

## HAPPY HOUR - with the Turf Docs

By Josh LePine, Superintendent Maple Bluff Country Club, WTA Board Member

What an outstanding event! Thank you to the 100 plus attendees and the Turf Docs for a great, fun, casual, yet extremely informative, *Happy Hour with the Turf Docs* earlier this winter. Although COVID would not allow us to meet in person for WTA Research Day 2021, we still came together virtually on January 21st, as an industry, to talk turf with some of the leading turf scientists in the world.

Thank you to Dr. Frank Rossi, Dr. Doug Soldat, Dr. Paul Koch, Dr. Bill Kreuser and Glen Obear for sharing their knowledge, research and experience. The attendees had the opportunity to submit questions prior to the event and then sit back, virtual chat, listen and learn as our experts casually talked turf, poked fun at each other at times and dove deep into multiple trending turf topics. These topics included data driven precision turf fertility, wetting agents, plant growth regulators, Best Management Practices, new UW Turf Short Course offerings, topdressing and many more!

It was a free two-hour event; we covered a ton of valuable information, but the interest and questions exceeded our time. Dr. Rossi did an excellent job of moderating while giving each Turf Doc an opportunity to answer and dedicated the perfect amount of time to explore each topic we addressed.

Below are the submitted questions we did not have time to explore. Dr. Soldat (DS) and Dr. Koch (PK) took time to answer and we have included their responses here.

The WTA looks forward to continuing this successful event in the future. Keep the great questions coming!

### Research

#### • In your opinions, what aspects of precision turf management do we need further research and understanding?

PK: We have a lot of the science in place, the most important advancements over the next few years will be technological. Both in how we collect and analyze the data, but also how we apply product to smaller, more targeted areas in an efficient way. We have shown that the Smith-Kerns dollar spot model can be used to pinpoint fungicide applications to targeted areas on a golf course, now we need the ability to collect, manage, and apply that data.

DS: We need better software to make using precision data easier. Most soil moisture sensors come with an interface that displays the data or even maps the moisture data, but it's hard to make the best use of that data if it isn't talking to the irrigation system directly. Similarly, you can use a drone to see the NDVI data for the course, but the next steps aren't clear. You can run a dollar spot model or have maps of where extra N may be needed, but until the prediction software talks to the sprayer, precision turf management will be hard to implement. It's all coming along, but too slowly in my opinion.

#### • With the variety of winter weather we are having nowadays, how does that impact the future of winter disease research?

PK: It makes it more uncertain. Shorter durations of snow cover seem to suggest that snow mold pressure will be less, but warmer fall temperatures mean the turf will be less hardened going into snow cover and could be more susceptible going into winter. This winter was a great example. We had basically no winter until January, then we had a ton of snow on unfrozen ground and had a lot of disease on untreated turf.

#### • If time and money were no object, what turf research projects would you develop and why?

PK: I would hire an army of data experts to run a series of machine learning models that would help us learn so many things about how microbes relate to weather patterns and how that relates to disease development. Since I have no idea how any of this works I would need to spend a lot of money hiring smart people.

DS: I would be working on the same topics (turf nutrient and water efficiency) but on a bigger scale. It would be fun to have a golf course as a research facility to test the impact of different irrigation or topdressing programs over the course of years and decades. The problem doing this now is that we tend to kill grass when we put it under different management protocol (killing grass is how we learn) and golfers and people who make money on the course tend not to like that! If money were no object, I'd like to be able to do experiments on a large scale in an environment where failures of turf are rewarded.

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## PRESIDENT'S MESSAGE

# Let's Wrap Up 2020 On A Positive Note

By Brad T. DeBels, PhD, Weed Man Lawn Care



As I write to you today, I believe Spring has finally sprung in Wisconsin. For me, that means the next two months will be filled with busy phone lines and lawn applications. Our years success is largely determined entirely by the months of April and May. For many of you, I suspect your less concerned about sales calls, and more interested in the turfs condition coming out of winter, what that first

cut may look like, or how you will fill your staff for the summer. Either way it is an exciting time of year for all of us in the green industry as we look forward to 2021.

For the WTA we have learned a lot about how to be flexible in 2020, yet we sincerely hope for a path back to normalcy in 2021. As I look at the calendar, we are a short few months away from Summer Field Day. We will continue to offer online research presentations similar to last year, but as of today, while with some minor precautions, we plan to have this event in person this summer.

I look forward to seeing everybody back in our natural habitat for a great day of education with the best researchers in the industry.

Many of the educational features that were introduced in 2020 were very popular and are here to stay. As a board we want to continue innovating and identify the best way to interact with our membership. New in 2021 the WTA has partnered with Dr. Doug Soldat and Dr. Paul Koch in the development of the 'Turf Specialist Consultation.' The goal of this initiative is to get UW turf specialists to your facility to investigate and answer any questions you may have. There are two support level options associated with the visits based upon your specific needs. See the following page for additional details and if you have any questions or would like to set up a visit, please email me at [braddebels@weedmanfr.com](mailto:braddebels@weedmanfr.com).

And as always, thank you for your membership! We are always looking for additional members, so if you have a colleague that would benefit from additional resources and education, encourage them to enroll with the WTA. It is your support that keeps the Wisconsin green industry the best in the nation. Enjoy spring and see you all soon! ■



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# UNIVERSITY OF WISCONSIN TURF SPECIALIST CONSULTATION

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***Questions about your agronomic program?  
Questions about Golf Course or Sports field?***

This program is a partnership between University of Wisconsin Turfgrass Extension Specialists Dr. Doug Soldat and Dr. Paul Koch and the Wisconsin Turfgrass Association. All proceeds from this program are allocated to the WTA and the professors for additional turfgrass research and education.

## **SUPPORT LEVEL \$1,000**

On-site consultation includes a ½ day visit from either Dr. Soldat or Dr. Koch to cover any topics related to the golf course/sports field construction, agronomics, soil test results and/or challenges.

## **SUPPORT LEVEL \$500**

A review of the golf course agronomic program by either Dr. Soldat or Dr. Koch includes analysis of current fertilizer and pesticide applications, review of soil test results and comparison to industry standard and university research.



***Participation is limited! Direct interest to: Dr. Brad DeBels, WTA President  
at [braddebels@weedmanfri.com](mailto:braddebels@weedmanfri.com).***

## Fertility

- **Kinds of technology that will be applied on turf's fertilizer in a near future.**

DS: Turfgrass fertilization is about control. There are two ways to control nutrient release to turfgrass. The first is using inexpensive products but lots of labor. Pick any soluble fertilizer and apply it in small amounts when it is needed. In this scenario, the labor and assessment of turfgrass nutrient need are the two limiting factors (i.e., how do we determine how much and when to apply it). The way is to apply slow-release fertilizer that releases N as it is needed by the turf. This saves labor, but increases the cost of the product, and it doesn't change the importance of getting an accurate assessment of how much to apply and when. In the late 90s polymer coated tech took off. In the early 2000s the dispersible granule fertilizer technology was patented. Those are the two biggest advancements in turf fertilizer technology during my career. I don't have a magic 8-ball, but I don't see any game changing fertilizer technologies on the horizon. All the advancements are going to come in better nutrient needs assessments (growth models, soil tests that actually work for N, using NDRE and NDVI to vary the N rate of the spreader or sprayer).

## Spray Applications

- **I've seen some people spray an outside pass on fairways, then spray the middle after. What kind of pickup happens on your tires, and how does that effect the efficacy of the product?**

PK: If the product is still wet the tires will pick up small amounts of the product and can spread it around over small distances. I have never seen any evidence that enough product would be picked up to limit disease control in the areas the tires ran over.

- **Can you discuss Host Plant Defense Induction products and Systemic activated response. (SAR) Can we overapply and overdo it on multiple products creating a SAR?**

PK: This is a pretty long, complex topic so I'll just focus on the second question. I have never seen a phytotoxicity or turf

health issues using SAR products. I know other researchers have looked at 2x and 4x rates and also haven't seen any turf health issues. So, in short, I haven't seen any turf health evidence that you can 'overdo' SAR products.

## Cultural Practices

- **How do you help maintain root density in native soil greens in the heat of the summer? Greens seem to lose their roots and then they get soft and ripped up from foot traffic.**

DS: Wet soils retain heat and turfgrass crowns near the surface are under more heat and traffic stress than ones buried a bit below the surface. Therefore, the way to cool the soil and protect the crown is to make sure you have an aggressive topdressing program. Keep the crowns buried and work at building up a 3+ inch sand cap where you can get lower soil moisture levels than in a native soil. This takes time, but it's important to remember when you are designing your topdressing program.

- **What kind of benefits are we seeing from rolling fairways? Is there any correlation with rolling and a decrease in organic matter or less frequent fungicide applications?**

PK: Michigan State has showed reduced dollar spot in rolled vs non-rolled fairways. It doesn't appear to be quite as significant as the impact when greens are rolled, but still a reduction.

- **Reseeding and protecting grass in heavily compacted/high traffic areas, especially in areas where dogs run off-leash.**

DS: I like tall fescue for these areas because it does well in low maintenance situations and is tolerant of traffic. Reseeding success depends heavily on seed/soil contact. You need to remove the dead vegetation, loosen the soil, plant the seed, rake to cover the seed in soil, mulch it, and keep it wet.

## Current/Future of Turf Management

- **With limited staffing and finances in 2020 for most operations, many places have reduced or eliminated cultural practices (topdressing, aerification, applications etc.) this season and seen little effect on course conditions. What is your opinion on these reductions and what possible effects will it have on future maintenance practices? And what strategies could you suggest for convincing ownerships that these practices are necessary and should be returned once return to normal?**

PK: One year in the course of a golf course lifetime is pretty short. Over time the negative issues may continue to build and eventually lead to a serious deterioration in course quality. Similar to our own health, I might be able to get away with eating like crap and never exercising for a period of time...but I don't think it will end well if I keep that up for long.

*Continued on page 5*

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Misc.

- I've been seeing some increased use of "low grow/no mow" turf alternatives. Can you speak a bit to that? your thoughts on that as a trend? application, comparison to current practices, etc.?



DS: I can't speak to grass alternatives, but low grow/no mow turf is basically fine fescues. From our years of research at the OJ Noer Facility on these grasses, we've found that Chewings fescue is consistently the best low mow/no mow option, followed closely by hard fescue. These two keep weed competition low and maintain good density in low or no input situations.

- Are you using microbiome analysis in order to manage better your greens and soils? I do, thanks to the new DNA sequence technics analysis. So you learn about bio sustainability, health and Nutrition in a better manner.

PK: We currently have multiple studies that could be characterized as microbiome studies in progress. At this point our knowledge of the microbiome is very limited, so I would be very skeptical of any claims that the microbiome can be harnessed in any specific way to manage turfgrass. ■

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# Former WTA Director and Long Time WTA Member Passes

By Bruce Schweiger, Superintendent, O.J. Noer Turfgrass & Research Facility, University of Wisconsin-Madison

On Sunday, January 24, 2021, Curtis Leonard Larson, loving husband and father of four, grandfather of seven, great grandfather of five and great-great grandfather of one, passed away at the age of 85 after a valiant battle fighting Covid-19.

Curt was born in 1935 and raised on a small farm in Jackson County near York-halfway between La Crosse and Eau Claire. It was a farming community with a large Norwegian population-his great grandparents were immigrants of Norway. He enjoyed attending the Lutefisk dinners at the holidays.

He graduated from Hixton High School in 1953 and went to work for a local milk Co-op. One year later he moved to Janesville where he worked briefly at GM, then Wurtz Mobile as a mechanic. In 1961 Curt started his career at Wisconsin Turf Equipment Corporation servicing lawn mowers and small engines, He retired in 2000 as the Executive Vice President. Curt served as Director of the Wisconsin Turfgrass Association and made many lifelong friends in the golf course industry.

Curt Married the love of his life and high school sweetheart, Mary Louise Boe on August 14, 1955. They celebrated their 65th wedding anniversary. Together they had four children-Brian, Bruce, Barry and Andrea. Curt was dedicated to his family and was so proud of them. Dad was always available at the drop of a hat to help out and offer advice. During his retirement Curt was an avid member of the Golden "K" Kiwanis where he dedicated his time to fundraising. He was almost always certain to sell a winning truck on ice ticket! Curt loved all sports, especially the Wisconsin Badgers basketball and football teams. He also loved golfing, walking in the park and any fresh baked treats he could get his hands on! Anyone who knew Curt knew how meticulous he was about his yard and when he was not able to get it done, he taught his granddaughter Kailey to complete the task.

Anyone who knew Curt admired him. He was always calm and collected. He will be missed dearly by so many friends and especially his family.

He is survived by his wife, Mary, brother Palmer, sister Mary Jane Kleba (Jack), brother-in-law, Gordon Boe, sons Brian (Gail, Nicole, Kalista, Ki, Kamoni, Erik, Rebecca and Caleb), Bruce (Joy, Aidan and Karina), Barry (Jane, Jennifer, Ava, Jameson, and Sam) and daughter, Andrea Hughes (Chad and Kailey), many nieces, nephews, and many friends who are like family. Curt was preceded in death by his parents, Palmer and Mamie Larson, in-laws, Orville and Leona Boe, a brother, James Larson, sisters-in-law, Helen Larson, Joan Boe and Carol Larson.

The family would like to thank the staff at Mercy Hospital and Trauma Center who worked tirelessly taking care of our beloved father and husband.

A private family service was held on Friday, January 29, 2021. A celebration of life will be held at a later date. Please visit [www.whitcomb-lynch.com](http://www.whitcomb-lynch.com) to send condolences to the family.

In lieu of flowers, the family would appreciate memorials to Faith Lutheran Church, 2116 Mineral Point Ave., Janesville, or the Blackhawk Golden "K" Kiwanis Club. 1455 Palmer Dr, Janesville, WI 53545. ■



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# University of Wisconsin Soil Testing Lab Is Moving (Again)

By Doug Soldat, PhD, Soils Department, University of Wisconsin-Madison

The University of Wisconsin Soil Testing Laboratory is getting a new home. In 2021, the Marshfield-based lab will come back to Madison as it integrates with the Wisconsin State Laboratory of Hygiene. Moving is nothing new to the UW Soils Lab. The lab started in the late 1950s and originally was housed in the basement of King Hall on UW-Madison's campus. In the 1960s, the lab became one of the first in the nation to use computer generated soil testing reports. As it grew, it created pressure on the many other important research labs in the Soils building, and it was clear that the lab needed to find a new home. Sometime in the late 1960s the laboratory was moved to a location on Park Street. At some point the lab was again moved (reasons and dates of the move are unknown to me), this time to a series of trailers on Rosa Road off Mineral Point Avenue on Madison's west side. In 2004, the lab moved to a state-of-the-art building just down the road on the West Madison Agricultural Research Station property. Then, in 2015, budgetary constraints forced CALS to consolidate the Madison-based UW Soil and Plant Analysis Lab with the UW Soil and Forage Analysis Lab in Marshfield. Two directors, Dr. Robert Florence skillfully handled the transition and consolidation. We also anticipate another smooth transition as the current director, Dr. Andrew Stammer, integrates the lab in Marshfield with the Wisconsin State Laboratory of Hygiene in Madison. The lab in Marshfield stopped accepting samples on

January 1st of this year, but is expected to resume this year. When the transition occurs (expected in the summer of 2021), the UW Soil Testing Lab website ([uwlab.soils.wisc.edu](http://uwlab.soils.wisc.edu)) will be updated with the new submission instructions.

Hopefully, you are familiar with the UW Soil Testing Lab and its services; let me introduce you to the Wisconsin State Laboratory of Hygiene ([slh.wisc.edu](http://slh.wisc.edu)). The Wisconsin State Laboratory of Hygiene is the state's public, environmental and occupational health laboratory and it has been providing services to the state for over 100 years. Administratively, it is part of UW-Madison and is operated out of the School of Medicine and Public Health. The lab is housed in several buildings in the Madison area and has many divisions (clinical testing, forensic toxicology, occupational health, etc.). The division that the Soils Lab will be joining is the Environmental Health Division. The Environmental Health Division currently tests water (including groundwater and wastewater), air, sediment, solid wastes, and tissue so adding a soil component to that list is logical. The lab is equipped to test these substances (air, water, soil, etc.) for pesticides, nutrients, metals, radionuclides, industrial chemicals, other pollutants, and pathogenic microbes. The primary customer of the WSLH is government agencies (i.e. DNR, DATCP), but a few of their current offerings (and obviously all of the new soil testing offerings) are available to the public.

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Why the change? In short, the Marshfield building housing the soil testing laboratory requires very expensive upgrades in air handling in order to maintain compliance with state and federal guidelines. The renovation costs are so high that the Department of Soil Science and the College of Agricultural and Life Science are not able to fund the renovations required to keep the building operational. The lab itself operates in the black, but not by enough to cover the costs of the improvements. Until recently, it appeared that the only option would be to close the lab all together. Much credit should be given to Professor

and Soil Science Chair Alfred Hartemink for being unwilling to let the historic lab close under his leadership, so he searched tirelessly for a creative solution. We are also very grateful that Jamie Shauer, the director of the State Laboratory of Hygiene welcomed the idea of integration with open arms. Everyone is excited about the new collaboration, and I am hopeful that after a long journey involving many different locations the UW Soil Testing Lab has found a permanent and secure home within the Wisconsin State Laboratory of Hygiene. Keep an eye on [uwlab.soils.wisc.edu](http://uwlab.soils.wisc.edu) for transition details. ■

## Snow Mold Damage Shifts South In 2021

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

Depending on where you're located in Wisconsin, it was either the most snow mold you have seen in 15 years or the least. Snow mold is a fact of life for Wisconsin turf managers, but the winter of 2020-2021 flipped the script. Let's review what happened this winter and discuss how we can learn from it for next winter.

• **Snow mold was much more severe in southern Wisconsin.** Typically central and northern Wisconsin have longer durations of deep snow cover compared to southern Wisconsin. In fact, I hadn't observed significant, widespread snow mold develop in southern Wisconsin in probably 8 to 10 years. But this year, southern Wisconsin and northern Illinois had the most widespread snow mold I have observed in all of my 15 years at UW (Figure 1, 2). This was true for lawns, sports turf, and golf courses. In contrast, central Wisconsin had almost no snow mold at all. Northern Wisconsin still had ample amounts of snow mold, but not as severe as it can sometimes be. So what happened? In southern Wisconsin, a series of snowstorms blanketed the area throughout January and early February, depositing a deep snow cover on unfrozen ground that insulated the turf prior to the deep cold snap that occurred in mid-February. Central Wisconsin didn't have this snow cover, and the deep cold snap froze out the snow mold fungi and prevented growth and infection.

• **What are the options for recovery?** Eh, not many good ones. The good news is that pink and gray snow mold, the types of snow mold predominantly seen in southern Wisconsin and northern Illinois, don't typically kill the plants. Over time, as the plants begin growing in the spring, the crowns will rejuvenate the infected leaf material and the plants will recover. However, the turf stand might be thinner than normal, especially early in the spring, meaning a preemergent



Figure 1. This golf course fairway from the Chicago area hadn't treated for snow mold for a number of years. Their luck ran out this year.

herbicide is especially important in these areas to prevent weed seeds from infiltrating. We also recommend lightly raking up the affected areas to encourage oxygen flow, sunlight, and warmer temperatures to penetrate into the canopy and stimulate faster growth. A light application of fast-release fertilizer can also be made to stimulate growth, but the efficacy of this application will be highly dependent on the air temperatures. My recommendations are typically to lightly rake up the affected areas, apply a preemergent herbicide over the area in early to mid April, and hope for a warm spring. Fungicide applications in the spring are not typically recommended.

• **Tall fescue seems to be more susceptible to snow mold than other lawn grasses.** I haven't done a study specifically comparing snow mold resistance in tall fescue to other grasses like fine fescues and Kentucky bluegrass, but based on my observations and a few other conversations this spring it appears that snow mold was worse on lawns that included tall fescue. This would make sense since tall fescue has mostly been bred for brown patch resistance,



Figure 2: It wasn't just golf courses. Home lawns also got clobbered, as my own lawn can very clearly show.

but worth watching closely as more tall fescue gets planted in our area.

• **Treated areas were mostly free of disease.** Fortunately most of the snow mold that occurred was on non-treated turf. Lawns and sports turf are rarely preventatively treated with fungicides, and the golf course fairways that were hammered with snow mold were mostly courses that choose to not treat for budgetary reasons. While those areas escaped with minimal disease over the past 10 years, that luck ran out this year.

• **Snow mold leads to more snow mold.** In the past we have observed that sites that get hit with snow mold one year tend to have more severe snow mold the following winter. This is due to an increase in the amount of snow mold fungi present in the system that is available to start new infections the following winter. While an increased amount of fungi won't overcome a snowless winter, your risk of snow mold is higher in the year following a significant outbreak because of the increased amount of fungi. If your site got clobbered by snow mold this year, it might be worthwhile to increase your level of protection for next winter. ■



# Rating Snow Mold Plots Up Nort'

By Kurt Hockemeyer, TDL Manager, Plant Pathology, University of Wisconsin-Madison

Welcome to 2021 everyone. I am knee deep in snow mold rating season right now. All of the Wisconsin and northern Michigan sites have already been rated, with mixed results. Some studies resulted in good disease pressure and others left much to be desired. I'd like to talk a bit about each of our snow mold study locations.

One of our best sites for snow mold studies has always been Marquette, MI. This location almost always gets deep snow cover early in the winter and it stays for a long time. In years past, snow cover has lasted 6 months (early Nov to early May). This year was a low disease pressure year for Marquette though. But low disease pressure in Marquette still means quite a bit of disease. The nontreated plots had 72.5% disease, which is still significant. Snowfall came a bit later than normal and melted off relatively early as well. According to our temperature sensors at Marquette, it doesn't appear that deep snow cover arrived till late December. Then it melted off on March 11 for approximately 80 days of snow cover. The course superintendent said he thinks this is the earliest the course has melted in his time there.

Wausau, WI is our central Wisconsin snow mold site, and there was almost no disease pressure there this year. It was an odd year for Wausau in terms of the amount of snow they received. According to the state climatology office in Wausau, they have only received 32" of snow versus an average of 52" at this point in March. The superintendent's estimate of snowfall was even less at 18"! Regardless, both of those estimates are well below average for Wausau. So, when there isn't any deep snow cover, anytime temps dip well below freezing, the soil has no snow to insulate it. Soil temps drop, and the super cold soil naturally keeps the snow mold fungus from infecting the turfgrass.

Our snow mold timing study, which is replicated in Minocqua, Wausau, and Madison, is aiming to come up with a temperature-based timing threshold to help folks properly time their snow mold applications. A standard fungicide application goes down every 2 weeks starting way too early all the way up to right before permanent snow cover. The old recommendation for snow mold app timing has always been something like "sometime before permanent snow cover." We are looking to put hard data behind this recommendation. How early is too early? What is the ideal time? We hope to answer these questions. Minocqua had snow cover from mid-December to mid-March, approximately 90 days. This resulted in very high disease pressure in the nontreated plots (91% disease). We already talked about Wausau. The only snow mold patches we saw were in the timing study. The nontreated plots averaged 12.5% disease. Not much but not nothing either. Madison had a banner year in terms of snow mold severity (Figure 1). We had a big snow in mid-December, but then snow depths started thin down



Figure 1. Dr. Koch's tweet and photos about the banner snow mold year in Madison at the OJ Noer.

a bit towards Christmas. Then deep and permanent snow cover came in late December and didn't melt till March 9. The nontreated plots had 87.5% disease which is huge for Madison.

We also partnered with the University of Minnesota to have two snow mold studies in northern Minnesota. Giant's Ridge near Biwabik, MN sounds like they have extremely high levels of snow mold this year. It sounds like that's the norm for them. Craguns Legacy near Brainerd, MN had at least some disease from the pictures that were texted to us, but it looks like there are not many differences among the treatments. We will make a trip up to northern Minnesota early next week to do final ratings and pictures. Be on the lookout for final snow mold reports on our website in the coming weeks ([tdl.wisc.edu](http://tdl.wisc.edu))

Thanks to everyone who has renewed their TDL membership for 2021. Without these memberships, there would be no TDL. More information on becoming a TDL contract member can be found on the following webpage, by visiting the TDL's website (<https://tdl.wisc.edu/contract-membership/>). Please contact either me ([hockemeyer@wisc.edu](mailto:hockemeyer@wisc.edu)) or Dr. Koch ([plkoch@wisc.edu](mailto:plkoch@wisc.edu)) if you have any interest in becoming a contract member. Or you can phone the lab at 608-845-2535. Thank you for your time and consideration. ■



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# Thank You Notes For 2020

By Bruce Schweiger, Superintendent, O.J. Noer Turfgrass & Research Facility, University of Wisconsin-Madison

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 never left. Due to Covid-19 and other issues, the O.J. Noer Facility entered November way behind on maintenance and projects that were placed on 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 that 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 hydraulic to pull 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. 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 Tony, you saved the day!

Once again, the O.J. Noer Facility was in need of general 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. ■

# CALENDAR OF EVENTS

To see if a Spring/Summer turf event is still scheduled, please contact them directly. Phone numbers for some of the common organizations are listed below. Stay safe and healthy!

WTA Members -- If you have an important date that you would like to share with other members, Call 608-845-6536 or email [audra.anderson@wisc.edu](mailto:audra.anderson@wisc.edu) to include it in the next calendar.

## Contact Telephone Numbers

GCSAA	Golf Course Superintendents Association .....	800-472-7878
iLandscape	the Illinois + Wisconsin Landscape Show .....	630-472-285
NGLGCSA	Northern Great Lakes Golf Course Superintendents Assoc.....	906-424-4176
Northern	Northern Green .....	651-633-4987
PAT	Pesticide Applicator Training (Turf and Landscape 3.0).....	608-262-7588
STMA	Sports Turf Managers Association .....	800-323-3875
TPI	Turf Producers International .....	800-405-8873
WDATCP	Pesticide Certification & Licensing.....	608-224-4548
Wee One	Wee One Foundation Golf Outing .....	630-457-7276
WGCSA	Wisconsin Golf Course Superintendents Association .....	920-643-4888
WGIF	Wisconsin Green Industry Federation .....	414-529-4705
WPT	WPT Garden Expo.....	608-262-5256
WSPA	Wisconsin Sod Producers Association .....	262-895-6820
WSTMA	Wisconsin Sports Turf Managers Association .....	920-723-0936
<b>WTA</b>	<b>Wisconsin Turfgrass Association .....</b>	<b>608-845-6536</b>



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