

**Snow Mold
Control
*What is Your
Game Plan?***

Hole Notes

The Official Publication of the MGCSA



Vol. 54, No. 7 August 2019

Platinum Podium and Event Sponsor



Gold Tee Prize and Event Sponsors



Plaisted Companies
INCORPORATED



People... Products... Knowledge..

Silver Tee Sign Event Sponsors



VERSATILE VEHICLES

Frost Inc.

Spray Technology Products

Superior Tech Products



For the Strongest Turf



TWIN CITY SEED COMPANY.



Science For A Better Life



Consistent quality. Reliable delivery.

As the largest, full service golf supplier in the Midwest, we've got what you need. And our fleet of 45+ trucks will ensure you get it *when you need it*.

Call our technical service team for soil testing or soil mix recommendations. View our full product offering online.



- Horticultural Mixes
- Soil Amendments
- Landscape Rock & Mulch
- Retaining Walls & Pavers
- Construction Sand
- Cart Path & Road Base
- Topdressing & Bunker Sands
- Black Dirt & Peat



Elk River, MN • plaistedcompanies.com • 763.441.1100

THE SOIL EXPERTS.



Special Interest

Wee One Registration	Page 21
The Championship	Page 37
MGCSA/PBI Scholarship	Pages 38 - 39

Mark Your Calendar:

August 26

Badgerland Exposure at Eau Claire CC in Eau Claire WI
Host Nick Peinovich

September 5

The Championship at Oak Glen Golf Club
Host Pete Mogren

September 24

Southwest Exposure at Dacotah Ridge Golf Course
Host Aaron Johnson CGCS



Superior Tech Products

Leading Edge Turfgrass Solutions
Golf Courses | Sport Fields | Parks

952-546-3678

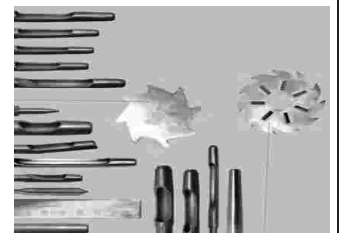
www.stproots.com

stp@stproots.com



smooth
healthy
consistent
greens

- * Liquid & Granular Fertilizers
- * Organic Fertilizers
- * Post Patent Pesticides
- * Aerification Tines & Bedknives
- * Natural & Artificial Turf grooming equipment.





Feature Articles:

- 4 T's to Improve Your Course** **pages 8 - 17**
 By Dan Tolson CGCS, Superintendent at The Club at 3 Creek

- Le Sueur Country Club to Host 2019 Wee One** **pages 18 - 24**
 By Various Authors

- Why Wee One?** **pages 24 - 28**
 By Luke Cella ED Wee One Foundation

- Snow Mold Control Evaluation** **pages 30 - 36**
 By Kurt Hockemeyer and Paul Koch UW Madison

- MGCSA Announces Legacy Scholarship Recipients** **pages 40 - 47**
 By Matt Cavanaugh, Rush Creek Golf Club

Monthly Columns:

- Presidential Perspective** **pages 6 - 7**
 By Matt Rostal

- In Bounds** **pages 48 - 51**
 By Jack MacKenzie, CGCS

Editorial Committee

Matt Cavanaugh
 MATTC@UMN.EDU
 Liza Chmielewski
 LIZA@GERTENS.COM

On the Cover
Winter prep is just around the corner. The 2018 - 2019 UW TDL studies are on pages 30 - 36. Check them out!

Hole Notes (ISSN 108-27994) is digitally published monthly except bimonthly in November/December and January/February by the Minnesota Golf Course Superintendents' Association, 10050 204th Street North, Forest Lake, MN 55025. Jack MacKenzie CGCS publisher. Please send any address changes, articles for publication, advertising and concerns to jack@mgcsa.org.



Presidential Perspective

by Matt Rostal, Superintendent Interlachen Country Club

As we get deeper into August I start salivating for the food at the

State Fair. But, more importantly, I know the days are getting shorter and the weather is getting cooler. Hopefully, it is time for everyone to take a little breather from syringing greens and worrying about turf health because Mother Nature just decides to make the grass happy again!! I love this time of year.

Exposure Events:

As a reminder there are two Exposure Events this month. Please check to see if you can make either of these opportunities to network and play golf somewhere you possibly have not before. The Northeast Exposure Event is at Lakeview National on August 19th and Badgerland Exposure Event is at Eau Claire Country Club on August 26th. It would be great if

we could get more members to participate in these events.

wee one
foundation



The Wee One:

This year's location and date have been changed. The new date will be Monday September 30th and the event will be hosted at Le Sueur Country Club. We need this event to be a huge success because some money raised will go to support the O'Connor family. The MGCSA is a very close knit Association that helps out other superintendents and golf courses in need. Well, now is the time to step up to help one of our fellow superintendents. It is time to set a

new record for the Minnesota Wee One!!

All of this information is on the MGCSA website.

Dr. Brian Horgan:

In 2001 then MGCSA President E. Paul Eckholm, CGCS wrote: 'I am the luckiest guy in the turf business. I am the one who gets to announce that the University of Minnesota has hired a Turfgrass Extension Specialist, Dr. Brian Horgan.'

Now 2019, I am the luckiest guy in the Turf Business to announce that Dr. Brian Horgan accepted a position at Michigan State University. It is a huge loss for the MGCSA and the University of Minnesota, but a tremendous opportunity for Brian, plus a return home for the Horgan family.

Professionally, I would like to thank Dr. Brian Horgan for his vision, dedication, passion and outstanding contributions to the Minnesota Golf Course Superintendents' profession for

the past 19 years! You will be greatly missed by everyone in the MGCSA! Personally, I would like to thank Brian for his friendship. We have spent some time together on golfing trips, laughing together and maybe drinking a pint or two. I will miss seeing him at our MGCSA meetings and events but I know our paths will cross again. Congratulations to you, Brian!!

Right now there is nothing to report on regarding Dr. Horgan's replacement once he departs at the end of the month. Once the U of M knows the direction they are heading to fill Brian's position, we will pass that information on to the MGCSA membership.

I hope to see many of you at upcoming events in the next couple of months. Or maybe I'll run into you at the State Fair as I am a traditional food-aholic (Pronto Pups, fries and cheese curds). I love this time of year.

4 T's To Improve Your Golf Course That Won't Cost You a Dime

By Dan Tolson CGCS, The Club at 3 Creek

First published in *The Perfect Lie*, June 2019 and reprinted with permission from the Peaks and Prairie GCSA

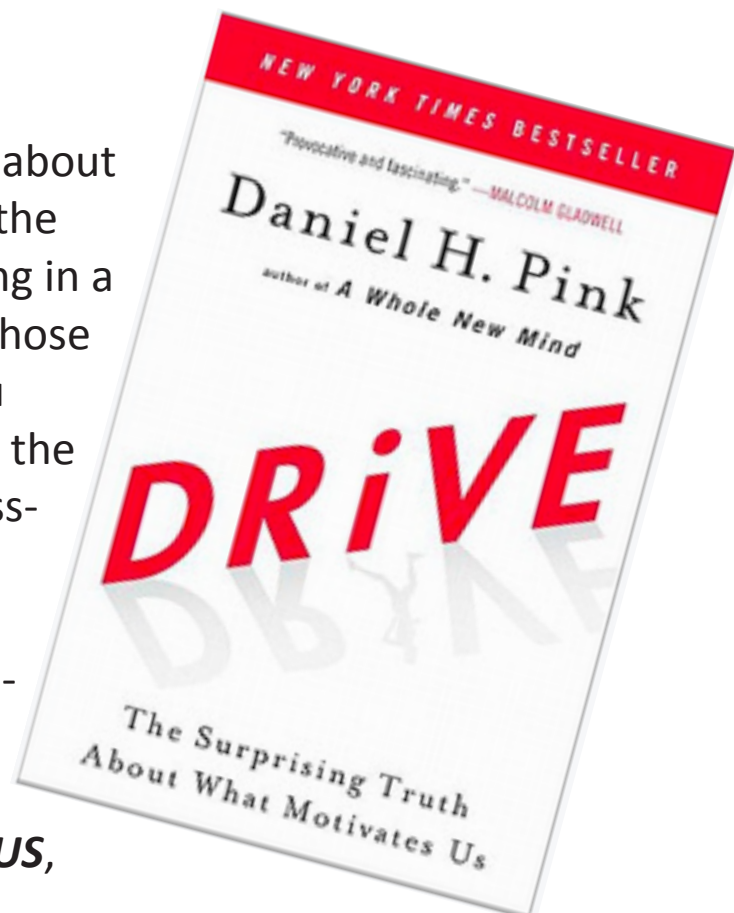
Do more with less. We've all heard the axiom? It's tossed around so regularly, it seems like a fad. It usually precedes notification from a board member that your budget has been cut, or a rant by a superintendent who is dealing with shrinking resources.

In a "do more with less" industry, and when dealing with factors outside of your control like Mother Nature and a fickle economy, success can be found regardless of budget size. No matter if your operating budget is six digits or seven, growing or shrinking, there are certain things you CAN control unrelated to finances. By implementing a few common sense tweaks, you can do more with less and make huge improvements...for free!

Tune your Culture

Ever worked for a screamer? How about the negative 'Eeyore' who is convinced the glass is half empty? No one likes working in a negative environment. Unfortunately, those managers still exist and the attitude you project will be reflected in your staff. In the modern world, if we are going to successfully recruit staff in a highly competitive market, we don't have much choice but to create a culture where employees enjoy coming to work and feel valued.

In the book, ***DRIVE, THE SURPRISING TRUTH ABOUT WHAT MOTIVATES US,***





Above: The Club at 3 Creek

Daniel Pink dissects how three intrinsic motivators can do more to create an outstanding workforce - more than any external motivators like salary or benefits. By offering autonomy (the ability to be self-directed), mastery (continual improvement) and purpose (working for a transcendent cause), we can lead our staff from robots who are working for a paycheck to 'think-for-yourself' partners engaged in pursuing the success of the operation. It is not always easy to apply these three motivators to a golf course maintenance staff because the problems we're trying to solve just aren't that complicated. Crafting a unique mission, vision, values statement and holding your staff accountable to it can lead them towards these three intrinsic motivators without even trying.

As you consider what you want your culture to be, start with core values. What are you passionate about? What is your automatic default that you can't compromise even if you wanted to? The answers point to who you are and what is most important to you, your core values. Distill those down into a few concise words or a statement to define your department.

As you LEAD and your crew follows, they will begin to share those same core values and it will define your culture. From there you can establish a mission statement (why you are here) and a vision statement (where you are going). Workers will enjoy their work more when they know what they are there to do and why. Once you know what your vision is, you can begin to set tangible goals. Once goals are

set, turn your staff loose to accomplish them and boom! you've created autonomy, mastery and purpose AND the resulting intrinsically motivated employee!

This topic is the subject of untold dozens of leadership books and I have just skimmed the surface here. The most important thing to remember as you begin to tune your culture is that the single biggest improvement you can make to your operation is to become a better manager of people. Personally, I have a long way to go in this regard, but I've attempted to become a student of the subject. Find some books that move you, study them and put them into practice.

Teach your Standards

Standards of performance make it possible to hold employees accountable, creates a consistent product and streamlines training. A maintenance staff working without written and clear standards is like flying an airplane with your eyes closed.

Standards set the bar to get everyone on the crew shooting for



Above: A picture is worth a thousand words. High quality framed prints communicating the standard for each area of the course remind the crew daily what is expected of their performance. In today's busy world, society/employees react quickly to concise pictures.

the same goal, and they give a clear communication tool for your golfers on what they should expect to find on the golf course. Most courses have some kind of written standard, usually within the pages of an employee handbook given to new employees on their first day, and then buried in the bottom of a locker never to be seen again. So, how do you get your standards off the page translated into actions by everyone on your staff day in day out?

Standards should be as short and concise as possible while still getting the point across. We have

our standards broken down by area with a short bullet list of expectations for those areas and a picture of what we expect them to look like every day. A picture speaks a thousand words and should be incorporated into your daily training. With the pictures in our manual, a new employee can understand what our expectations are for every area of the golf course in less than an hour.

If a picture is worth a thousand words, a video is worth a novel. Don't overlook the power of the video recorder in your pocket.



We've Got You Covered

 **Exteris[®] 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, Exteris and Stressgard are registered trademarks of Bayer. ©2019 Bayer CropScience ES-0519-EXT-0046-A-1



Above: A banner hangs prominently in the 3 Creek Turf Management Center break room to communicate mission and core value statements.

Years ago, the SVW videos were available to help train course staff on the various facets of golf course maintenance. I remember the VHS tapes droning on in the break room, and how we used to have to pause the tape to explain how our course was different from the Florida course in the video. Nowadays with an abundance of video editing apps, you can shoot a clip from your own golf course on your cell phone, throw it into a short video and have it posted to YouTube in 15 minutes without ever leaving your cart. iMovie is a good one that is easy to use and it comes free with every iPhone.

Some people learn by reading, but very few in my experience.

There is a reason for the explosive growth and success of “YouTube University.” Most people learn by watching others. Videos communicate through language barriers and save you time having to show different people the same thing over and over. If you have a chronic problem with some aspect of your training program, try making a video of someone doing it the right and see if that problem goes away.

Track Data

Goal setting and goal accomplishment is much more difficult if you aren’t keeping track of data. Knowing data like payroll numbers, chemical usage, mowing frequency etc. helps you make educated and

Greensmaster® TriFlex® HYBRID & HYDRAULIC RIDING GREENSMOWERS

The TORO logo is displayed in white, bold, sans-serif capital letters on a red rounded square background.

100
YEARS
IN GOLF
1919 2019



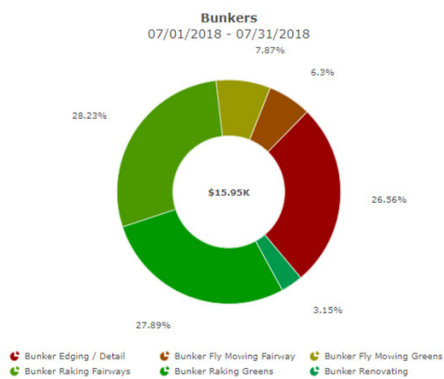
State-of-the-art cutting performance.

Finally a riding greensmower that cuts as flawlessly as a walker. The Greensmaster TriFlex Series models are packed with cutting performance innovations that leave greens with an exceptional quality of cut, superior aftercut appearance, and improved turf health.

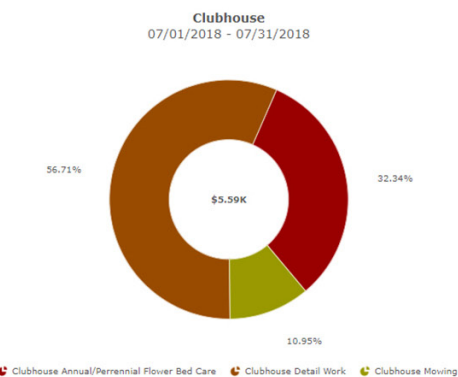


Phone: (763)592-5600
4830 Azelia Ave. N Suite 100.
Brooklyn Center, MN 55429
www.mtidistributing.com





Task Name	Reg Hours	Reg Wage	OT Hours	OT Wage	Total Wage
Bunker Edging / Detail	276.00	\$4,236.30	0.00	\$0.00	\$4,236.30
Bunker Fly Mowing Fairway	64.00	\$1,004.16	0.00	\$0.00	\$1,004.16
Bunker Fly Mowing Greens	80.00	\$1,255.20	0.00	\$0.00	\$1,255.20
Bunker Raking Fairways	287.00	\$4,503.04	0.00	\$0.00	\$4,503.04
Bunker Raking Greens	283.50	\$4,448.13	0.00	\$0.00	\$4,448.13
Bunker Renovating	32.00	\$502.08	0.00	\$0.00	\$502.08
	1,022.50	\$15,948.91	0	\$0	\$15,948.91



Task Name	Reg Hours	Reg Wage	OT Hours	OT Wage	Total Wage
Clubhouse Annual/Perennial Flower Bed Care	102.50	\$1,808.04	0.00	\$0.00	\$1,808.04
Clubhouse Detail Work	192.00	\$3,170.73	0.00	\$0.00	\$3,170.73
Clubhouse Mowing	39.00	\$611.91	0.00	\$0.00	\$611.91
	333.50	\$5,590.68	0	\$0	\$5,590.68

Above: Data showing ready allocation for two areas of the golf course in July of 2018, created in just seconds using task tracker software.

confident management decisions. I admit, I'm guilty of being a data-head. I have files full of records that I haven't looked at in years. But I save them...just in case some day I need to compile a report. Collecting data IS important and if done right can greatly improve your operation. If you have a certain area you want to improve, start with gathering intelligence about that area. Maybe you think you need a new irrigation system. Do you know exactly how much you spent last year repairing breaks and hand watering? How many gallons of water did you use? Was that

less than the year before or more? What is the five-year trend of irrigation costs? Without clear and accurate answers to those questions it would be very difficult to convince your owner or board to drop \$2 million on an irrigation system. And maybe when you discover those answers, you realize you don't need one as bad as you thought you did.

In the old days, tracking data like this was done with a pen and a yellow tablet. It took an OCD mind to keep track of it, file it and compile it into something useable. Thanks to modern technology we can gather metrics on just about

anything automatically and use apps and computer programs to compile it into beautiful graphs and charts. For the do-it-yourselfer, Google offers an abundance of tools. In Google forms you can create an easy form for your crew to fill out (they all have a phone in their pocket capable of anything) to track everything from greens moisture to bunker sand depth. At the end of the week, export it to a spreadsheet and filter out the pertinent info. And best of all, it's free. All you have to do is create a Google account.

If you have a little cash to spend to track labor and other metrics there are some great companies offering internet platforms for a small monthly fee. At my course we use ASB taskTracker. In my humble opinion, it's worth every penny. I'm not endorsing them over others, but it's a perfect fit for us to beautifully merge a daily digital job board with labor tracking for every job on the golf course. We now have five years of accurate data for every area on the course. Come fall budget time, my board receives concrete numbers of payroll details from the prior three-five

**IN FRONT
ON ANY COURSE!**

**JOHN DEERE
UTILITY TRACTORS**

Loaded with premium, state-of-the-art technology and class-leading features you won't find anywhere else. See offers at FrontierAgTurf.com

years supporting the labor numbers I'm requesting. It makes budgeting much easier and gives credibility to the requests for increases.

Take Inventory

Every golf course is unique and has something to offer no other course can. Whether a beautiful stream flowing through the middle, a compelling historical past, the 'best' greens in town, perfect bunker sand, or environmental significance. If you want to make your course better, set it apart from the competition. Take an inventory of what makes it unique and special, then leverage that difference for your benefit. Lots of superintendents across the country do a wonderful job at this. Through social media outlets and in their communities, they loudly tell the story that makes them special. When you think of golf in Northern California, what comes to mind? The 7th hole at Pebble Beach! When conversation shifts to wildlife on the golf course, usually Paul Carter's 'Eagle Cam' at Bear Trace comes up. Granted, those examples are outliers and not the norm of Montana and Wyoming golf courses, but when your golfers are sitting around the breakfast table talking about your canvas, what do you want them to talk about? Wouldn't you rather they focus on an asset or something positive than complain about the



Dan Tolson CGCS
@mountainturf

The first 14 days of a Mountain Bluebird. This box on 6 tees is rocking again for the 6th year in a row. These babies will likely be fledged before the weekend is over. Then summer begins! [#wildlifeonthegolfcourse](#) [#theclubat3creek](#)



2:43 PM - 14 Jun 2018

Above: Social media is a great way to promote any special opportunity. 3 Creek uses Twitter to communicate wildlife and environmental initiatives.

slow greens or bunker sand? As the superintendent, you have the greatest influence to leverage your best assets. Take an inventory of what makes you special and maximize the impact that can benefit your clients. If the asset you want to leverage isn't quite where you want it to be, set some goals to make it better...see above.

Despite popular opinion and in contradiction to most of the grumblings heard at the bar on Friday night, it doesn't take more money to improve your golf course. As a manager in charge of the most valuable asset at your facility, you have the power to create a positive culture with a clear mission. Once you have everyone headed in the right direction use photos, videos and clear standards to teach your staff what is expected. Tracking data will allow you to set and accomplish smart goals while leveraging the assets which make your club special. Before you know it, golfers will be flocking to your course, business will be booming and the growth in the budget you've always longed for will follow.*

Cut your Turf, not your Budget.

And take advantage of Turfwerks' Customized Financing Options!

THINK NEW OR USED EQUIPMENT IS OUT OF YOUR BUDGET - THINK AGAIN!

AT **TURFWERKS** CAN WE WORK WITH YOU TO OFFER YOUR COURSE CUSTOMIZED FINANCING. TO FIND OUT HOW WE CAN HELP, CONTACT YOUR SALES REP TODAY.

You get the equipment you need, golfers get the greens they want, we get a happy customer.

CALL TURFWERKS TODAY TO DISCUSS FINANCING OPTIONS FOR YOUR GOLF COURSE.

Adam Hoffman Ph: 612-802-3149 • Nick Sherer Ph: 612-308-0102

TurfWerks

JACOBSEN
A Textron Company

RAIN BIRD

neary
TECHNOLOGIES

STANDARD
GOLF, EDWARDS

PAR
AIDE

VENTRAC

TURFCO

PROGRESSIVE
TURF EQUIPMENT INC.

Smithco

7012 6th Street North | Oakdale, MN 55128 • www.Turfwerks.com

Le Sueur Country Club and Superintendent Tom Meier to Host 2019 Wee One Tournament September 30



Over the next few months, Tom Proshek will have his hands full at Brackett's Crossing Country Club completing a remodeling project. The 2019 Wee One Golf Tournament destination had to be changed to accommodate the renovation. Fortunately for the Foundation, Tom Meier, Superintendent at Le Sueur Country Club, stepped up and procured the Le Sueur venue for the event.

The Wee One Foundation is excited and grateful to have landed at such a fantastic alternative venue.

Le Sueur Country Club was founded and built in 1926 by the Green Giant

Company. The original architect was Ward Cosgrove, CEO/ Owner of the Green Giant Company. The new nine was designed by Joel Goldstrand. The original club was built to accommodate Green Giant's corporate officers, staff and customers. In 1926, LCC was laid out as a nine-hole course but eventually expanded to 18 holes in the mid-1970s. The course measures 6,117 yards and features many holes with beautiful vistas of the surrounding valley.

Le Sueur News-Herald wrote back in 1949 a history of the club's inception in 1926...

"Along about the year 1926 in the late spring, Dr. R. M. Kraft, now living in St. Johns, Michigan, Ben Schlegel, now living in California, and the writer, Paul Eastwood Sr., were enjoying a Sunday afternoon picnic dinner. In the course of the conversation Dr. Kraft said he thought it was about time for Le Sueur to build a golf club. The other two agreed that as long as it



**ANTHRACNOSE
DOLLAR SPOT
BROWN PATCH**

KNOCK 'EM ALL OUT
With One Punch *And* One Rate.

Tekken™ Broad Spectrum Fungicide from PBI-Gordon uses two modes of action to deliver dependable control of 21 diseases, including anthracnose, dollar spot, and brown patch. The patent-pending formulation increases turf quality while reducing the risk of turf damage compared to stand-alone DMI applications, and Tekken controls listed diseases for up to 28 days with the same rate, eliminating the guesswork.

28 Days | 21 Diseases | 1 Rate

► For more information contact Jeff Schmidt at 952.237.0160.



PBIgordonTurf.com

Always read and follow label directions. Tekken™ is a trademark of PBI-Gordon Corp. 10/18 05183

 **pbi / GORDON**
CORPORATION
Employee-Owned



seemed to be the smart thing for smart towns to do, certainly Le Sueur should keep abreast of the times. Ben said he had just the spot for it; out on his farm east of town. None of the three scarcely knew a golf ball from a yard stick, so agreed to get a hold of someone who did, and take a spin out to this Schlegel place.

The only person in town at the time whom we thought knew golf was Ray Pefferlie, who owned Rexall Drug store here. Bright and early Monday, the four looked over the acres suggested and taking Ray's word for it, decided then and there to get it started. It was a tough assignment and most people contacted knew nothing of the game and did not care to learn more. But the foursome kept at it, and in a short time raised enough money to rent that old corn field for a year as a try out.

By that time, there were twenty-five willing to put in a little money and a lot of time. First thing was to get out there with hoes and pitchforks to get the corn stalks off the ground and burned. Along came Ebbie Gilbertson, who had played a lot of golf before moving to Le Sueur, and to him was

WEE ONE MINNESOTA GOLF OUTING AT LE SUEUR COUNTRY CLUB

- Supporting Those in Need -
- Peers Helping Peers -

2019 support going to the O'Connor Family



Monday, September 30, 2019

Le Sueur, Minnesota

HOSTS:

Tom Meier, Superintendent, and the MGCSA



\$140 per Player / \$560 per Team of Four

Four Person Scramble - only one MGCSA member per team necessary

Great Golf Prizes. On course refreshments. Lunch on the course.
Heavy hors d'oeuvres immediately following golf with cash bar reception.

Enter Early. Field is limited to 36 teams (144 players).

Taco Bar & Brats to go (lunch included in registration fee)

Country Club Attire – Collared Shirts; Soft Spikes Only.

10:00 - 11:00 a.m. Registration – Driving Range available

11:00 a.m. GOLF - Shotgun

4:00 p.m. Prizes and hors d'oeuvres reception (cash bar)

Contests: Must be present at the reception to win.

Pro Shop Certificates 1st Place \$500, 2nd Place Draw \$300, 10th Place Draw \$160, 18th Place Draw \$160, 24th Place \$160 Draw

Gross Skins Game - \$20 per team The Rock "Speaker" Challenge WEE Putt Contest prior to shotgun for \$100

Mulligan Purchase: 4 for \$20 or 8 for \$40

Closest to the pin winners on the Par 3's will draw down for a set of irons.

Featured Raffle Prizes – \$5 for 5 tickets or \$20 for a LONG arm's length.

Green Egg Outdoor Grill, Golf Clubs and MUCH MORE.

----- PLEASE FILL OUT COMPLETELY - THE DINNER COUNTS ARE IMPORTANT -----

Name: _____ Course/Company _____

Name: _____ Course/Company _____

Name: _____ Course/Company _____

Name: _____ Course/Company _____

REGISTER: _____ GOLFERS @ \$140 per Player / \$560 per Team of Four (Golf, prizes, refreshments, lunch, hors d'oeuvres)

_____ Attending for Dinner Only \$ 100

TOTAL ENCLOSED: \$ _____

Make check payable to MGCSA and mail to: MGCSA, 10050 - 204th Street N., Forest Lake, MN 55025

Or, pay on our website using PayPal: <https://www.mgcsa.org/events>

REGISTRATION DEADLINE: SEPTEMBER 20, 2019

wee one foundation



a tribute to wayne otto, cgcs

delegated the job of laying out the nine holes. That done, with sand and a tin cup added to each “green,” Le Sueur golf club was ready for business, and it did a surprisingly good business, too, as more and more persons became interested in the great national outdoor pastime.

Next spring, the grass was growing and of course needed mowing. About twenty of us took our lawn mowers out and up and down the fields. We went all afternoon, and did a nice job too. Remember, Gene Felton was one who spent the afternoon on the business end of a mower. He was living in the house now occupied by George Ochs, and at that time he had about fifty square feet of lawn to mow. And when we let him off at home, there was a big husky doing his mowing job. That was the spirit that started what is now the finest golf club in the state.”

Speed ahead to 2019 and you will find the Le Sueur Country Club little changed except for upgrades inspired by today’s standards of firm and fast greens, tight mowed fairways and exceptional maintenance provided by Superintendent, Tom Meier, and his staff.

According to an article from minnesotagolfcourses.org, “Golfers of all skill levels will enjoy the well-maintained venue that plays difficult in spots, but overall provides a relaxing afternoon in a serene setting. Players have plenty of room to land tee shots on the wide, bentgrass fairways. However, the hilly terrain can cause what seems likely to be perfectly placed tee shots to roll into the mid-cut fescue rough or the oak and birch woods. Golfers can salvage most errant shots that find the woods because the trees are not thick, and they are spaced far enough apart to provide space to punch out into the fairway. Those who find it difficult to address uneven lies will have problems on this course. The hilly terrain also presents golfers with blind approach shots to the large greens. Course architects strategically placed deep fairway bunkers at distances that the average golfer can reach from the tee. Sand traps lurk behind many of the greens. A meandering creek influences club selections on five holes. Golfers must decide whether to lay up to the creek or go for broke. The creek’s deep ravine swallows shots that find their way into the drink. Golfers must loft approach shots to stick balls on the firm bentgrass greens. Green undulations increase the already fast putting speeds. Marked sprinkler heads inform players of approach shot distances.”



The Wee One Foundation wishes to thank the Le Sueur Country Club, Tom Meier and his staff for helping the organization fulfill its mission of *Peers Helping Peers* by providing a great golf venue for the September 30th event.



Why Support the Wee One?

By Luke Cella, Executive Administrator Wee One Foundation

In a few weeks the annual golf outing at Le Sueur Country Club will take place to benefit the Wee One Foundation. Like most yearly occasions, the event signals the passing of another golf season for golf course superintendents, suppliers and the myriad of people that comprise the golf industry in Minnesota. We certainly hope the season is full of good health and well-being for all as we trek toward September. Unfortunately for some there will be trials to come. Some of those trials may begin with a trip to the doctor after one “just doesn’t feel right”. Or a misfortunate accident or mishap where an injury occurs. Whatever the cause of the affliction, the life of the person and their family that surrounds them is impacted.



One Cause. One Goal. One Percent.

***One Cause:** Help golf course management professionals and their dependents that are having trouble paying medical bills due to the lack of comprehensive insurance or adequate financial resources.*

***One Goal:** Raise \$10 million in 10 years to support these families.*

***One Percent:** Donate 1% of your 2014 revenue, maintenance budget, or salary over the next 10 years in 10 payments.*

Example Contribution:

2014 Salary = \$70,000

1% = \$700

Donation = \$70 per year for 10 years

To learn more about One for the Wee One,
visit weeone.org/onepercent or call (630) 457-7276.

wee one
foundation

This impact can be all-encompassing as a family tries to figure treatments, doctors, referrals, scheduling, transportation, insurance, medications, all while trying to manage their jobs, other family members and new trials as their life is in tumult. Most of us know it doesn't even take that serious of an accident or illness for this turmoil to occur, that is why it is easy for us to realize help is needed when something severe happens. This is the principle the Wee One Foundation was founded upon and continues to this day; we help. As our missions

states:

“The Wee One Foundation was developed to assist golf course management professionals (or their dependents) who incur overwhelming expenses due to medical hardship without comprehensive insurance or adequate financial resources.”

Events like the fund raiser at Le Sueur CC and people like Jack Mackenzie, CGCS, Tom Proshek, Paul Diegnau, Darren Redetzke, Dale Parske, and Peggy & Tom Smith continue to drive the Foundation there.

The advertisement features a background image of a golf course with a green, a sand trap, and trees. The Hartman logo is prominently displayed in the upper left, featuring a stylized green tree and the name 'HARTMAN' in large, serif, black letters. Below the name, it says 'Golf Course Construction & Renovation' in a smaller, sans-serif font. A purple swoosh underlines the name. To the right of the logo, the text 'Quality since 1971...' is written in a red, cursive font. At the bottom left, the text 'Specializing in...' is written in a purple, cursive font, followed by a list of services: 'Bunkers • Tees • Laser Leveling • Green Drainage • Irrigation • Design • Pump Station Upgrades' in a yellow, sans-serif font. At the bottom left, the address '8099 Bavaria Rd. Victoria, MN 55386 952.443.2990' is listed in a white, sans-serif font. At the bottom right, the contact information 'info@hartmancompanies.com www.hartmancompanies.com' is listed in a white, sans-serif font.

HARTMAN
Golf Course Construction
& Renovation

Quality since 1971...

Specializing in...
Bunkers • Tees • Laser Leveling • Green Drainage • Irrigation • Design • Pump Station Upgrades

8099 Bavaria Rd.
Victoria, MN 55386
952.443.2990

info@hartmancompanies.com
www.hartmancompanies.com

It is through their organization, leadership, commitment, and generosity, that allows the Wee One to flourish so it can help when incidents occur.

To those we help, the Wee One Foundation is the greater community within golf that is able to give some relief and want nothing in return. We are kind of like the neighbor that brings a warm dinner over to share, but only on a greater scale. Knowing that others are thinking and caring for you simply helps. The Wee One Foun-

dation is the extended golf family that reassures those suffering they are not alone. Though we plan for the future, we don't know what will come. There have been more than a few times when the Foundation wasn't sure how it was going to help when many requests mounted, however monies came in and gifts went out. The Wee One is a channel for your help to reach those in need, we're a small resource that makes it easier for you to help. That's all we are. Our motivation comes from you; that feeling of wanting to give back, the desire to



Non-retouched client photo: GreenJacket System coming off in the spring!



20+ YEARS OF SUPERINTENDENT SUCCESS
PROVES THE GREENJACKET SYSTEM CAN MAKE
A REMARKABLE DIFFERENCE.

- Patented **IMPERMEABLE** Reinforced Winter Cover Turf Protection System shelters turf from cold-weather damage.
- **PERMEABLE** Reinforced Grow-in Covers dramatically increase the sun's ability to germinate and **GROW** healthier turf while allowing the underlying turf and soil to breathe.

Find out how the GreenJacket System can make a difference for you and your turf.

888-786-2683 • info@greenjacket.com • GreenJacket.com

READ UNIVERSITY RESEARCH in the GJ Research Tab at GreenJacket.com

support someone that didn't ask for trouble, the goodness that surrounds us. The Wee One Foundation is an extension of the virtues that make up the golf course superintendent profession. Though not in our nature to ask for help, we do for those who won't.

Consider making the Wee One Foundation one of the contributions you make on an annual basis. We have a small membership fee of \$75 or a giving program that is getting our endowment off the ground. We understand there are many opportunities for you to give but know the Wee One Foundation is made up of and helps people just like you.

In addition to yearly contributions, the Wee One Foundation conducts events each year. Attend, sponsor or even help at one. Look for companies that support the Wee One through purchasing programs periodically throughout the year. Small donations may not seem like much, but it all adds up and more importantly it helps.

Most recently the Wee One Foundation made a gift to a golf course

superintendent and his family in Minnesota. There is no need to share his name, because the Wee One does not expect anything in return. Our hope is the gift will allow him to focus on his health and well-being and he will know the industry he had dedicated his life to cares about him personally. His situation was made known to us by a fellow MGCSA member a few short weeks ago through our website: weeone.org We hope you will visit it and learn more about the Wee One and how you are already part of us.

Wee One Facts:

Since it began in 2004, the Wee One Foundation has helped over 110 families in 28 different states.

The group has gifted over \$1.3 Million to those in need.

There are 350 annual contributors and need of more.

Over 20 local GCSAA Chapters support the Wee One Foundation through hosting events, promotion, gifts and donations.

WE WENT BACK

AND FORTH

AND BACK

AND FORTH

PERFECTING

THE DESIGN.

At Par Aide, we continually obsess over the form and function of every product we sell. That way, you never have to go back and forth on which brand you buy.



ACCUFORM ACE II

Learn more at ParAide.com



2018-2019 Pink Snow Mold Control Evaluation: OJ Noer Research Facility – Verona, WI

Kurt Hockemeyer and Paul Koch, Ph.D.
Department of Plant Pathology
University of Wisconsin-Madison

OBJECTIVE

To evaluate fungicides and varying spray volumes for the control of *Microdochium* patch (caused by *Microdochium nivale*) on fairway height turfgrass.

MATERIALS AND METHODS

This evaluation was conducted at the OJ Noer Research and Education Facility in Verona, WI on an ‘Alpha’ creeping bentgrass (*Agrostis stolonifera*) fairway maintained at a height of 0.5 inches. Individual plots measured 3 ft x 4 ft and were arranged in a randomized complete block design with three replications. Individual liquid treatments were applied at a nozzle pressure of 40 p.s.i using a CO₂-pressurized boom sprayer equipped with two XR Teejet air induction nozzles. All fungicides were agitated by hand and applied in the equivalent of either 1.5, 1.0, or 0.5 gallons of water per 1000 ft². Treatments were applied using TeeJet AI80025 nozzles. One application was made on 24 Oct 2018 (Early), and all other applications were made on 16 Nov 2018 (Late). The experimental plot area was inoculated with *M. nivale*-infested rye grains shortly after the late fungicide applications were made and then covered with custom made insulation frames and an Evergreen cover. The Evergreen cover and frames were removed on 20 Mar 2019, and disease severity, turf quality, turf color were evaluated on 21 Mar 2019. Disease severity was visually rated as percent area affected, turfgrass quality was visually rated on a 1-9 scale with 6 being acceptable, and chlorophyll content (turfgrass color) was rated using a FieldScout CM 1000 Chlorophyll Meter from Spectrum Technologies, Inc. (Aurora, IL). Treatment means were analyzed using Fisher’s LSD method and are presented in Table 1.

RESULTS AND DISCUSSION

Microdochium patch pressure was quite high under the cover and frames, with non-treated controls averaging 52% disease. Medallion, Heritage TL, Instrata, and the experimental granular products provided the most effective suppression of *Microdochium* patch. Though not statistically significant, higher disease was observed at lower water volumes with the contact fungicide Medallion. No differences in disease control were observed with the penetrant fungicide Heritage TL at the different water volumes. Turf quality and turf color mostly mirrored disease severity. Phytotoxicity was not observed with any treatment.

Table 1: Mean snow mold severity, turf quality, and turf color were assessed on March 22, 2019 at the OJ Noer Research Facility in Verona, WI.

Treatment	Rate	Spray Volume/Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
1	Non-treated control		51.7ab	3.7fg	117.7f
2	AND18131 4-way G	6.6 lb /1000 ft2 Late	10.0fg	6.0abc	159.7ab
3	AND18148 3-way G	6.6 lb/1000 ft2 Late	13.3efg	5.7bcd	139.0b-f
4	Prophecy G AND18131 4-way G	2.6 lb/1000 ft2 6.6 lb/1000 ft2 Early Late	11.7efg	5.7bcd	153.0a-d
5	AND12147 G	6.67 lb/1000 ft2 Late	5.0fg	6.3ab	164.7a
6	Secure	0.5 fl oz/1000 ft2 1.5 gal H2O/1000 ft2	48.3ab	3.7fg	122.7f
7	Secure	0.5 fl oz/1000 ft2 1.0 gal H2O/1000 ft2	68.3a	3.3g	122.7f
8	Secure	0.5 fl oz/1000 ft2 0.5 gal H2O/1000 ft2	45.0abc	3.7fg	126.3ef
9	Medallion	2.0 fl oz/1000 ft2 1.5 gal H2O/1000 ft2	6.7fg	6.3ab	154.7a-d
10	Medallion	2.0 fl oz/1000 ft2 1.0 gal H2O/1000 ft2	8.3fg	6.0abc	166.7a
11	Medallion	2.0 fl oz/1000 ft2 0.5 gal H2O/1000 ft2	11.7efg	5.3b-e	157.3abc
12	Insignia	0.7 fl oz/1000 ft2 1.5 gal H2O/1000 ft2	35.0b-e	5.0cde	151.7a-d
13	Insignia	0.7 fl oz/1000 ft2 1.0 gal H2O/1000 ft2	41.7bcd	4.3efg	131.3def
14	Insignia	0.7 fl oz/1000 ft2 0.5 gal H2O/1000 ft2	38.3bcd	4.7def	132.7c-f
15	Heritage TL	2.0 fl oz/1000 ft2 1.5 gal H2O/1000 ft2	23.3c-g	4.7def	151.7a-d
16	Heritage TL	2.0 fl oz/1000 ft2 1.0 gal H2O/1000 ft2	28.3b-f	4.7def	138.3b-f
17	Heritage TL	2.0 fl oz/1000 ft2 0.5 gal H2O/1000 ft2	18.3d-g	5.0cde	147.7a-e
18	Instrata	7.0 fl oz/1000 ft2 1.5 gal H2O/1000 ft2	3.3g	7.0a	160.7ab
LSD P=.05			23.87	1.06	24.82

^aAll applications were applied at “late” timing and 1.5 gal H2O/1000 ft2, unless otherwise noted.

^bMean percent diseased area assessed on March 22nd, 2019.

^cQuality was visually assessed where 1 = dead, 6 = acceptable, 9 = dark green.

^dColor was assessed using a FieldScout CM1000 Chlorophyll Meter from Spectrum Technologies, Inc.

Together we are better. The MGCSA wishes to thank Dr. Paul Koch and Kurt Hockemeyer for their commitment to turf pathology in the mid-west. Snow mold diseases can be difficult to recover from and expensive to control. Your continued research brings assurances to those who manage fine turf areas.

2018-2019 Snow Mold Control Evaluation: Marquette Golf Club – Marquette, MI



Kurt Hockemeyer and Paul Koch, Ph.D.
Department of Plant Pathology
University of Wisconsin-Madison

OBJECTIVE

To evaluate fungicides for the control of Typhula blight (caused by *Typhula incarnata*) and Microdochium patch (caused by *Microdochium nivale*) on golf course turfgrass.

MATERIALS AND METHODS

This evaluation was conducted at Marquette Golf Club in Marquette, MI on a creeping bentgrass (*Agrostis stolonifera*) and annual bluegrass (*Poa annua*) golf course fairway maintained at a height of 0.5 inches. Individual plots measured 3 ft x 10 ft and were arranged in a randomized complete block design with four replications. Individual treatments were applied at a nozzle pressure of 40 p.s.i using a CO₂-pressurized boom sprayer equipped with two XR Teejet AI8004 VS nozzles. All fungicides were agitated by hand and applied in the equivalent of 1.5 gallons of water per 1000 ft². Granular applications were made by evenly spreading a pre-weighed amount of product over the designated plots. Early applications were made on 4 Oct 2018 and late applications were made on 1 Nov 2018. The experimental plot area was not inoculated. Snow cover was present from mid-November through mid-April, a total of approximately 150 days. Disease severity, turf quality, and turf color were measured on 17 Apr 2019. Disease severity was visually rated as percent area affected, turfgrass quality was visually rated on a 1-9 scale with 6 being acceptable, and chlorophyll content (turfgrass color) was rated using a FieldScout CM 1000 Chlorophyll Meter from Spectrum Technologies, Inc. (Aurora, IL). Treatment means were analyzed using Fisher's LSD method and are presented in Table 1.

RESULTS AND DISCUSSION

Nontreated controls averaged 81% disease, indicating high disease pressure. On average about 90% of the disease present was caused by *M. nivale* and 10% was caused by *T. ishikariensis*. Any treatment providing greater than 95% control under these circumstances performed exceptionally well, and 45 treatments met that standard. Of those, 34 treatments provided greater than 99% snow mold control. Turf quality and turf color mostly reflected disease severity. Phytotoxicity was not observed with any treatment.

Table 1: Mean snow mold severity, turf quality, and turf color were assessed on April 17, 2019 at Marquette Golf Club in Marquette, MI.

	Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
1	Non-treated control			81.3a	2.3n	121.5v
2	Premion	8.0 fl oz/1000 ft ²	Late	0.0o	7.5abc	250.3d-r
	Foursome	0.5 fl oz/1000 ft ²				
3	Previa	4.0 fl oz/1000 ft ²	Late	0.0o	7.3a-d	246.0f-s
	Premion	10.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
4	Previa	4.0 fl oz/1000 ft ²	Late	0.0o	7.8ab	249.0e-r
	Premion	10.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
5	Previa	5.5 fl oz/1000 ft ²	Late	0.0o	7.8ab	263.8a-r
	Secure	0.5 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
6	Concert II	5.5 fl oz/1000 ft ²	Late	0.0o	7.8ab	275.3a-h
	Turfcide	8.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
7	Concert II	8.3 fl oz/1000 ft ²	Late	0.5o	7.5abc	297.8a
	Turfcide	8.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
8	Previa	5.5 fl oz/1000 ft ²	Late	3.0mno	7.0b-e	265.3a-r
	Turfcide	8.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
9	Previa	4.0 fl oz/1000 ft ²	Late	8.0i-o	6.0f-i	269.3a-o
	Turfcide	6.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
10	Previa	2.67 fl oz/1000 ft ²	Late	8.0i-o	6.0f-i	241.5h-t
	Turfcide	4.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
11	Previa	1.33 fl oz/1000 ft ²	Late	31.3cd	4.5klm	236.8m-t
	Turfcide	2.0 fl oz/1000 ft ²				
	Foursome	0.5 fl oz/1000 ft ²				
12	AND18131 4-way	6.6 lb/1000 ft ²	Late	10.5h-m	5.8g-j	249.8e-r
13	AND18148 3-way	6.6 lb/1000 ft ²	Late	17.5fgh	5.0jkl	251.3c-r
14	Prophecy	2.5 lb/1000 ft ²	Early	3.0mno	6.5d-g	231.3rst
	AND18131 4-way	6.6 lb/1000 ft ²	Late			
15	AND12147	6.67 lb/1000 ft ²	Late	12.5g-l	5.8g-j	235.0o-t
16	A13705V	4.5 fl oz/1000 ft ²	Late	0.0o	8.0a	279.5a-g
	A19188B	1.0 fl oz/1000 ft ²				
	Par	0.37 fl oz/1000 ft ²				
17	A13705V	2.6 fl oz/1000 ft ²	Late	0.0o	8.0a	249.5e-r
	A19188B	1.0 fl oz/1000 ft ²				
	Turfcide	6.0 fl oz/1000 ft ²				
	Par	0.37 fl oz/1000 ft ²				

^aEarly treatments applied on Oct 4, 2018 and late treatments applied on Nov 1, 2018

^bMean percent diseased area assessed on Apr 17, 2019.

^cQuality was visually assessed where 1 = dead, 6 = acceptable, 9 = dark green.

^dColor was assessed using a FieldScout CM1000 Chlorophyll Meter from Spectrum Technologies, Inc.

Table 1(cont): Mean snow mold severity, turf quality, and turf color were assessed on April 17, 2019 at Marquette Golf Club in Marquette, MI.

	Treatment	Rate	Applicatio Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
18	A15457K	0.24 fl oz/1000 ft2	Late	0.5o	7.5abc	274.0a-i
	A17856B	1.88 fl oz/1000 ft2				
	Turfcide	6.0 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
19	A15457K	0.24 fl oz/1000 ft2	Late	0.5o	7.8ab	288.8ab
	A17856B	1.88 fl oz/1000 ft2				
	Daconil Wthrstk	5.5 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
20	A15457K	0.24 fl oz/1000 ft2	Late	2.5mno	7.3a-d	257.0b-r
	A17856B	1.88 fl oz/1000 ft2				
	Secure	0.5 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
21	A15457K	0.24 fl oz/1000 ft2	Late	0.0o	7.8ab	263.0b-r
	A17856B	1.88 fl oz/1000 ft2				
	Banner Maxx	2.0 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
22	A15457K	0.24 fl oz/1000 ft2	Late	0.0o	8.0a	251.8c-r
	A17856B	1.88 fl oz/1000 ft2				
	A13705V	2.6 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
23	A22835A	2.87 fl oz/1000 ft2	Late	5.0k-o	6.8c-f	264.3a-r
	Par	0.37 fl oz/1000 ft2				
24	A22835B	2.87 fl oz/1000 ft2	Late	6.3j-o	6.8c-f	262.8b-r
	Par	0.37 fl oz/1000 ft2				
25	A22835C	2.87 fl oz/1000 ft2	Late	3.0mno	7.3a-d	271.3a-l
	Par	0.37 fl oz/1000 ft2				
26	A22835D	2.87 fl oz/1000 ft2	Late	0.5o	7.8ab	271.0a-m
	Par	0.37 fl oz/1000 ft2				
27	A15457K	0.236 fl oz/1000 ft2	Late	20.0efg	5.3ijk	233.5q-t
	A17856B	1.88 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
28	A19188B	1.0 fl oz/1000 ft2	Late	0.5o	7.5abc	280.3a-f
	A17856B	2.61 fl oz/1000 ft2				
	Par	0.37 fl oz/1000 ft2				
29	Traction	1.3 fl oz/1000 ft2	Late	0.0o	7.0b-e	248.0e-s
	26/36	4.0 fl oz/1000 ft2				
30	Traction	1.3 fl oz/1000 ft2	Late	0.0o	7.0b-e	264.8a-r
	26/36	8.0 fl oz/1000 ft2				
31	Pinpoint	0.31 fl oz/1000 ft2	Late	0.0o	7.0b-e	256.5b-r
	Tourney	0.44 fl oz/1000 ft2				
	Rotator	0.5 fl oz/1000 ft2				
32	Fludi 50	0.495 oz/1000 ft2	Late	13.0g-k	5.8g-j	239.5j-t
33	QP Ppz	6.5 fl oz/1000 ft2	Late	3.8l-o	6.5d-g	240.8i-t

^aEarly treatments applied on Oct 4, 2018 and late treatments applied on Nov 1, 2018

^bMean percent diseased area assessed on Apr 17, 2019.

^cQuality was visually assessed where 1 = dead, 6 = acceptable, 9 = dark green.

^dColor was assessed using a FieldScout CM1000 Chlorophyll Meter from Spectrum Technologies, Inc.

Table 1(cont): Mean snow mold severity, turf quality, and turf color were assessed on April 17, 2019 at Marquette Golf Club in Marquette, MI.

	Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
34	Chloro 720	5.5 fl oz/1000 ft2	Late	45.0b	3.8m	189.5u
35	Profile 200	6.3 fl oz/1000 ft2	Late	0.0o	7.0b-e	243.0h-t
36	Fludi 50	0.495 oz/1000 ft2	Late	0.0o	7.0b-e	245.8g-s
	QP Ppz	6.5 fl oz/1000 ft2				
37	Fludi 50	0.495 oz/1000ft	Late	2.5mno	7.0b-e	252.3c-r
	Chloro 720	5.5 fl oz/1000 ft2				
38	Chloro 720	5.5 fl oz/1000 ft2	Late	0.5o	7.0b-e	237.8k-t
	QP Ppz	6.5 fl oz/1000 ft2				
39	Chloro 720	5.5 fl oz/1000 ft2	Late	0.0o	7.3a-d	253.0c-r
	Fludi 50	0.495 oz/1000 ft2				
40	QP Ppz	6.5 fl oz/1000 ft2	Late	0.0o	7.0b-e	278.0a-g
	Instrata II A	1.92 fl oz/1000 ft2				
	Instrata II B	0.236 fl oz/1000 ft2				
41	Pedigree	5.5 fl oz/1000 ft2	Late	28.8cde	4.5klm	209.0tu
42	Pedigree	6.6 fl oz/1000 ft2	Late	35.0c	4.3lm	193.3u
43	Pedigree	4.4 fl oz/1000 ft2	Late	10.0h-n	6.0f-i	235.5n-t
	Banner Maxx	2.0 fl oz/1000 ft2				
44	Pedigree	5.5 fl oz/1000 ft2	Late	12.5g-l	5.5hij	252.8c-r
	Banner Maxx	2.0 fl oz/1000 ft2				
45	Pedigree	6.6 fl oz/1000 ft2	Late	13.8g-k	5.5hij	252.8c-r
	Banner Maxx	2.0 fl oz/1000 ft2				
46	Dexter Xcel	13.8 fl oz/1000 ft2	Late	1.3no	7.5abc	264.8a-r
	KFD-391-01	0.5 fl oz/1000 ft2				
47	Tebuzol	0.9 fl oz/1000 ft2	Late	0.0o	7.0b-e	263.8a-r
	KFD-112-02	1.35 fl oz/1000 ft2				
48	Pegasus DFX	3.25 oz/1000 ft2	Late	0.0o	7.0b-e	271.8a-k
	KFD-380	0.81 fl oz/1000 ft2				
49	KFD-112-02	1.35 fl oz/1000 ft2	Late	0.0o	7.0b-e	258.3b-r
	Pegasus DFX	3.25 oz/1000 ft2				
50	Insignia SC	0.7 fl oz/1000 ft2	Late	5.5k-o	6.3e-h	260.0b-r
	Trinity	2.0 fl oz/1000 ft2				
51	Insignia SC	0.7 fl oz/1000 ft2	Late	1.3no	6.8c-f	264.5a-r
	Trinity	1.0 fl oz/1000 ft2				
	Turficide	4.0 fl oz/1000 ft2				

^aEarly treatments applied on Oct 4, 2018 and late treatments applied on Nov 1, 2018

^bMean percent diseased area assessed on Apr 17, 2019.

^cQuality was visually assessed where 1 = dead, 6 = acceptable, 9 = dark green.

^dColor was assessed using a FieldScout CM1000 Chlorophyll Meter from Spectrum Technologies, Inc.

Table 1(cont): Mean snow mold severity, turf quality, and turf color were assessed on April 17, 2019 at Marquette Golf Club in Marquette, MI.

	Treatment	Rate	Application Timing ^a	Disease Severity ^b	Turf Quality ^c	Turf Color ^d
34	Chloro 720	5.5 fl oz/1000 ft2	Late	45.0b	3.8m	189.5u
35	Profile 200	6.3 fl oz/1000 ft2	Late	0.0o	7.0b-e	243.0h-t
36	Fludi 50	0.495 oz/1000 ft2	Late	0.0o	7.0b-e	245.8g-s
	QP Ppz	6.5 fl oz/1000 ft2				
37	Fludi 50	0.495 oz/1000ft	Late	2.5mno	7.0b-e	252.3c-r
	Chloro 720	5.5 fl oz/1000 ft2				
38	Chloro 720	5.5 fl oz/1000 ft2	Late	0.5o	7.0b-e	237.8k-t
	QP Ppz	6.5 fl oz/1000 ft2				
39	Chloro 720	5.5 fl oz/1000 ft2	Late	0.0o	7.3a-d	253.0c-r
	Fludi 50	0.495 oz/1000 ft2				
40	QP Ppz	6.5 fl oz/1000 ft2	Late	0.0o	7.0b-e	278.0a-g
	Instrata II A	1.92 fl oz/1000 ft2				
	Instrata II B	0.236 fl oz/1000 ft2				
41	Pedigree	5.5 fl oz/1000 ft2	Late	28.8cde	4.5klm	209.0tu
42	Pedigree	6.6 fl oz/1000 ft2	Late	35.0c	4.3lm	193.3u
43	Pedigree	4.4 fl oz/1000 ft2	Late	10.0h-n	6.0f-i	235.5n-t
	Banner Maxx	2.0 fl oz/1000 ft2				
44	Pedigree	5.5 fl oz/1000 ft2	Late	12.5g-l	5.5hij	252.8c-r
	Banner Maxx	2.0 fl oz/1000 ft2				
45	Pedigree	6.6 fl oz/1000 ft2	Late	13.8g-k	5.5hij	252.8c-r
	Banner Maxx	2.0 fl oz/1000 ft2				
46	Dexter Xcel	13.8 fl oz/1000 ft2	Late	1.3no	7.5abc	264.8a-r
	KFD-391-01	0.5 fl oz/1000 ft2				
47	Tebuzol	0.9 fl oz/1000 ft2	Late	0.0o	7.0b-e	263.8a-r
	KFD-112-02	1.35 fl oz/1000 ft2				
48	Pegasus DFX	3.25 oz/1000 ft2	Late	0.0o	7.0b-e	271.8a-k
	KFD-380	0.81 fl oz/1000 ft2				
	KFD-112-02	1.35 fl oz/1000 ft2				
	Pegasus DFX	3.25 oz/1000 ft2				
	Insignia SC	0.7 fl oz/1000 ft2				

The MGCSA offers a special thanks to the following superintendents for hosting our snow mold research this past winter: Eric Leonard at Cherokee Country Club, Randy Slavik at Wausau CC, and Craig Moore at Marquette CC. The results presented here would not be possible without their support.

Additional thanks go to the companies that sponsored research in the reports presented here: Adama, The Andersons, AMVAC, BASF, Bayer, Intelligro, Nufarm, PBI Gordon, Syngenta, and UniPhos.



The Championship
Oak Glen Golf Club
Stillwater, Minnesota
Host Pete Mogren
September 5, 2019



**FIELD LIMITED TO 120 PLAYERS Golf, cart, prizes, lunch and dinner: \$80
ENTRY FEE INCLUDES: LUNCH, RANGE, GOLF, CART, RECEPTION AND AWARDS**

Schedule of events:

10:30 am	Registration, warm up
11:00 am	Bag Lunch
12:00 noon	Shotgun Event
5:00	Reception/Appetizers

Dress Code for Golf & Post Meal: Must wear collared shirts, slacks or Bermuda length shorts. No denim.

Golf & reception: \$80

Casual attire acceptable at reception. *Email Jack your handicap*****

- _____ Championship Flight - Gross Event
- _____ 2nd Flight - Handicap 20-26
- _____ 1st Flight - Handicap 9-19
- _____ Senior Flight - Age 50+ (Net event)

**** flights may be modified based on participation**

CHECK APPROPRIATE FLIGHT

Name: _____ Handicap: _____

Golf Course / Company: _____

Deadline: August 26, 2019

*******If insufficient participants are in any one flight, the individuals will be grouped by the pro-shop.**

Register on line at mgcsa.org

***Educational Support Available:
The Great Lakes School of Turfgrass Science
Online Scholarship Program
Provided by:***



And Funded by:



General:

In order to enhance the educational opportunities of our existing membership/staff and promote the Golf Course Management Industry, the MGCSA is offering a new Reimbursement Program for the Great Lakes School of Turfgrass Science Online. (4) Reimburse coupons will be offered annually to approved applicants who complete the Online program and submit their Certificate of Completion. Applications will be reviewed by the Scholarship Committee. All decisions of the committee will be final.

Applicants will be notified by December 15th prior to the School's Registration deadline. Applicants will still need to register/pay for the Online School as if they were attending on their own. The Reimbursement check of \$495 will be issued to the individual or company paying the initial Class Fee following the completion of the course. Four scholarships are available for the 2020 class.

Eligibility:

1. Applicants must either be a MGCSA member or sponsored by a MGCSA member to apply.
2. Completion of the program and providing Certificate of Completion is necessary for reimbursement.

Criteria for Selection:

1. (4) Applicants shall be selected based on employment history, recommendations and personal statement essay.
2. Financial need is not a factor in the selection
3. Any Scholarship Committee member with a conflict of interest must remove him/herself from the process. (family member or current employee applying)

How To Apply:

Applicants must complete the [application form](#) and supply the following under one cover:

1. Personal Statement Essay
2. All applications must be post marked by Dec. 15th of the year submitted.
3. Send applications or email to:

MGCSA
10050 204th Street North
Forest Lake, MN 55025
jack@mgcsa.org

2019 MGCSA Leg



Maggie Taylor

**Parents: Amy and Fred
Taylor CGCS
Fred is the Superintendent
at Mankato Golf Club**

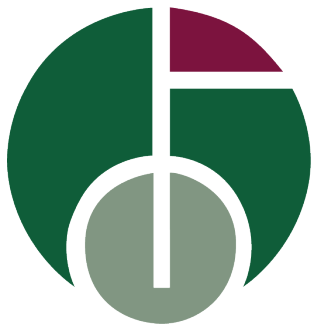
Maggie graduated with honors from Mankato East High School where she was involved in many school activities including Choir, Fellowship of Christian Athletes, Link Crew, Project for Teens, National Honor Society, and Student Council. This year Maggie served as President of the Student Council; was captain of the volleyball team, Dance Company, and the track and field team; was recognized with All-State Academic and Big 9 Conference Scholar Awards; and was the recipient of the Most Valuable Player Award for volleyball and the Coaches' Award for track and field. She was also awarded the Triple "A" Award (academics, arts, and athletics) by her school's administration.

When Maggie wasn't participating in school activities or working, she enjoyed giving back to the community by volunteering. Maggie taught Sunday School, assisted with senior activities, coached at youth sport camps, and was a bell ringer for the Salvation Army.

Maggie will be attending Juniata College in Huntingdon, Pennsylvania. While at Juniata, she will be playing volleyball and majoring in

Legacy Scholarship Award Recipients

Minnesota Chapter



GCSAA

Golf Course Superintendents Association of America

Politics and Spanish. She is excited for the new college experience.

Thank you MGCSA for your generosity in providing this scholarship!



2019 MGCSA Leg



Sara Kelly

**Grand parent: Mike Kelly
Mike is an affiliate
member of the MGCSA.
His company's name is
Environmental
Agronomics.**

Sara is a great person, both inside and out. Like all Grandpa's I love her so much.

Sara is a sophomore at the College of Saint Benedict studying biology with hopes of becoming a veterinarian. Her academic success is showing through achieving the Dean's List both of her freshman year semesters. Outside of school, Sara is on the CSB figure skating team, which she is will be copresident of this year. She also enjoys spending her free time outside in nature or with her friends.

School has been fun for her. Grades are very good and she has found some other non-scholastic activities.

Legacy Scholarship Award Recipients

Thank you MGCSA for this wonderful scholarship.



Minnesota Chapter

GCSAA

Golf Course Superintendents Association of America

2019 Joe Garske L



Lida Dodge

**Parents Jenny and Vincent
Dodge CGCS**

**Vince is the Superintendent
at the Wilderness at
Fortune Bay**

Lida Dodge, of Ely, Minnesota, is a 2019 graduate of Memorial High School with honors. Lida lettered in volleyball, basketball, and softball during her high school career and was active as well in student council, Key Club, and other high school organizations. Lida will be attending Aurora University this fall at her birthplace of Aurora, Illinois to study Early Childhood Education with an emphasis on ESL and Special Education. The major choice is a good fit in that Lida spends much of her free time by being a nanny. Lida has always shown an affinity for working with children and is very excited to begin her college years near her grandmother in Illinois. The MGCSA Garske Scholarship will be a great help in helping Lida to achieve her goals and the assistance is much appreciated. Thank you for the support.

Lida has had a connection to the golf course since she was a toddler. I used to take her onto the golf course during grow in when she was around two years old and even then she seemed to know her way around the golf course more than some players.

Legacy Scholarship Award Recipients



Fast forwarding to today, Lida still is a part of the golf course working outside services at the Pro Shop. Her friendly nature and high energy have been a welcome addition to the staff. It will be a little sad to see her go but we are all excited for her future which the Garske family has generously helped in making possible. We really are part of a pretty cool industry.



2019 Joe Garske L

Renewal Recipient

Isaiah Anderson

**Parents: Amanda and
Jonathan Anderson**

**Jonathan is the Assistant Su-
perintendent at St. Cloud
Country Club.**



**Isaiah will be entering his second year of college and will be attend-
ing St. John's University this fall where he will continue to study biology.
Isaiah had a great freshman year at Concordia College in Moorhead but
wanted to be closer to his family and try something different this year.
As parents we respect that Isaiah is willing to make life changes if he
thinks it will benefit his life going forward. We will also enjoy having him
closer to home to spend more time with him.**

**Isaiah had a busy summer as he worked part time at the St. Cloud Coun-
try Club on the golf course and took EMT training through the St. Cloud
Technical College. With his interest in medicine, it was a very educa-
tional experience to see first hand what he will encounter in the medical
field.**

**We are very proud of Isaiah and look forward to watching him continue
to work hard and do the best he can in all of his ventures. Thank you to
the MGCSA and Par Aide for this wonderful scholarship and supporting
Isaiah's education.**

Legacy Scholarship Award Recipients



In Bounds

by Jack MacKenzie, CGCS

You have likely heard the news that there is a steep decline in the number of hunters purchasing licenses, gear and even property to pursue the sport of selective animal harvest across the state of Minnesota, and the U.S. As the population in our country rises, the number of hunters has steadily declined since 1991 from a high of 14.1 million adult participants to 11.5 million in 2016. Fishing is also on the decline.



One could say that this should have a very positive impact upon the animal population in general, but in reality, the opposite is true. The great shift of recreational dollars from government organized and managed fee structures used for habitat and animal management to hobbies that do not generate monies from license and registration fees actually harms the managed wildlife population. Roughly sixty percent of dollars necessary for the conservation of both wildlife and the fisheries in our country are generated through license fees and excise taxes on guns, ammunition and tackle.

This is money critical to the continued management of all government lands for the enjoyment of every individual who uses them. However, the “user pay, user play” balance is out of whack and soon everyone will suffer as habitat management and population controls are allowed to decline from lack of funding.

Bottom line, without support, there will eventually be a very negative impact felt upon our wildlife and, in turn, the wildlife management industry.

Not unlike the imbalance between hunters, animal protection and land administration, the Minnesota Golf Course Superintendents Association is also being impacted by the attrition of its participation numbers. Ten years ago, the economy forced the closure of a couple dozen golf courses across the state, however membership numbers were bolstered by the recruitment of an equal number of facility managers; one membership per course. This trend hit its peak over the last twelve months and today the Association is again seeing a marginal decline in membership.

It does not matter if the reasons are apathy, lack of generational interest, the decline in young individuals entering the industry or limited recruitment ... also known as marginal mentoring. What matters to the industry is a decline in representation and solidarity on issues that strongly relate to all golf course superintendents.

Grave concerns include: nutrient management, irrigation rights, pesticide laws and labor regulations. Without a strong membership and advocacy support, external forces could cripple the golf industry through anti-golf agendas. Without a strong MGCSA membership, managing golf courses as we know it today could be dramatically changed in the future.

It wasn't that long ago, two decades or so, the Association boasted over 1,000 members in all categories. Today that number is just north of 625; all categories included. This number represents about 65 percent of all golf destinations in the state.

At one time, decades ago, I was pretty indifferent about the MGCSA, it was "there", a small suck on the course budget teat, but not much, and I received well more than I ever put into the organization. My marginal invoice, when paid in combination with the rest of the membership, cov-

ered operational costs and subsidized many initiatives. Out of sight and mind, I really didn't care about my membership fees... my club always paid for it, and my assistants and spray techs to belong as well.

In recent years, the association has stepped up the return on investment. All courses, members and non-members are represented through advocacy and receive a return on that small investment. In fact, one could argue that just one executive initiative has saved your course, at a minimum, the cost of your membership through the elimination of redundant pesticide license, fees and time to recertify in all pesticide categories. Also, your water rights, nutrient availability and even ability to apply pesticides are much more secure than a decade ago, as the MGCSA has made significant inroads into our agencies through solid partnerships, and legislators through physical "meet and greet" opportunities.

Blah, blah, blah... in one ear and out the other. Remember, I've been there. However, on your behalf and all courses in the state, the MGCSA has been busting "it". Isn't it time you flexed a bit of management muscle and garnered additional members for the association? New members to help support the Association? Folks who can help pay the bills?

For your information and a couple of facts:

- 1) Very few memberships are paid by individuals. Thus, practically all memberships are paid for by the courses. So what is the "hang-up" to pay member fees?
- 2) If you choose to not invite your assistant, spray tech or equipment manager into the ranks of the Association, then the MGCSA will eventually cease to exist. As evidence of this potential extinction.... How healthy are the Kiwanis Club, Mason or other civic organizations in your community?

- 3) Without your support, as the population of Minnesota Superintendents, I will be limited in my position to represent you and continue to amass power for the industry.
- 4) As individuals transition out of the business, their replacements into superintendent or assistant positions are not renewing their membership at a high rate with the MGCSA. I need voters to represent well at the Capitol.
- 5) Young superintendents do not appreciate the value of the MGCSA and are not mentoring their staff to become members, even though, as proven out historically, almost all courses would pay for the memberships.

How about a couple suggestions:

- 1) The “lack of great employee” conversation is becoming passé. If you wish to retain your high capacity employees, how about joining them into our professional organization. Capture them early and they may choose this industry as a career.
- 2) Join your assistant, technician and EM into the MGCSA membership. Set the precedent for future generations by being a membership mentor. They may never get anything from their membership, however the Association could use the financial support.
- 3) Talk positively about the Association... or even more of a stretch, how about becoming more active in the MGCSA through Committee and BOD participation?
- 4) Make a difference through membership, participation and enthusiasm.

Bottom line gang, if you don't stoke the MGCSA fire with new members, it will dwindle. Perhaps it won't go out for a long time, but the blaze will gradually become less and less brilliant. Not unlike the hunting and fishing opportunities, if we cannot self-support our own interests then who will?