

The GRASS ROOTS

AN OFFICIAL PUBLICATION OF THE WISCONSIN GOLF COURSE SUPERINTENDENTS ASSOCIATION

VOL. XLVIII
ISSUE 5
SEPTEMBER / OCTOBER 2019



THE GOLF COURSES OF

LAWSONIA



CLESEN
PROTURF
SOLUTIONS



**YOU SPRAY
WE'LL SPREAD**

For more information about *You Spray, We'll Spread*, contact your Clesen Sales Representative.

Matt Kinnard
(262) 720-0251
matt@clesenproturf.com

Eric Styck
(262) 278-7055
estyck@clesenproturf.com

Rob Wasser
(262) 221-5524
rwasser@clesenproturf.com

Steve Wasser
(920) 225-9658
swasser@clesenproturf.com

Dustin Peterson
(309) 314-1937
dpeterson@clesenproturf.com

clesenproturf.com

- NEW FROM SYNGENTA -

Use Posterity Now and Pay June 2019



Posterity®
Fungicide

fairy ring. Posterity delivers power that lasts, holding stronger for up to 28 days of dollar spot control, and setting a new standard for spring dead spot control. With Posterity, you can manage the toughest and most prevalent diseases with confidence.

Posterity® fungicide, the most active SDHI in the turf market that elevates the control of key diseases including dollar spot, spring dead spot and



SecureAction™
Fungicide

SecureAction™ fungicide includes a boost of acibenzolar-S-methyl (ASM) to better mitigate and quickly recover from biotic and abiotic stresses. Its enhanced formulation offers improved dollar spot control and brings the ASM defense to fairways and greens.

To Learn More, Contact Your Clesen Sales Rep or
Visit: clesenproturf.com/posterity
clesenproturf.com/secure-action



TABLE OF CONTENTS

THE PRESIDENT'S MESSAGE Super Pro Relationship	4
TURFGRASS DIAGNOSTIC LAB Oh Where, Oh Where Has The Snow Mold Gone?	6
WISCONSIN STATE GOLF ASSOCIATION Lawsonia Links Hosts 118th State Amateur Championship.	10
WISCONSIN SOILS REPORT Evaluation of Commercial and Consumer Grade Robotic Mowers	16
MEMBER SPOTLIGHT Michael Bekken	22
EQUIPMENT MANAGERS Equipment Managers Meeting At Maple Bluff Country Club	26
MUSINGS Healthy New Year	30
WGCSA Fox Valley Golf Club Hosts Joint August Meeting	32
WGCSA Madison Hosts Annual Couples Night Dinner	34
TOURNAMENT TIME University Ridge Hosts Senior PGA Tour	36
TOURNAMENT TIME Thornberry Creek Hosts LPGA Classic	39
EDITOR'S NOTEBOOK Happy New Year	42
PAR FOR RESEARCH LETTER & DONATION FORM .	28
ADVERTISER INDEX	43
EVENT SCHEDULE	42

ABOUT THE COVER

The par 5 thirteenth hole at Lawsonia Links Course plays 568 yards . Lawsonia hosted the Wisconsin State Amateur in July.

Hope smiles from the threshold of the year to come, whispering "it will be happier".

By British Poet Alfred Lord Tennyson, 1809-1892

This quote by Tennyson can remind us each year and even each day and hour is a chance to be happier in what we do and how we act. A new opportunity with a clean slate to make happier happen.

Visit our Website at

www.wgcsa.com

THE GRASS ROOTS

is the bi-monthly publication of the Wisconsin Golf Course Superintendents Association. No part of the *THE GRASS ROOTS* may be used without the expressed written permission of the editor.

EDITOR

David A Brandenburg, CGCS
Rolling Meadows Golf Course
PO 314 Theresa, WI 53091
grassroots@wgcsa.com
920-960-1678

WGCSA Board Of Directors

PRESIDENT

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

DIRECTORS

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

VICE PRESIDENT

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

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

TREASURER

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

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

SECRETARY

Garrett Luck, CGCS
Hidden Glenn at Bentdale
Farms
778 Sherman Rd.
Cedarburg, WI 53102
gluck@hiddenglengolfclub.com

Tim Wegner
Brown Deer Park GC
7835 N Green Bay Road
Milwaukee, WI 53209
twegner4@wi.rr.com

PAST PRESIDENT

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

VENDOR LIAISON

Rob Johnson
Waupaca Sand & Solutions
E3481 Royalton St
Waupaca, WI 54981
rjohnson@waupacasand.com

CHAPTER MANAGER

Brett Grams
WGCSA
N9122 Virginia Dr.
Waupaca, WI 54981
bgrams@wgcsa.com

CLASS C REPRESENTATIVE

Kathryn Lifke
Trappers Turn GC
W1873 Allen Rd.
Theresa, WI 53091
klifke9@gmail.com

CLASS EM REPRESENTATIVE

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

Super Pro Relationship

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

I know from past experience and networking with colleagues that the relationship between the Golf Professional and the Golf Course Superintendent can range from mutually beneficial to toxic. As with most things in life, communication and seeing things from someone else's point of view are keys to a successful relationship.

I want to use my platform here to brag about Maple Bluff's Head Golf Professional, Brian Bishop. I thought I was a hands on leader, manager until I met and worked with Brian. I thought I was an early riser and motivated morning person until I saw Brian each and every morning. He inspires me and I like to think that I motivate him. I've been working on golf courses for 32 years and I've never seen anything like it. Best words to describe Brian: Humble, honest, genuine, family man, dependable, leader by example, driven and smart.

He is able to lead a great team by not asking any of his employees to do anything he isn't willing and able to do himself. He sets the range, stages golf carts, opens the proshop and communicates with our Greens Department, all prior to his staff or members arriving for the day. Brian treats each and every member with the same courtesy and respect. I knew he was a winner when my first winter here Brian was out with full winter gear crawling on his hands and knees shagging range balls from the tree lines that surround our driving range.

Brian is active in the Wisconsin Section of the PGA and past winner of Golf Pro of the Year and Merchandiser of the Year. I was lucky and fortunate to attend the WI PGA awards ceremony in Wisconsin Dells last year to witness him win his Pro of the

As with most things in life, communication and seeing things from someone else's point of view are keys to a successful relationship.

Year award. Brian sat me next to his family and Assistants. I was the only Superintendent in the room but I was warmly welcomed and met some great people.

Brian listens, and understands that providing us with accurate and timely outing and tournament information is critical to both of our department's success. Who, what, when, where, why and how's are always discussed well in advance of an event. We talk every morning and look forward to it. Most times it is very brief. We discuss cart rule, course conditions, any feedback positive or negative from the day before, what the Greens Staff is working on that day and that week.


On more than one occasion, Brian has offered to help with course prep. Most times we have it covered but during peak leaf drop in the fall and the entire course needs to be cleaned for daily play, I welcome a good operator on a Turbine Blower. I am amazed how he can be such a good communicator, merchandiser, teacher, organizer and member service provider yet still have time to offer help to the Greens Department.

I attempt to do my part and reciprocate the open lines of communication. A member comment or question after a round of golf are many times directed at the golf staff in the

proshop due to accessibility. Brian listens and understand what the Greens operation is attempting to accomplish each day and is a great source of golf course maintenance information to the membership. Not only is Brian a great listener, he retains it, understands it and helps communicate it to the membership. Brian also knows when the question needs to be answered by me and makes sure the member and I connect.

To supplement revenue, MBCC had been booking an increasing number of Monday outings. Mondays were historically a "maintenance day". An opportunity to perform agronomic practices that would otherwise be difficult to accomplish without impacting the member experience. Brian recognizes how beneficial these practices are and how the Greens department and I need time and course access to accomplish them. Brian knows that these agronomic practices are difficult to accomplish on an event Monday when the entire greens staff is prepping the course for the event.

He also understands we have noise ordinance issues and "starting earlier" isn't an option in most cases. With Brian's help, we were able to negotiate with the Club's board of directors and incorporate a "maintenance morning". If we host an event on a Monday, then the first tee time allowed that following Wednesday is 10:00am. Although a small window of opportunity, this little "head start" has been a blessing. Thanks to Brian for recognizing its need and helping me push for the club's approval.

I don't mean to brag. Simply couldn't resist the opportunity to share how blessed I am to have a Super Pro relationship. 





JW TURF

REWARDS

ENROLL IN J.W. TURF REWARDS TO

Earn 5% credit on all parts and service work.

Visit jwturewards.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 jwturewards.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.

Oh Where, Oh Where Has The Snow Mold Gone?

By Kurt Hockemeyer, Turfgrass Diagnostic Lab Manager, UWisconsin-Madison, Department of Plant Pathology

Being a member of Dr. Koch's research lab here at UW-Madison, one of our defining research fields is snow mold research. We are the #1 snow mold research lab in the nation, if not the world, just in terms of the amount of snow mold research we do and the quality of that research. Every winter we drive to multiple locations and layout multiple snow mold research trials.

Then, every spring, we go back to each of these locations and evaluate the turf once the snow has melted. This information is then analyzed and posted to our website (tdl.wisc.edu) for the public to consume. We have years and years of data, so the robustness of this data is even greater because we have such a wide range of locations and years. Hopefully, if any of you read-

ing this ever have any questions about a specific tank-mix for your specific snow mold fungicide application, you have looked up our reports to see how effective your tank-mix might have been in recent years. That's exactly why we post these reports, for the end user to get information and put it to use in a real world scenario.

So where exactly do we put our snow mold research? **Figure 1** shows where in WI and the Upper Peninsula we have done research in recent years. Our northernmost location has been Marquette, MI. The city, dubbed a "jewel on the shores of Superior", is also a jewel for snow mold research. Being next to Lake Superior, snowfall totals up there are always high, creating a great environment for snow mold infection. Deep, deep snow cover for

long periods of time keep soil surface temperatures from dipping too low.

I know that is probably a foreign idea for some folks, thinking of snow mold disease as a desirable thing. But in research, disease is a desirable thing. As a great plant pathologist once taught me, we are trying to kill grass. By killing grass, we can give end users the most relevant data possible. When soil surface temps remain right around 32°F, that's when snow mold pressure is high. In my few years of experience there, a light year of snow mold in Marquette is about 70-80% disease.

Shout out to Craig Moore, golf course superintendent at Marquette Golf Club, for allowing us to come up every fall and do some research on one of his fairways. I always enjoy getting up to Marquette when I can.

Our next northernmost location is Minocqua, WI at Timber Ridge Golf Club. Superintendent Jay Pritzl has been great to work with. Minocqua is another great location for snow mold pressure. Lots of snow cover for long periods. Our central WI site is Wausau Country Club near Wausau, WI. Randy Slavik and Aaron Hansen are extremely helpful to us every time we head their way, and we are very grateful for their help every year. But snow mold pressure here starts to see a bit of a decline. We tend to get more pink snow mold, rather than gray or speckled snow mold.

Some years it seems snow cover is plenty deep, but snow mold pressure is very low, sometimes 20% or less. And then finally we do a few snow mold trials in the Madison area. Over the past decade, we have observed snow mold pressure in only 2 of those 10 years! Why is this? Madison used to be very consistent with snow mold pressure in the past.



Figure 1. The black stars indicate where our lab has done snow mold research in recent years. Sites starting at the northernmost location moving south are Marquette, MI, Minocqua, WI, Wausau, WI, and Madison, WI. Snow mold pressure has been sorely lacking at our southernmost location over the past decade.

PRECISION
LABORATORIES

Results. Expect it!

Liquid and Granular Soil Surfactants,
and Maintenance Chemistries

Quest
Products Corp.

Finding new ways to improve
the treatment of trees and plants.

**SAND
TRAPPER**

The Logical Choice for
Bunker Maintenance

agrichem

0-0-30 Turf Summer
Stress Phiter

KOCHEK

Water Movement
Solutions

Ocean Organics

Specialty Fertilizer Manufacturers
3-0-1 Early Bird Organic

**Nature
Safe**

Natural and Organic
Fertilizers

LebanonTurf

More Brands.
Better Performance.

Best of All Worlds™

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

QUALI-PRO

Quality Turf and
Ornamental Products

Solu-Cal

Calcium,
The Forgotten Nutrient

**Emerald
Isle, Ltd.**

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

BARENBRUG
Great in Grass®

The Industry Standard in
Coated Grass Seed Technology

DHD
TURF & TREE PRODUCTS

866.343.8733

“Committed to Your Success”

Danny H. Quast

danny@dhdproducts.com

920.210.8616

Joe Jehnsen, CGCS

jmehnsen@dhdproducts.com

920.344.4938

Mike Upthegrove

mupthegrove@dhdproducts.com

920.210.9059

Turf and Tree Supplies ♦ Fertilizers ♦ Plant Protectants ♦ Equipment

TURFGRASS DIAGNOSTIC LAB

When I first started looking into why snow mold pressure has declined in the Madison area, I would have bet money that I would look up historical snowfall totals and just see a massive decline in how much snow has fallen in the Madison area.

But **Figure 2** shows that is not the case. 2010 and 2014 had historically high snowfall totals, but zero disease was observed on our research trials. 2011 and 2013 had slightly less snow than 2010 and 2014, and some (about 20%) snow mold was observed those years. No other years had natural infection occur. So what does this mean? It means that the graph does not tell the whole story.

As stated previously in this article, snow mold occurs when the snow cover is deep enough to insulate the soil surface temperature and keep it from dipping too far below 32°F. One theory is that in those years with lots of snowfall, the snow is coming later in

the winter. So bitter cold temperatures occurring before adequate snow cover dips soil temps below freezing which naturally prevents the snow mold fungi from infecting turf and completing their life cycle.

I just looked up soil temperatures on Greencast (<http://www.greencastonline.com/tools/soil-temperature>). Current soil temps in Madison, 22°F. Current soil temps in Wausau, 30°F. Current soil temps in Minocqua, 26°F. Current soil temps in Marquette, 31°F. So how does the northernmost location have the highest soil temps and the southernmost location have the coldest soil temps. The answer is snow cover. Madison lacks snow cover right now so soil temps dip well below freezing when air temps do the same. Wausau (about 14"), Minocqua (about 13"), and Marquette (about 20") all have significant snow cover that is keeping soil temps from dipping too low. The snow mold fungi are cold lov-

ing fungi (psychrophilic), but not that cold!

So why am I even bringing this up for everyone who is managing turf in the lower third of the state? Because this may present an opportunity for you. You may be able to reduce the number of active ingredients you put in your tank mix for snow mold applications. When it comes to greens, it's probably best to not mess with what you are already doing. The threshold for damage is already very low, and the area of greens is usually not that large anyways. Where you might be able to find savings and still get effective control is on fairways and tees. Even during the years when some snow mold was observed, one active ingredient was enough for 100% control (**Table 1**). Obviously, you can do whatever you want with your turf, but we wanted to point out this significant observation to everyone in case you want to make use of it.

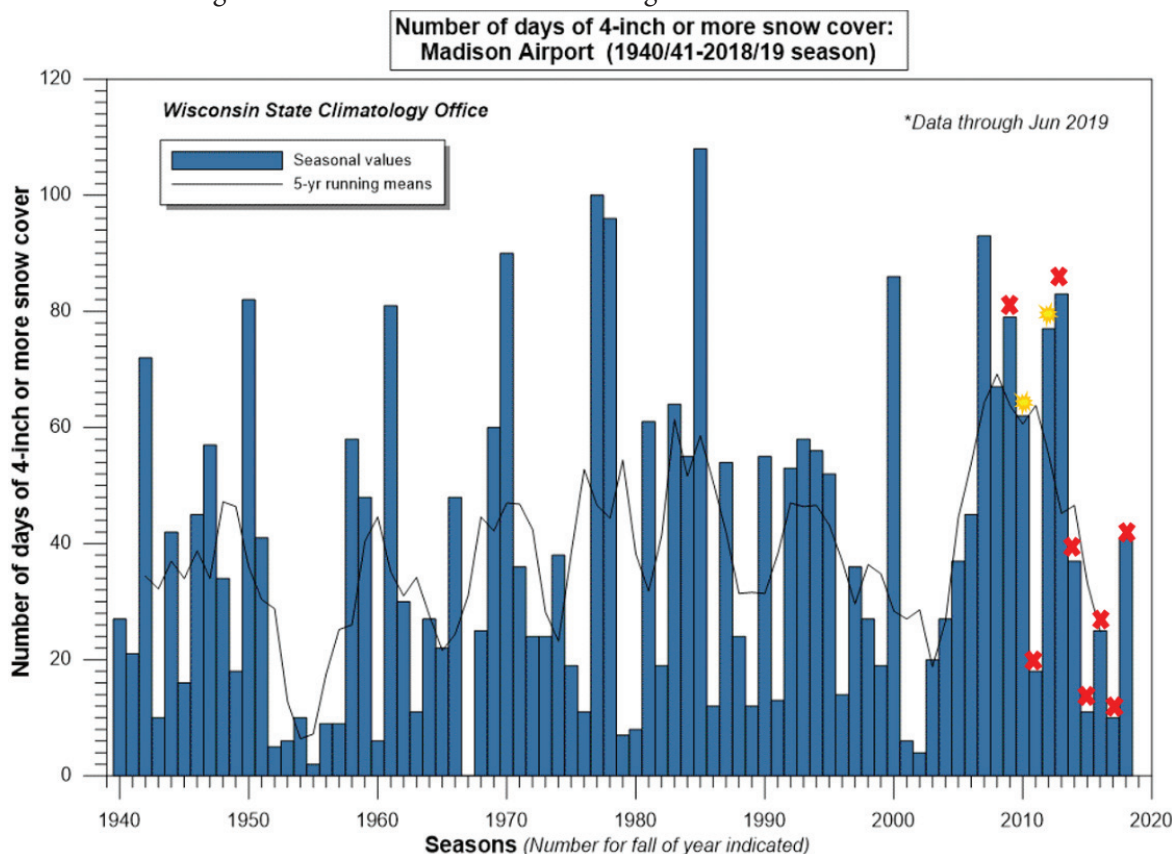


Figure 2. Number of days in Madison, WI with 4 inches or more of snow cover. Red X's indicate years in which the Koch lab did not have natural snow mold infection. Yellow bursts indicate years in which natural infection was observed.

TURFGRASS DIAGNOSTIC LAB

I presented these observations at the WGCSA Golf Turf Symposium a few weeks ago and heard some concerns and feedback. I will try to address those concerns here. When I am talking about snow mold pressure decreasing, I am specifically talking about pink snow mold caused by the fungus *Microdochium nivale*. There is another form of this fungus that causes the disease *Microdochium patch*. The main difference is when these diseases occur. Pink snow mold occurs under snow cover and needs snow cover to occur. *Microdochium patch* can occur just about any time of the year when temps are cool (35-60°F) and conditions are wet.

When I first heard that there was a distinction between these two diseases, I thought it to be quite silly, considering they are caused by the exact same fungus. But as I have learned more I can see that the distinction is

actually quite useful. *Microdochium patch* is a major disease in the Pacific Northwest on annual bluegrass putting greens. During the winter there, environmental conditions remain cool and moist, which are perfect for the *M. nivale* fungus. Management of this disease is not dissimilar to managing dollar spot during the summer.

Fungicide applications may need to go down every 2-3 weeks during the winter. This means selection pressure on the fungus is extremely high, and fungicide resistance developing in the fungal population is a major concern. But with pink snow mold, the fungicides go down only once before snow cover. The growth of *M. nivale* under snow cover is not as fast as when *Microdochium patch* occurs, therefore the selection pressure on the fungus is not as high. Fungicide resistance concerns are lower. I am unaware of even a single case of pink snow mold break-

through due to fungicide resistance.

So to summarize, we are currently in a short term trend of lower snowfall and lower disease pressure from pink snow mold in the southern third of Wisconsin. History says that higher snowfall will eventually return, but that does not necessarily equate to higher disease pressure.

When the snowfall occurs in relation to bitter cold temperatures probably plays a much higher role in disease pressure than just snowfall totals. And even in the years we do get pink snow mold, one active ingredient in your snow mold fungicide application has been enough for 100% control.


You may consider reducing the number of active ingredients in your current fairway and tees tank-mix. This could save you money while still giving you significant control of pink snow mold in the few years we get disease. 

Table 1: Mean snow mold severity, turf quality, and turf color assessed on April 8th, 2013 at Odana Hills GC in Madison, WI.

	Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
1	Non-treated control			13.8a	5.3c	0.574ab
2	Turfcide 400	8.0 FL OZ/1000 FT2	Late	0.0b	7.0b	0.553ab
3	Turfcide 400	12.0 FL OZ/1000 FT2	Late	0.0b	7.0b	0.526b
4	Turfcide 400	16.0 FL OZ/1000 FT2	Late	0.0b	7.0b	0.543ab
5	Banner MAXX II	2.0 FL OZ/1000 FT2	Late	0.0b	7.0b	0.554ab
6	Turfcide 400 Banner MAXX II	8.0 FL OZ/1000 FT2 2.0 FL OZ/1000 FT2	Late Late	0.0b	7.0b	0.564ab
7	Turfcide 400 Banner MAXX II	12.0 FL OZ/1000 FT2 2.0 FL OZ/1000 FT2	Late Late	0.0b	7.0b	0.597ab
8	Turfcide 400 Banner MAXX II	16.0 FL OZ/1000 FT2 2.0 FL OZ/1000 FT2	Late Late	0.0b	7.0b	0.533b
9	Turfcide 400 Banner MAXX II Daconil Ultrex	8.0 FL OZ/1000 FT2 2.0 FL OZ/1000 FT2 3.2 OZ/1000 FT2	Late Late Late	0.0b	7.0b	0.525b
10	Daconil Ultrex	3.2 OZ/1000 FT2	Late	0.0b	7.0b	0.620a

Lawsonia Links Hosts 118th State Amateur Championship

David Brandenburg, Editor

The Links course at Lawsonia is widely considered one of the best classic golf courses in the country, but the work done in the past decade has really brought the design back to the layout envisioned by Bill Langford and Ted Moreau in 1930.

The course features wide fairways, deep bunkers, raised green complexes and an open concept most golfers are not used to.

If you had asked me 20 years ago what some of my favorite golf courses were, I am sure I would have rattled off names of some nice facilities with tree lined fairways with mowing stripes to dazzle the eye. Don't get me wrong, those are still challenging and great golf courses, but what classic architecture has to offer is special.

With age comes the appreciation for the finer things in life, and in the world of golf nothing is finer than the

open concept Lawsonia now offers. The course is split into two sections, but to stand on the 18th green and basically see the entire back 9 and the incredible land forms and movement of the gorse grasses in the wind is a site to behold.

Lawsonia is recognized nationally by:

- Golfweek: #24 in top 100 best courses you can play and #4 in Wisconsin.
- Golfweek: #62 in top 200 classic courses.
- Golf Digest: #58 in Americas greatest public courses.
- Golf Magazine: #85 top 100 courses you can play.

These are all great accolades for a layout that offers golfers an economical chance to step back in time and play golf using the fast and firm conditions a links layout can offer.

The Wisconsin State Amateur is open to all male amateur golfer with a handicap under 9.4. Entrants do not need to be a resident of Wisconsin but non-residents must agree to no participate in any other states amateur championships.

The leaders of 9 qualifying events, along with players exempt to due past events, form the field of 156 players.

Exempt players include past champions, the top 25 from the 2018 amateur and the top 25 amateur golfers on the previous year's amateur player of the year rankings. Also winners of the previous year's WSGA Match Play, Junior, Mid Amateur, Senior Amateur and Senior Match Play and the WPLA Ray Fischer and 36 Hole Championship, NEWGA, TRGA, CVGA, MDGA and Madison City Championship.



This shot of cup changing on the par 5 thirteenth hole is a good example of the land forms and terrain that Lawsonia has to offer the states best players.



golf industry show

Booth #3925



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

Call Peter Meyer at 877-710-9363
or visit my website at www.NationalGolfGraphics.com

WISCONSIN STATE GOLF ASSOCIATION

The 156 qualifiers played 36 holes over two days and then the field was cut to the low 70 and ties to play the final 36 holes over the last two days.

In the end, Hunter Eichhorn of Carney Michigan, a junior at Marquette University took home the Sinnissippi Cup with a 7 under par score of 281 for the 72 holes. Hunter's scores of 73,65,69 and 74 were enough to win by 1 shot over Matt Tolan of Eau Claire and Phillip Johnson of Colgate. Eichhorn had led most of the 2018 amateur only to lose it in the final round.

Only 7 players broke par during the final round as the course played tough with a hard setup and windy conditions.

The Sinnissippi Cup name comes from the first State Amateur held at the Sinnissippi Country Club (Now Janesville CC) in 1901.

In the 36 hole team championship called the Yule Cup ,Brown Deer Park won with a 5 under 427. Brown Deer's team included Hunter Eichhorn, Michael Harris and Jack Schultz. The Yule Cup has been held during the state amateur since 1909 and features 3 man teams from the same

WSGA Club.

The course received rave reviews from the players and the event held July 15 to 18 was during one of the season's few warm and dry spells.

Lawsonia features 36 holes with the Links and the Woodlands courses each living up to their names. The courses are located near Green Lake and part of the property with the Green Lake Conference Center.

Both courses are looked after by Golf Course Superintendent Mike Lyons and his staff. Mike was born in Chicago but grew up in West Bend where he started in the industry as a caddy. After high school Mike enlisted in the Navy and served 4 years with time in Orlando, Coronado Island and San Diego.

Mike served as a cook on the USS Kitty Hawk serving up to 5,000 troops 3 times per day. His time in the Navy allowed him to travel to Hawaii, the Philippines, Japan, Korea, Singapore and Australia.

Returning home in 1982 Mike went to work as a chef at West Bend Country Club where he developed an interest in golf

course management.

After two years at the University of Wisconsin - Marathon, with summers on the grounds crew at West Bend under Bruce Worzella, Lyons enrolled in the turf program at UW Madison with the late Dr. Wayne Kussow as his advisor. Mike graduated from Madison in 1989 and was hired by Rod Johnson at Pine Hills Country Club to fill the second assistant superintendent position before moving up to assistant for 6 years.

In 1995, Mike was hired at Old Hickory Golf Club in Beaver Dam as the Golf Course Superintendent and served as such until he left for Lawsonia.

Mike is a past president of our association and has served on most of our committees over the years. He is currently a regional manager for Oliphant Golf Management along with his role as superintendent for the Lawsonia Golf Courses which are operated by the Oliphant team.

Congratulations to Mike Lyons and the entire team at the Golf Courses of Lawsonia on a successful 2019 Wisconsin State Amateur.



Above: The WSGA tent and sponsor signs for West Bend Insurance greet the players on the 1st tee.

Left: This deep fairway bunker protects the dogleg corner on the first hole.

Above Left: Classic style wooden rakes greet the customers.



WISCONSIN STATE GOLF ASSOCIATION



Top Left: Fairway mowing on the second hole with the historic barns in the background.

Bottom Left: Golf Course Superintendent Mike Lyons takes a moment from his busy morning to pause for a picture.

Bottom Right: A greensmower on the sixth hole while fairway mowers work in the background.



"The fairways are immaculate!"



"It was like playing on carpet."



"The course is in amazing shape."

When you can protect your fairways like your greens, you'll get rave reviews.

Golf's leading fungicide, Secure[®], is now even better. New Secure[®] Action[™] fungicide now includes a boost of *acibenzolar-S-methyl* (ASM), giving turf abiotic benefits such as increased drought tolerance, heat tolerance and quicker recovery. The enhanced formulation also offers improved dollar spot performance, including an increased control interval of 14-21 days.

Visit GreenCastOnline.com/SecureAction to learn more or contact:

Phil Spitz | 414-429-2015 | Phillip.Spitz@Syngenta.com

 **Secure[®] Action[™]**
Fungicide

syngenta[®]

 @SyngentaTurf #Time4SecureAction

WISCONSIN STATE GOLF ASSOCIATION

Qualifying Sites For The State Amateur

The Legend at Bergamont, Oregon
Drugan's Castle Mound GC, Holmen
Mascoutin GC, Berlin
Mill Run GC, Eau Claire
Broadlands GC, North Prairie
Janesville Riverside GC, Janesville
Oakwood Park GC, Franklin
Brown Deer Park GC, Milwaukee
Lake Arrowhead GC, Pines Course, Nekoosa



Rolling of the putting green with the par 3 tenth hole in the background.

DON'T SPRAY BLIND!

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



THE UNIVERSITY
of
WISCONSIN
MADISON

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

WISCONSIN STATE GOLF ASSOCIATION



Top Left: Detailed bunker work.

Top Right: The par 3 fourteenth green from behind tenth green

Middle Left: Rolling the tenth green with the twelfth and thirteenth in the background.

Bottom Left: Fairway mowing on the par 4 sixth hole.

Bottom Right: Greens mowing on the famous “box car” hole. The par 3 seventh is rumored to have a train box car beneath the green.



Evaluation of Commercial and Consumer Grade Robotic Mowers

By Doug Soldat, PhD, Department of Soil Science, University of Wisconsin – Madison &
Nick Bero, M.S., Department of Soil Science, University of Wisconsin

INTRODUCTION

Mowing is essential to maintaining a lawn or turfgrass area, but it also imposes regular damage and stress on the plant. Removing too much vegetation off at one time or mowing with a dull blade are well known to decrease turfgrass quality. Regularly mowing with a heavy mower may also create soil compaction issues. For these reasons, there is much excitement in the industry about small autonomous (robotic) mowers. Not only do these robotic mowers have the potential to alleviate issues associated with labor (availability, cost, etc.), they are lightweight, use sharper blades than conventional mowers, and never remove too much tissue at one time. Grossi et al. (2016) documented that mowing with a robotic mower instead of a gasoline-powered mower improved turfgrass quality, resulted in fewer weeds, and reduced energy consumption by three-fold. The goal of this study was to assess the response of turfgrass to both commercial and consumer grade robotic mowers compared to traditional mowing.

MATERIALS AND METHODS

This research project was conducted at the University of

Wisconsin's O.J. Noer Turfgrass Research and Education Facility in Verona, WI. Two separate study areas were used, one for the commercial robotic mower, and another for the evaluation of the smaller consumer grade mowers. The commercial mower evaluation was conducted on a lawn under Batavia silt loam soil in a long-established stand of Kentucky Bluegrass. We compared the Echo Robotics TM2000 to mowing with a John Deere 9009A during the 2019 growing season. The John Deere 9009A, has five rotary decks and an approximately nine-foot cut width. The mower covered an area of approximately 17,000 square feet traversing a gravel pathway and several trees. The mower mowed for approximately six hours per day for five days a week at a cut height of 2.25 inches. On July, 24th the mower went through maintenance and the mowing timing was changed to 2 hours per day for 3 days per week and cut height was raised to 2.5 inches. The robotic mower was always adjusted (mowing height, speed, frequency, blade changes) at the discretion of and by the Echo Robotics staff, the owners of the unit. The frequency of the traditional mowing varied from once to twice a week depending on rate of grass growth.



Figure 1. Two of the consumer grade robotic mowers are shown in the foreground with the commercial grade traditional mower operating in the background. (Photo: Micah Woods)

WISCONSIN SOILS REPORT

The consumer grade mower evaluation was conducted on a nearby site (same soil), but on an established stand of tall fescue (Turf Saver RTF) instead of Kentucky Bluegrass. Three robotic mowers, Robomow, WORX, and Husqvarna (**Table 1**), were compared to mowing with a Honda gasoline powered mulching push mower. The robotic mowers were set up by following their instruction manuals. These mowers automatically calculated the mowing operation time by using the size of the area to be mowed. In this case, approximately 1,400 square feet. Control plots were mowed by the conventional rotary mower once per week. All mowers were set to mow at 3 inches.

Data collection was identical for both commercial and consumer mower evaluations. All data was collected from six random areas within each mowed area, the six

measurements were analyzed as separate plots. Note, that this is not considered true replication which would require replication of the mowers (i.e. three or four identical mowers). While true replication would have been ideal for true statistical analysis, it was cost prohibitive to do so. Turfgrass color index was evaluated weekly using a reflectance meter (CS, Holland Scientific), which measured the normalized difference red edge light (NDRE). Visual turfgrass quality ratings were taken on a weekly basis using a 1 to 9 scale, where a rating of 9 indicates the highest possible turf quality a rating of 6 is the minimally acceptable quality for a lawn, and 1 represents completely dead turf. Turf density was measured by taking five 4.25 inch cup cut soil samples and directly counting of grass plants.

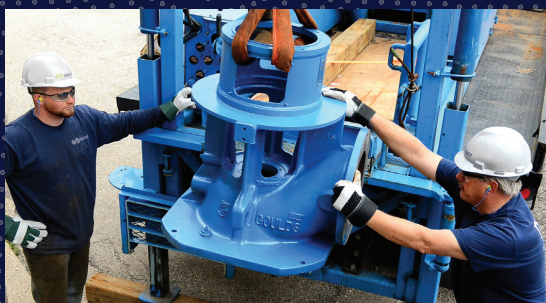
Table 1. Specifications of the robotic mowers used in this evaluation.

Mower	Mowing Area	Boundary Wire Required	GPS	Approx. Purchase Price
Echo Robotics TM2000	6 acres	Yes	Yes	\$15,000
Robomow RC304	0.1 acres	Yes	No	\$1,000
WORX Landroid	0.25 acres	Yes	No	\$1,000
Husqvarna Automower 315x	0.4 acres	Yes	Yes	\$2,000

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

WISCONSIN SOILS REPORT

RESULTS

Commercial Grade Evaluation

Averaged over the study period, the conventional mower had significantly greater visual quality and NDRE than the robotic mower (**Table 2**). Interestingly, both areas had statistically similar turf density on July 9th, but near the end of the season the Echo Robotics TM2000 had significantly more turf plants per area than the conventionally mowed turf. Despite this density difference, the conventional mower maintained greater NDRE (**Table 3**) and visual turfgrass quality (**Table 4**) on the majority of evaluation dates over the season. **Figure 2**

shows the difference in turfgrass appearance that persisted for much of the season. The results are in contrast with the findings of Grossi et al. (2016) which documented an improvement in turfgrass quality with robotic mowing (although a different unit was evaluated). The decreased turfgrass quality may have been related to the small area on which the mowing was conducted. The Echo Robotics TM2000 is designed to mow up to 5 acres. By mowing only a fraction of that area, we may have subjected the turf to excessive wear. A future evaluation should compare the mowing quality on an area that is closer to the size the mower was designed to handle.

Table 2 - Average color index, visual quality, rust pressure, and percent green cover from 9 May 2019 – 4 October 2019. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	NDRE	Visual Quality	Density 9 July	Density 20 Sept
	0-1 (1 is greenest)	1-9 (9 is best)	----- Shoots/in ² -----	
Echo Mower	0.345 b	5.81 b	5.37 a	6.82 a
Control	0.376 a	6.98 a	6.54 a	5.26 b

Table 3 – Turfgrass NDRE (a color index) from May 2019 – October 2019 by rating date. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	16 July	24 July	31 July	8 Aug	15 Aug	22 Aug	29 Aug	13 Sept
	----- 0-1 (1 is greenest) -----							
Echo Mower	0.321 b	0.337 b	0.348 b	0.327 a	0.341 a	0.360 a	0.376 a	0.348 b
Control	0.389 a	0.374 a	0.398 a	0.328 a	0.379 a	0.373 a	0.365 a	0.399 a

Table 4 – Turfgrass visual quality from May 2019 – October 2019 by rating date. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	16 July	24 July	31 July	8 Aug	15 Aug	22 Aug	29 Aug	13 Sept
	----- 1-9, 9 is best -----							
Echo Mower	No data	5.7 b	5.3 b	5.3 b	6.0 b	6.3 a	6.2 b	5.8 a
Control	No data	7.0 a	6.7 a	7.0 a	7.2 a	7.2 a	7.2 a	6.7 a



Figure 2. Side-by-side view of Kentucky Bluegrass mowed with the Echo Robotics TM2000 (left) and the John Deere 9009A (right). This photo was taken approximately four weeks after mowing treatments were imposed.

WISCONSIN SOILS REPORT

Consumer Grade Mower Evaluation

Similar to the commercial grade evaluation, we noted significant differences in turfgrass visual quality and NDRE and density between robotic and traditional mowing (**Table 5**). However, The Husqvarna model, actually improved NDRE and density (on one date) compared to traditional mowing. In contrast, the Robomow unit resulted in significantly lower visual quality than the control. This suggests that the performance of the mowers is subject to design and programming, and with the right design and programming, improvements in turfgrass response can be had. While the WORX and Husqvarna models cut grass using a razor blade, the Robomow utilized a metal flange that was clearly less sharp than the razor cutting units. While NDRE of the Robomow unit (and other robotic mowers) was rarely lower than the conventional mowing (**Table 6**), the duller cutting head of the

Robomow likely contributed to the poorer turfgrass quality over much of the season (**Table 7**). **Figure 3** shows the differences in appearance among three of the mowing treatments. We attempted to quantify quality of cut differences among the mowers by collecting leaf samples, scanning them and using digital image analysis to characterize the cleanness of the cut leaf. However, this analysis was unable to produce results that were analyzable (**Figure 4**).

In conclusion, we demonstrated that mowing using commercial and consumer grade robotic mowers can affect turfgrass responses in both negative and positive ways compared to traditional gasoline powered mowers. It is clear that more research is required to determine the optimal design and programming (mowing frequency) parameters for robotic mowers. This optimization is likely to reap the hypothesized benefits that robotic mowers offer.

Table 5 - Average color index, visual quality, rust pressure, and percent green cover from 9 May 2019 – 4 October 2019. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	NDRE	Visual Quality	Density 9 July	Density 20 Sept
	0-1 (1 is greenest)	1-9 (9 is best)	----- plants / in ² -----	
Robomow	0.378 a	5.98 c	4.55 a	5.02 ab
Worx	0.364 b	6.15 bc	4.69 a	4.48 ab
Husqvarna	0.390 a	6.56 a	3.98 a	5.81 a
Control	0.359 b	6.31 ab	4.04 a	4.02 b

GOLFCREATIONS





Hawks Landing Golf Club
Verona, WI



Before

Meticulous detail Versatile approach Perfect tie-ins Satisfaction guaranteed

A division of: Lohmann Companies ♦ Marengo, IL ♦ 815.923.3400 ♦ www.lohmann.com *ASGCA, GCBA, Better Billy Bunker Certified

WISCONSIN SOILS REPORT

Table 6 – Turfgrass NDRE (a color index) from May 2019 – October 2019 by rating date. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	16 July	24 July	31 July	8 Aug	15 Aug	22 Aug	29 Aug	13 Sept
	----- 0-1 (1 is greenest) -----							
Robomow	0.330 ab	0.348 a	0.375 a	0.377 ab	0.373 b	0.405 a	0.402 ab	0.417 ab
Worx	0.318 b	0.342 a	0.363 a	0.364 ab	0.380 b	0.376 b	0.377 bc	0.390 b
Husqvarna	0.342 a	0.361 a	0.377 a	0.388 a	0.407 a	0.409 a	0.408 a	0.432 a
Control	0.329 ab	0.348 a	0.361 a	0.358 b	0.370 b	0.366 b	0.356 c	0.384 b

Table 7 – Turfgrass visual quality from May 2019 – October 2019 by rating date. Results followed by different letters within each column are statistically different according to Fisher's Least Significant Difference (alpha=0.05).

Treatment	16 July	24 July	31 July	8 Aug	15 Aug	22 Aug	29 Aug	13 Sept
	----- 1-9, 9 is best -----							
Robomow	7.0 a	5.3 b	5.5 b	5.7 b	5.7 a	5.8 b	6.0 b	6.8 ab
Worx	5.7 b	6.7 a	6.5 a	5.8 b	5.8 a	6.0 b	6.5 b	6.2 b
Husqvarna	6.0 b	6.7 a	6.0 ab	6.7 a	6.0 a	6.8 a	7.2 a	7.2 a
Control	6.0 b	6.8 a	6.7 a	6.7 a	6.2 a	6.0 b	6.0 b	6.2 b



Figure 3. Picture showing differences in mowing quality for Robomow (left), Honda push mower (center), and the WORX robotic mower (right). The cords in the foreground are providing power to the charging stations.

References

Grossi, N., M. Fontanelli, E. Garramone, A. Peruzzi, M. Raffaelli, M. Pirchio, L. Martelloni, C. Frascioni, L. Caturegli, M. Gaetani, S. Magni, J.S. McElroy, and M. Volterrani. 2016. Autonomous mower saves energy and improves quality of tall fescue lawn. Hort-Technology. 26(6):825-830. ✓



**DEPARTMENT OF
SOIL SCIENCE**

University of Wisconsin-Madison



Figure 4. Digital scan of a set of leaf blades for analysis.

From Reservoir to Rotor...

Rain Bird has you covered.



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 exclusively 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.™

CLESEN
PROTURF
SOLUTIONS

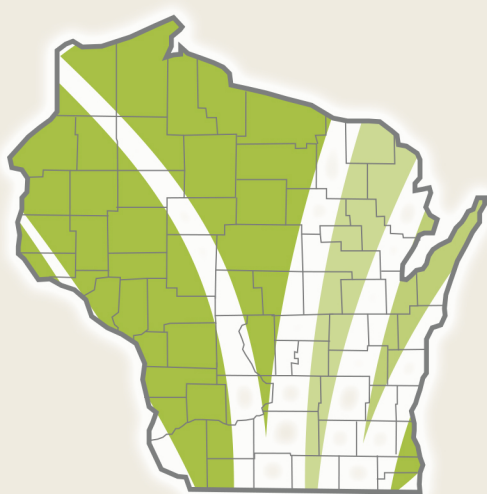
Now The Rain Bird Golf Distributor For All Of Wisconsin

Clesen PROturf Solutions is now the Rain Bird Golf Distributor for all of Wisconsin and Minnesota.

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

Dustin Peterson

(309) 314-1937 | dpeterson@clesenproturf.com



RAIN BIRD

MEMBER SPOTLIGHT

Michael Bekken

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

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

Name: **Michael Bekken**

Company Position: **PhD Student in Dr. Soldat's Lab**

Years as WGCSA Member: **2**

Membership Classification: **Student**

Bio: Michael earned a B.S. in Biology and Geology and played collegiate golf at the College of William and Mary in Virginia. Michael is currently pursuing a Ph.D. at the University of Wisconsin-Madison under the direction of Dr. Doug Soldat where he is studying resource use efficiency on golf courses.

18 Holes With Michael Bekken

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

Growing up I always loved science and golf. Both my parents are scientists and I really enjoyed going to work with them and exploring their labs. No one in my family plays golf, but for some reason I gravitated toward the game at an early age. In middle school, I decided I wanted to try to pursue a career that combined environmental science and golf. I went to William and Mary with the goal of pursuing this career. When studying abroad at the University of St Andrews in Scotland, I was able to become an intern in the R&A's Sustainability Department. This led to my first full time job, which was at the Golf Environment Organization (GEO) in North Berwick, Scotland. Living in Scotland and working in golf sustainability was a dream come true! However, my passion for research brought me back to the states and here to UW-Madison for graduate school.

2. What is the most rewarding part of your career? Being able to explore new ideas as a scientist in itself is very rewarding to me. However, the most rewarding part of my job is producing a tangible tool or piece of research that is helpful to a superintendent or someone in the turfgrass industry.

3. What would you consider to be your greatest career challenge? Reading! I have a reading disability which has always made reading speed and comprehension very difficult

for me. I think this is part of the reason I gravitated toward math and science growing up. My reading has improved through the years, but it has been a struggle!

4. Which three adjectives describes you the best? This is difficult! I hope people would describe me as kind, persistent, and open-minded.

5. Tell us about your family. I have a small family. Our family is mostly from Missoula, Montana. My parents are now retired but spent their careers as Geoscience Professors (Geologists) at Virginia Tech (Blacksburg, VA). Both my parents love the outdoors. My dad also loves flying airplanes and my mom is really into architecture and interior design and organization (I have never met a more organized person and it has been great to learn from her through the years). I have a younger sister that is a senior at Ithaca College in Ithaca, New York. We are very close. We enjoy playing all sorts of sports together: ping pong, badminton, squash, throwing the football around etc. etc.

6. Any pets? I don't personally have any pets. Though I love to go home and visit my parents two dogs, Abby and Coco. They are half Shih Tzu and half Poodle and are adorable!

7. What drives/motivates you every day? I am incredibly passionate about planet Earth and how humans can try to live more sustainably here. It's really quite simple for me... we only have one home and we should take care of it, not only for ourselves but also for the billions of other species that are here with us.

8. Who Do You Admire? I admire my parents most. They were able to both be full time professionals, raise my sister and I, and keep a wonderful house growing up. It wasn't easy, but they did it through grit and determination. I hope I can do the same thing one day.

9. Who is the person in history you'd most like to meet? I think it would be fascinating to sit down with Charles Darwin. When looking at a problem, I think Darwin had the ability to truly look at the data/evidence first and come up with an idea or hypothesis second. This characteristic is incredibly important in science; however, it is much easier said than done.



MEMBER SPOTLIGHT



Michael playing hickory golf in Scotland.

FROM SMITHCO AND TEEJET® TECHNOLOGIES

STAR COMMAND 2.0

The Next Generation of Sprayers

EXPERIENCE TOTAL CONTROL

- Control droplet size for greater efficacy independent of rate or speed.
- Spray from 2 to 10 mph. Up to twice as fast as other sprayers.
- Get the ongoing support of Smithco and TeeJet®.
- Plus the dependability of the only GPS sprayers tested over 4 years by superintendents.

Start with the 2 finest sprayers Smithco makes. The Spray Star 3180 and 2000. Both factory-fitted with a DynaJet® Nozzle Control System and Aeros Field Computer from TeeJet.

Smithco.com

Burris
EQUIPMENT
burrisequipment.com

WAUKEGAN

2216 N. Greenbay Rd.
Waukegan, IL 60087
847.336.120

LAKEMOOR

27919 Concrete Dr.
Ingleside, IL 60041
815.363.4100

JOLIET

2001 Cherry Hill Rd.
Joliet, IL 60433
8115.464.6650

MEMBER SPOTLIGHT

10. What's a fun fact that people don't know about you? I love cooking. I am a flexitarian, meaning I only cook vegetarian food, but I will eat meat on occasion and if it is served to me. In an effort to do my part to combat climate change, I calculate and mitigate my personal carbon footprint every year.

11. What do you do in your spare time, favorite hobbies? Golf has been my main hobby through the years. I also love skiing (downhill and cross country) in the winter. My family is from Montana and skiing out there is the best. I also enjoy swing and ballroom dance.

12. If you could go anywhere in the world on vacation, where would you go? I would go to Scotland and play golf. Even though I lived in Scotland for two and a half years, I love going back and play courses that I haven't played yet. Castle Stuart is next on my list.

13. What is the one thing you would like to learn/achieve someday? I would love to become fluent in both German and Norwegian. Germany is just such a cool country, and I have family in Norway. It would be great to speak with them in their native language.

14. What is your favorite turf management related tool or technique? I find weather and climate fascinating, and thus my favorite turf related tool is a weather station!

15. Favorites:

TV Show: Big Bang Theory (And Mr. Rogers Neighborhood as a kid.)

Movie: Ratatouille (Incredible story line and artwork, all around incredible film)

Food: Smoothies (The best way to start the day.)

Sports Teams: US Ryder Cup Team which has been tough the past 15 years.

16. Do you golf? Handicap? Best shot or golf story? I do! My handicap at the moment is 0. The best my handicap has ever been was during my college days, +2. I played Division I golf at William and Mary.

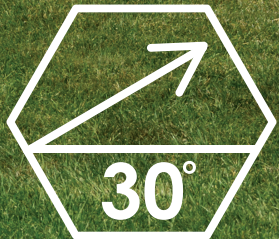
In college I often played a par 3 course that was near campus. On a particularly cold and blustery winter day I decided to play a couple holes. I walked to the first tee without warming up. The first hole had a small green and was about 150 yards. I stretched for a while and then teed off. My first shot went way left into the trees. I dropped a second ball down and as I was swinging a cart came out of nowhere and crossed right between me and the hole. It was too late for me to try and stop my swing and so I hit the ball, but quickly focused on the cart instead of my ball. Fortunately, the ball missed the cart. I had a brief exchange with the guy in the cart, we both apologized to each other. And just as I turned back to see where my ball had gone, I caught a glimpse of it going in the hole! To this day, that is the only hole in one I have had. And it doesn't really count because it was my second ball!

17. Top Bucket List Item? I think it would be great to qualify for a USGA championship. I was never able to qualify for the US Amateur growing up. I think the Mid-Am is my best shot at this point!

18. If you could provide one piece of professional advice, what would it be? Hmm, I am awfully young to be giving professional advice. What has helped me so far in the early stages of my career is to start planning for the next transition months and years before that transition actually happens. 🌱



Bekken family on a hike on Christmas Day, 2018 (Missoula, MT).



30°



KEEP YOUR
CONTOUR



30+
ATTACHMENTS



FLEXFRAME



LIGHT
FOOTPRINT

VERSATILITY THAT WORKS



Tough Cut



Contour Mower



Turbine Blower



444 N. Madison St.
Chilton, WI 53014
(800) 279-2341
www.horstdistributing.com

HORST DISTRIBUTING, INC.

Request more information or schedule a demo today!

SALES PRESIDENT

Grant Mortimer
gmortimer@horstdistributing.com

TERRITORY SALESMEN

Dennis Robinson Greg Kallenberg
(920) 901-2124 (920) 858-9276

Equipment Managers Meeting At Maple Bluff Country Club

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

I am extremely proud to be part of the golf turf industry. Collaboration amongst competitors for the common good is everywhere. Although our clubs and facilities are competing for members and customers, Superintendents and other industry professionals openly share ideas, equipment, staff and materials to help a colleague in need.

On October 21st, WGCSA industry partners, yet competitors in the fierce Golf and Utility Cart market, came together to help educate our WGCSA Equipment Managers and other members in attendance. We learned about gas and electric golf cart maintenance, new lithium battery technology, battery care, diagnostics, gas engines, fuel additives, winterization and golf fleet best management practices.

I want to thank Ben Rudolph from Premier Golf and Utility (Club Car), Scott Mack from Kohler Engines, Jim Gaugert and Mike Piersch from Harris Golf Cars (Yamaha) and Greg Stoeger and Ben Krause from Versatile Vehicles (E-Z-Go). These gentlemen brought gas and electric golf carts to Maple Bluff Country Club's maintenance facility and spent the day conducting seminars, answering questions and demonstrating maintenance and new technology on their respective vehicles.



Equipment Managers gathered at Maple Bluff to learn more about golf cart maintenance.

PENDELTON TURF SUPPLY

Ed Witkowski
414-640-6447
edward.witkowski@pendeltonturfsupply.com

805 Ela Avenue
Waterford, WI 53185
Phone: 262-534-3334
Fax: 262-534-2990



Clark Rowles
608-228-1782
clark.rowles@pendeltonturfsupply.com

FULL LINE OF TURF PRODUCTS
CHEMICALS • TEE & GREEN SUPPLIES
TIRES & TUBES • NEW PRODUCT INFORMATION

**SATISFACTION
GUARANTEED**



EQUIPMENT MANAGERS




Equipment Managers from around the state came to learn about golf cart maintenance directly from the manufacture's representatives.

The WGCSA is committed to offering EM education events throughout the state. Austin Wright and his EM Committee are busy planning the next event. Please consider attending in the future.

Contact Austin Wright, Ben LaBarre, Brett Grams or Josh LePine with any seminar ideas and offers to host a shop tour or meeting.

In 2020 we will host 2 meetings specifically for equipment managers.

The Thursday January 23, 2020 meeting will start at Erin Hills for the morning session and move to Westmoor CC in the afternoon.

The Friday September 25, 2020 meeting is still looking for a location and could be your opportunity to showcase your facility. 

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



 **Daconil Action™**
Fungicide

syngenta.



Dear WGCSA member,

Preparations for the 11th Annual PAR 4 Research On-line Auction have begun. PAR 4 Research was created in 2010 to assist in funding sustainable turfgrass and environmental research to benefit golfers, homeowners and everyone in between who enjoys a little green in their life. As turfgrass managers and green industry professionals, we are the primary beneficiaries of the cutting-edge science that comes from the skilled researchers at the University of Wisconsin-Madison, and as such, we need your help in maintaining the strong tradition of turfgrass research in Wisconsin.

With the support of the industry including our own UW Research team and the WTA, the PAR 4 Research Auction has become a spring board for Wisconsin Golf in each of the last 10 golf seasons. Since the inaugural event, this event has raised over \$95,000! All proceeds were donated to the Wisconsin Turfgrass Association for turfgrass and environmental research funding.

There is such great potential for PAR 4 Research online auction growth and success as the WGCSA membership represents over 225 facilities. Yet only 25% of the facilities participated as donors. More facility participation is the **ONLY** way to help the PAR 4 Research effort grow. Your support allows golfers the opportunity to give directly back to research that helps our game, our industry and our Association.

The 2020 Par 4 Research online auction is targeted to run April 3rd – April 12th (Master's Week). Time is of the essence and the first call for donations are to be confirmed by **February 15, 2020**. Please, talk to your course's decision maker(s) as soon as possible and consider donating to this very worthwhile cause. Popular auction items include but are not limited to:

- Foursome(s) with carts
- A stay-and-play package
- A lesson from your golf professional
- Season pass(es)

If your facility is willing to make a donation please complete the enclosed application and return to Brett Grams, Chapter Manager. He will again be processing all donations by loading them on the Auction Website for viewing.

If you have any questions or concerns, please do not hesitate to contact Brett at 920-643-4888. He can also provide assistance by helping you with letters or communications to your decision makers if needed.

Lastly, help us spread the word about this great cause! **Please communicate about the Par 4 Research Auction in your communications to your members or golfers during the winter months.** Our auction is timed to run during Masters Week and the start of the golfing season. The more people that know about our efforts the more money we can raise!

Thank you,
The PAR 4 Research Committee



2020 Donor Information

Golf Course Name: _____

Golf Course Physical Address: _____

Golf Course Website: _____

Authorized Donor/Contact Name: _____

Position: _____

Mailing Address: _____

Phone Number: _____

E-mail Address: _____

Donation Information

*All donations will be valid from May 15, 2020 through the end of your 2020 golf season unless otherwise specified.

____ # of tee times donated Each tee time consists of: ____ 2 sets of 2 green fees

____ with carts ____ without carts ____ 1 set of 4 green fees

Please list any restrictions, such as dress code or blackout dates, in the space below:

Additional Donation Goods or Services

__ Lesson(s) with Golf Pro __ Accommodations __ Meals __ Other

If yes, please provide details in the space below:

\$ _____ Estimated Retail Value of Donation

__ The WGCSA should provide the necessary gift certificates for our donation

__ We have provided our own certificates, valid for the 2020 golf season with this form.

PLEASE SEND COMPLETED FORM TO:

Please return promptly

(The sooner we receive the sooner we can promote!)

**WGCSA
N1922 VIRGINIA DR
WAUPACA, WI 54981**

THANK YOU!

Healthy New Year

By Jake Schneider, Seasonal Worker, Trondheim Golfklubb, Norway

It was with great joy that I opened one of the digital industry newsletters around the holidays and found yet another story about mental health. Although I don't subscribe to nearly as many such turf publications as I used to, it seems to me that if you were to plot a graph showing the number articles about mental health over time that you would see an exponential jump over the past one to two years. And, to me, it's about time.

A few years ago, I remember talking with a group of my long time friends, and one of them happened to mention how he had been dealing with a bunch of anxiety due to changes and challenges with some of the usual culprits—family, work, and finances. I think that it caught the majority of us off guard as, from an outward ap-

pearance, everything seemed to be going well in his life.

Given that we are a group of guys, it should come as no surprise to most that we spend most of our time doing and talking about stupid guy stuff while mostly ignoring the deeper questions about how others were really doing in terms of happiness and whole body health.

Given that we are a group of guys, it should come as no surprise to most that we spend most of our time doing and talking about stupid guy stuff while mostly ignoring the deeper questions about how others were really doing in terms of happiness and

whole body health. But, this conversation was somewhat of a breakthrough for many of us.

Not only did we learn about the rough spot in this particular person's life, but we came to find out that many of us were dealing with different variations of the same. Given that roughly 20% of Americans have some form of anxiety, it really shouldn't have been a surprise, but it simply wasn't a topic that we had explored despite knowing each other for the better part of three decades.

Now that the barrier is down, it is refreshing to share this incredibly important side of our lives with each other, and although it hasn't provided for a magical, quick fix, having a support system with shared experiences has been comforting in my own dealings with anxiety.

Most of my uneasy feelings revolve around new experiences and/or people. Being in situations where I don't feel in control, lack of structure, and restlessness along with an overactive mind; to name a few.

In other words, moving to a foreign country without a job to occupy my time and mind was an incredible challenge that, although improved, has yet to be overcome. Unsurprisingly, the time when I felt consistently the best over the past 18 months was when I was working at Trondheim Golfklubb this summer; my mind and body were actively engaged in the moment and not worrying about items that honestly don't need to be worried about. Looking back, I can remember getting fidgety around the extended holiday-time vacations that I had both at Blackhawk CC and at The Bruce Company, and this was when I was living close to family and friends, in a city that I called home.



KEEPING YOUR COURSE GREEN.

- Well Drilling/Well Rehab
- Irrigation/Turbine Pump Repairs
- Pumpstation Installation & Retrofits
- Pumpstation Service & Repairs
- Fountains & Aerators
- Preventative Maintenance

Pumpstation Professionals
A Division of Midwest Well Services, Inc.

800.383.7412
PUMPSTATIONPROFESSIONALS.COM

Full Service Provider for Watertronics, Flowtronex & SyncroFlo Systems



Although I haven't (yet) seen a professional about my anxieties, the positive changes that I experienced when getting back to work this summer confirmed my suspicions that: 1) I've had this hardwired into me for a long time and 2) it seems exacerbated because my life, in its current form, is lacking in both structure and familiarity. For a while, I thought that some switch in my brain was flipped when the events that led to my divorce occurred, and while, I am sure that those circumstances didn't help the situation in the short term, the combination of environmental and genetic factors seems to be the main issue—sounds an awful lot like turfgrass disease.

There's no doubt that being in the turf industry is an incredibly challenging career filled with both internal and external stressors. I can't help but imagine the positive changes that would result in both personal lives and on the golf course if turf professionals devoted as much time and energy to their own physical and mental health as they do to the conditions of their precious playing surfaces. Thankfully, times seem to be changing, and such discussions are no longer faux pas. So, in the first year of the new decade, I hope that everyone will pursue a happier and healthier self; you won't be alone. ✓



ADVANCED TURF SOLUTIONS®

We provide fertilizer, chemical and seed solutions for the golf course, sports turf, landscape and lawn care markets. Contact your local rep for details.

Mike Werth

📞 608.214.7011

🐦 @werthashot

✉ mwerth@advancedturf.com



Todd Fregien

414.949.1089 📞

@ToddFregien_ATS 🐦

tfregien@advancedturf.com ✉

Rusty Stachlewitz

📞 630.779.0761

🐦 @RustyStack

✉ rstachlewitz@advancedturf.com



1556 Advance Road, Unit C
Madison, WI 53718
608.571.0782

advancedturf.com 📘 🐦 📷 @AdvancedTurf

Fox Valley Golf Club Hosts Joint August Meeting

Bret Grams, WGCSA Chapter Manager

Scott Bushman and the members and staff at Fox Valley Golf Club hosted the Northern Great Lakes and Wisconsin Golf Course Superintendent chapters for our annual joint meeting in August.

Located halfway between Appleton and Green Bay Fox Valley markets itself as an amazing golf course with a great social atmosphere for its members.

Looking at their calendar, the club has a large number of fun events and tournaments for their membership.

The course was designed by Ed Locke and opened in 1966 with the green surrounds rebuilt in two stages in the early 90's and in 2018 the club underwent a complete tee rebuilding project with the work done by Topp Shape Golf Construction out of Ohio.

Bushman said over time the tees edges had sluffed off and they had a number of long tees with multiple sets of markers on them.

With separation between the tees the holes look more appealing to the

eye and they have less comments about tee marker placement from the membership.

Our host Scott Bushman has been the Golf Course Superintendent at Fox Valley for 22 years. Growing up in Marshfield, WI Scott loved to play golf and was offered a job to work at Marshfield Country Club while out hitting range balls by owner Andy Acker.

Scott was considering going to college at River Falls as a Physical Education major but changed to parks and turfgrass at Ackers urging.

The meeting started with a talk by Mr. Shane Conroy, GCSAA Great Lakes Field Staff on updates at the national organization and what the future holds.

A picnic buffet lunch with brats and burgers and sides was served before the 2 person best ball golf event.

Golf was followed by hors d'oeuvres, awards and camaraderie. Thank you Scott and Fox Valley for hosting the WGCSA and NGLGCSA. ✓

THANK YOU TO OUR INDUSTRY PARTNERS!!!

HOLE SPONSORS

Advanced Turf Solutions
Aquatrols
Burris
Clesen Pro Turf
DHD Turf and Tree
Dow Agrosience
Horst
JW Turf
Milorganite
National Golf Graphics
Pendelton Turf Supply
Premier Golf and Utility
Reinders
Syngenta
Turf Ventures

FLAG EVENT SPONSORS

Clesen Pro Turf
DHD Turf and Tree
JW Turf
National Golf Graphics (3Holes)
Reinders
Syngenta



GCSAA Great Lakes Field Staff representative Shane Conroy discusses the latest news from our national organization.



2 Person Best Ball Results

Gross -

1st Place: 72 - Scott Anthes and Tim Bresser
2nd Place: 73 - Dan Gille and Dan Wubbels
3rd Place 73 - Chris Goeben and Walker Smith

Net -

1st Place: 62 - Ben Larsen and Dustin Peterson
2nd Place 63 - Joe Brown and Peter Meyer
3rd Place 65 - Brian Busha and Mark Simon

Flag Event Winners

Long Drive - Scott Anthes and Chris Goeben

Closest to Pin - Zak Kachelek, Dave Herr, Michael Stachowicz and Dan Wubbels

Long Putt - Dustin Peterson and Chris Goeben



Our host Scott Bushman with the framed flag presented to our host meeting sites.
Thank you for having our group Scott.

Madison Hosts Annual Couples Night Dinner


Bret Grams, WGCSA Chapter Manager

The 2019 edition of the Couples Dinner was held at Coopers Tavern, 20 West Mifflin Street in Madison on Saturday November 2nd. Coopers is located on the Capital Square and offers views of the State Capitol.

The WGCSA group was in a private upstairs room for appetizers, dinner and refreshments to enjoy a night of conversation and friendship.

After dinner the group was able to wander the many night life spots around the square. Although the group did not have a room block there were plenty of hotels within an easy walk from the excitement for those that wanted to stay overnight.

The couples weekend dates back to 1965 when Past President Alan Kress made a motion to hold a late season "dinner dance" at the West Bend Country Club. Over the years the dinner dance has grown and faded and grown again with everything from a 2 day event with golf, dinner and live bands to the fun get together we now have.

The Couples Dinner is a good way to end the season with your spouse and catch up with industry friends. We hope you can join us at the 2020 location. 

WGCSA President Josh LePine entertains the group with the Wisconsin State Capital in view out the window behind him.



HERFORT NORBY GOLF COURSE ARCHITECTS



Phone: 952.361.0644 Fax: 952.361.0645
Email: knorby@herfortnorbygolf.com web: www.HerfortNorby.com

WGCSA couples from around the state gathered for camaraderie, conversation and good times at the Coopers Tavern in Madison.



**Sand is Important.
Solutions are Essential.**

**Key support for your
topdressing, bunker &
construction mix decisions.**



WAUPACA

Waupaca Sand & Solutions
715-258-8566 - www.WaupacaSand.com

TOURNAMENT TIME

University Ridge Hosts Senior PGA Tour

David Brandenburg, Editor

A golf event cannot be any more “Wisconsin” than the American Family Insurance Championship. With hometown hero Steve Stricker as host of the “AmFam” held at University Ridge Golf Course, operated as part of our land grant university, it screams badger state.

To top that the 2019 version was won by our other hometown hero Jerry Kelly. Kelly outlasted Retief Goosen and Steve Stricker to win in 3 extra holes and took home the 1st place trophy and \$300,000.

Designed by Robert Trent Jones and opened in 1991 University Ridge provides an excellent test for the PGA Senior Tour players. The competitors love it as do the spectators.

Recent investments in opening up wooded areas to improve air movement and redoing the bunkers have paid off for Golf Course Superintendent Phil Davidson and his staff.

Some bunkers that saw little use were replaced by grass swales while others were rebuilt using the ‘Better Billy Bunker Method’ to reduce erosion and soil contamination during heavy rain storms.

The 2019 AmFam was attended by 70,000 spectators and raised more than \$2.4 million for charity. The 2020 event is a little earlier and will be held May 30 to June 7 to accommodate schedule changes to the US Senior Open. 🌱



Mowing the first cut on the hole 1.



The media carts and trailers are located by the O.J. Noer Turfgrass Research Center.

Extraordinary
is Your New Ordinary

For more information on the Bayer portfolio of products, contact your Area Sales Manager, Chad Hauth at chad.hauth@bayer.com (630) 945-2123

 **Stressgard®**

ALWAYS READ AND FOLLOW LABEL INSTRUCTIONS
Bayer Environmental Science, a Division of Bayer CropScience LP, 5000 CentreGreen Way, Suite 400, Cary, NC 27513. For additional product information, call toll-free 1-800-331-2867, environmentalscience.bayer.us. Not all products are registered in all states. Bayer, the Bayer Cross and Stressgard are registered trademarks of Bayer. ©2019 Bayer CropScience ES-419-GLF-86-A-R2

TOURNAMENT TIME



Top Left: Host Superintendent Philip Davidson and Assistant Superintendent Paul Karklus take a moment to pose.

Top Right: Checking the green speed on hole 14 green.

Below: Tournament host Steve Stricker putts out on hole 9 with his pro am team watching. Hole 1 is in the background.



TOURNAMENT TIME



Top Left: Greens mowing on hole 13 with the divot crew on the fairway. Hole 13 is a par 4 that plays 336 yards and is named “Halfpipe”.

Middle Right: Tee mowing on hole 9

Bottom Right: The par 3 Fifth Hole plays 198 yards from the back tees and is called “Noer’s View” as the O.J. Noer Center is in the background.



CHAMPIONS

RICH IN ORGANIC MATTER

Milorganite fertilizer helps to improve drainage in heavy soils and increases the water holding capacity in sandy soils.



1-800-279-2341



1-800-785-3301

www.milorganite.com 1-800-287-9645



TOURNAMENT TIME

Thornberry Creek Hosts LPGA Classic

David Brandenburg, Editor



Top: The 190 yard par 3 eighth hole.

Middle: Raking bunkers on the tenth hole.

Bottom: Jane Park, Woodstock, GA warms up for her Sunday round. Park finished at 12 under good for 49th place.



The LPGA held the 3rd Thornberry Creek Classic July 4th to the 7th. Shanshan Feng of China won the event with a final score of 259 or 29 under par to take home the \$300,000 1st place money and the “Sky Woman” Trophy.

Unfortunately the Oneida Tribe has decided not to sponsor the classic in 2020 and the event is off the LPGA schedule. In 3 years the event raised \$100,000 for Oneida Youth Programs and had a 7 million dollar local economic impact.

In a further effort to step back from course operations the Oneida also hired Kemper Sports to manage the golf course on their behalf in the future.

Thornberry was well liked by the players and spectators but tournament golf is expensive for sponsors. Many of the investments made to the property to host the event will be enjoyed by players for years to come.

Golf Course Superintendent Steve Archibald is well respected by the players of the course and has been at the course for over 25 years. Steve said this year they had a frog hatch near the 12th green during the tournament so the staff had to improvise and use blowers to keep the frogs in the water and off the 12th green! 🌿

Spray Only Where You Should!

*Experiencing GPS Spray Control is Amazing!
Our experience sets us apart from anyone else.*



Proven technology that pays!

Frost Inc
Spray Technology Products

800-621-7910
info@frostserv.com
www.frostserv.com

TOURNAMENT TIME



Above: The details that go into cup changing on the 6th hole.

Below: Looking back on the 525 Yard 13th hole.



TOURNAMENT TIME



Above: Golf Course Superintendent Steve Archibald has been at Thornberry Creek for 26 years and spent 10 years in the Navy. His cart has emblems representing the areas of service his staff members have served in.

Middle: Fairway and bunker work on hole 9.

Bottom: Greens and collar work on hole 10.



HELP MOTHER NATURE WAKE YOUR GREENS

Help your plants recover from cold, wet weather by optimizing their own natural health defenses with ENC® and Renova®.

Contact your local Helena representative or visit HelenaProfessional.com for more information.



Always read and follow label directions. Helena, ENC, Ele-Max, Precision Nutrition and People... Products... Knowledge... are registered trademarks of Helena Holding Company. Renova is a registered trademark of Valagro SpA. © 2019 Helena Holding Company. HPG0319P

Happy New Year

David Brandenburg, Editor

Happy New Year to you and yours. What an interesting end to 2019 with our first snow since Thanksgiving and many courses full of golfers the days before and after Christmas before the snow and cold moved in.

White with snow for Halloween and Thanksgiving then golf and green grass for Christmas may be something we never see again.

If you missed my explanation in the May June issue of The Grass Roots that came out in early December I will repeat the issues are late because, I as editor, could not get it done during the golf season this year. No excuses, just an apology to the readers, writers and advertisers and to say we are catching up now. The only benefit is that you may have more time to read the excellent articles during the off season.


To recap where we are, this is the September October issue going to press January 1 to be delivered by mid January. Then the November December issue will be finished right after conference and show and reach you in early February and then the January February issue will come out in late February putting us right back on track.

On the next page you will see Phil and Matt Davidson won the WSGA Pater-Filius Amateur Gross Championship.

Congratulations guys! I saw Phil's smile by chance looking at Twitter one day. Not to pick on Phil but remind all of you... Please let us know when news happens to you or your staff. Toot your horn. It is not bragging, it is news that our membership wants to read.

Our association is like a family and we want to know more about you. Just send an email or forward a tweet etc. and let us know when you or your staff have a baby, get married, get the big buck or win a golf event. Don't be shy and realize Brett and I cannot be everywhere or see everything. I want to be sure to thank our salespeople and primarily Mark Robel of Reinders, who is the king of sharing good news about his customers and even those of you who are not his customers.

On the same subject if you and your course has done some renovations or started a new process with success please write it up, attach a few pictures and send it off to us for publication. Articles can be one to four typed pages in a word document. I realize most of you do not need help but if you want help just ask, I will be happy to help spread the news.

Enjoy the slower times of January and I hope to see many of you in Orlando and then at our great events that the education, assistants, mechanics and golf committees have lined up below. 

2020 Event Schedule!

January 7 - (Tuesday) WTA Turfgrass Research Day - NEW LOCATION American Family Training Center

January 23 - (Thursday) Equipment Mangers - Erin Hills GC (AM) & Westmoor CC (PM)

January 29 - (Wednesday) GIS WI Room - 6:30-9:30 Mago's, International Drive, Orlando, FL

February 18 - (Tuesday) Assistants Seminar - Whispering Springs GC, Fond du Lac

March 4 - (Wednesday) Northern Great Lakes GCSA Educational Conference - The Waters in Minocqua

March 10 (Tuesday) WGCSA Spring Business and Education Meeting, South Hills G&CC, Fond du Lac

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

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

May TBD - (Monday) May Meeting (Morning Start) - North Shore CC, Mequon

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

July TBD - WTA Summer Field Day - O.J. Noer Research Facility, Madison

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

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

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

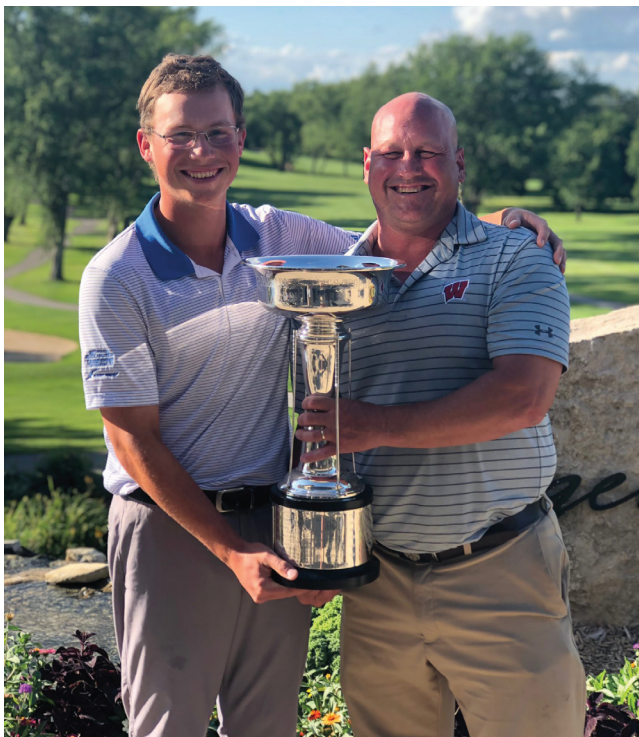
TBD - WTA Golf Classic - TBD

TBD - Couples and Guest Evening - TBD

November 30-31 - (Wed-Thur) 55th Golf Turf Symposium - American Club, Kohler

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

EDITOR'S NOTEBOOK



Congratulations to University Ridge Golf Course Superintendent Phil Davidson and his son Matt for winning the Gross Amateur Division of the WSGA Pater Filius (Father - Son) Championship at the Legend of Merrill Hills in July. The duo carded a one over 73.

SUPPORT OUR ADVERTISERS THEY SUPPORT US

FULL PAGE ADVERTISERS

Clesen Pro Turf - Page 2
DHD Turf & Tree Products - Page 7
Horst Distributing - Page 25
JW Turf - Page 5
National Golf Graphics - Page 11
Rain Bird - Page 21
Reinders - Page 44 (Back)

HALF PAGE ADVERTISERS

Advanced Turf - Page 31
Burris - Page 23
Lohmann Companies - Page 19
Midwest Turf - Page 43
Pendelton Turf Supply - Page 26
Suez Advanced Solutions - Page 17
Syngenta - Pages 13 & 27
Waupaca Sand & Solutions - Page 35

THIRD PAGE ADVERTISERS

Herfort and Norby - Page 34

QUARTER PAGE ADVERTISERS

Frost - Page 39
Milorganite - Page 38
Pumpstation Professionals - Page 30

EIGHTH PAGE ADVERTISERS

Bayer - Page 36
Helena - Page 41

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

ALWAYS IN SEASON

Toro Sand Pro 2040Z



TORO®

Wisconsin Chapter
GCSAA
Platinum Partner

COMMERCIAL EQUIPMENT SALES

John Jensen, Sales Manager
(414) 313-5130

Derek Kastenschmidt
(414) 313-5260

Mark Robel
(414) 313-5296

Scott Neary
(608) 220-6593

Bob Giesler
(920) 660-4227

Reinders

Solutions & Supplies for the Green Industry
W227 N6225 Sussex Road,
Sussex, WI (800) 782-3300
www.reinders.com