldn't be allowed to open. Reason eventually prevailed, and golfers were able to again hit the links in late April when the governor's safer-at-home orders were modified. And then, the floodgates opened.

Although it makes sense that people would take refuge in the fresh air of the outside world in a virus-fueled pandemic, I don't think there are many who predicted the tremendous growth that it would bring to outdoor-related industries. From golfing to hiking to cross country skiing and beyond, Wisconsinites, more than ever, started to rediscover the amazing benefits of spending time in nature, and despite an abbreviated season, golf courses in 2020 saw tee sheets that were more filled than they had ever been. Although maintaining the grounds with limited staffing and extra precautions in place to keep employees healthy was certainly a challenge that only the sadistic would want to repeat, the financial windfalls were significant and much needed. But, there was no certainty that the positive momentum would continue into 2021 when more restrictions were lifted.

As we've seen, things are still going awfully well, and many golf courses are in better financial positions than they have been in in decades. It's been terrific to see folks discover and rediscover the many positive effects of playing a few holes with friends and family, but getting to this point without a global pandemic would have been preferred. It is what it is, and although the situation is far from ideal, seeing the golf industry thrive again is refreshing. At this rate, though, we better buckle up for 2030. Hopefully, it strikes with the same whimper as Y2K while driving another influx of cash to the golf industry. 🌱



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MEMBER SPOTLIGHT

Justin Prescott

By Josh Lepine, Certified Golf Course Superintendent, Maple Bluff Country Club and
Ben Labarre, Golf Course Superintendent, The Legend at Bristlecone

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

Name: **Justin Prescott**

Company Position: **Equipment Manger, Kenosha, CC**

Years as WGCSA Member: **2**

Membership Classification: **EM**

39 years old husband to Stephanie, father of Maggie (9), Clara (2), Wallace (1). Have held positions in the golf industry as grounds crew, irrigation technician, assistant superintendent and am currently Equipment Manager at Kenosha Country Club. Technical diploma in advanced welding and fabrication, with work experience in the maintenance and repair of ski lifts and snowcat grooming equipment, aquatic weed harvesting work boats and specializing in golf turf maintenance equipment.

18 Holes With Justin Prescott

1. How did you get started in the turfgrass industry?

As an operator for a summer job at a local course.

2. What is the most rewarding part of your career? I enjoy it. I have never found anything that comes close as a job.

3. What would you consider to be your greatest career challenge? Balancing work and family.

4. Which three adjectives describes you the best? Diligent, loyal and empathetic

5. Tell us about your family. My family is my world. 39 year old husband to Stephanie, father of Maggie (9), Clara (2), Wallace (1)

6. Any pets? No

7. What drives/motivates you every day? Making a better life for my family. Being passionate about my career.

8. Who Do You Admire? My parents.



Above: Wallace, Stephanie, Maggie, Justin and Clara enjoying some warm weather.

Below: Stephanie and Justin



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MEMBER SPOTLIGHT

10. What's a fun fact that people don't know about you?

I enjoy writing, just recently found this out myself! I enjoy learning, I have an almost unsatiable thirst for knowledge.

11. What do you do in your spare time, favorite hobbies?

Golf, Nature Walks, Swimming, Skiing, Music

12. If you could go anywhere in the world on vacation,

where would you go? Europe, I would love to visit my ancestral roots.

13. What is the one thing you would like to learn/ac-

complish someday? I would like to purchase a home for my family.

14. What is your favorite turf management related tool

or technique? Networking, friends and colleagues sharing knowledge is my most valuable tool.

15. Favorites:

TV Show: Dr. Who

Movie: Back to the Future

Food: Coffee

16. Do you golf? Handicap? Best shot or golf story?

I golf when I can. I once nearly had an ace, but won closest to pin and a set of irons therefore.

17. Top Bucket List Item? Travel Europe

18. If you could provide one piece of professional advice, what would it be? DON'T PANIC! 🌱



Above: Justin and Stephanie

Below: The family enjoying the holidays



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WTA Fall Golf Classic 2021 at Nakoma Golf Club

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



On Monday, October 4th 2021, ninety-eight golfers took over Nakoma Golf Club in Madison.

The activity is the largest fundraising event for the WTA every year. The WTA has been hosting the Fall Golf Classic since 1982. The WTA has only had two rain outs, 2018 and 2019. Over the years my predecessor, Tom Schwab, has made this an entertaining event, with the focus on fun, not just a skills challenge. The festivities at Nakoma Golf Club continued this mission.

The event was attended by 98 golfers of all skill levels. The laughter and fun was abundant all around the course and clubhouse the entire day. The first few holes began with a very light mist but I did not see any umbrellas being used. It lasted for a hole for two then the day was pleasant.

Overcast and warm but not hot until the very end of the day when the mist returned. The mist was not enough to dampen any fun.

Superintendent, Mike Lemke, had the course in great shape. When I visited with Mike the Friday before, the greens were slick. Sunday afternoon Nakoma Golf Club received one inch of rain. When Mike told me this Monday morning I was concerned, you see in my much younger days after one inch of rain, the course would be playable but very wet. Mike told me not to worry as there is now an interstate system of tile throughout the property. He was right, the course handled the water well. The only casualty was the green speed. As we all know green speed takes a pounding after heavy rains, but it might have been a blessing in disguise because I heard many people had problems putting. The slower speed might have contributed

to a more enjoyable day. Thank you, Mike and your staff for all you did to make the day happen, you made my job much easier.

When it comes to making my job easier the entire staff at Nakoma Golf Club must have had that as a goal. The pro shop communicated their needs and helped me with a few issues. They were super easy to work with. Event manager, Brianna, understood what we needed and was wonderful. The kitchen staff was very helpful with a few concerns of mine and the food was great. Lastly, I want to thank the Nakoma Golf Club Board of Directors for allowing us to hold our Fall Classic at such an enjoyable course.

This event would not be possible without the sponsorship of our members and vendor partners. Please remember those that sponsored this event as you move through early order season and next year's growing season. In alphabetical order below:

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NOTES FROM THE NOER



Top Left: Registration is under way at the beautiful Nakoma Country Club.

Top Right: David Brandenburg and John Turner, with Steve and Tim Schmidt smile despite their scorecard.



Left: The Maple Bluff team of Dave Brown, Boe Jentree, Jens Arneson, and Josh LePine look like winners.

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NOTES FROM THE NOER

The event was a four-person scramble and there were some pretty good scores posted. The team of Edward Huberty, Kyle Dawson, Brian Opheim and Riley Thomson won with a winning score of 10 under par. Seven teams finished with a score of seven-under-par or better. As I mentioned this is not a skills challenge so the next golf winning score was four under par, winning a scorecard playoff was, Devin Lysne, Kevin Green, Omar Zaldivar, and Reid Maier. The next golf prize that went to the last-place team with a score of (none of your business) was Ethan Rosenberg, Brian Haag, Justin Mottl, and Dan Prochaka.

The Classic had five event hole prizes, the first four were gift certificates to the pro shop. The winners were: Closest to pin number 17 David Blast

Long Drive number 10 Aaron Hansen
Long Drive number 10 for women Tiffani Horman

Long putt number 18 Devin Bressers

We also had a special sponsored prize for closest to the pin on hole number four. An ION Pathfinder 280 all-weather bluetooth speaker was donated by Bio-Health Pod System by Rigerio, represented on the tee by long-time member Colin Seaberg. The winner was Paul Evans.

Each year the WTA does a playing card raffle which is normally a huge success, and this year was not any different. We thank everyone that bought a card or two to support a good cause. Their year there were three prizes awarded. A Fitbit Versa 3 watch won


by Michael Bekken, a Ph.D. student in the Soldat lab in Soil Science

Two pack of Ring Doorbell Camera System

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After the prizes were awarded, it was time for the raffle. With the very generous support of the people and companies below, we again were able to make sure every participant received a prize.

The day ended with a few heartfelt good-byes and an idea-sharing session around the bar. On behalf of the entire WTA Board, I would like to thank everyone that participated and helped make this year's Fall Golf Classic a huge success.

Hope to see everyone next year at the 2022 event at Oneida Golf and Riding Club. 



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Enjoying after game conversation are Omar Zaldivar, Devin Lysne, Reid Maier and Kevin Green

NOTES FROM THE NOER



The 158 yard par 3 13th hole at Nakoma is well protected by bunkers.

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NOTES FROM THE NOER



Top Right: The downhill par 3 4th hole plays 146 yards downhill but shots right or left of the green require a great recovery shot for par.

Top Right: Beth Whitehouse served as photographer.

Middle Right: The team of Lee Mahnke, Mike Bremmer, Phil Davison and Eric Leonard were the leaders on paper before the round began.

Lower Middle Right: The activity around the pool attracted everyone's attention.

Bottom Right: The 527 yard par 5 16th hole plays downhill but is not a easy birdie.



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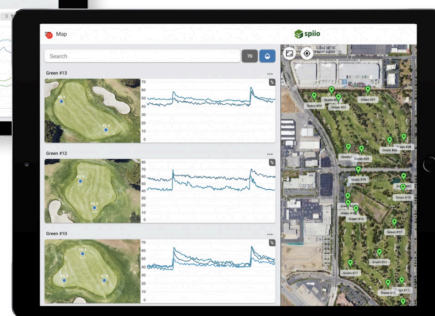
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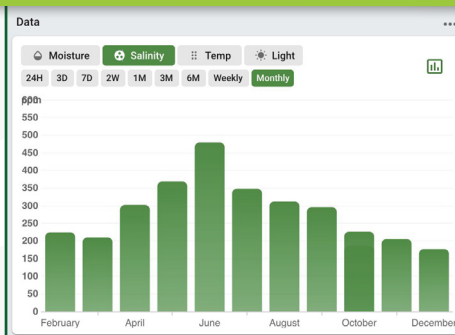
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2020-2021 The Hockemeyer Snow Mold Prediction Model: The Follow Up

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



For my last Grass Roots article, I wrote my predictions on how much snow mold pressure we would have at each of our snow mold research sites during snow mold rating in spring 2021. I believe I was correct on some accounts and very, very wrong on others. As a reminder, to the right is my rating scale for predicting snow mold. Let's get into it.

Marquette, MI

Prediction: That's a lot of snow mold (50-75% disease in nontreated plots)

Result: That's a lot of snow mold-72.5% disease in the nontreated plots

Nailed it. I was a little hesitant to predict a lower amount of disease in Marquette, but it looks like it was a good call. I thought that disease pressure would be negatively affected by later than average snow cover in Marquette and it looks like I was right. The main question was how much disease pressure would drop after very little snow in November and deep snow not arriving till late December. Still a decent amount of disease pressure by any standard though. I was very close to being wrong but when you're right, you're right!

Prediction Scale	Percent Snow Mold in Nontreated Plots	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'd?	0-10	So little snow mold infection you can't even spell it right.



Figure 1. Dr. Koch harvesting some sclerotia from a nontreated plot in Marquette. Plots in the foreground were treated with effective fungicides and resulted in very little breakthrough. Nontreated areas are in the background.



TURFGRASS DIAGNOSTIC LAB

Minocqua, WI

Prediction: I've had better snow mold (25-50% disease in nontreated plots)

Result: Snow Mold Utopia-91% disease in the nontreated plots

For the second straight year, I massively underpredicted the amount of snow mold that would be present in Minocqua. November and December snowfall was below normal, but it was also warmer than normal. Also, the fairway in which we locate this study is a unique microenvironment. Very shaded and sloped away from the sun. Maybe this microclimate is enough to overcome any shortcomings in the overall weather patterns from year to year. Or maybe the overall weather just wasn't all that detrimental to snow mold infection. Either way I was wrong again.

Wausau, WI

Prediction: What's snow mo'u'ld? (0-10% disease in the nontreated plots)

Result: 1st study: What's snow mo'u'ld?-0% disease in the nontreated plots

2nd study: "Baby Bear" snow mold-12.5% disease in nontreated plots

There were two studies in Wausau. The large snow mold study did not have a single speck of snow mold. But our smaller timing study did have a small amount of snow mold. Below average snowfall throughout the whole winter was probably the main driver behind very little snow mold pressure. Why a small difference between the two studies? No idea. The two plots were right next to each other and likely had very similar microclimates. I'll give myself only one point here for getting only one study correct but I was very close on the 2nd study.



Figure 2. Natural infection of gray snow mold in Madison. We had enough snow cover in Madison for extensive infection by *Typhula incarnata*. Treated areas in the background.

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TURFGRASS DIAGNOSTIC LAB

Madison, WI

Prediction: I've had better snow mold (25-50% disease in the non-treated plots)

Result: 1st study: Snow Mold Utopia-87.5% disease in the nontreated plots

2nd study: That's a lot of snow mold-66.7% disease in the nontreated plots

I underestimated how much snow mold we would get on both of our studies in Madison. We had some pretty good snow cover in Madison starting in mid-December and it lasted into March (close to 90 days). Our first study was the timing study and it had almost as much snow mold as our timing study in Minocqua. I think there are several

reasons why we are seeing this. First off, we had great snow cover early in Madison which just made a great environment for snow mold infection. Second, we've had this study on the same plot for several years now and I believe that the amount of snow mold inoculum has slowly built up over those few years. Third, we've found in years past that if you juice up some turf with some potassium apps in the fall, you get more severe snow mold. So, every fall, I do 2-3 apps of potassium to get these plots juiced up and ready for snow mold. Our second study was our pink snow mold study where we inoculate the plots with rye grains that have been infested with the *Microdochium* fungus, and then cover the plots with insulation frames and an

Evergreen tarp. This study usually gets consistent snow mold due to all the things we do to encourage snow mold infection. And this year was no different.

To summarize all my predictions, I got 2 of 6 predictions correct. Ugh... not great. Guess I should work on my snow mold prediction model. Oh well, there's always next year! I do enjoy these predictions so unfortunately you'll be seeing more of these articles from me in future years. Hopefully I get better at my predictions though. It's early December now so I will soon start my predictions for the latest round of snow mold studies. Let it snow baby!

Kurt Hockemeyer can be reached at 608-845-2535 hockemeyer@wisc.edu or tdl.wisc.edu ✓



Figure 3. More natural infection of gray snow mold in Madison. Plots treated with Instrata at the proper timing had very little disease.



Figure 4. Pink snow mold infection on the plots that we inoculated with *Microdochium nivale* and covered with insulation frames and a tarp in Madison. Various products have different efficacies against *Microdochium*.

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WGCSA 2021 Meetings

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

As 2021 started, and covid continued to affect our lives, we quickly learned how to use virtual meeting platforms such as Zoom, Go to Meeting, Facetime, and Skype to communicate.

These were all great ways to learn but turf managers could also suffer from information overload as so many vendors and organizations were providing great content through the platforms.

For many of us it started with the Virtual Golf Industry Show. I attended when I could but it was hard to avoid work and life interruptions when just watching a class as a muted, invisible attendee. It was good education, but not the best delivery method. It made me feel sorry for the many students attending school virtually and I wondered how they could concentrate from home with a dog, cat and other people home.

The WGCSA season started with a virtual Spring Business Meeting which I could not attend due to technical difficulties. Along with the normal valuable association business a valuable bylaw change was approved.

In laymans terms, the full membership will still vote on the entire association budget at the annual fall meeting. However our Scholarship and Research disbursements can be approved by the Board of Directors rather than the entire membership.

This change was needed because the membership only meets twice per year, but research proposals are submitted year round. At our fall meeting time, the researchers know what research they want to do, but they do not know what other funding sources are going to participate through donations or grants.

The 5 person Scholarship and Re-

search Committee (The Treasurer and 4 at large members) will recommend scholarship and research disbursement based on the approved budget, and the Board of Directors will vote to approve or disapprove.

Our first golf event of the year was the Annual Super-Pro sponsored by Premier Golf & Utility. This years event was held at Wild Rock Golf Club.

Hosts were Golf Course Superintendent Lucas Johnson and PGA General Manager Pat Stein. 31 teams competed in the two divisions of Modified Chapman Alternate Shot and complete results can be found on the PGA of Wisconsin website and the winners are on page 68.

The Sandbox at Sand Valley was host to the Two Person Class C and EM Two Person Scramble on May 4th. Hosts Superintendent Rob Duham and Equipment Manager Austin Wright had a fun filled day planned for the group.

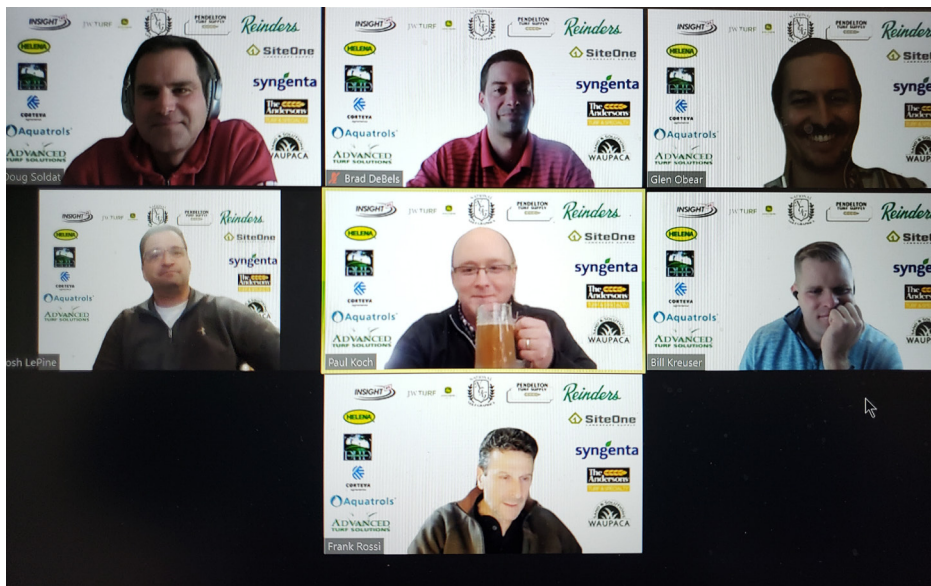
The event was open to all members but Equipment Managers and Assistant Superintendents were encouraged to attend.

The Sandbox was designed by Bill Core and Ben Crenshaw and features a 17 hole short course. The holes vary from 40 to 140 yards and feature unique green complexes.

Abby Springs was host to the two person scramble on May 11th. Host Superintendent Lee Suwalski and Director of Grounds Andy Kronwall had the course in great early season condition for our group.

Abby Springs is a regular to host our events and the course never disappoints with elevation changes and a combination of open and tree lined holes.

In June the WGCSA went to Green Lake to the historic Lawsonia Golf Course Links 18. Fast and firm were the words of the day.



The new normal of virtual learning. The WTA's Happy Hour with the Turf Docs. From the comfort of the office or home attendees could learn from Doug Soldat, Brad DeBels, Glen Obear, Josh Lepine, Paul Koch, Bill Kreuser and Frank Rossi. This session was a nice 2 hour 2 hour learning experience with attendees interacting by chat. The seminar was bring your own beverage.



The Blue Mound Country Club team of PGA Director of Instruction Jim Schuman and Superintendent Alex Beson-Crone, shown here with sponsor Darrin DiChristopher of Premier Golf & Utility Vehicles shot a record 8 under par 64 for a winning net score of 63.3 to narrowly beat out the West Bend Country Club team of James Kelly and Brian Bonlender by .35 strokes.



Abby Springs Host Superintendent Lee Suwal-ski welcomed the group in May. In fall of 2021 the course underwent a large project with new green complexes with 007 bentgrass, bunkering, fairway drainage and pond work. The changes to the Killian/Nugent design were done by the team of Bob Lohman and Todd Quinto. The Abby Springs website has a great review of the work.



Peter Meyer shows perfect long drive form on hole 14 at Abby Springs. He didn't win but was in the center of the fairway.



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Host Superintendent Mike Lyons and his staff had the course in excellent condition for the 2 Person Best Ball Format.

Chris Goeben and Andrew Harvey tied for low gross with a 71 with Travis Krauklis and Mark Lockhart.

Steve Abler and Adam Sueflow beat out Peter Meyer and Grant Larson in the net competition.

On July 20th the WTA Summer Field Day returned and a complete write up can be found on page 35 of this issue.

The joint NGL/WGCSA Member Guest meeting was supposed to be held at Northern Bay in Arkdale with Bruce Livingston as our host. The gathering fell victim to a combination of covid safety and covid we are so busy we cannot get away.

As a superintendent who had a event

cancelled a few years ago for lack of attendees it is unfortunate.

In this case, some of our members would prefer not to travel or gather with those we do not see every day due to covid. It is also a sign of how strapped many courses are for employees in positions from managers to mowers.

September 13 many of our members joined the Wee One Foundation at Pine Hills County Club for this important benefit.

This long time benefit named for Wayne Otto provides for donations to those in need in the turf industry. Since 2004 the foundation has gifted over \$1,800,000 to families with medical hardships.

You do not have to play in the event to support the Wee One. You can support

by simply being a member or pledging 1% to the endowment campaign. Visit weeone.org for more information.

The year ended with the Fall Business Meeting via zoom on December 15th. Rather than bore you with the details, I will simply say your association is in good hands. The work by Chapter Manager Brett Grams, President Jeff Barlow and the rest of the board has the association doing well during these interesting times. The entire list of board members is on page 3 of this issue and feel free to contact them to contribute your opinion or to volunteer for board service.

Next years event calendar is on page 7 of this issue and we hope to see you networking with your peers and supporting the WGCSA at one of more of these events. 🌱



Top Left: Lawsonia Golf Club host Superintendent Mike Lyons

Top Right: WGCSA Flags donated by Peter Meyer and National Golf Graphics

Bottom: The 6th green in the foreground with the 9th fairway and clubhouse in the background. Keeping the ball out of the "gorse" on the short curves was key to scoring.



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120th Wisconsin Amateur Championship Visits Westmoor CC

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

The State Amateur was held July 19 to 22 at Westmoor CC in Brookfield. Host Superintendent Patrick Reuteman and his staff had the course in excellent condition for the event.

The course features challenging green surrounds and the rough was the place to avoid for any chance to stop the ball on the firm, fast greens.

Piercen Hunt of Hartland, shot 279 for the 4 rounds won easily by 6 strokes over 2019 champion Hunter Eichhorn of Carney, MI and Adam Miller of Nekoosa. The final total score of one under par shows just how difficult the course was playing. Considering 6th place was 10 over par Westmoor was a true test of golf for the states best play-

ers.

Patrick started his career in golf at Westmoor in 2009 while in college. He spent the 2011 season as a grounds intern for the Milwaukee Brewers and the 2012 season as a intern at The Ridgewood Country Club in Paramus NJ.

After graduating from the University of Wisconsin Madison with a Soil Science, Turf and Grounds Management degree Reuteman returned to Westmoor in 2013 to serve as Assistant Superintendent for nearly 9 years before becoming the Superintendent in 2017.

Pat follows in the footsteps of Bryan Bergner who served as Superintendent from 2011 to 2017. Previous Su-

perintendents include Jerry Kershasky (1976-2011) Bill Brazeau (74-75), Wayne Gripp (72-73), Erve Bertram (43-71) and Archie Schendel (25-42)

Westmoor opened in 1925 and is a full service club with not only golf, but tennis, pool and excellent dining inside or out.

Originally designed by member Lloyd Fitzgerald the course was partially redesigned by William Langford in the late 50's due to expansion of the nearby interstate. In 1973 David Gill came in and did some work on holes Langford had not done. In 2009 Todd Quitno of Lohmann Golf Design was tasked with revising the green surrounds and 16 holes received significant changes. ✓



Amateur Qualifier Sites and Host Superintendents

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Johnson Park GC - Jeremy Dahl
Watertown CC - Tim Venes
Wausau CC - Aaron Hansen
Turtleback GC - Todd Severud
The Oaks GC - Jeff Rottier
Washington County GC - Dave Jahnke
Fox Valley GC - Scott Bushman
La Crosse CC - Greg Willman
Lake Arrowhead GC Lakes - Eric Jasin

Left: Mowing the 18th green

Right: Host Superintendent Patrick Reuteman

Page 73 Top Left: Mowing the 7th collar with hole 8 in the background

Page 73 Top Right: The 18th from the tee at 469 yards will challenge the players.

Page 73 Bottom Left: The par 3 5th shows the elevation of the green surface compared to the surrounds

Page 73 Bottom Right: The fairway team on hole 7

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Jeff Barlow Serves as 46th WGCSA Leader

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

Jeff Barlow was elected as the 46th President of WGCSA at the Fall Business Meeting. Jeff has served at Waupaca Country Club, first as Assistant Superintendent for 5 years and now Superintendent for 22 years.


A 1991 graduate of Waupaca High School Barlow attended UW-Oshkosh for two years before finishing at UW Madison with a degree in Soil Science with a emphasis on Turfgrass Management in 1995.

Married to Jennifer and with 3 daughters, Jeff still finds time to coach, fish and hunt.

Jeff not only serves the WGCSA but he serves as a Town Supervisor in the Town of Dayton and is going on his third term.

Waupaca Country Club was designed in 1923 by Jack Burns believed to be a superintendent at a Appleton area golf club. Known as one of the "finest nines in the country" the course features mature pines and oaks along with the Waupaca River.

It was clear from the clubs website Jeff is a well respected for his work on the golf course and with the membership.

The WGCSA is in good hands with Jeff at the helm. 



Top: The Barlows: Jennifer, Kate Brenna, Emily and Jeff

Center: Right: Kate, Emily and Brenna

Below: This shot of Waupaca Country Club shows the glowing bentgrass but also shows golfers want to keep the ball in play.



COVER STORY



President Barlow is active outdoors and has a wonderful family. Shown to the left with his wife Jennifer and Above with his daughters Katie, Emily and Brenna.

Below is a picture of Hole 6 at Waupaca Country Club. The 421 yard par 4 is one of four river crossings and highlights the mature trees the course is known for.



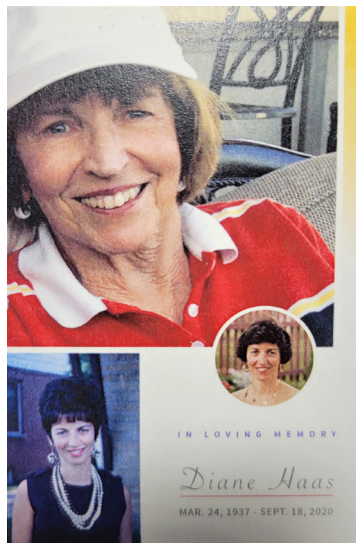
Changes Abound

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



Gene Haas, Retired Director of the WSGA and long time contributor to The Grass Roots, memorialized David Smith with this drawing. David passed away at the age of 69 on October 9th 2021.

David was a long time member of WGC-SA and 34 year Superintendent at Abby Springs in Fontana. Although soft spoken, Smith was a leader in the industry and former WGCSA board member.



Diane Haas who served for 25 years as the voice and administrator for the WGCSA passed away on Sept 18, 2020. Diane started working with us when her husband Gene, as executive Director for the WSGA, and Jim Belfield as President of WGCSA agreed to have the WSGA serve as our administrator.

It was Diane who filled that roll and kept the members and boards in line by handling our mailings, membership and financials.

The bottom picture was taken shortly after Diane's retirement in 2007. Left to right are Gene Haas, David Brandenburg, Monroe Miller, Diane Haas, Brian Zimmerman, Jim Vanderwynen and Mike Lyons. Diane was a gift to our association and will be missed by many, and especially by Gene her husband of 62 years.



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EDITOR'S NOTEBOOK

After 12 good years, 1 bad year and 1 horrible year as editor of *The Grass Roots* I am turning over my pen and camera to Jake Schneider. I should have done this 2 years ago when my job shifted to the clubhouse and the time I dedicated to these pages disappeared.

Frankly I should have been fired, but I think the board was worried about who would take over or didn't want to hurt my feelings. Luckily Jake Schneider is now available to take over and lead *The Grass Roots* to the next chapter of the WGCSA history.

For 2021 you will receive one big issue and soon after you will receive Jake's first issue of 2022 with a new look and a planned 4 issues per year.

I want to thank Monroe Miller for trusting me with the magazine that he turned into the best chapter publication in the country. I also want to thank the 8 Chapter Presidents and many board members that I served as Editor under.

Thank you to Chapter Executive Brett Grams who does so much for *The Grass Roots* as Business Manager but also for the association as a whole.

The writers deserve the huge thank you's, as their words make *The Grass Roots* educational, and allows us to stand out from other publications.

Most of all, thank you to my long time associate and Superintendent James Juoni who along with our Equipment Manager Jeremy Ruplinger watched over the staff while I was at meetings or golf events taking pictures. I appreciate it more than they know.


I will miss the rush of the deadlines and getting to know more people than I can count. I will also miss the media tents at major golf tournaments and the unlimited ice cream.

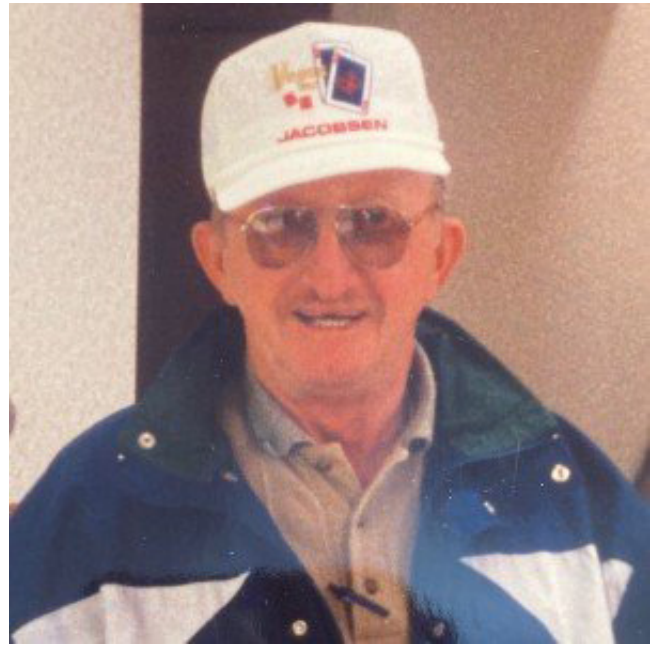
I will enjoy going to association meetings and not worrying about a camera or detailed notes.

My apologies for my inability to produce the issues in a timely manner the past two years. I had good intentions and optimism that did not pan out.

Be sure to support Jake by submitting articles about your research, projects, successes and sometimes your failures. Even if you just send him pictures of your big buck, new wife or baby he will appreciate it. The e-mail will remain the same: grassroots@wgcsa.com.

Zachary Marten has earned a \$2,5000 Joseph S. Garske Grant from the GCSAA. Zachary is son to Todd Marten, Assistant Superintendent at Pine Hills Country Club in Sheboygan and is studying accounting at Concordia University.

Garske grants were established in honor of the founder of Par Aide and have been awarded for 18 years based on a students community service, leadership, academic performance and an essay. Congratulations to Zachary and his parents Todd and Lisa. 



Longtime WGCSA member Myron Seaver passed away December 25th. In his younger days Myron served as Golf Course Superintendent at Bigfoot CC and Evergreen GC before joining Jacobsen Dealer Wisconsin Turf where he served for 30 years as a salesman. Myron was a regular at association meetings and a true people person.



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EDITOR'S NOTEBOOK



Travis Miller is the recipient of the 2020 J.R. Love Scholarship. Travis was a soil science major at UW Madison and has done internships at University Ridge, Whistling Straits and the Wade Hampton Golf Club in North Carolina.

For more information on scholarship opportunities offered through the WGCSA visit our website at wgcsa.com



Gene Haas submitted this drawing of Dr. Doug Soldat last year. He was responding to Dr. Soldat's article about his change in life and trying to find something to do.

Mr. Haas is not only an excellent artist but a walking encyclopedia of golf history in Wisconsin.

During the covid shutdown Governor Evers had called Gene to discuss how golf could be safely played. The next day, golf was allowed. Coincidence? I think not.

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JOHN DEERE
GOLF



Golf & Sports Turf Rollers



BERNHARD



LASTE C

IT'S ALL ABOUT PLAYABILITY...

Midwest Turf, offering Innovative Products to help you Exceed your Playability Goals.

When You Make An Input, How Does it Directly Impact Playability?

tvSiphon
multifunctionalsurfactant

tv23G
surfactantin fusednitrogen

GR
Verschoor Aankers
TOPCHANGER



tvBase
long-termwettingagent

tvSTS
spraytanksynergy

STEC EQUIPMENT

SANDFILLER

The Sandfiller is the ultimate machine for trash removal and sand backfilling with the ability to sort-out, collect, deposit material, and sandfill in one pass. With the ability to hold over 1000 lbs of sand, this machine is designed to work efficiently without the need to continually refill. And when you have filled the collection hopper it has a hydraulic dumping feature to make clear up easier. With a working depth of 2" and variable working widths, the Sandfiller can easily be adjusted for light or aggressive work.

SPECIFICATIONS			
Model	Working Width	Working Depth	Required Power
SP-120	48"	0-1.5 in.	45-60 HP

The Sandfiller runs on a series of 3 low-impact rollers allowing the machine to float on uneven terrain with ease.

WHY IT'S #1

- ✓ Holds Over 1000 lbs of Sand
- ✓ Adjustable Working Depths
- ✓ Removes Unwanted Trash Buildup
- ✓ Verticut, Collects and Sandfills in One Pass
- ✓ Hydraulic Dumping Collection Box

VERTICUT, COLLECT AND SANDFILL IN ONE PASS

It has been developed for simultaneous verticutting and sandfilling in one pass. This greatly improves the surface drainage and allows up to 15% surface input to help stop the formation of contaminated turf. The Sandfiller is perfect for greens applications ranging from major and recreational to sand trap maintenance.

TCT FAIRWAY TRENCHER

The TCT Fairway Trencher is designed to be the ultimate in strength and versatility. With several chain options available—including soil blades, terminator teeth, 30/20 chain or variable buffer—there is a trench setup for almost any condition. Most wear parts, such as bearing and chain components, are made in the USA and readily available to keep you working without interruption. With three boom options, the TCT can trench down to 4 feet deep and trench widths from 4" to an unbelievable 12" wide! The trench is neat and clean thanks to the crumpler bar and a two piece conveyor system.

SPECIFICATIONS			
Model	Working Width	Working Depth	Required Power
TCT	4-12"	Up to 48"	40-80 HP

The TCT Fairway also has options for laser depth control and electric over hydraulic joystick control.

THE ULTIMATE TRENCHER FOR DRAINAGE PROJECTS

The TCT Fairway Trencher is designed with a heavy duty steel base that is rated up to 80 HP and can withstand the toughest of conditions.

WHY IT'S #1

- ✓ Joystick Remote
- ✓ Adjustable Working Widths
- ✓ Adjustable Working Depths
- ✓ No Clean Up Necessary
- ✓ Clean Narrow Trench



Want to improve playability at your course? Contact your Midwest Turf representative for real results!

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