The GRASS ROOTS

AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

VOL. XLIX ISSUE 4 JULY / AUGUST 2020







Todd Fregien(414) 949–1089
@ToddFregien_ATS
tfregien@advancedturf.com



Mike Werth
(608) 214–7011
@werthashot
mwerth@advancedturf.com



Jeff Leuzinger (815) 213–2858 @TallturfJeff jleuzinger@advancedturf.com



TABLE OF CONTENTS

THE PRESIDENTS MESSAGE I Miss You	is t
WISCONSIN SOILS REPORT	Co TH pre
MUSINGS As Seen In Norway	
NOTES FROM THE NOER When Will Normal Change Again?	
USGA GREEN SECTION Improve Irrigation System Performance With Proper Pump Maintenance and Testing	
TURFGRASS DIAGNOSTIC LAB Summer Stress Extravaganza 2020	
STUDENT ARTICLE Exploring The Golf-Park Concept In The United States	
COVER STORY State Amateur at Milwaukee Country Club	j
EDITOR'S NOTEBOOK Not Perfect But We Will Take It	an
ADVERTISER INDEX	Н
EVENT SCHEDULE	glu
ABOUT THE COVER The 325 Yard Par 4 ninth hole at And into the forest I go to lose my mind Milwaukee Country Club, host of and find my soul.	W

the 119th Wisconsin State Amateur.

> Visit our Website at www.wgcsa.com

By Scottish-American author John Muir, 1838-1914

This quote by Muir can remind us to use not only the forest but also golf, lakes or our favorite locations to relax, refresh and find our happiness.

THE GRASS ROOTS

the bi-monthly publication of the Wisconsin Golf ourse Superintendents Association. No part of the HE GRASS ROOTS may be used without the exessed written permission of the editor.

EDITOR - David A Brandenburg grassroots@wgcsa.com - 920-960-1678 PO 314 Theresa, WI 53091 **BUSINESS MANAGER - Brett Grams** bgrams@wgcsa.com - 920.643.4888 N2299 Country Lane, Waupaca, WI 54981

2020 WGCSA Board Of Directors

PRESIDENT Josh Lepine, CGCS Maple Bluff CC 500 Kensington Drive Madison, WI 53704 joshl@mbcc1899.com

VICE PRESIDENT Jeff Barlow, CGCS Waupaca CC 1330 Ware St. Waupaca, WI 54981 jj12barlow@gmail.com

TREASURER Scott Anthes Brown County GC 897 Riverdale Dr Oneida, WI 54155 thes_sp@co.brown.wi.us

SECRETARY Garrett Luck, CGCS idden Glenn at Bentdale Farms 778 Sherman Rd. Cedarburg, WI 53102 ck@hiddenglengolfclub.com

VENDOR LIAISON Rob Johnson aupaca Sand & Solutions E3481 Royalton St Waupaca, WI 54981 hnson@waupacasand.com

CLASS C REPRESENTATIVE Jens Arneson Maple Bluff CC 500 Kensington Drive Madison, WI 53704 jensoarneson@gmail.com

DIRECTORS Brian Bonlender West Bend CC 5846 Hwy Z West Bend, WI 53095 brian@westbendcountryclub.org

Benjamin LeBarre The Ledgend at Bristlecone Pines 1325 E Bristlecone Dr. Hartland, WI 53029 blabarre@theledgendclubs.com

Timothy Schmidt Butte des Morts CC 1411 South BLuemound Dr Appleton, WI 54914 tischmidt31@gmail.com

Tim Wegner Brown Deer Park GC 7835 N Green Bay Road Milwaukee, WI 53209 wegnertim49@gmail.com

PAST PRESIDENT Jon Canavan Milwaukee County Parks 9480 Watertown Plank Rd Wauwatosa, WI 53226 jon.canavan@milwcnty.com

CHAPTER MANAGER Brett Grams WGCSA N2299 Country Lane Waupaca, WI 54981 bgrams@wgcsa.com

CLASS EM REPRESENTATIVE Austin Wright Sand Valley Resort 1697 Leopold Way Nekoosa, WI 54457 awright@sandvalleygolfresort.com

PRESIDENT'S MESSAGE

I Miss You

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

What can I say, I miss you all! 2020 was an extremely difficult season. I miss seeing you at events, miss talking turf with vendors, miss seeing the UW professors and turf plots at WTA Field Day and miss the beer cheese soup at the American Club. I will miss Wisconsinizing at GIS. I miss my normal turf world life!

We started the Spring of 2020 not knowing if and when we could open our golf facilities. Once we did open in late April, it was like flood gates. Golf was one of the few shows in town. We all became creative with our staff schedules, course set ups and golf course management to navigate the pandemic and provide our customers and employees a safe and enjoyable outdoor experience. Boy did we ever. We set a golf round record here at Maple Bluff Country Club with no outings or outside events, strictly member and guest play. Many of our facilities served as a home away from home for more people than normal this season. Food, beverage, and event revenue declined, so many

of us struggled through a budget cut year, all the while experiencing the busiest golf year ever. I don't know about you, but I was happy to be employed and thankful for my career choice of working outdoors. It was therapeutic for me to work on the golf course as I was stressed out thinking about my kid's schooling, my staff and member's health and happiness and my wife, who is a frontline worker as a UW Hospital ER nurse.

I'm thinking about all of you and the potential impacts this pandemic has had on you, your families, and friends. We all know someone who is struggling.

Vaccines are starting to be administered and our Association is busy planning the calendar for 2021. My hope is we can all be together again, sharing ideas, stories, and a handshake. Thank you for your continued support of the WGCSA. Our board's time and attention were diverted in 2020 from normal operations to completing the Wisconsin Industry Best Management Practices Guide. More on that in the next message!



IT'S ALL ABOUT PLAYABILITY...



Now's the time to be thinking about long lasting, DEEP HYDRATION with TV Base. It's the best value on the market!





Dave Radaj (847) 366-5802 Nick Baker (630) 621-5826

a Turf Ventures company

PRESIDENT'S MESSAGE

2021 Event Schedule!

January 21 - (Thursday) WTA-Happy Hour With The Turf Docs Virtual Presentaion

February 2-4 - GCSAA Virtual Golf Industry Show

March 2 - (Tuesday) WGCSA Virtual Spring Business Meeting

April 28 - (Wednesday) WPGA/WGCSA Super Pro - Wild Rock GC, WI Dells, WI

May 4 - (Tuesday) Class EM, Class C Meeting - Sand Box Par 3 Course at Sand Valley Resort, Neekosa, WI

May 11 - (Monday) WGCSA May Meeting - Abbey Springs, Fontana, WI

June 14 - (Monday) WGCSA June Meeting - Lawsonia, The Links, Green Lake, WI

July 27 - (Tuesday) WTA Summer Field Day - O.J. Noer Research Facility, Madison, WI

August TBD - Joint NGLGCSA/WGCSA Member Guest - HOST NEEDED

September 13 - (Monday) Wee One Fundraiser - Pine Hills CC, Sheboygan, WI

September 21 - (Tuesday) NGLGCSA Superintendent and Crew Outing @ Greywalls Course, Marqette, MI

September TBD - Equipment Managers Meeting - Location TBD

TBD - WTA Golf Classic - Location TBD

TBD - Couples and Guest Evening - Location TBD

Dec 1 and 2 (Wed/Thursday) 55th Golf Turf Symposium - American Club, Kohler, WI

Feb 5-10, 2022 - Golf Industry Show, San Diego Convention Center, San Diego, CA

Feb 4-9 2023 - Golf Industry Show, Orange County Convention Center, Orlando, FL

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

Daconil Action™ Fungicide, A New Era in Turfgrass Management

The power of the active ingredient contained in Daconil® fungicide combined with a revolutionary Turf Protein Booster results in longer, more efficient, and broader spectrum turfgrass disease control.

- Boosts turfgrass natural defense proteins (PR proteins)
- Enhances overall plant health
- Increases tolerance to environmental stresses, like drought
- Suppresses activity of fungi, bacteria, viruses, and abiotic diseases

To learn more about Daconil Action, visit DaconilAction.com or contact:

Phil Spitz Cell: 414-429-2015 phillip.spitz@syngenta.com







WISCONSIN SOILS REPORT

COVID's Silver Linings

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

In tough situations, it's always good to reflect on the things you are grateful for and the ways in which a crisis made you stronger. Of course everyone will have their own list, but here's mine.

I'm playing more golf.

It's not just me. Golf rounds are way up everywhere – public and private. Of course along with this comes the increase in wear and tear. Ball marks are worse than ever and cart traffic is being amplified by the one rider per cart rule. Some places have fewer resources to deal with these issues because of lost outing revenue,

etc. But his article is about the silver linings, not the cloud. Remember that without golfers there is no golf. How many times have you said or thought, "this job would be great if it weren't for the golfers"? Well, we got a small taste of that in April, and I think many people realized that golf without the golfers isn't great at all.

Many people have reconnected with the game or have been introduced to it for the first time. This definitely applies to me and my son, Sam. I played a lot of golf in my youth, but like many, after working on golf courses in college, I played

less and less golf. I was on the course all day, so I wanted to do something differently with my time off. Then, a high-pressure job and kids came along and my free time became non-existent. I got tenure, the job pressure relaxed slightly, and my kids became more independent. But for the last several years I've been spending all my nights and weekends at Little League complexes.

COVID made this year a lot different for us. We have been going to an occasional Little League tournament, but mostly our nights and weekends are free. Guess what we've been doing? Golfing. My youngest son, Sam, and I play at least once a week. It's been fun to introduce him to the game that I've played my whole life and watch him improve.

When we aren't playing, we often hit balls at the local range while my oldest son, Oliver, takes his swings in the batting cages. I even took a lesson to figure out why I'm so bad at golf (answer: it's my swing). The last time I visited the range, there was a 50 minute wait for a spot (and this is not a small place, they have 80 tee decks). On another weekday this year, I had to search 30 minutes outside of Madison for an open tee time. I don't expect that type of demand to continue indefinitely, but it can only be good for the future of the game.

It is easy for me to see that our family was seriously overdosed on youth baseball. Next year will be more balanced, and there will be more golf in our family's future. I know we are not alone. I just hope they fix ball marks as religiously as the Soldats do.



Sam getting ready to tee it up at Glenway Golf Course in Madison.



ENROLL IN J.W. TURF REWARDS TO

Earn 5% credit on all parts and service work.

Visit jwturfrewards.com.



Enroll once and you're in the program. It's simple and quick.

For every parts or service order you make with J.W. Turf in 2019, you earn a 5% credit towards future equipment purchases.



You also receive access to other exclusive members-only benefits, such as discounts and early access to special promotions.

Program details available at jwturfrewards.com.

We also offer a new, easy online service tool.

MyDealer allows you to schedule service appointments, order parts, and view invoices. It's compatible with your desktop, tablet or mobile device.

If you haven't yet signed up for a MyDealer account, call 847-683-4653 and we will create your profile.

WISCONSIN SOILS REPORT



If you are going to be stuck somewhere, the OJ Noer Facility is a beautiful place to be. Ph.D. Student Qiyu Zhou can be seen collecting her clippings with undergraduate assistant Andrew Pahnke.

Universities are getting better at distance education.

This spring, I taught a course called Agricultural Weather and Climate for the Farm and Industry Short Course. I designed that course for our new 1 and 2 year certificate turf programs. If you want to be a turf manager, it helps to know a lot about the weather. Because it was a short course, the last day of class was March 13th, which also happened to be the last day of inperson instruction at UW-Madison. I was one of the lucky ones that did not have to switch from in-person instruction to online instruction on the fly. I greatly admire and appreciate my colleagues that did so. We did not see this coming at the time, but it is becoming clear that the fall semester will be mostly online as well. I'm ok with this. We've come a long way

in online instruction, and the time is now to start to put it into wider practice. In fact, I was frustrated by the fact that our new turfgrass certificates would not have online options. Don't get me wrong, I prefer in-person instruction by leaps and bounds over online instruction, but sometimes inperson instruction isn't possible.

Look at the Great Lakes School of Turfgrass Science. That program grew out of a great, but floundering in-person week long short course that served people from Wisconsin and Minnesota. We replaced it with an online course when enrollment wasn't high enough to cover our fixed costs. We were nervous about how it would work out, but the Great Lakes School has been an enormous success, averaging 70 students per year and drawing people from all over the

US and world. It's time for the university program offerings to expand similarly. There will always be a place for in-person instruction, but the increases in online offerings will benefit a wider set of people in the near future.

The WTA Turfgrass Field Day will reach more people than ever.

This one flows from the last one. WTA Field Day is my favorite work day of the year. I get to show off our work and see hundreds of people. It sort of reminds me of my wedding day. I'm always excited and nervous, things happen fast and I never get to talk to everyone that I want to.

But this year, the situation will not allow for 250+ people to visit the OJ Noer Facility. Instead, we are bringing the field day to you with online videos of our latest research.

WISCONSIN SOILS REPORT

The personal connections will be lost, but I am confident our content will reach folks in Wisconsin and beyond, that would never be able to attend our event. This might convince them to join the WTA, or perhaps make time to come down to Madison for a future field day.

We will likely continue to produce videos for online distribution for all future events. We will probably look back and ask ourselves why weren't we doing this before? COVID sucks, but it will make us better at things.

The list of silver linings for me doesn't end here. I've noticed that I've been spending more time with my field plots. That allows me to make more observations and come up with more ideas. It helps me better appre-



ciate the work that station manager Bruce Schweiger and his staff do on a daily basis to keep our research plots healthy. I've spent more time keeping the UW Turf website current, and I am working on a long overdue project to make all the UW Research Reports searchable and accessible.

I've also been able to write more scientific manuscripts and finish up research projects. Normally these tasks get de-prioritized because of my intense travel schedule for the in-person extension events.

Sure, we can all list the negatives brought about by the pandemic, but what are your silver linings? What things will be better on the backside of this for you and your operation and for you and your personal life? I hope you stay well and look forward to connecting sometime soon – hopefully in-person, but virtually if we have to!



MUSINGS

As Seen In Norway

By Jake Schneider, Seasonal Worker, Trondeheim Golfklubb, Norway

s a bit of an update from last issue's article, the golf season did finally commence at Trondheim Golfklubb on May 23. There were still a few reasonably-sized snow banks in play in the shadiest of areas. I'm not sure what the rules say about playing out of a snow-filled bunker, but it was just time to open the course to the mostly patient members. Naturally, following a historically cold and snowy May, we had a very warm and dry June during which I came to more fully appreciate the joys of air conditioning that is absent in our sauna-like apartment (and Norway in general). Over the course of a fourweek stretch, we went from playing winter rules to seeing some summer dormancy set in on the unirrigated fairways. Two weeks of cloudless days during which the sun only sets for four hours with low relative humidity, and you get some fairly high ET rates. Thankfully, Mother Nature seems to have settled into a pattern of normalcy much to the joy of greenkeepers and golfers, alike.

And, speaking of golfers, they are out in droves this year. Since their beloved summer trips to Spain are on the backburner, people are rediscovering entertainment options in their own backyards instead. At last count, TGK had somewhere north of 300 new members which is quite a bit for a nine-hole course. Everyday seems like a weekend in terms of play, and we're lucky that there is enough light to play for 20+ hours each day during the bulk of the summer months to spread out the tee times. This year's midnight sun tournament had to be expanded to two days (June 20 and 21) and had shotgun starts at 8 pm. Maybe, just maybe, my prediction of golfing taking off here will come true. Aside from the short season,



the underlying factors of high average income, love of the outdoors, and incredible work/life balance are all favorable when it comes to hitting the links regularly.

Aside from a never-ending stream of golfers, there have been a few other noteworthy items that are largely unseen in Wisconsin that I've observed on the course this year. First and foremost, the moose that managed to avoid me all of last year has been a very friendly public figure in 2020. Based on very little actual knowledge, I approximate that he (or she) is not quite fully grown and is a bit of an attention seeker as far as moose go. He enjoys hanging out both in the parking lot and in the natural area between our 2nd and 8th tee boxes. Bullwinkle has also been spotted intentionally taking a sprinkler head shower and has done a great job thus far of not making unwanted hoof indentations on the greens. We hope that he keeps up the good work.

In less exciting animal news, the damn sheep have also returned. While these eating and pooping machines aren't as novel as Bullwinkle. the reason for their presence just might be. You see, in Norway, it isn't the farmers responsibility to keep the sheep from going anywhere. Rather, if you don't want them roaming your property, it is up to you to keep them off - usually by way of fence installation. Although we do have a fence, there are also several gates on the public trails that wind through the property that don't always get closed properly. And, it turns out that sheep are very opportunistic. The young ones are also awfully cute. So, between the moose and the sheep, we have a very environmentally-friendly vegetation-control (and fertilization) program for the manicured and native areas, alike.

MUSINGS

Sticking with the four-legged theme, it's not uncommon to see dogs on the course, but unlike the unleashed ones that would ravage the bunkers at Blackhawk, these are well-behaved canines that accompany their owners for a round. Most are leashed to the golf bag, but the most disciplined can freely tag along and sit where they are told. I'm not sure that there is an official policy on bringing Fido, but it seems as if common sense rules. The dogs here generally seem to be similar to the people—quiet and leery of strangers—and I have yet to hear one bark or cause any sort of disturbance on the course.

While dogs might seem a little foreign, seeing a golfer pushing around a baby stroller might be an even more unusual sight on Wisconsin's golf courses, but not here. Thanks to 49 weeks of paid parental leave that Sticking with the four-legged theme, it's not uncommon to see dogs on the course, but unlike the unleashed ones that would ravage the bunkers at Blackhawk, these are well-behaved canines that accompany their owners for a round. Most are leashed to the golf bag, but the most disciplined can freely tag along and sit where they are told. I'm not sure that there is an official policy on bringing Fido, but it seems as if common sense rules.

can be split between mom and dad, there are ample opportunities to push around a sleeping baby and get in a quick nine holes. Considering that children will often be bundled up for an outside stroller nap even in winter, being taken golfing as a newborn isn't thought of as something out of the ordinary here. And, what better way to subconsciously get them introduced to the game.

Finally, during those aforementioned hot days that hit Trondheim, we didn't need to set out water or coolers for golfers to stay hydrated. Instead, if their water bottles get a little low, they just dip them in the stream that runs through the course and drink it unfiltered. Sure, you could theoretically do this at many courses in the Badger State, but you would more than likely have to set aside a few sick days afterwards and would also be clear for a colonoscopy (which is a good analogy for 2020 thus far).

On that note, I hope that everyone has a less adventurous remainder of summer filled with timely rains, cool temperatures, and happy golfers.



NOTES FROM THE NOER

When Will Normal Change Again?

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

This growing season is going by quickly. I am not sure if it is the lack of staff or wanting the Covid-19 effect to pass. What is the Covid-19 effect, will it pass, when will it pass, what did we learn, the questions are endless.

Things began to unfold in March, which made the future appear quite bleak. I found every conversation I had with friends started with are you okay, is your family healthy, anyone at the Noer sick, anyone you know sick? I found myself asking those same questions and now it seems "normal" to start conversations that way. I have been very lucky that my family has been healthy. It has truly changed family life at the Schweiger household.

When I arrive home from work or just being out and about, groceries, taking my father-in-law to the hospital, etc, there is a pre-designated area for the clothes I have worn outside my home. These clothes are washed separately from all other washable items. Every vehicle I have has a mask of some kind and a container of hand sanitizer that I carry from vehicle to vehicle. I started out with one container of hand sanitizer in each vehicle but when the weather warmed, I noticed the alcohol was dissipating and the sanitizer was sticky. Then CDC said do not store hand sanitizer in a car due to the heat. Is this my

new normal?

My son, who works for the University of LaCrosse and his family who live in La Crosse taught me how to use Dou for video calls. We have not seen them in person since January, I miss hugging and playing with my grandson Wesley. They are being very cautious and as of this writing La Crosse county is the hotbed of new infections for Wisconsin. We have been able to see my granddaughters from Monona a few times. Trying to social distance from a two and three year-old has its own challenges.

Work at the Noer moves on just as it has in the past. Research is being done and everyone is working with a smaller crew. My staff is a crew of two college students that are working 20-25 hours per week. Around Memorial Day the grass here exploded! We have been chasing grass all month. When we are not mowing, we are spending time on blowers or raking large areas of the property. I would normally have one other employee that works May to November at 30 hours per week but that has been an issue. It is a long story, but needless to say, I have no one in that position right now. Hopefully I will be allowed to hire someone before August 1st when one of my employees leaves to begin soccer camp at UW-Madison.



Greens clipping disposal system













GOLF COURSE SIGNS | TEE MARKERS | YARDAGE MARKERS SPRINKLER HEAD YARDAGE CAPS | FLAGS | ACCESSORIES

www.NationalGolfGraphics.com Call Peter Meyer 877-710-9363

NOTES FROM THE NOER

Thankfully my staff are hard workers and stepping up the best they can with their limited hours. We are somehow keeping up but any extras are often falling by the wayside or being pushed back a few weeks.

That is the update from the Noer. Now the real story, yes this is another tough year. As things have closed down and UW funding has been altered, we are all being asked to cut back when it comes to expenses. One issue for us is on-site transportation vehicles. We have three departments working here and six vehicles. Each department has been assigned two vehicles for their use. My staff is normally short at least one vehicle so we purchased two garden carts from Menards. My budget does not have room for the purchase of additional on-site vehicles but I was able to purchase the two garden carts to pull with my John Deere lawn tractors. Is this the perfect option? No, but we get the job done. We use one to collect and haul away clippings after mowing greens. At times I drive a John Deere lawn tractor pulling a garden cart with my hammer, shovel, irrigation repair supplies, a weed eater or whatever tools I need to accomplish a task.

We are also doing our best to keep hours and expenses as low as possible because we, as the Agriculture Research Station (ARS) group, have multiple properties and some are being hit harder than others. Even though we each have our own budget we are a TEAM. If I can generate a small savings that can be used to help fund much-needed labor, projects, or repairs on another research farm, then so be it. In my short time as part of ARS, I have seen the research farms help each other and many of them have been there for me when I needed it. I am proud to part of that TEAM. I will do whatever is needed to help our TEAM.

At times this has been a difficult situation for the Noer and me personally. I need to thank Carol for the understanding of my varied hours, split shifts, weekends, and evening paperwork. I will quote a great American (my wife Carol), "These issues are not a crisis but an inconvenience that we will overcome." Or this great

quote, "Save your bitching for REAL problems." Sometimes a slap upside the head is very useful and she knows how to do that! As the Covid-19 world evolves, step back and look around you. We work in a great industry, interact with helpful colleagues, have family support and every day we get to watch the sunrise (sometimes the sunsets), is this life so bad?

By now, I hope you have heard WTA Summer Field Day has been canceled. Be on the lookout for the WTA Virtual Summer Field Day! Dr. Koch and Dr. Soldat will take short videos of their research and share them on the WTA website. Keep looking for more information.

Lastly, the WTA Fall Golf Outing is planned for Monday, October, 6th at Westmoor Country Club in Brookfield, WI. We will be looking at a few possible changes to the program to encourage social distancing but the course will be fantastic. Plan now to attend this for a much needed FUN day after a long hard year.

Stay healthy and keep your head up because this too shall pass!





We know there's a lot riding on your turf. Your professional success relies on your ability to maintain healthy grass and top playability.

As the only manufacturer committed exlusively to irrigation, Rain Bird designs fully-integrated end-to-end solutions to address the challenges of maintaining healthy grass and top playability on the golf course. From water-saving nozzles to highly efficient pumps to leading-edge Control Technology, Rain Bird products make the most of every drop, delivering superior results with less water. Keeping the world and your golf course beautiful.

That's The Intelligent Use of Water. ™





Wisconsin Rain Bird Golf Distributor

Contact Dustin Peterson or Adam Lesmeister for further information and assistance with all of your irrigation needs.

Dustin Peterson

(309) 314-1937 | dpeterson@clesens.com Adam Lesmeister

(320) 287-1720 | alesmeister@clesens.com



Improve Irrigation System Performance With Proper Pump Maintenance and Testing

By Derek Nees, Project Manager, Brotcke Well and Pump

This article is reprinted from the Volume. 58 (23), December 4, 2020 of the USGA Green Section Record. Copyright United States Golf Association. All rights reserved."

that is both literally and figuratively true for golf courses. But with ever-tightening budgets, sometimes it's the mower with the bad bearings, not the one that's just squeaking, that gets the grease. When money is tight, an irrigation pump that seems to be working fine is probably not going to get much attention. Unfortunately, there are serious problems that come with neglecting pumps until a catastrophic failure happens – with huge upfront costs and the risk of widespread turf damage being the two biggest potential concerns. The good news is that pump station failure is usually avoidable – or if not avoidable, at least failure can be forecasted.

Irrigation systems have lots of parts and the pumps may be the most neglected and most misunderstood components of them all. The pumps used in golf course irrigation stations, under normal conditions, can last for years if not decades. It is not unheard of for the pumps to outlast multiple superintendents. A common statement from superintendents is "That pump hasn't been touched since I've been here," which illustrates the room for improvement in pump maintenance.

Every pump motor should have a tag that lists the manufacturer, model number and other specifications that can be used to determine appropriate maintenance intervals.

It's also important to remember that catastrophic failures aren't the only pump station issues that superintendents should be worried about. The pumps in the pump station were sized to meet the designed volume and pressure of water. As the pumps become less efficient over time, they do not move the same volume at the same pressure. At first, the drop in performance may not be noticeable at the sprinkler head. However, even a slight reduction in performance can result in increased electrical costs which could equate to thousands of dollars wasted over the course of a season.

Preventative Pump Maintenance

Preventative maintenance can prolong the life and efficiency of the pumps. Preventative maintenance on pumps



Preventative maintenance and pump testing will improve performance and extend the life of your pumps.

TRUE NO INTEREST, NO PAYMENTS UNTIL MAY 2021

CONTACT YOUR REINDERS REPRESENTATIVE FOR FURTHER DETAILS Subject to credit approval. Some restrictions apply.















RECOMMENDED PREVENTATIVE PUMP MAINTENANCE

Task	Purpose	Frequency	Time of Year	Level of Expertise
Remove any Winterization Coverings	Prep for Start Up	Once a Year	Beginning of Season	In-House
Clean out Rodents, Insects or Debris	Prep for Start Up	Once a Year	Beginning of Season	In-House
Inspect Wire Connections	Tighten Loose Connections	Once a Year	Beginning of Season	In-House
Inspect Wire Housing	Replace Any Heat Damage	Once a Year	Beginning of Season	In-House
Inspect and Clean Power Contacts	Clear of Dust and Oxidation	Once a Year	Beginning of Season	In-House
Inspect for Leaks	Indicates Wear	At Minimum Monthly	Throughout Season	In-House
Replaces Fuses	To Ensure Proper Power Input	Once a Year	Beginning of Season	In-House
Inspect Motor Winding	Maintain Longevity of Motor	Once a Year	Beginning of Season	Service Professional Recommended
Grease Bearings on Turbine Motors	Reduce Wear	Every 3-9 Months	Throughout Season	In-House
Pump Test	Assess Pump Efficiency	Every 1-3 Years	End of Season	Service Professional Required
Vibration Test	Identify Misalignment	Every 1-3 Years	End of Season	Service Professional Required

Table 1

in both the irrigation pump station and the water well can be very cost effective, even when paying a service company. The first step is to determine what the manufacturer suggests for maintenance. Pump system manufacturers will be able to provide you with a specific schedule for service that they recommend for a particular system. If you have a system with components that did not come from only one manufacturer, service information is still available to you but will require some additional legwork on your end.

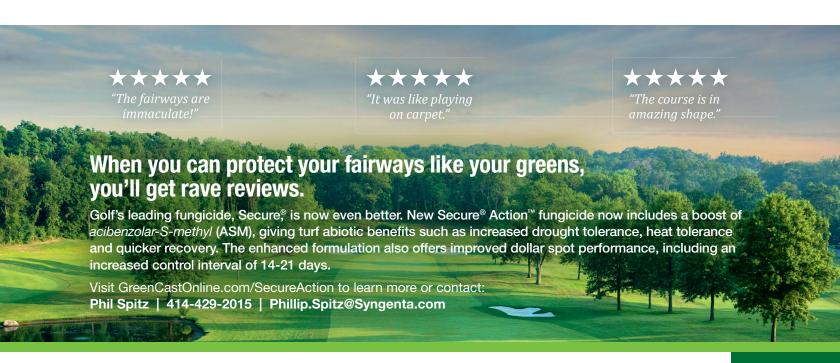
All pump motors require some basic, periodic maintenance like greasing the bearings and adjusting shaft seals. The shaft seal on vertical turbine pumps is commonly called "packing." These types of services are typically performed on an interval ranging from every three months to once a year depending on hours of use. For other common service intervals please refer to **Table 1.**







The shaft seal on this vertical turbine pump is compromised and in need of new packing. Neglecting your pumps will lead to premature failure and costly repairs.

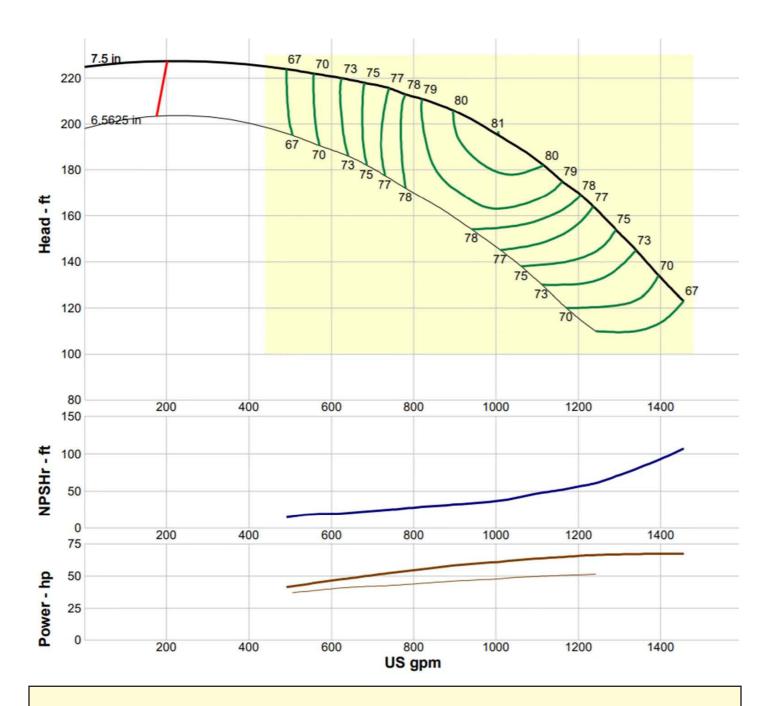




syngenta.

Preventative maintenance also includes diagnostic testing. Performance tests that show the health of the pump and motor are extremely useful. A pump test completed by a service company will allow you to accurately assess your current pump condition. The process involves isolating each pump from the rest of the system, so that the gallons per minute (GPM) data collected can be plotted on the manufacturer's pump performance curve. The perfor-

mance curve is a graph of the ratio between total dynamic head (TDH) and water volume (measured in GPM). The curve produced from the pump test can be compared to the original curve from when the pump was new. Once a drop in performance is quantified, timeframes for repairs and budgeting decisions for replacement can be forecasted. A performance test is also the best way to determine the energy cost implications of an inefficient pump.



Characteristic efficiency curves for a deep-well turbine pump. (source: Hydroflo Pumps USA, Inc.)

LF550/557[™], LF570/577[™]





LIGHT ON TURF, HEAVY ON PRODUCTIVITY

The LF550/570™ and LF557/577™ lightweight large area reel mowers offer industry-leading productivity and functionality. The combination of Jacobsen Classic XP™ Reels and SureTrac™ 4WD System allow you to achieve the precision you demand, even on slopes and hills. With the InCommand™ Control Console, everything you need is at your fingertips, including programmable mowing and transport speeds and full text diagnostics. Designed with ease of maintenance in mind, the series features automatic wet parking brakes, hard tubing, and easily accessible routine service items.

ADAPTI-THROTTLE
AUTOMATIC ENGINE
SPEED CONTROL

37 or 50 HP DIESEL ENGINE

UP TO **11 MPH**

UP TO 139"
CUTTING WIDTH





Pump testing should be completed not only for the irrigation pump station but at each individual water well.

The importance of proper pump maintenance applies to water well pumps also. Some golf courses supply their own water pulled from underground sources. Testing the pumps that draw this supply is just as important as testing the ones that distribute water around the course. Pump tests performed on a water well can show the health of the pump and the water well productivity. Pump tests should be run on water wells every one to three years. If the pumps have not been tested recently and a service history is lacking, it may be best to run a pump test in two consecutive years to build a baseline for future comparison.

Another important test that a pump service company can provide is called a vibration test. A vibration test, unlike a pump test, does not measure flow rates but can indicate potential issues like bearing wear, shaft misalignment or unbalanced impellers. The two tests can be combined or performed independently to help assess the current condition of the pumps and motors. If you haven't had them done recently, it is probably best to reach out to your local pump service provider and arrange for an evaluation.

Pump Types and Longevity

Pump stations and water wells use a variety of pumps. Centrifugal, vertical turbine, submersible, and horizontal split-case pumps are some of the more common types found on golf courses.

At first glance, the variation and complexity of pumps can seem overwhelming. Yet, the basics of a pump are all the same. A pump consists of an impeller inside a bowl-shaped housing. The impeller is spun at high RPMs by a motor. Pumps can have more than one impeller and the more impellers a pump has the more water pressure it will build. Some pump maintenance can easily be completed in-house, but some work is best done by a professional pump technician.

An example of a pump that will last for decades if properly maintained is the vertical turbine. Vertical turbines are commonly used to pull water from a lake or a water well. The basic design is the pump sits submerged in the water and a shaft runs to a motor resting above the water. The advantage of this design is the motor is never submerged and can easily be serviced. Regularly greasing the motor bearings is a simple task that can keep that pump running for decades instead of years. Performance tests every three years will allow you to track the health of the pumps. As performance wanes a plan can be put in place to have the pump pulled and rebuilt in the offseason when irrigation demand is minimal.

Causes of Pump Failure

Once you have run pump tests and vibration tests, the results may show that the pump does not perform as well as it did when it was new, which is not un-

expected. Pumps, just like any mechanical device, will wear out over time. When the metal fatigues or thins out, the tolerances needed to move water efficiently are lost. A pump test is usually the only way to diagnose this issue unless a major failure occurs. Given the fact that a major failure could result in turf loss, it is good to track performance over time so that issues can be anticipated and prevented.

Some water conditions like high total dissolved solids (TDS), extreme pH levels, or biofouling will prematurely wear and clog pumps. These conditions usually can be treated to help reduce the wear on pumps. However, just because some of these water characteristics are present does not necessarily mean the water will need to be treated. A pump test can be used to determine what degree these conditions are affecting the pump and how long it will last under the current conditions. Depending on the conditions, treatment might be a lower-cost option than complete pump replacement. Bearing wear, shaft alignment and trash on the inlet screen are also things that contribute to pump failures.



Dirt, sediment and mineral buildup can degrade pump impellers. As such, every effort should be made to screen water before it enters the suction line.

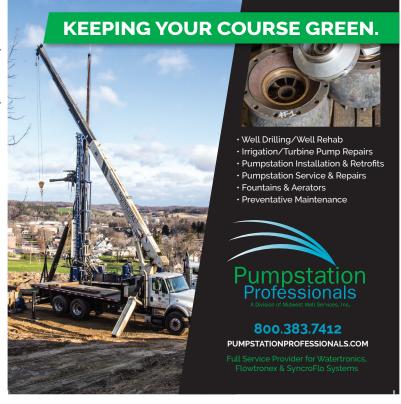


Periodic pump testing by a professional is a worthwhile investment. The results can determine whether a problem exists and provide information on how to address it.

Summary

Preventative maintenance is an easy sale when compared to the alternative of unpredictable, premature pump failure. To get started, gather information about the make and models of the pumps in the irrigation pump station and water wells. Turn to the manufacturer for suggested service tasks and frequency. In general, pump motors will require small amounts of grease to be applied one to four times a year. Some motors require oil for lubrication but those that do often do not require frequent attention. Inspection of seals for leaks can be easily performed monthly. Running pump tests and a vibration test once a year can help catch issues before they become major problems. It is usually best to run the test at the end of the growing season. That way, if repairs are needed, they can be performed when water demand is low.

As pumps tests are acquired, the data should be evaluated over time to determine the rate at which pump performance is deteriorating. If the pump has a substantial drop-off in performance, then you may want to bring in outside help to determine the cause. Do not replace a pump without knowing the underlying cause of its failure. Otherwise the new replacement may fail just as quickly. When a pump is replaced or rebuilt, run a pump test on it immediately to know how it performs from day one. These simple steps can save money by making your pumps more energy efficient and helping the equipment last for its full life expectancy.



TURFGRASS DIAGNOSTIC LAB

Summer Stress Extravaganza 2020

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

y last article for *The Grass Roots* magazine I talked about our snow mold trials and I ended that article with "...now on to summer diseases...". Boy is it funny to think how different things are after just 2 months. Summer stresses have been flexing their muscles for the past two weeks. We just had a few days reprieve, but it looks like highs near 90, lows near 70, and high humidity are coming back for another stretch. If you made it through the first gauntlet OK, be on the lookout for diseases and abiotic stresses to show up during the next onslaught. I imagine summer stresses build up on turfgrasses like loading straw bales onto a beast of burden. As the weight of the stresses builds up, you might make it through OK the first time, but when more stresses start to build up, eventually the weight

When stresses are "above normal", some plant death or decline might be more noticeable or more severe. That decline could be fungal in nature or could be abiotic in nature. Abiotic simply means "not caused by living organisms". This is the time of year when almost half of all the samples I diagnose as abiotic decline. But abiotic decline is boring to talk about, so let's talk about what diseases I've been seeing and hearing about.

becomes too much. And all too often it is the one straw that breaks the camel's back. In any given summer with "normal" stresses and your standard fungicide program, there is still pathogen activity on your golf course. It might never be visible though because the plants are healthy enough to fight off infection or infection is not severe enough to cause widespread symptoms. When stresses are "above normal", some plant death or decline might be more noticeable or more severe. That decline could be fungal in nature or could be abiotic in nature. Abiotic simply means "not caused by living organisms". This is the time of year when almost half of all the samples I diagnose as abiotic decline. But abiotic decline is boring to talk about, so let's talk about what diseases I've been seeing and hearing about.

Lots of older bentgrasses and recent renovations of bentgrass have been exhibited patches of off color plants. The roots of these plants look mostly healthy, but there are at least one or two roots on affected plants that have a rotted inner cortex (Figure 1). These roots are unable to take up water to support the above ground leaves and stems. These roots were compromised from a take-all infection from either last fall or earlier this spring. Because only a few roots are compromised symptoms rarely result in complete death. Often brand new roots can be seen right next to the old compromised ones.

Summer patch on annual bluegrass has been showing up quite a bit as well. This is also caused by a root infecting pathogen (Figure 2), but the infection can occur all through summer when soil temps are warm. The summer patch pathogen, Magnaporthiopsis poae, can grow more quickly than other microorganisms at very warm temps. This disease can result in complete death of plants though. One thing to note is that if plants are not dying in roughly circular patches, arcs, rings, or frogeyes, then summer patch is likely not the culprit.



Figure 1. The inner cortex of roots turned black and rotted. This symptom is very common with take-all infections.

TURFGRASS DIAGNOSTIC LAB

Figure 2. Thin, dark runner hyphae and infection structures of the summer patch pathogen on an annual bluegrass root.



DON'T SPRAY BLIND!

Become a Turfgrass Diagnostic Lab member today and know what's affecting your turf...BEFORE you spray.



tdl.wisc.edu/contract-membership 608-845-2535

TURFGRASS DIAGNOSTIC LAB

Reports of Pythium blight have come my way but no official sample submissions (Figure 3). With the high overnight lows and high humidity, it's no surprise to see Pythium popping up. Protecting areas that are prone to Pythium blight could be done with phosphites if some damage could be tolerated. Under low disease pressure the phosphites should work great. Under high disease pressure some damage might be observed. If no damage can be tolerated it might be worth it to spot treat the prone areas with a more substantial Pythium fungicide like Subdue or Segway.

There have been a few hot weather diseases that I have not seen or heard anything about. No brown patch, no Bipolaris leaf spot, and very little Anthracnose. This could be that many supers are self-diagnosing, or it could be that these diseases are not popping up for whatever reason. One of the many vagaries of turfgrass pathology I suppose. Anthracnose and Bipolaris tend to be more common at the TDL later in the summer anyways.

Looking ahead at my next deadline for a Grass Roots article, it will be September 15. At that point most of the summer trials will be ended and I will have hopefully compiled all the reports and published them on our website. I will also be in full planning mode for snow mold trials. Thinking about it like that makes the summer seem really, really short. But in the meantime, good luck to everyone during the summer stress extravaganza that has been July 2020.

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



Figure 3. Pythium blight showed up only on spots that were reseeded just this spring. Established bentgrass did not have any Pythium.







IN GROUND WIRELESS SENSOR MEASURES RECORDS MONITORS

■ MOISTURE

SALINITY

TEMPERATURE

LIGHT

10 MINUTE INSTALLATION

Sensor	Temperature, Light (FC/Lux), Salinity (EC) and Soil Moisture Sensor
Battery	Average 5 year battery life with standard usage. Free replacement of unit when battery dies.
Connectivity	Cellular 3G/4G - provides hourly data
Min and Max Operating Temperatures	-4 to 170° F soil temperatures
Bury Depth	1 inch to 2 feet (can easily be moved anytime)



Monitor data from your mobile device or desktop in real time via cellular networks.

Scan QR Code with your phone camera for Spiio installation and use video.









Exploring The Golf-Park Concept In The United States

By Michael Bekken, Graduate Student, Department of Soil Science, University of Wisconsin - Madison

Editor's Note: This is a student article that is eligible for the 2020 Monroe S. Miller Literary Scholarship.

The COVID-19 pandemic tem-L porarily closed golf courses in Wisconsin and throughout much of the United States. During the peak of the initial lockdown I was intrigued by the social commentary concerning who was allowed to use a golf course's green space when closed to golfers. I recall an Instagram post directed to the Madison Parks Department, "I know golf courses are closed, but can I go for walks in them?" The response, "Yes! In fact, because they are closed, under the new ordinance, you may [also] walk your leashed dog." On Twitter, a family in San Francisco tweeted about sharing a picnic, walking the cypress tree-lined fairways and enjoying the views of the city on the Presidio Golf Course, which was open as a public park during the lockdown. I also read tweets from superintendents who were upset that walkers were on their golf courses without permission.

These examples illuminate a range of perspectives for how golf course land is used from those who would prefer that golf course green space accommodate a variety of activities (let's call them golf-parks) to those who would prefer that golf course land be maintained exclusively for golf. The golf-park model-land that hosts a golf course in addition to other recreational or experiential activities-has been applied successfully abroad but has not been widely replicated in the US. In this article, I will discuss the recreational and experiential potential of golf-parks, delve into the roots of the discussion over the functionality of golf course land, explore why golfparks are not common in the US and argue that the golf-park concept may offer an opportunity to expand societal support for golf green spaces. In closing, I will refer readers to resources that can help Wisconsin golf course superintendents, owners and managers determine whether the golf-park model could work for their course.

The goal of a golf-park is to maximize

the positive societal benefits that golf course land provides. A growing body of research indicates that green spaces, which include golf courses, are incredibly important for physical and mental health, longevity and social well-being. In a rapidly urbanizing world, the demand for access to green space will increase and urban and suburban golf courses, especially municipal courses, could respond to these needs.



Given that the National Golf Foundation estimates that only 8 percent of the American public plays golf, a large proportion of the general public cannot realize the benefits of the green space provided by golf courses. Fortunately, golf courses have the potential to host a variety of recreational and experiential activities that appeal to wide swaths of the general public.

According to the Scandinavian Turfgrass and Environmental Research Foundation (STERF), who have invested heavily in the golf-park concept (multi-functional golf courses), there are seven principle ways in which golf course land can be valued by the non-golfing public.

- 1. Provide a pristine environment. This is the value of an undisturbed natural environment such as an old growth forest, an ocean or a lake, which can have the appeal of a national park.
- 2. Provide a habitat experience. Golf courses commonly host forests, meadows, and park landscapes. This

category is valued by those who want to connect with nature.

- 3. Offer panoramic views. This category is similar to a scenic overlook and is valued by those who enjoy a beautiful view.
- 4. Host biodiversity. Golf courses host wildlife, which is of interest to birding groups or other wildlife enthusiasts.
- 5. Host cultural history. Golf courses can be on land that is of archeological or historical significance such as burial mounds or other historical structures.
- 6. Offer activity and challenge. Golf courses can host trails for walking, hiking, running, cross country skiing and mountain biking. Other possible recreational activities on golf properties include playgrounds, canoeing, kayaking, and other forms of golf such as frisbee golf or footgolf.
- 7. Provide services for social gatherings. Most golf courses already provide these services, which are important to the functioning of any park.

No single golf course or park will offer all of these attributes, but this list provides a framework for valuing a golf course's resources beyond playing golf. Given all of these experiential and recreational opportunities, STERF outlines the following three ways in which to organize a golfpark geographically: 1) offer different functions on different parcels of land (e.g. a golf course and walking trails on physically different areas of the golf course property), 2) offer different functions on the same unit of land but at different times or seasons of the year (e.g. a golf course during the day and a walking park in the evenings), or 3) offer different functions on the same land unit at the same time (e.g. golfers and walkers use the same land simultaneously).

Despite the recreational and experiential opportunities on golf course land, golf-parks are not common in the US. To understand why this might be, I read about private property laws in the US and abroad.

your water supply experts

water well services

- well/pumps emergency maintenance services
- well rehabilitation & maintenance program
- pump sales & maintenance
- well drilling
- water system engineering/construction
- hydrogeological services







Contact Us: 888.769.9009 Oconomowoc, WI • Elburn, IL www.waterwellsolutions.com



Water Well Solutions is now SUEZ Advanced Solutions

Currently in the US, landowners have the "right to exclude", which means that posting a "No Trespassing" sign is legal and must be abided by according to American law. Recent Supreme Court decisions have solidified this right. However, this was not originally the case in the US. Until the late 19th century, citizens had the "right to roam" on private land as long as it was unenclosed.

At public golf courses in the US, I commonly see signs stating "golfers only". Given the "right to exclude", my amateur legal interpretation is that these signs legally exclude all nongolfers from trespassing on the land. On private golf courses, signs are posted to remind the public that the land is private and only available to members and their guests (Figure 1). Thus, for many golf courses in the US, non-golfers are not permitted on golf course land.

In contrast, Scotland's traditional "right of way" laws were modernized in the Scottish Land Reform Act of 2003, which laid out the Scottish Outdoor Access Code, which grants generous access to public and private lands that cannot be revoked by private property owners. The code states that,

Scottish access rights apply...to hills and moors, forests and woods, beaches and the coast, rivers and lochs, parks and some types of farmland. There are also some common-sense exceptions, including houses and gardens, other buildings and their yards or compounds, school grounds and places which charge for entry. Access rights include things like walking, cycling, climbing, horse-riding, kayaking, swimming, and watching wildlife, but do not include things like shooting, fishing or access with motor vehicles.

The Scottish Outdoor Access Code has a specific section for golf courses which states that access rights are



Figure 1. A sign on a golf course in my hometown reminding the public that the course is "Private Property" and that you must be a member of the golf club to gain access to the grounds.

granted to cross over a golf course.

You can only exercise access rights to cross over a golf course and in doing so, you must keep off golf greens at all times and not interfere with any golf games or damage the playing surface. Golf courses are intensively used and managed, and there can be hazards such as where golfers are playing 'blind' shots. In exercising access rights: allow players to play their shot before crossing a fairway, be still when close to a player about to play, follow paths where they exist, and keep your dog on a short lead.

There is also a section of the access code specifically for golf course superintendents.

When fertilizers or pesticides have been used, the duration of any hazard depends on the material used but should not normally extend more than a few days. Golf course managers can ask you to avoid using particular routes at these times. Following such advice can greatly help minimise risks to safety.

In essence these practical and common sense laws have embedded golf etiquette into Scotland's legal framework. Scottish law does not state that golf courses can be used as parks, simply that the public can walk through them. However, many golf courses in Scotland incorporate walking paths that are used for more than just passing through the course. The Old Course at St Andrews is closed on Sundays and is used as a public park. The greens are corded off and children kick soccer balls, play in the bunkers and chase each other on the most famous golf course in the world.

Of course, there are risks in opening golf courses to the public as a park. What is impressive about the Scottish approach is their proactive rules for mitigating these risks.

For example, the number of dog walkers on golf courses in Scotland is high. In addition, the number of golfers who bring their dogs with them during a round is also high (Figure 2). As a result, there is a high probability of what I will call "dog pollution". To address this issue the Scottish Parliament passed the Dog Fouling Act of 2003. The opening line of the actual law states, "If a dog defecates at any time upon any place to which this Act applies and a person who is in charge of the dog at that time fails to immediately remove the feces from the place, that person shall be guilty of an offense." This offense is generally mediated by a moderate fine. Signs are posted around most golf courses reminding dog walkers of the law (Figure 4). Having played many golf courses in Scotland during nearly three years of living there, I can attest that courses are clean and Scots respect and abide by this law.



Figure 2. A Scottish gentleman and his dog stroll up the 18th fairway of the Old Course at St Andrews. The dog is proudly carrying his owners mat, which are used in the winter to reduce the number of divots taken while the turf is growing slowly.





WAUKEGAN

2216 N. Greenbay Rd. Waukegan, IL 60087 847.336.120

LAKEMOOR

27919 Concrete Dr. Ingleside, IL 60041 815.363.4100

IOLIET

2001 Cherry Hill Rd. Joliet, IL 60433 8115.464.6650



Figure 3. Finishing at the Old Course with dog in tow. The iconic red brick building behind the 18th green was originally the Grand Hotel. Though it closed during WWII and then became a dorm for University of St Andrews students called Hamilton Hall until 2005. The building is now Hamilton Grand and owned by Wisconsin's own Herb Kohler where flats sell for many millions of pounds.



Figure 4. Most golf courses in Scotland kindly remind the public of the Scottish Dog Fouling Act. This is the sign posted on the golf courses at St Andrews.

In the US the golf-park model is not popular, even in areas that could benefit from the concept where there is a low density of publicly accessible urban green space but a high density of golf courses. In most communities with more than 200,000 people, access to greenspace within the city limits is often significantly limited. Los Angeles is an example of a city that has a high density of golf courses but has limited urban green space and could benefit from the golf-park model.

The golf industry is concerned that interest in golf has declined in popularity amongst younger generations, perhaps in part because the game is viewed as stuffy, exclusive, and out of touch. A potential solution to this image problem might be to open golf courses to the public and allow a variety of activities on them throughout the year. Shifting to a golf-park model would not only help change the perception of golf but also allow more people to enjoy the golf green spaces and perhaps inspire more people to try the game.

It is hard to determine how the golf-park concept would impact golf course revenue, which is an important consideration for the golf-park concept given that many US golf courses are in financial distress. Offering multiple recreational activities at a golf course may open additional revenue streams, though this income may not offset lost golf revenue.

For municipal courses, a golf-park model makes sense because it invites a much larger percentage of tax-paying residents to use the golf green space. Historically, municipal courses made money for a city and were built in part for their ability to generate revenue. However, in recent years, as the popularity of the game has declined and golf course infrastructure has aged, these courses are now becoming expensive for cities to maintain. In several US cities including Madison, the public parks systems have or will close municipal courses because they are no longer revenue streams and cater to a relatively small percentage of the population that the parks departments serve.

ALWAYS IN SEASON

HELPING YOU GET THE JOB DONE











Many of Madison's municipal golf courses do host cross country ski trails in the winter (which I and many others enjoy), but these courses do not host non-golf activities in the summer months. In fact, I haven't personally seen a golf course anywhere in the US that does.

However, when I raise the possibly of a golf-park type model with superintendents in the US I generally receive a lukewarm reaction at best. which is understandable. Unlike in Scotland, the US does not have the same cultural norms or federal laws to secure access but safeguard the land, such as an outdoor access code or a dog fouling act. And even if there are local ordinances that have a similar intent, these laws do not appear to be obeyed to the same degree. Amer-

icans, in my experience, are generally poor at caring for shared public spaces leaving litter behind when cans are available, and many do not pick up after their dogs, which is a headache for both superintendents and golfers.

Safety is also a critical consideration of the golf-park concept and unfortunately American private property laws do not help the golf-park concept. In conversations with golf course general managers, the prohibitive cost of liability insurance is commonly cited as a reason for not allowing walkers on the courses. Liability insurance policies are needed to protect the course owner(s) in the event of an injury are price prohibitive. Walkers who are injured because of natural features on private property have often successfully sued the landowner for damages in the US. While it is hard to know for sure, it seems the "No trespassing" signs so ubiquitous in the US are necessary for legal protection. Scotland has avoided this problem, as the right to roam laws protect landowners so that injuries to walkers resulting from natural features are not the responsibility of the landowner.

In my opinion, Americans would be better off if they could embrace the perspective of personal responsibility instead of blaming someone else for personal injury damages. Short of changing deep-seated legal precedent, if the golf-park concept is to be successful in the US, any golf-park must be vigilant about the temporal or physical separation of golf from other recreational or experiential activities. Any misunderstanding or lack of communication would lead to the looming legal threat of the public walking around in a territory with high speed projectiles flying through the air at great regularity. And then there is the question of responsible dog ownership, which has been an issue in the US for decades.

The golf-park concept faces multiple hurdles in the US. First, the nature of private property laws in the US allow for the legal exclusion of non-golfers from golf courses. Second, there is an American tradition that golf land is used exclusively for golf and not for other recreational activities even though this is inconsistent with golf's traditions in Scotland, where the game originated. Third, weak cultural norms around caring for public spaces make de facto attempts at the golf-park concept (i.e. allowing dog walkers on golf courses) a headache for US golf course superintendents. And fourth, a "blame someone else" attitude in the US has been supported by the legal system such that golf courses are financially at risk if they allow any other form of recreation on the course during the months when the course is open to golfers.



But perhaps attempting to confront these hurdles is worthwhile, for both the golf industry and public health. According to the USDA from 1982 to 2007, 41 million acres of land in the US (roughly the size of Wisconsin) were developed into urban or suburban land. Projections indicate that an even larger area than Wisconsin will be urbanized by 2060. As urban areas become more and more ubiquitous, access to greenspace will continue to decline for many Americans. While this is unfortunate news for those of us who cherish greenspace (as I know all members of this association do), perhaps it represents an opportunity for golf courses to become even more vital to nearby residents as areas of recreation and respite. Golf courses could serve not only as golfing grounds, but also as areas where non-golfing urbanites starved for a connection with nature go to recharge after a draining day at the office. Golf faces many challenges in the future--shortage of land and declining popularity to name a few--but if the industry embraces the role of bolstering access to urban green space, I would argue that the game we all love will be in a much better position to continue to prosper into the 21st century and beyond. While there are all sorts of legal and cultural hurdles to address in the US, I think the game of golf has untapped potential with the golf-park concept.

I am interested to continue to hear the thoughts and opinions of the members of this association with respect to the golf-park concept (email me at bekken@wisc.edu). What has your experience been with allowing (or not allowing) other forms of recreation on the course? How much interest is there in the local community for gaining access to the course for activities other than golf?

Executing the golf-park concept will look slightly different for every golf course because each and every golf course and surrounding community is unique. However, if you, your greens committee, or your local com-

munity is interested in moving the golf course toward a golf-park model, Scandinavian Turfgrass and Environment Research Foundation (STERF) has developed a helpful framework to determine how the recreational and experiential value of your golf course property can be maximized. The STERF guide outlines a process that starts with communication strategies with golfers and the local community and ends with a mapping strategy to determine which types of recreation and experiences in addition to golf are most appropriate for your course. The guide can be found on the STERF website (visit www.sterf.org, and click "Library", then "Handbooks", and then "Multifunctional potential"). I encourage everyone in the association to take a look at the guide and consider whether a golf-park model might be appropriate for your golf course in Wisconsin. This association has always been an innovative one, and I believe this is golf's future. Let's stay ahead of the curve.

PENDELTON TURF SUPPLY

Helping you Achieve Turf and Aquatic Excellence

In the SPOTLIGHT:









805 Ela Ave Waterford, WI 53185 www.pendeltonturf.com



Edward Witkowski (Owner) ed@pendeltonturf.com (414) 640-6447



Kristin Witkowski (Sales) kristin@pendeltonturf.com (414) 640-2241

119th State Amateur at Milwaukee Country Club

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

The 119th Wisconsin State Amateur Championship was held at Milwaukee Country Club July 27-30. The top 100 golf course drew a lot of interest from qualifiers hoping to play the historic layout.

Milwaukee Country Club was established in 1894 and moved to its current location along the Milwaukee River in River Hills in 1911. The original course was designed by golf professional Alec Wilson. In 1928 the club hired H.S. Colt and C.H. Alison to design the present course. Then the course was remodeled by Tom Doak in 2015.

Although Doak removed a number of trees, the fairways are still tree lined but views of the river have been opened up from the upland holes to provide amazing vistas.

The historic and exclusive club was home club of Manuel de la Torre who served as Golf Professional and Teaching Professional for decades. A 5 time winner of the Wisconsin State Open de la Torre was a favorite when the tournament came to Milwaukee Country Club in 1954 after winning in 1952 at Blue Mound and in 1953 at Racine CC. Unfortunately he took second to Walt "Boots" Porterfield at his home course but came back to win in 1955 over Tommy Veech at Oneida Golf and Riding Club.

Milwaukee Country Club hosted the 1903 Western Open, 1969 Walker Cup, 1988 U.S. Senior Amateur and the 2008 U.S. Mid-Amateur along with the Wisconsin State Open in 1920, 1954, and 1980.

MCC has also hosted the State Amateur 11 times with match play contests in 1902, 1914, 1917, 1922, 1925, 1938, 1949, 1960 and stroke play contests in 1971, 1995 and 2020 The 2020 Amateur Championship was won handily by 22

Qualifying Sites for the 2020 Wisconsin State Amateur

Janesville Riverside, Janesville
The Legend at Bergamont, Oregon
Brown Deer Park, Milwaukee
Washington County GC, Hartford
La Crosse CC, Onalaska
Meadowbrook CC, Racine
Mascoutin GC, Berlin
Lake Arrowhead GC, Nekoosa
The Oaks GC, Cottage Grove
Eau Claire G&CC, Altoona



year old Thomas Longbella, of Chippewa Falls by 10 shots over Tyler Leach and Nate Thomson. The course was set up fair, but long and challenging by Bill Linneman and the WSGA staff. Besides Longbella, and a few others, the scores showed the challenge and 14 over par was the 36 hole cut line

Longbella is long off the tee and just made up his mind to aim at the center of the greens and let his putter do it from there. After some near misses in the past four State Am's the University of Minnesota student entered day four with a 6 shot lead and never looked back.

In the Yule Cup where 3 man teams from the same club compete over the first two days of the State Amateur, the team from University Ridge GC shot 25 over par to beat out the teams from North Hills CC and Whispering Springs GC.

From Milwaukee the State Amateur moves on to Westmoor Country Club in Brookfield for 2021 followed by Sand Valley, Nekoosa for the first time and then returning to Erin Hills, Hartford in 2023.

Todd Bidlespacher has been the Golf Course Superintendent at Milwaukee Country Club since 2019. While attending West Virginia University for business Todd worked summers at Hershey CC for Matt Shaffer. Getting to know Matt convinced Bidlespacher to go back to college at Penn State for turfgrass.

Todd's career has taken him from Assistant Superintendent at Hershey CC, Hershey, PA and The Country Club in Pepper Pike, OH to Superintendent at Kirtland CC, Willoughby OH and Lancaster CC in Lancaster, PA before arriving at Milwaukee.

At Lancaster CC, Bidlespacher and his staff hosted the 70th United States Women's Open Championship in 2015.

Milwaukee Country Club features bent/poa greens, tees and fairways with a rough consisting of blue, rye and fescue.

The historic club is not without challenges and many are associated with the Milwaukee River flowing through the property. Ice problems are common during the spring thaw and flooding affects several holes along the river during heavy rains.

The other challenge is keeping the 5 acres of steep faced bunkers ready for play despite the challenges Mother Nature can throw at the staff.

Assistant Golf Course Superintendent Brad Wagner joined the club shortly after Todd and according to Bidlespacher played a key role with course improvement projects, hiring staff and preparation for the 2020 State Amateur.

The players and WSGA staff raved about the golf course conditioning and layout in tribute to Todd, Brad and the rest of the talented staff.

Milwaukee Country Club Golf Course Superintendents

1902-1942 Fred Haselow 1943-1949 Ted Booterbough 1950-1973 John Stampfl 1974-1989 Danny Quast 1990-2001 Vince Monahan 2002-2019 Pat Sisk 2019 -present Todd Bidlespacher







Above Left: Starting on the first tee.

Above Right: Rolling on the 10th Green with the 11th tee in the background.

Left: Zeke and Brad Wagner at the morning meeting.

Member 9 with Todd Bidlespacher, Milwaukee Country Club

- 1. What was your first vehicle? 1980 Chevy Chevette.
- **2. Favorite piece of golf course equipment?** Chainsaw or Aerifyer depending on the time of year.
- **3. 18 Hole Handicap?** 14
- **4. What is your current vehicle?** 2019 Toyota Tundra.
- **5. Favorite TV shows?** I currently do not watch much other than sports and the weather channel.
- **6. Favorite professional sports team?** Pittsburgh Steelers.
- 7. Favorite main course meal? Steak or anything Italian.
- **8. Pets?** 2 dogs Ben a 9 year old Border Collie and Zeke a 2 year old mixed breed.
- **9. Favorite thing about working in the golf industry?** The people I have been fortunate to meet and work with and continuing relationships built over the last 25 years.

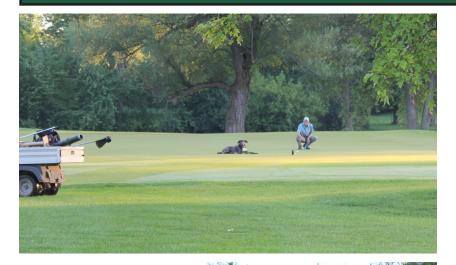


Left: The elevated 8th green is protected by this massive bunker on the front left, another on the right, and a steep drop off on the back.

Below: The signature 12th hole requires a accurate shot over the Milwaukee River.









Top Left: Green speed is measured on the 15th under the watchful eye of the supervisor.

Top Right: Checking moisture with a moisture meter.

Middle Left: Hand watering to achieve the proper moisture percentage for the days play.



Middle Right: The fairway mower team on the 15th fairway.

Bottom Left: The 15th is another example of the steep and deep bunkers on the course. The top of the flagpole is barely visible in the center.



Above: The golf course team on the 9th green with the Wisconsin State Golf Association State Amateur Sinnissippi Cup trophy so named after the host site of the first amateur 119 years ago. Sinnissippi Country Club later became Janesville Country Club.

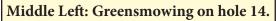
Below: The team is out at first light to ensure the course is ready for the states best players.





Top Left: Cup changing on hole 2.

Middle Right: Bunker perfection on hole 3.



Middle Right: Bunker team preparing the bunker on hole 14. Notice how the fairway height turf runs right up to the bunker to help catch balls that are slightly off line.



EDITOR'S NOTEBOOK

Not Perfect But We Will Take It

By David Brandenburg, Editor

2020 started with an early spring for many in Wisconsin, and golfers were ready to dust off the clubs until the covid shutdowns started.

In Fond du Lac we opened for play March 16 with the Pub & Grill at half capacity. The next day the Pub & Grill were mandated off premise carry-out only and effectively closed.

On Tuesday March 24th all Wisconsin Courses were closed and most stayed closed until April 24th when we were able to open to walking golfers only.

I was amazed at how many golfers found they could walk 18 holes when they normally took carts. Push cart sales and rentals went wild and golf courses struggled to find extra walking carts to sell and rent.

We had a few customers find doctors to give them handicap cards so they could ride, but for us we had more customer complaints that the rangewas closed than that they couldn't take carts.

By Friday May 1st golfers could take carts and the pub and grill could provide carry-out food and beverages. Then May 13th the State Supreme Court struck down the Safer at Home Order and it was business as usual with the exception of cleaning, sanitizing and distancing.

Gone were benches, ballwashers and drinking fountains but golf was being played. With the state order struck down, courses were soon subject to a variety of local city and county regulations with Dane and Milwaukee Counties being the most restrictive through the year.

Golf was lucky to be allowed to open long before other businesses in thanks to efforts by the leaders and boards of the WGCSA, WSGA, WPGA and GCOW. Without their hard work, countless phone calls and the use of a lobbyist to help get our message heard by the Governor and his staff we would have stayed closed with the barbershops and gyms.

We can count our blessings we are in a recreational activity that has been shown to be safe under the right rules and procedures to allow our customers to continue to play their game.

And play the game they did. Golf courses around the state recorded record levels of rounds as other recreational activities were taken away due to worries about covid.

The one downfall to our industry was clubhouses were either limited or entirely shut down losing not only golfers having a post round meal but also weddings and banquets of all sorts.

If we do return more to normal in 2021 many courses are going to have to find clubhouse staff members that have moved on to other industries with clubhouses shut down for so long.

Golfers with nothing else to do and good weather through the season was surprisingly welcome for golf courses.

SUPPORT OUR ADVERTISERS THEY SUPPORT US

FULL PAGE ADVERTISERS

Advanced Turf - Page 2
Clesen Pro Turf - Page 27
DHD Turf & Tree Products - Page 44
Horst Distributing - Page 21
JW Turf - Page 7
National Golf Graphics - Page 13
Rain Bird - Page 15
Reinders - Page 17 & 33

HALF PAGE ADVERTISERS

Burris - Page 31
Lohmann Companies - Page 9
Midwest Turf - Page 4
Pendelton Turf Supply - Page 35
Suez Advanced Solutions - Page 29
Syngenta - Pages 5 & 19
Waupaca Sand & Solutions - Page 11

THIRD PAGE ADVERTISERS
Herfort and Norby - Page 14

QUARTER PAGE ADVERTISERS

Frost - Page 18 Milorganite - Page 28 Pumpstation Professionals - Page 23

EIGHTH PAGE ADVERTISERS

Bayer - Page 38 Helena - Page 42 Leibold Irrigation - Page 43



EDITOR'S NOTEBOOK

A pet peeve of mine is people who are on the golf course when it is closed or non golfers who just feel the course is a park and use it to fish or walk. Most golf courses are considered private property and anyone who has not paid to be there is in reality trespassing.

My kids got used to driving past the course in the offseason, no matter where we were headed, to check if anyone was on the course and chase them off or at least leave a nicely worded note on their car

I have mellowed out over the years and now really do not worry about it.

When the state first closed golf courses we had a problem with customers trying to sneak on to play. It was bad enough that I actually barricaded off the clubhouse driveway which was a hassle for staff and deliveries.

All closing off the driveway resulted in was keeping the honest golfers from driving through the parking lot to look while the others just parked off property and played anyway. I decided to change our approach. Rather than trying to keep golfers out, we invited the public to use the closed golf course to walk.

We had quite a few regular customers and new people come walk the course with the only rules being to clean up after your dogs and no fishing poles or golf clubs were allowed.

Surprisingly the walkers discouraged the golfers from sneaking onto play so that problem was solved and we received calls from non-golfers thanking us for the opportunity to walk the course during the lock down.

Our new walking policy is reinforced by the article from Jake Schneider on page 10 titled "As Seen in Norway" and Michael Bekken's article on page 28 titled "Exploring the Golf-Park Concept In The United States."

We do not have a property that could accommodate walkers and golfers at the same time but when the course is closed it worked for us.

Check out those articles and our other submissions for education and entertainment.

Congratulations to Neil Radatz for

renewing his status as a Certified Golf Course Superintendent in March. Neil has been the Superintendent at Hawks Landing Golf Club in Verona since 2000.

Radatz spent the season helping to build Pioneer Pointe, a new 13 hole par 3 course on the site of the former Tumbledown Trails Golf Course.

With holes from 100 to 280 yards the course will provide a fun challenge on the south side of Madison. The course was designed by the Lohmann Quinto firm with input from Jerry Kelly, and is expected to open in late 2021. If you follow Neil on twitter (@hawksnr) he has been posting great pictures of the project.

As we look back on the 2020 golf season we can consider our industry lucky as we were open when others were closed and if your family and staff stayed healthy you can consider yourselves very lucky.

It sure has not been a perfect year but considering all that has happened, we will take it.







LebanonTurf

More Brands.

Best of All Worlds™

Offering a Full Line of the Finest Fertilizers and Grass Seeds to Fit Any Budget

Quality Turf and Ornamental Products



The Forgotten Nutrient



Tru Foliar Nutrient and Iron Products Fortified with North Atlantic Sea Kelp

BARENBRUG

Great in Grass®

The Industry Standard in Coated Grass Seed Technology



The Logical Choice for Bunker Maintenance





Water Movement Solutions



Organics®

Specialty Fertilizer Manufacturers 3-0-1 Early Bird Organic



"Committed to Your Success"

Danny H. Quast danny@dhdproducts.com 920.210.8616

Joe Jehnsen, cgcs 920.344.4938

Mike Upthegrove jmjehnsen@dhdproducts.com mupthegrove@dhdproducts.com 920.210.9059

Turf and Tree Supplies

Fertilizers

Plant Protectants

Equipment