

QUARTERLY PUBLICATION OF THE MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | SPRING 2017

LOOKING FOR THE BEST POSSIBLE PROGRAM TO GET YOUR GREENS **READY** FOR TOURNAMENT SEASON?

EMPLOYEE ISSUES

Soil Phosphorus and Potassium Research on Bentgrass Putting Greens





We're supplying all your golf course needs.



GOLF & PROFESSIONAL TURF MANAGEMENT



EQUIPMENT SERVICE



EQUIPMENT PARTS



IRRIGATION, WATER MANAGEMENT & LANDSCAPE LIGHTING



GOLF CARS & UTILITY VEHICLES



RESIDENTIAL & LANDSCAPE CONTRACTOR EQUIPMENT









487 West Division Street Sparta, MI 49345

1050 North Opdyke Road Auburn Hills, MI 48326

800-822-2216 www.spartandistributors.com



QUARTERLY PUBLICATION OF THE MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | SPRING 2017

COURSEconditions

hat

Featuring MiGCSA President Mark Ostrander

Feature Article: Employee Issues

Soil Phosphorus and Potassium Research on Bentgrass Putting Greens





We're supplying all your golf course needs.



GOLF & PROFESSIONAL TURF MANAGEMENT



EQUIPMENT SERVICE



EQUIPMENT PARTS



IRRIGATION, WATER MANAGEMENT & LANDSCAPE LIGHTING



GOLF CARS & UTILITY VEHICLES



RESIDENTIAL & LANDSCAPE CONTRACTOR EQUIPMENT









487 West Division Street Sparta, MI 49345

1050 North Opdyke Road Auburn Hills, MI 48326

800-822-2216 www.spartandistributors.com

3

CONTENTS

- 4 MiGCSA Membership Report
- 5 President's Perspective
- 6 Employee Issues
- 8 Calendar of Events
- **9** The Michigan House at the Masters
- 0 2017 GCSAA Chapter Leaders Symposium
- 4 2017 Spring Management Meetings
- 7 Soil Phosphorus and Potassium Research on Bentgrass Putting Greens
- 9 Golf Course Dragons
- 20 Superintendent Mark Ostrander
- **24** Industry Profile Shane Barney
- **29** From National
- 30 Michael Brown Assistant Superintendent
- 35 2017 Spring Opener
- **36** A Message from MTF
- **38** Wet Spring and Flooded Turf
- 40 Jeff Holmes, CGCS, Awarded 2017 GAM Superintendent Award of Merit
- 43 Best Management Practices (BMP)
- 44 The 41st Annual Can-Am
- 46 Association Update



Mark Ostrander, Superintendent at The Moors Golf Club

94

Shane Barney, Regional Sales Manager for the Great Lakes at NuFarm



<u>Aigcsa</u>	COURS	Econditions			
BOARD OF DIRECTORS					
PRESIDENT	MARK OSTRANDER - 2018 Western-Class A The Moors C.C.				
VICE PRESIDENT	DAN DINGMAN - 2018 Greater Detroit-Class A Birmingham Country Club				
SECRETARY/ TREASURER	JEFF SWEET, CGCS Mid-Class A Bucks Run G.C.				
PAST PRESIDENT	JUSTIN BICKEL - 2017 Northern-Class A The Nightmare/Dream G.C.				
BOARD MEMBERS	JEFF HOPKINS Western-Class A Muskegon County Club	JIM BLUCK, CGCS Northern-Class A Arcadia Bluffs Golf Club			
	ROB STEGER, CGCS Mid-Class A Saginaw C.C.	MIKE ROSEN Northern-Class A Ostego Club			
	JEFF SWEET, CGCS Mid-Class A Bucks Run G.C.	ANDEW DALTON Class A Metamora G&C.C.			
	DAVID J. PAWLUK, CGCS Greater Detroit-Class A The Inn at St. John's	JESSEE SHAVER Class A Gull Lake C.C.			
	DOUG WARE Greater Detroit-Class A City of Livonia				

Greater Detroit-Class C Bloomfield Hills Country Club

ROB STEGER, CGCS Chairman

ANDREW DALTON MIKE MAUSOLF JUSTIN BICKEL COLLIN ROMANICK DAN MAUSOLF

MIGCSA MEMBERSHIP Report **SUMMARY OF CLASSES**

	CURRENT MEMBERSHIP	SPRING 2016 MEMBERSHIP
Class A	254	249
Class B (this used to be SM)	66	73
Class C	111	106
Class AA	37	37
Class AFF	163	168
Class EM	42	54
Class E	18	16
Class H	31	30
Class R	8	8
Class SA	17	26
TOTAL	747	767

Please log in to your account at www.migcsa.org to renew your membership for 2017. If you are unsure of your status contact us at info@migcsa.org or I-888-3-MiGCSA.

Course Conditions is published 4 times a year by the Michigan Golf Course Superintendents Association. Opinions expressed by guest writers do not necessarily reflect the views of the MiCGSA. For more information on Course Conditions or the MiGCSA please contact us at info@migca.org, I-888-3-MiGCSA or 316 Glencarin Dr. NE, Rockford, MI 49341.

PRESIDENT'S PERSPECTIVE



MARK OSTRANDER

Happy Spring to you all! One thing that is predictable each year is that every season will be different. Here in Kalamazoo, we were able to open the golf course in January, February, and March. That is a first for us in the 16 years that I have been part of the team. Unfortunately, the weather has been less pleasant since then. We are soon to be in full swing and the fun will start all over.

For those that know me well, you are probably most surprised to see that I am the one that is writing the "President's Perspective". I am a little surprised myself. I have never been one to be on student council or part of clubs. I wasn't even part of the Turfgrass Club at Michigan State which I am not sure you can graduate without being a member. I was always content sitting in the shadows and allowing others to serve and make the decisions. Then one day, it all changed. Jeff Holmes from Egypt Valley CC, my first mentor, called me and asked if I would be willing to serve. I have always had trouble saying 'no' to Jeff, so I took the challenge. In hindsight, I am very thankful that

Jeff thought enough of me to ask and encouraged me to serve our association.

I have learned that success is easier to obtain with a good team. We all have our own team's that we work with at the course. Be it your assistant, equipment technician, or seasonal staff, they all bring their own value/role to the overall product. When the team performs well and in harmony, remarkable things happen. We all work tirelessly to create this environment as we know poorly functioning teams cost us time and money.

Outside of our immediate teams are the professionals that we choose to do business with. Through the years, I have established great relationships with many exceptional professionals that know much more than I do about their specialty. Many of these folks are Industry Partners with the MiGCSA. I consider each of them as part of my team.

We are all fortunate to work in a state that has one of the top Turfgrass programs in the country. The faculty at Michigan State University is second to none. The Michigan Turfgrass Foundation is crucial in this area. On more than one occasion, I have leaned heavily on these experts to help in tough times. They most certainly are part of my team.

Lastly and maybe most importantly, my mentors, co-workers, and peers have all been and will continue to be integral to my team. I never hesitate to pick up the phone to ask for advice or to simply blow off some steam. Many valuable relationships have been formed with folks that are fighting the same battle as I am. I am always amazed by what I can learn when I just listen to different ideas.

The MiGCSA has helped me put all of these different teams together as one great team. The association is my army. Do I "need" them everyday? No. More importantly, the association gives me the confidence that I am going to succeed. If I don't have the answer, someone associated with MiGCSA is going to be able to help. The networking possibilities are endless through the MiGCSA. We are all fighting for the same thing. Every superintendent that I have called, whether I knew them or not, has been very friendly and eager to help. The MiGCSA is a community. We are a team. In order to reap the benefit, you must engage with the team.

I thank Mr. Holmes for encouraging me to become part of the team. My experience with the MiGCSA has made me a stronger, more confident superintendent. If you have wondered how to become engaged, reach out to one of us. There are many opportunities such as educational seminars, golf days, committees, Legislative Day, and Holiday parties to name a few. I promise you, you will be glad you did it!

Have a great summer!

President Mark Ostrander President, MiGCSA

5

EMPLOYEE ISSUES

BY ERIC DAVEY, PRESTWICK VILLAGE G.C.

ne of the hardest parts of our job as Superintendents is hiring and retaining employees. All of us are pretty confident in our abilities of growing grass or preparing the golf course in the proper way but most are struggling in the area of retaining quality employees. For me, this has been one of the most difficult areas. We have budgeted for a certain amount of employees and are having trouble or are unable to fill our budgeted numbers. This is very difficult to explain to the membership when we are asked why we are under budget and our answer is that we just simply cannot find people to work. Some of the difficulty is attributed to being located in a more rural area and not central to any one large city. We have tried several different things to encourage more applicants. Following are some of the methods we have tried.

- Signage The club entrance is located on a major road. To take advantage of this, we have posted a large "Help Wanted; Apply Here" sign. While not the classiest method, this has turned out to be one of the more successful things we have done since we get a greater amount of traffic and most of the traffic, in theory, is located somewhere in the area.
- 2. Posting in Paper/Online Posting jobs in papers, Craigslist and other online websites result in varying degrees of success. This method seems to attract a lot of phone calls but very little true interest. It also seems to attract a lot of people that have never worked in the golf course industry or on a golf course. When we do hire using this method, we have difficulty retaining the employee. During the interview process, the applicant believes that they can handle the physical aspects of the job; however, when they get out on the golf course, they realize they are not prepared physically for the demands of the job and therefore, resign.
- 3. Community Postings Posting at local schools and churches has resulted in applicants that are younger and typically nice people; however, many are very active within the community and/or sports and require excessive amounts of time off. They are also more likely to need time off for the holidays and/ or family vacations. This can be very difficult for us to accommodate since these are high-priority days at our facility.



- 4. Employee Referral Incentive One of our most successful recruiting tools is within our current staff. We have a policy of which we will pay our current staff \$100 for every referral that results in the new employee lasting 90 days or longer.
- 5. Temporary Labor Our 5th topic, and one of the reasons for writing this article, was to go into brief detail on temporary labor companies. As described above, we are located in a rural area and it is very difficult for us to recruit employees. Temporary labor companies experience these difficulties as well; however, we have had some measurable success so it is worth considering. Building a relationship with one of your local temporary labor companies is encouraged. I have been able to build and maintain a relationship with a local company and we have been able to bring in temporary labor for aerification and other high employee demand projects that take place on the golf course. With a little bit of foresight and planning, your recruiter should be able to recruit a few employees to help out in these situations. I have also been able to foster a relationship where we are allowed to hire employees from them with no penalty or charge. If we like the employee, we can hire him on the spot. On the other hand, if we identify an employee that we do not feel is performing up to our expectations, we can have that employee removed from our staff immediately. Keep in mind when hiring temporary laborers is their rate of pay. You will be paying a premium to the temporary company and that employee will not receive all of those funds. It is important that your current staff is making more than your temporary laborers. The first thing employees will discuss with one another is what they are making. When you decide to contract temporary workers, you can discuss with the recruiter their rate of pay and what they will need to perform the job, i.e., uniforms, boots, gloves and safety gear.
- 6. Pay Increase Finally, one of the last things we have tried is increasing pay. We have increased pay over the last couple years to a \$1.50 more an hour then we were paying just two years ago for starting

wages. Although we do not believe this has attracted many employees, it has helped to retain them. This also has helped to justify to our membership the need to increase our core workers rates of pay and has helped us retain quality employees.

Over the past few years we believe the labor pool has changed drastically. The work pool mainly consists of Millennials and the retired. Those that have retired and come to work for us want to work but have trouble meeting the physical demands. Millennials request more vacation days and are more apt to being tardy. We have had to adapt to this change and become more flexible in order to retain employees.

Unfortunately, this includes being more flexible with tardiness and production levels. We realize this is not what anyone wants to hear or recognize but it is simply the truth. You can discipline every employee and write them up for every issue that occurs but at the end of the day how many employees will you have? If you don't adapt, it will be you, your assistants and mechanic left to do the work of 25 guys. I have struggled in determining whether or not to get rid of an employee that is not living up to years past standards; however, we have to realize that for every fired employee we have to hire another. While we can be more flexible and accommodate a casual tardy or an employee taking a personal phone call, we still have a zero tolerance policy for any kind of unsafe work practices, misuse of equipment or failure to comply with any safety issues. Doing so will result in automatic termination.





CALENDAR OF EVENTS

MONDAY, MAY 22 – WEE ONE FUNDRAISER (BIRMINGHAM C.C., BIRMINGHAM)* SUNDAY, JUNE 4 – NORTHERN FUNDRAISER PRACTICE ROUND (ARCADIA BLUFFS, ARCADIA) MONDAY, JUNE 5 – NORTHERN FUNDRAISER (ARCADIA BLUFFS, ARCADIA) THURSDAY, JUNE 8 – LEGISLATIVE GOLF DAY (CAPITOL BUILDING, LANSING) THURSDAY, JUNE 22 – LAFONTAINE OUTING (COYOTE PRESERVE, FENTON) WEDNESDAY, JULY 12 – MID GOLF EVENT (APPLE MOUNTAIN, FREELAND)

Please visit www.MiGCSA.org for all of the latest and most up to date information. You can quickly and easily register for events, view past issues of Course Conditions, browse and post items for sale, post and browse classifieds, and so much more. If you need help logging in email us at info@migcsa.org

THE MICHIGAN HOUSE AT THE MASTERS



or the first time the MiGCSA was able to offer lodging options at the Masters Tournament to Members and their guests in Augusta for the entire week. 16 MiGCSA Members and their guests utilized this unique Member benefit in 2017. The week was not sold out but based on interest from the Class A Member survey the MiGCSA Board has approved this again for

2018. A new house has been selected for more comfortable sleeping and bathroom arrangements that is walkable to the course being less than a mile from the North Gate, where the GCSAA/PGA entrance is located. This is newly renovated house with 4 bedrooms with 7 gueen size beds and 4 bathrooms. This will be available for the entire week and the rates are listed below. This is available on a first come first serve basis and registration is open now, email info@migcsa.org to reserve your spot.







2017 GCSAA CHAPTER LEADERS SYMPOSIUM

BY JEFF SWEET, CGCS, MIGCSA SECRETARY/TREASURER

t is with great honor that I was able to attend this year's Chapter Leader/Executive Symposium with our Executive Director, Adam Ikamas. This year's symposium was held at the GCSAA Headquarters in Lawrence, Kansas. This was my first-time visiting Kansas, and it was a great experience. The state is home to some of the friendliest people you will ever meet, and everyone seemed to have a smile on their face. I was also surprised, as far as first impressions are concerned, that the state isn't flat at all. There are many rolling hills and an abundance of trees!

GCSAA Headquarters is very impressive and everyone I interacted with has the best interest of you, the Golf Course Superintendent, on their mind at all times. It was great finally meeting many of the staff I have interacted with via email or phone over my 20+ years as a member of GCSAA.

The first speaker of the event was J. Rhett Evans, CEO of GCSSA. One word can describe him and his talk -impressive. Mr. Evans gave a very inspirational speech titled "Making a Difference". It had several key points that caused me to self-reflect and determine where I personally need to improve to help both our course and our association. I would like to share these key points with you today.

Key Points:

- Find someone to help you through life.
- Know that life is not fair and that you will fail often.
- Take some risks.
- Step-up when times are the toughest.
- Lift up those around you.
- ...and never, ever give up!!!

Personally, his speech was the highlight of a very educational and eye-opening trip. I can say with great confidence that we are in very good hands as an association, especially with a leader, like Mr. Evans, in place.

As the symposium progressed, I started to interact and network with Chapter representatives from across the country. That is when one thing came abundantly clear



-- how respected and admired your chapter and our Executive Director, Adam Ikamas, are. Many conversations started with "How did you do this?" or "How did you start that?" From our Industry Partner Program and the great relationship that we have with all of our valued Industry Partners, to our Social Media presence, it is safe to say that your chapter is on the leading edge of many things. The things we have become accustomed to in Michigan are just ideas at other chapters across the country; and not just smaller chapters, some larger chapters too. The credit goes to all of the respected and visionary boards before me. Without their leadership and Adam's determination, this association would be a shell of what it is today.

The rest of the trip was filled with many informative talks, along with information on how the GCSAA is working for you through promotion, governmental affairs, and education. I am about as skeptical as they come, but I

came away from the trip thoroughly impressed with our national organization.

In closing, I want to leave you with a couple ideas of things you can do to further strengthen the MiGCSA:

- Volunteer for a committee.
- Have an idea? Let us know how you want to implement it.
- Want a new educational event? Let us know and be prepared to help get it off the ground.

With your involvement in the MiGCSA, we will continue to improve this great organization for generations to come. Also, if you are ever in Lawrence, make sure you try the Duck Fat Fries at The Burger Stand. Have a great season!



Skip Hall shall@cdi-mi.com 616-350-0869



616.896.2008

Visit **rainbird.com/DefendYourTurf** to watch a video about how top courses like The Club at Admirals Cove are getting more from their irrigation—and their turf.



Follow us @RainBirdGolf 🎔

Using real-time diagnostics to prevent real-big problems.

That's intelligent.

Rain Bird innovation gives The Club at Admirals Cove total control. When The Club at Admirals Cove decided to renovate in 2015, they chose the Rain Bird® IC System[™] for its real-time diagnostics and single-head control. From running instant pass/fail tests and voltage checks to quickly controlling individual rotors from anywhere, they have the power to defend their turf with Rain Bird.



For a free Rain Bird IC System demonstration, contact Chad Kempf at 616-443-2449 or ckempf@rainbird.com.





Your Full-Service Turf Management Partner for 60 Years



People...Products...Knowledge...

From tee to green and beyond, Helena has been your full-service partner for 60 years. Helena offers a wide range of innovative products, including nutritionals, wetting agents, pest control products and more. To maximize the effectiveness of your inputs, Helena also provides professional application services, along with course mapping and analysis. To achieve the guality you desire, partner with Helena to enhance your turf management program.



Greg Ward

Brett Roberts 616.340.9557 | wardg@helenachemical.com 989.640.0415 | RobertsB@helenachemical.com

Helena Chemical Company

125 North M-140 | Watervliet, MI 49098 3477 S Graham Rd | Saginaw, MI 48609

More access, more content and more products are just a click away at www.helenaprofessional.com.

MCCProfessional F facebook.com/helenaprofessional

tered trademarks of Helena Holding Company. © 2017 Helena Holding Company. HPG0317P Always read and follow label directions. Helena, and People...Products...Knowledge..

Prevent & Treat LDS while Enjoying an Exclusive Offer Aristocracy

Aristocracy is a nonionic wetting agent and soil conditioner from Helena that prevents and treats localized dry spots (LDS) and other problem areas in turf to keep grass growing in top condition. Aristocracy can be applied year round to promote healthy greens, tees, fairways, lawns and sports turf. It remains active in the soil for up to 40 days after application, and it has shown impressive results in all turf types.



Take Advantage of Helena's 2017 Exclusive Aristocracy Promotion Program Dates: April 1, 2017 - June 30, 2017 Purchase 30 Gallons of Aristocracy & Receive FREE Costa Sunglasses or Jaybirds Wireless Headphones!

COSTA SUNGLASSES: Style: Brine, Tuna Alley, Fantail, Galveston, Caballito, Cocos; Lens Color: Blue or Black; Frame Color: Black or Tortoise | HEADPHONES: Jaybird Freedom Model

Greg Ward

Brett Roberts

616.340.9557 | wardg@helenachemical.com 989.640.0415 | RobertsB@helenachemical.com

Helena Chemical Company

125 North M-140 | Watervliet, MI 49098 3477 S Graham Rd | Saginaw, MI 48609

More access, more content and more products are just a click away at www.helenaprofessional.com.

Always read and follow label directions. Helena, and People...Products...Knowledge... are i

MCCProfessional F facebook.com/helenaprofessional

THANK YOU to migcsa's 2017 industry partners

SUPPORT THE COMPANIES THAT SUPPORT YOUR ASSOCIATION



FOR MORE INFORMATION ON THE INDUSTRY PARTNER PROGRAM PLEASE CONTACT THE MIGCSA AT INFO@MIGCSA.ORG OR 1-888-3-MIGCSA

2017 Spring Management Meetings



J. Rhett Evans, GCSAA CEO at the Northern Meeting

he 2017 education season started in Plymouth at The Inn at St. Johns on March 2nd. More than 80 attendees made it to see another great lineup including Ross Miller, Country Club of Detroit on Annual Bluegrass Weevils: What do We Need to Prepare For? Chris Wilczynski, C.W. Golf Architecture & Warwick Hills Staff on How to Develop a Successful Golf Course Architectural Master Plan, The Tall Grass Panel hosted by Rob Pylar featuring Brian Schweihofer, Brian Hilfinger, Eric Davey and Scott Rettmann. After a fantastic lunch Brian Mavis, Mavis Consulting covered "Can Solid Tine Aeration Only Work for Putting Greens?" The day closed out with Mike DeVries, DeVries Designs -Creating Great Golf.

The second of the three Spring Management Meetings was at Egypt Valley Country Club in Ada on March 16th. Much better weather greeted more than 80 members who attended to see Chris Wilczynski, C.W. Golf Architecture & Egypt Valley Staff on How to Develop a Successful Golf Course Architectural Master Plan. Scott Rettmann, Walnut Creek C.C. on Bunker Renovations. Brian Mavis, Mavis Consulting "Can Solid Tine Aeration Only Work for Putting Greens?". After lunch Brad Klein from Golfweek did a great presentation on The ABCs of Golf Course Architecture.



The Technician room was full thanks to Dave Ertl of Traverse City G.C.C.

15

The third and final meeting at Treetops on March 28th was a repeat of the great lineup that was cancelled last year because of a severe winter storm. The day started with Paul Koch, Ph.D. from the University of Wisconsin, Snow mold control; what works and why the hell didn't it work at my place? He was followed by Rhett Evans, CEO GCSAA on Moving Forward. After lunch Brian Mavis from Mavis Consulting again shared his research on Solid Tine Aeration

Only for Putting Greens. Jon Scott from



Golfweeks Brad Klein at the Western Spring Meeting

Nicklaus Design was scheduled to speak about Travels with Jack but a flu bug sidelined him, thankfully here in Michigan we are fortunate to have world class speakers a phone call away. Dr. Kevin Frank saved the day and presented on timely topics for Michigan.

Also at this meeting was another great technician track thank to Dave Ertl at Traverse City G&C.C. Thank you to Doug Veine, Bernhard Co. UK speaking on The Importance of Having Sharp Cutting Units. Mike Honeycheck, J.W. Turf, Diagnosing & Troubleshooting Manual Transmissions. Dean Morrison, Jacobsen, Tier 4 Updated



Technology. And finally, John Garlets, Spartan Distributors, Reel & Rotary Mower Quality of Cut.

The Tall Grass Panel in Detroit with Brian Hilfinger, Eric Davey, Scott Rettmann and Brian Schweihofer



We are the Midwest's premier John Deere golf equipment supplier. JW Turf has over 30 allied partners along with a used equipment department. We have a highly experienced and dedicated service and parts team and are currently celebrating 30 years as a company. Through a strong partnership with our customers, our diverse and talented team members are committed to earning your business every day.







And Many More...

Two Michigan Locations, Alto and Wixom

SOIL PHOSPHORUS AND POTASSIUM **RESEARCH ON BENTGRASS PUTTING GREENS**

DOUG SOLDAT, PH.D., Dept. of Soil Science

University of Wisconsin-Madison djsoldat@wisc.edu

ou've heard the line at least one hundred times before: "Apply phosphorus" and potassium based on your soil testing results." This is generally good advice. Phosphorus and potassium are held in relatively large quantities in the soil and soil testing can indicate if the soil amount will be able to meet the needs of the plant. However, before you can be confident in the soil test recommendation there needs to be a large amount of data supporting those recommendations. Unfortunately, generating data on soil testing is time consuming and expensive and therefore we simply don't have as much of it as we would like.

From 2008 – 2011, we conducted a study to get at the minimum Mehlich-3 soil test phosphorus levels needed for an established bentgrass green on a pH neutral sand. The root zone had no organic matter when it was constructed. Different amounts of phosphorus were applied to the plots and after about two years, classic phosphorus deficiency symptoms appeared. As you can see from Figure 1, plots with 5 ppm or less are turning purple, and plots at 7 ppm or above look healthy. From these data, someone with a very similar situation (bentgrass, low organic matter, neutral pH sand) could be even more confident in their soil test results. For example, if you send your soil sample to the Wisconsin soils lab for Mehlich-3 analysis, anything less than 25 ppm will come back as "low" and recommend you apply phosphorus fertilizer. However, this interpretation of 25 ppm is a conservative. From the data shown in Figure 1, you could be reasonably confident that your value of, say, 15 ppm is still well above the threshold for phosphorus deficiency. Soil testing labs have to be conservative with their recommendations because researchers haven't conducted enough research studies like the one I just described. If the research site was annual bluegrass on a silt loam with high organic matter (or another situation different from the original) the results very likely would be different - I'm not confident that the grass would be healthy at a level of 7 ppm. Until we have the data, we tend to err on the conservative side.



Figure 1. Phosphorus deficiency symptoms on an 'A-4' creeping bentgrass putting green on a sand root zone with pH 7 and very low organic matter. The Mehlich-3 soil phosphorus levels are shown for each plot.

So with that in mind, we began a similar study on the same site as soon as the phosphorus study ended but this time did it for potassium. First, we brought the phosphorus levels up and the grass recovered fully, and guickly. Then we stopped applying potassium to some of the plots and applied medium, high, and very high rates to the others on a bi-weekly basis (actual annual rates are shown in Table 1). We thought it might take two or three years for deficiency symptoms to show up as was the case for the phosphorus study. We are now entering the seventh year and are still waiting for something interesting to happen. The growth, color, and visual quality have been identical averaged over the six growing seasons (Table 1).

In our boredom, we stopped applying fungicides after a year or two to see how potassium applications affected disease. Over the years, it has become clear that potassium does not affect dollar spot in the least. We haven't had enough brown patch to know for sure, but it appears that low potassium treatments get slightly more brown patch than the high potassium treatments. However, what is most striking is that low potassium treatments have much less pink snow mold damage than the treatments receiving potassium fertilizer (Figure 2). Data in Table 2 show the pink snow mold damage since 2014 has always been significantly less severe in the control (and the calcium sulfate treatment) than the three potassium treatments. The three potassium treatments are often statistically similar to each other and we haven't noticed that the low rate is any better or worse than the high rate.

Table I. The treatments have not created significant differences in growth, color, or quality when averaged over the study period. Application rates shown below are annual totals. Different letters within columns indicate statistically significant differences according to Fisher's protected $LSD_{0.05}$.

Treatment	Average daily growth	Average color index	Average visual quality
	g/m ²	1-999	-9
Control	4.3 a	242 a	5.4 a
Calcium Sulfate @ 1.3 lbs/1000 sq. ft.	4.3 a	240 a	5.4 a
Potassium Sulfate @ 1.3 lbs/1000 sq. ft.	3.7 a	241 a	5.4 a
Potassium Sulfate @ 2.6 lbs/1000 sq. ft.	3.9 a	243 a	5.5 a
Potassium Sulfate @ 8 lbs/1000 sq. ft.	4.1 a	239 a	5.4 a



Figure 2. The plot on the left has not received potassium for the past six years. The plot on the right has received 1.3 pounds of K2O/1000 square feet annually during that period. The grass type is 'A4' creeping bentgrass maintained as a putting green on a sandbased root zone.

Table 2. The treatments resulted in significant differences in pink snow mold (or microdochium patch). Application rates shown below are yearly totals. Different letters within columns indicate statistically significant differences according to Fisher's protected $LSD_{0.05}$.

Treatment	Spring 2014	Spring 2015	Spring 2016	Spring 2017
	%	%	%	%
Control	0.5 b	2.0 c	4.8 b	19.0 b
Calcium Sulfate @ 1.3 lbs/1000 sq. ft.	0.0 b	0.8 c	5.6 b	18.2 b
Potassium Sulfate @ 1.3 lbs/1000 sq. ft.	2.5 a	8.5 b	22.5 a	54.6 a
Potassium Sulfate @ 2.6 lbs/1000 sq. ft.	3.3 a	12.0 a	22.5 a	49.7 a
Potassium Sulfate @ 8 lbs/1000 sq. ft.	3.5 a	7.8 b	20 a	59.9 a

So this is an interesting development. As I discussed earlier, most soil test reports will err on the conservative side – i.e. you'll get a recommendation for phosphorus, even when it's likely that your soil is not truly deficient. There is thought to be little to no harm in applying a little bit of extra phosphorus. However, it is apparent that for potassium, conservative soil test guidelines are likely increasing snow mold damage on bentgrass. Potassium is often thought of as a stress nutrient. It has been implicated in traffic stress, heat stress, cold stress, and disease stress. Those perceptions, coupled with conservative soil test recommendations have led to the over-application of potassium fertilizers on bentgrass. Our research suggests that there are negative consequence of excess potassium, other than the time and money that is wasted when the nutrient is applied in excess of the minimum required. Some folks have expressed indifference to these results because of the well documented ability of fungicides to control snow mold disease. But a time may come when pesticide restrictions force managers to rely on ecological and cultural tools alone to manage pests. The more information we have, the better prepared we will be.

It is very important to highlight the specificity of these results to bentgrass. Researchers at Rutgers have clearly documented that low potassium levels can result in increased winter kill and summer anthracnose damage to annual bluegrass (Schmid et al., 2006). This is the frustrating aspect of soil test calibration work - the results may differ from one grass to the next, which further complicates the interpretation of soil tests. However, on the bright side, I think these differing results have provided an opportunity to use potassium to manage for the type of grass that we want to maintain. If a golf course superintendent has a pure stand of bentgrass, keeping potassium levels low may be a good strategy to keep annual bluegrass from invading. On the other hand, a manager with primarily annual bluegrass should use the latest data to make sure potassium requirement of annual bluegrass are being met to minimize anthracnose and winter kill.

In summary, if your soil test says your soil is low in a nutrient, and your grass looks healthy, it is more likely that the soil test interpretation is wrong. I recommend following the Minimum Levels for Sustainable Nutrition by Pace Turf. These are the most research-based soil test interpretations that we have at the moment, but still have some of the disadvantages that affect other soil testing interpretations in that they lack specificity to a particular species and soil type. If you are growing bentgrass on sand, I think there are good reasons to think twice before applying potassium – especially if annual bluegrass invasion is a concern. Continue to support local soil test calibration research. The research takes time and only directly affects a small group of managers but overtime this work will be critical for improving our nutrient use efficiency.

References

Schmid, C.J., J.A. Murphy, B.B. Clarke, M. DaCosta, and J.S. Ebdon. 2016. Observations on the effect of potassium on winter injury of annual bluegrass in New Jersey in 2015. Crop, Forage & Turfgrass Management. DOI: 10.2134/ cftm2015.0170.



GOLF COURSE DRAGONS

BY PAUL ALBANESE, ASGCA

Where did the "form" of golf come from? Why sand bunkers? What about tee "boxes"? As mentioned in the last column, in many areas of design, the concept of

"form following function" is prevalent; golf design is no exception.

The sport of golf began on the linksland of Scotland. Well, actually, it can be argued that golf began in Holland via the game Kolven, played on ice. And, when the Dutch came to the Edinburgh ports in Scotland for trade, they would play a derivation of their home country sport using rocks and Kolven sticks on their way to town. The game started simply as a one on one contest based on the practice of another sport, endeavoring to put a round object into a hole before one's opponent. The forms of golf begin.

Before long, as golf historians note, one of the first formal creations of the game evolved: the hole itself. The original holes were believed to be rabbit holes that were prevalent throughout the linksland on which golf was relegated. These golf holes would become larger in diameter and lose their "roundness" over time. A more standard size and sturdier "form" of a golf hole was deemed more fair to the game. And, supposedly, that is when a golfer of unknown origin decided to imbed a drain pipe into the ground resulting in the 4.5 inch size hole we use today. (How I often wish that ancient player grabbed a 10 inch pipe to use that day!)

As the game evolved, so did the forms of the game. Well known by many golfers and design historians are how the forms of bunkers began; via sheep and livestock burrowing into the leeward side of hills and knolls to block themselves from the piercing Scottish wind. This action would cause the turf to scrape away, leaving a patch of messy mud, proving especially difficult to play from with a feathery golf ball. The always resourceful Scots simply toted some sand from the nearby beaches and placed it in these spots, and the first "sand bunkers" were formed – as a reaction to a need for function.

Bunkers, at the outset, continued to be formed primarily out of practicality versus any true golf strategic decision. Many sand bunkers on the Scottish linksland were simply located where golfers hit many of their shots. The many divots created by golfers iron shots caused the similar muddly depressions formed by livestock, so again, sand was used to make those areas more playable – i.e functional.

Livestock and animals were also a key reason for why golf is played on turf and at different heights of cut. As golf historians have shown, golf was relegated to the linksland of Scotland because that land was deemed less tillable and agrarian friendly; the land townspeople let their livestock graze and rabbits abound. As the game evolved, golfers would invariably choose to play on the areas on which golf balls could be seen better, which were where the livestock liked chew the links grasses low. And, they also noticed that the best place in which to site the actual hole into which to putt was best suited where the rabbits chewed the turf even lower, allowing the balls to roll more smoothly. Hence the birth of the greens and fairways.

As can be seen, the forms of original golf were explicitly derived from the function of nature. And, as the game continues to evolve throughout its first two centuries, the forms become more and more man influenced. More on that in the next two editions.

Paul Albanese, ASGCA is a principal with Albanese & Lutzke, Golf Course Architects/Construction Managers. www.golf-designs.com paul@golf-designs.com



MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | WWW.MIGCSA.ORG







Mark Ostrander

Mark Ostrander has been the Golf Course Superintendent at The Moors Golf Club in Portage for the last 16 years. He takes the helm of the MiGCSA as the 9th President in the chapter's history. He has two children Molly (15) and Matthew (11). He is a graduate of Michigan State University Turfgrass Program.

- . HOW DID YOU BECOME INVOLVED IN THE GOLF BUSINESS? I originally went to University of Michigan to become an Oral Surgeon. After two years, I decided that this path wasn't for me. I transitioned into architecture with the dream of ultimately designing golf courses. I was encouraged to meet with a superintendent to discuss this path. That superintendent, Jeff Holmes, was a friend of my dad. Jeff suggested that I work on a golf course to get a feel for the maintenance side before trying to design one. So, I took Jeff's advice (one of many times) and worked for him for two years. The rest is history.
 - a. WHERE WAS THE FIRST COURSE YOU WORKED ON? Egypt Valley C.C. What was your first job on that course? First and only job was cutting cups and hand watering greens. The Ridge superintendent at the time was Andy Meyer. When I would "complain" to Andy that I wanted to learn how to mow, he told me that if I wanted to do this for a living, I needed to spend all of my time on the greens. Great advice to this day. When did you know that this was a job you wanted to do as a career? About a week after I started
 - b. WHAT WAS YOUR FAVORITE JOB THAT FIRST SUMMER ON A COURSE? Cutting cups for the Senior tour event was pretty cool. Watching the Rules Officials decide cup placement was a mystery to me. Little did I know that they were just a couple of retirees enjoying their free coffee and donuts.
 - c. WHAT COURSE DID YOU GO TO AFTER COLLEGE? Point O' Woods C.C. Who was the first Superintendent at that course? Harry Schuemann. What did you learn from that Superintendent in the first year? Accountability. Harry held you accountable for everything you did. He led by example. He was the first one to get to the course in the morning and always the last one to leave. Hard work was the only way to survive.



20

- 2. WHAT ARE YOUR HOBBIES OR SPECIAL INTERESTS? Coaching and all things kids.
- 3. WHAT IS THE MOST DIFFICULT PART OF YOUR JOB? The labor shortage and turnover of staff. 15 years ago, this part of the job seemed more automatic. The past few years, we have had many bodies come in and out of the crew. This eats up a lot of time for training and the margin of error becomes much larger.
- 4. WHAT IS THE EASIEST PART OF YOUR JOB? Waking up in the morning. I truly enjoy what I do.
- 5. WHAT DO YOU SEE FOR THE NEXT GENERATION OF SUPERINTENDENTS? I believe there will be a ton of technology. Days will be filled with analyzing data and building programs whether it is for your mowers or your irrigation. Nothing will replace being in the field but I believe all the technical information will come from sensors and GPS imagery.
- 6. WHO INFLUENCED YOU THE MOST ABOUT TURFGRASS MANAGEMENT? This is hard to say. I have worked for three outstanding superintendents in Jeff Holmes, Harry Schuemann, and Ron Fox. Each one of them was completely different. I took what I believed was the best from each of them and molded myself form that.
- 7. WHAT IS THE MOST VALUABLE THING YOU HAVE LEARNED IN THE GOLF COURSE MANAGEMENT PROFESSION? That there is more to life than maintaining a golf course. We are all our own biggest critic. No one cares as much as we do. You have to let some of that go.
- 8. HOW DO YOU RATE IMPORTANCE OF THE SUPERINTENDENT'S ROLE AND INFLUENCE IN THE GOLF INDUSTRY? I believe that we set the standard for our facilities. In order to be in business, you must have a product to sell. We are responsible for producing the product. Our obsession with creating the best product we can is often based on pride and nothing else. It takes a pretty special person to operate that way.

- 9. WHAT IS YOUR OPINION OF THE ROLE OF AN ASSISTANT SUPERINTENDENT? He is the captain of your team. As we get pulled further away from the field, the importance of this position grows. I have had the privilege of working with four different assistants. I always hate to see them go as I know the value that they bring to the table.
- WHAT IS YOUR OPINION OF THE ROLE OF THE GOLF COURSE MECHANIC/TECHNICIAN? Equipment technicians are crucial. Good ones can fix and create anything. Bad ones can cost you valuable time and money. I am grateful for ours every time I attempt to repair something.
- 11. WHAT IS YOUR BIGGEST PET PEEVE CONCERNING GOLF COURSE ETIQUETTE? I have a few that make my skin crawl. I think the worst is when you see a large divot just lying in the fairway. Who does that?
- 12. WHAT IS YOUR FAVORITE SPORTS RELATED MOVIE? Slapshot, nothing beats the Hanson Brothers style of hockey.
- 13. WHAT IS YOUR FAVORITE NON-GOLF SPORT? Hockey, I have always had a little Happy Gilmore in me. I loved playing golf growing up but hockey has always been my passion.
- 14. WHAT DO YOU DO IN YOUR SPARE TIME? I have coached hockey at various levels for the last 15 years. Coaching can be extremely rewarding and it fills the void most of us experience come November.

15. DO YOU PLAY GOLF? WHAT IS YOUR HANDICAP? I have played golf all of my life. I grew up playing at Kent CC which often time gave Keith Patterson headaches. I used to be much better and more competitive. I qualified for the GAM Junior championship as a child. I also played Varsity golf for four years in High School. With young children, I haven't been able to play the game as much, therefore, the game isn't quite as fun. My kids have fallen in love with the sport which is my favorite way to play now. I have dipped to a 10 handicap. This is likely higher but when you only



post 3 rounds a year, it takes time for the needle to move.

- 16. WHAT IS YOUR FAVORITE GOLF COURSE THAT YOU HAVE PLAYED? One of my favorite golfing experiences was taking a trip to Ireland with my father. While there, we played several courses. My favorite of which was Ballybunion. This is easily the most natural, beautiful course I have ever stepped foot on. I spent most of my time on the sides of dunes. We felt sorry for the caddy that we were sharing as it was quite a workout for him.
- 17. WHAT GOLF COURSE YOU WOULD LOVE TO EXPERIENCE ONCE IN YOUR LIFETIME?

Augusta National. Like so many others, I grew up watching every hour of the Masters. The tradition that surrounds that tournament and course is what the game is all about. However, I would fear that playing it would ruin the image for me. Most of the areas I would be are not likely shown on television often except maybe McIlroy's infamous tee shot on 10. I could see myself there.

18. WHAT IS YOUR FAVORITE GOLF CLUB IN THE

- **BAG?** My favorite and least favorite at the same time is my driver. Nothing feels better than a driver on the screws. I swing for the fences. I feel like it is the only place in golf that allows you to let out some aggression, like a slap shot! Where did you shoot your best round of golf and what was the score? My best round ever was at Railside in Grand Rapids when it first opened. I shot a 70. The funny thing is that it was a day after a state tournament in golf in which I shot in the 80's. A day late I suppose.
- 19. WHAT IS YOUR FAVORITE PIECE OF EQUIPMENT YOU HAVE IN YOUR ARSENAL FOR GOLF COURSE MANAGEMENT? Anything

that aerifies. We have a Planet Aire which has proven to be very useful to vent the greens with no disruption. We try to do this at least monthly which helps the greens breathe and reduce any upcoming stress. The process also allows for water to penetrate into the profile better. Look out for a dry day though. The slits made by the machine will be wide open as much as 10 days after.

- 20. IF ONLY ONE PLANT PROTECTANT WERE AVAILABLE ON THE MARKET, WHAT WOULD YOU HAVE IN YOUR TANK? This was an easier question a few years ago. Since then, I have figured out that all plant protectants have a limited, useful lifespan. It is very important to be aware of the windows in which the turf is actually being protected before it is too late and you are spraying a product with little efficacy.
- 21. IF YOU HAD A MULLIGAN IN A TOTALLY DIFFERENT CAREER CHOICE, WHAT WOULD IT BE? I had originally set out to be an Oral Surgeon. When I first went to school, this was going to require way too many years of school and I wasn't interested in that at the time. During a pivotal discussion with my father, he recommended that I choose a career that I was passionate about. This proved to be excellent advice as I have enjoyed the adventure thus far.
- 22. WHAT ONE PIECE OF ADVICE WOULD YOU GIVE TO A NEW SUPERINTENDENT? You are part of a business model. For success, it is important that you bring your expertise to the operation. However, do not ever lose site of the fact that it is a business. Try hard to remove any barriers for the golfers (your customer) that make up their enjoyment. Do your absolute best to minimize putting barriers in front of them. In almost all cases, it is their course, not yours.
- 23. HOW MANY CREW MEMBERS DO YOU HAVE ON YOUR GOLF COURSE MAINTENANCE STAFF? We have 2 other full time staff. During the peak of the summer, we will carry 12-13 seasonal employees. This model is changing as it has become more difficult to find labor that is willing to work 45-50 hours a week. We are trending to more staff with fewer hours. Essentially splitting the shifts or roles.
- 24. WHAT TYPE OF IRRIGATION SYSTEM DO YOU HAVE AND APPROXIMATELY HOW MANY IRRIGATION

HEADS? The greatest hodgepodge of all time. We still have the original single row, hydraulic system with the big Toro 690's. We have added rough heads and green surrounds that are all electric. We did a conversion to E-Osmac a few years ago so that we could have radio control to our heads. We are updated our command system to Lynx this season. Outside of the pipe and heads, we are almost to modern day technology.

25. WHAT IS THE CULTURAL MANAGEMENT PRACTICE YOU COULD NOT DO WITHOUT?

After being here for 15 years, I believe the practice we couldn't live without is topdressing. A fresh layer of sand does wonder for green speed, trueness of the putt, as well as protecting the plant. There are times in the summer that you can just tell that the greens are begging for that new sand. They always seem to behave better and stronger after a good topdressing.

23

- 26. WHO IS THE GREATEST INFLUENCE IN YOUR PERSONAL LIFE? My father has been for my entire life. We spent tons of time together as I was growing up. As I started my career and family, it was harder to make that time. I was given the gift of spending a lot of time with him during his last year of life. I have always been grateful for everything he has taught me.
- 27. NAME ANY THREE PEOPLE WHO WOULD MAKE UP YOUR "DREAM SCRAMBLE TEAM". My Dad, daughter, and son.

5 THINGS PEOPLE MAY NOT KNOW ABOUT ME

- 1. I am a very private person and this exercise is against everything that I am
- 2. I bleed blue. I was raised a Michigan fan and attended U of M for two years. I cheer for Sparty
- 3. I am obsessed with Navy Seals
- 4. I was chosen for the "Dream Team" for Michigan
- Only hole in one I have is in disc golf

Same As Floratine ???

Affirm 0.9 oz 14 days

529 Jdays

Spectro 3.6 oz 14 days

28364 33 oz 14 days

Floratine

Program 1 days

REAT-LAKES TURF

Eleven consecutive years of trials at Michigan State University say otherwise. **Floratine treatments have** the lowest fungicide input of any research plot, yet have among the highest color, quality, and health ratings. That's what you get from quality nutritional products.

MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | WWW.MIGCSA.ORG





Shane Barney

Shane Barney been with Nufarm for 6 months as the Regional Sales Manager for the Great Lakes. He lives in Carmel Indiana with his wife of 16 years Teddi and their children Victoria (22), Grace (14), and Dmitry (9). He graduated from The University of Florida with his Bachelors of Science in Plant Science.

HOW DID YOU BECOME INVOLVED IN THE GOLF BUSINESS?

I was employed with SePRO Corporation for several years as the Marketing Manager when we re-introduced Cutless PGR to the golf market.

WHAT ARE YOUR EXPECTATIONS FROM THE MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION?

My expectation of the MiGCSA is to be ambassadors of the game of golf to the residents and visitors to Michigan. We know that golf courses provide much more to our communities than just a playground for golfers. We need to continue to promote the many benefits of maintained green space to the masses.

WHAT IS YOUR MOST EMBARRASSING MOMENT DEALING WITH A CUSTOMER?

By far my most embarrassing moment when dealing with a customer actually wasn't with one customer, but with a room full of close to 50! During a presentation discussing weed control, I misspoke and used the word "defecation" in place of "desiccation"! Big difference.

WHAT IS YOUR BEST ADVICE TO DECISION MAKERS WHEN DOING BUSINESS?

There is never a wrong time to do the right thing. In other words, if we always make every attempt to do what's right, things seem to work out for the best. Often times we spend too much time looking at the dollars and cents instead of simply doing what is right in the situation. If we do what is right, the money usually takes care of itself.

WHAT IS THE MOST REWARDING PART OF BEING IN AN INDUSTRY SUPPORT ROLE?

I love being able to help others succeed even in the smallest of ways. It is my passion.

INDUSTRY PROFILE



Grow a better tomorrow.

WHAT IS YOUR BEST SUCCESS STORY?

My best success story to date is that I believe my wife and I have raised three well behaved, polite, intelligent and caring kids. This, in my opinion, is any parent's greatest success story.

WHAT DO YOU ENJOY MOST ABOUT YOUR POSITION?

I enjoy helping people of various backgrounds be successful. Whether it is helping a Golf Course superintendent solve a growth regulator issue or a Lawn Care Operator get better control of difficult to control weeds, I truly get excited to help them work through and solve challenges.

WHAT ARE YOUR TRAVEL TIPS FOR THE LESS SEASONED TRAVELER?

Enjoy every minute of the journey. I have been fortunate to travel the world both in the military and in my personal life. My biggest tip is to get off the beaten path and experience this big world. You'll find that no matter where you are, People are People, and they really want to share their culture with you.

HOW MANY DAYS OF THE YEAR ARE YOU ON THE ROAD?

I am on the road approximately 3-4 days per week, but on average only 2 nights away from home per week. Balancing this time away from home is by far the most difficult part of my job so I make every effort to be home as much as possible.

WHAT ARE YOUR HOBBIES OR SPECIAL INTERESTS?

I have many hobbies (my wife says too many). I enjoy woodworking, fishing, shooting, camping with the family and college football. Go Gators!

HOW MANY MILES DO YOU DRIVE IN A TYPICAL YEAR? 40-50,000 miles per year

WHAT WOULD YOU CONSIDER THE VERY BEST PRODUCT YOU OFFER AND WHY?

This is a tough question, because I believe that every company has great products or they wouldn't be in business. People are the real differentiators and I don't believe that the smartest people are always the most valuable. I strive to be knowledgeable, honest, and reliable to my customers. I feel that if I bring these traits to the table along with our great products, then our customers will be successful.

WHY DID YOU CHOOSE THE PROFESSION YOU ARE IN?

I never thought that I would be in chemical sales, but am very glad that this is where I have landed. I grew up in Nebraska thinking that I would end up being an Agronomist in the Corn/Soybean industry. After attending the University of Florida, I realized that there was more out there than Corn and Soybeans! I ended up taking a position as a grower at a plant nursery in South Florida which I never imagined. Eventually a chemical distributor approached me to gauge my interest in sales. One thing led to another and here I am nearly 18 years later.

WHAT IS YOUR FAVORITE ITEM TO SELL/DEMO?

My favorite product to demo is Anuew plant growth regulator (PGR). I love the fact that PGR's behave differently on nearly every golf course depending on each course's cultural practices and grass varieties. This brings new challenges with each situation and I love that.

HOW LARGE IS YOUR TERRITORY?

I am responsible for Indiana, Michigan, Ohio, Kentucky, Western PA, and West Virginia.

WHAT IS YOUR FAVORITE GOLF COURSE TO PLAY?

Believe it or not, my favorite course to play is my hometown public course, Brookshire CC in Carmel,

25

IN. I love that it is local and I get to see what a great job the superintendent does on a limited budget.

IF YOU HAD TO HAVE A DIFFERENT PROFESSION, WHAT WOULD IT BE?

I would love to have been a football coach. I think in hindsight that this would have been a truly rewarding profession. I have a passion for helping others succeed which is really what coaches are responsible for doing.

WHO IS YOUR FAVORITE GOLFER AND WHY?

Fred Couples. I love Freddy's outlook on life in general. I think that he "gets it". He understands that he has the unbelievable privilege of getting paid to play golf for a living! I love his laid back persona and the fact that he can hit it a mile with what seems to be very little effort.

IF YOU COULD TRAVEL TO ANY TIME IN GOLF WHEN WOULD IT BE AND WHY?

I would have loved to have been around to see the Arnie and Jack rivalry. What they were able to do with the equipment back then was remarkable.

HOW MANY CONFERENCES/EDUCATIONAL EVENTS DO YOU ATTEND PER YEAR?

I would say that I attend close to 20 conferences/ educational events each year.

HOW MANY ROUNDS OF GOLF DO YOU PLAY A YEAR?

Not enough.

WHAT DO YOU THINK IS THE BEST EDUCATIONAL OPPORTUNITY/CONFERENCE THAT TURF CARE PROFESSIONALS CAN ATTEND?

I believe turf care professionals would benefit from attending more general business management seminars vs. the standard agronomic events. I think that this would really give us a more well rounded knowledge of our facilities and how we can improve them.

HOW DO YOU THINK THE INDUSTRY WILL BE DIFFERENT IN 10 YEARS?

I think that our industry will continue to be pressured to do more with less specifically on the agronomic side. Today's consumers have access to more information than ever before and this will lead to them having a much louder voice on our agronomic practices. Whether this is a good thing or not can be debated some other time, but the fact that their voice will be louder is a fact so we need to be prepared to deal with it. We better find a way to use our inputs differently if we are to be successful in 10 years.

ARE THERE ANY NEW PRODUCTS ON THE HORIZON?

We (Nufarm) have been launching new products at an unprecedented pace the past few years with the introduction of Anuew PGR, Pinpoint Fungicide and Celero Herbicide coming to the market in the past two years alone. We will be introducing several more products in the next few years as well including a new herbicide and fungicide.

5 THINGS PEOPLE MAY NOT KNOW ABOUT ME

- 1. I served 4 years in the United States Air Force
- My dream vacation would be to go fishing in Alaska
- My favorite singer/musician is Waylon Jennings
- 4. I lived in Turkey for 15 months
- 5. Born and raised in Nebraska



We've got you Covered





With new Leaf-Cote[™] Technology, Exteris Stressgard offers improved product retention on the leaf surface – sticking where it's needed most – at the site of fungal activity. If you're looking to stress less over managing foliar diseases on your fairways, Exteris has your turf covered.

Get more coverage at backedbybayer.com/exteris-stressgard

SayerGolf @

Exteris Stressgard

Bayer CropScience LP, Environmental Science Division, 2 TW Alexander Drive, Research Triangle Park, NC 27709. 1-800-331-2867. www.backedbybayer.com. Bayer, the Bayer Cross and Stressgard[®] are registered trademarks of Bayer. ExterisTM is a trademark of Bayer. Not all products are registered in all states. Always read and follow label directions. ©2017 Bayer CropScience LP.

REALIZE ANUEW, SUCCESS







Anuew[™] Plant Growth Regulator slows vertical growth, is labeled for most managed turf areas, and now offers the first EPA approved label containing Growing Degree Day (GDD) model application instructions. Learn how we can help you grow a better tomorrow.

NUFARMINSIDER.COM

FIRST EPA APPROVED LABEL WITH GDD MODEL APPLICATION track it on GREENKEEPERAPP.COM

> ©2017 Nufarm. Important: Always read and follow label instructions. Anuew[™] is a trademark of Nufarm. Primo MAXX® is a trademark of a Syngenta Group Company.



Grow a better tomorrow.

FROM NATIONAL



SHANE CONROY

BY SHANE CONROY

Golf's charitable side is no secret to those in the industry. In fact, golf contributes almost \$4 billion a year (more than all other major sports combined) to charities across the world, many of those with no affiliation to golf whatsoever. This spirit of giving back was not lost at the 10th anniversary of National Golf Day which took place this past April in Washington, D.C. To celebrate this milestone, members of the golf industry took part in a national service project, held the day prior

to National Golf Day, at the National Mall, which was led by GCSAA's director of government affairs, Chava McKeel. Chava worked with Michael Stachowicz, turf management specialist for the National Park Service and a retired 25-year member of GCSAA, as well as members of the Mid-Atlantic GCSA to pull off this massive volunteer project. Over 100 individuals were on hand to spruce up the National Mall, most of whom were representing GCSAA. Some of the activities which took place during the national service project included: repairing irrigation heads, aerifying the National Mall turf plots, edging pedestrian paths, cleaning benches and spreading turfgrass seed to name a few. This project was one of the highlights of the week and allowed golf industry professionals, especially those from GCSAA, to continue golf's proud tradition of giving back. There are already plans to repeat and grow this project at next year's National Golf Day.

Following the national service project, National Golf Day commenced with over 200 individuals from the golf industry, more than 70 of whom representing GCSAA, meeting on Capitol Hill to advocate on golf's behalf. Being part of this important event was truly an honor and many positives came from the meetings with U.S. Senators, Representatives and their staff members. It was fantastic to be able to connect with passionate industry professionals from every facet of the golf industry and deliver golf's positive message to policy makers. This event has grown each of the past 10 years, and the effects of our advocacy is paying off.

In early June, the Michigan Golf Alliance works just as hard to put together Michigan Golf Day at the Capitol. This important event allows the Michigan golf industry to reach policymakers at the state-level and advocate on the significant economic, environmental, and health benefits the game provides. With a \$4.2 billion economic impact, and employing over 58,000 individuals across the state, Michigan's golf economy is a major contributor to the state's success. This year's event will take place June 8th in Lansing, MI and I hope you can join others from the golf industry, and represent MiGCSA to advocate on behalf of our great industry.

I would also like to thank and recognize Michigan's current Grassroots Ambassadors Doug Hoeh, Ron Dahlin, Jerome Blahnik, Ryan Moore, Rob Steger, CGCS, and John Fulling, CGCS as they help move the needle in golf's direction when it comes to important policy affecting our industry. They represent six of the 16 available GCSAA Grassroots Ambassador positions in Michigan, and each are working hard to promote everyone involved in our profession. Grassroots Ambassadors act as a resource for Members of Congress and House Representatives and are the 'goto' individuals for lawmakers and staff on golf course management issues. If you would like to be involved in the Grassroots Ambassador program, please do not hesitate to contact me, or anyone on the GCSAA government affairs team.

Best of luck as the season moves forward and I look forward to seeing everyone soon!

Shane









Michael Brown

Michael Brown has been the Assistant Superintendent at Walnut Creek Country Club since December of 2016. He is married to his wife Lauren, who he met at Boulder Pointe Golf Club in 2006 while she worked in the pro shop. They will celebrate their five-year anniversary this June. They have a son, Declan James Brown and they live in Royal Oak.

HOW DID YOU BECOME INVOLVED IN THE GOLF BUSINESS? I started in a

kitchen at a country club as a dishwasher. I hated every moment of it so the next season I found a job at Lake Forest Country Club in Hudson Ohio. I believe the first job I learned at lake forest was to rake bunkers. I was so eager to learn all the equipment so I worked hard and progressed quickly. At the time, I was struggling with a college decision. I remember asking Tom Bolon "how do you do this for a living" during aeration. I think he knew I was serious because who really likes shoveling plugs. I loved it. Tom wrote a recommendation to ATI in Wooster Ohio and I started my school there later that fall. My favorite job that summer was hand watering.

WHERE DID YOU RECEIVE YOUR

EDUCATION? I received my education from Michigan State University. I graduated in 2005. There's not a day that goes by I don't use a calculation of some kind. I would say I use math most often. After I left school I went back to a summer job a Fellows Creek in canton as a spray tech. I knew I was on the right track because my first paycheck came with a \$4/HR increase in pay. Dennis Nordling was the Superintendent. He was a great boss. He really sent home the importance of learning the chemicals and what they are used for and usage rates. I made leaps and bounds in my chemical knowledge and application skills from working for Dennis.

WHAT IS YOUR FAVORITE SPORT AND TEAM? I grew up a Cleveland

Indians fan but after moving to Michigan in 2001 I became a Tigers fan.

WHAT DO YOU DO IN YOUR SPARE

TIME? 99 % of my spare time is spent with my wife and son. There is never enough time with either of them. If I had enough time I would go fishing a lot more and go back to playing tournament Disc Golf.

DO YOU PLAY GOLF? WHAT IS YOUR HANDICAP? I love playing golf. I started to keep track while working at Boulder Pointe Golf Club but never played enough rounds. I still don't but by my calculations I am a 16.

WHAT IS YOUR FAVORITE GOLF COURSE THAT YOU HAVE PLAYED?

That is a really tough question. I think my favorite was probably Robinson Ranch which is just outside LA north of the valley. The only dessert course I have ever played. It's kind of unique when your teeing off and all you hear is rattlesnakes. I remember seeing signs everywhere "Retrieve ball at your own risk. Rattlesnakes!" I lost a lot





30

of golf balls that day. What golf course would you love to experience once in your lifetime? TPC Sawgrass. What is your favorite golf club in the bag? 7 Iron, I am most consistent with that club.

WHAT IS YOUR FAVORITE PIECE OF EQUIPMENT YOU HAVE IN YOUR ARSENAL FOR GOLF COURSE

MANAGEMENT? I couldn't do without my 125' hose. What piece of equipment would you like to add to your arsenal for golf course management? Dryject. If only one plant protectant were available on the market, what would you have in your tank? Clorothalanil. What is the oldest piece of equipment that is still being utilized in your fleet? We are lucky enough to continue to update our equipment lease package. Much of our stuff is very new. We do have a few Toro machines like a 72 Groundsmaster and Workmann that are still mostly operational. What type of irrigation system do you have and approximately how many irrigation heads? Toro Osmac, 2,500 heads. A new system would be great across the course the system in place especially on the West is very deficient in coverage and uniformity. What is the cultural management practice you could not do without? Topdressing, it is so important.

WHO MAKES YOU LAUGH THE MOST ON YOUR CREW

AND WHY? Marcello and Jesus. Those brothers are fun to watch and work with. Every day at the wash pad is a crapshoot on whether they will actually get along or not. It's a constant slur of vulgar words and challenges, but hey we never have to ask them to wash something twice.

IF YOU HAD A MULLIGAN IN A TOTALLY DIFFERENT CAREER CHOICE, WHAT WOULD IT BE? Professional Fisherman

IF YOU COULD CHANGE ANY GOLF HOLE ON YOUR GOLF COURSE WITHOUT REPERCUSSION, WHICH ONE WOULD BE THE FIRST? I would change the 1st green on the West Course. It's got the most awful mickey mouse green. It has 3 tiers and severe slopes which I am sure have too much mix on them as they burn up every day if not watched closely while hand watering.

WHAT IS YOUR FAVORITE FOOD OR RESTAURANT?

I grew up in Texas as a young child. I can't resist good Barbecue.

My favorite restaurant is Lockharts BBQ in Royal Oak. It's the most authentic place I have been in Michigan.

WHAT VEHICLE WOULD YOU DRIVE IF YOU HAD A MONEY TREE GROWING IN YOUR YARD? Likely another Silverado 2500HD. I don't have the need for fancy cars.

HOW MANY CREW MEMBERS DO YOU HAVE ON YOUR GOLF COURSE MAINTENANCE STAFF? We currently have 31 seasonal employees. That is our fully staffed number. We have one spot open for our mechanic to hire an

Assistant Equipment Tech.

WHO IS THE GREATEST INFLUENCE IN YOUR PERSONAL LIFE? My wife constantly makes me want to be a better person.

NAME ANY THREE PEOPLE WHO WOULD MAKE UP YOUR "DREAM SCRAMBLE TEAM". Dad(RIP pop) Brothers Brandon and Aaron

WHY DID YOU CHOOSE A TURFGRASS MANAGEMENT CAREER PATH? I had fun doing this a summer seasonal employee and I still do. I love going to work and dealing with each day's challenges and victories. I get great satisfaction out of providing a service and experience people will remember.

WHAT IS THE MOST DIFFICULT PART OF YOUR JOB?

Missing time with my family. Everything at work is minuscule in comparison. What is the easiest part of your job? Just being on the course. The early mornings are my minds playground. You just can't beat an early morning sunrise with your coffee and dog.

WHAT ARE THE BIGGEST ISSUES FACING ASSISTANT SUPERINTENDENTS TODAY? Competition for

Superintendent jobs. I guess you must really look at what you expect out of your career and where you want to end up. There have been plenty of jobs but I won't take a job just for the title of Superintendent. I am still waiting for the current generation of superintends to start retiring. I know I will be competing with even some of my friends for those jobs. It's about how to set yourself apart from the competition.

WHERE DO YOU SEE YOURSELF TEN YEARS FROM NOW? I plan on being well settled into my Superintendent

role somewhere in southeast MI.



WHO INFLUENCED YOU THE MOST ABOUT TURFGRASS MANAGEMENT, WHO ELSE INFLUENCED

YOU PERSONALLY? I can't really pinpoint just one Super. I have had all good ones. I guess I am lucky in that regard. I still talk with Scot Gardner the most out of my past Supers. The other person I look to for information and knowledge is Sue Shockey.

WHAT IS THE MOST VALUABLE THING YOU HAVE LEARNED IN THE GOLF COURSE MANAGEMENT

PROFESSION? Family time is much more important than any blade of grass will ever be.

HOW DO YOU RATE IMPORTANCE OF THE ASSISTANT SUPERINTENDENT'S ROLE AND INFLUENCE IN THE

GOLF INDUSTRY? I think our role is vital to any operation and our influence is more indirect. The supers are the thinkers and really drive the industry. Assistants tend to be the ones carrying out those thoughts in the form of work.

WHAT IS YOUR OPINION OF THE ROLE OF THE MECHANIC IN RELATIONSHIP TO THE ASSISTANT.

I have worked with many different mechanics. I am not currently in charge so we really are like assistants together just in different capacities. I certainly know what III expect when I make the next jump. Good mechanics are hard to find so don't rock the boat too much when you find one.

5 THINGS PEOPLE MIGHT NOT KNOW ABOUT ME

- 1. My dad and I won a Redfish tournament in south Texas. The Redfin Boat Tournament
- 2. I'm a good Disc Golfer
- 3. I have been to Italy
- 4. I left the golf industry for 5 years to manage a Landscape company before returning to work for Scott Rettmann at Walnut Creek CC
- 5. I love woodworking





WHAT IS YOUR BIGGEST PET PEEVE CONCERNING

GOLF COURSE ETIQUETTE? I hate finding cigarette butts. Hmmm...Garbage Can? If I were to smoke a bunch of cigs and dump them in somebody's office would they like it, doubt it. It is the same for us so please for the love of the game throw your trash out. My office is not the golfers dumping ground. Although most treat it as such.

WHAT ARE YOUR OPINIONS OF GREEN SPEED AND

THE GAME OF GOLF TODAY? Here at Walnut Creek we try to provide a golfing experience. Green speed is a relative term. It is on a course by course basis what the number should be for comfortable golf. We as superintendents have become too good at providing top notch putting green surfaces with a high consistent green speed number. I try not to focus on the number but how will the ball roll up and down slopes and is it fair.

IF YOU COULD CHANGE ANYTHING ABOUT GOLF COURSE MANAGEMENT, WHAT WOULD IT BE? The hours involved with running and operation of high expectations.

WOULD YOU RATHER BE A WELL-COMPENSATED ASSISTANT SUPERINTENDENT OR A POORLY

COMPENSATED SUPERINTENDENT? I would rather be a well-compensated Assistant. A title is just a title. As I stated before I would not take a job just to be a superintendent. There are many more factors that go into taking a job than just the desire to oversee my own course operation and crew.

WHAT ADVICE WOULD YOU GIVE TO AN ASPIRING

TURF STUDENT? I learned 99% of what I know by practical application. Stick with a good mentor. They will teach you more than any classroom. There are many great college turf programs around now so pick what fits you and go for it. I certainly recommend MSU. GO GREEN!!!!


NEW, ArmorTech Rotator Fungicide. Your "Go-To" product for Golf Course Fungicide Rotation.





As a multi-site mode of action contact Fungicide, ArmorTech Rotator will help you control the toughest golf course diseases like Dollar Spot and many more. Plus as a FRAC group 29 fungicide, it provides a new alternative for resistance management. Rotator can be used as a rotation partner for Chlorothalonil found in Armortech CLT 825 CLT 720 and or combined with Systemic Fungicides. ArmorTech Rotator is both a powerful and cost-effective fungicide for golf courses.







Corporate Office: 3751 Blair Townhall Rd Traverse City, MI 49685

Phone: 800-636-7039 Fax: 231-943-9092 info@triturf.com

Grand Ledge Office: 3562 Jefferson Hwy Grand Ledge, MI 48837

Phone: 1-248-474-7474 info@triturf.com



Your rainy-day plan for firm, healthy greens.



Don't let excess soil moisture drown your hopes of maintaining dry, playable surfaces. Rely on the unbeatable combination of Fleet[®] plus EarthMAX[®]. Fleet[®] increases water infiltration and hydraulic conductivity. EarthMAX[®] works below the surface to enhance root growth and vitality. The result? Top-to-bottom preservation of turf playability and health, even when higher moisture conditions are possible.



MIKE RUPP SE MI/NW OH 419-764-3422



TONY STALEY SW MI/ NW IN 574-340-1105



DOUG JOHANNINGSMEIER Oakland County/SE MI 248-302-2054



ANDY GILROY SE MI 586-917-3851



MARC MCCOY Western/Mid MI 616-902-6196



KIMBERLY ROULEAU Northern MI 989-370-5250



For details, visit harrells.com or call your Harrell's sales representative today at 800.282.8007.







2017 Spring Opener

The 2017 golf season kicked off with a great day at Spring Lake Country Club with our host Adam Gaver and his Assistant Nathan Beach. It was a beautiful sunny warm day for more than 60 attendees. The shotgun start went off at 10:00 and the group was in by 2:30 and treated to a fantastic spread of food prepared by the SLCC staff. The golf course and service was phenomenal all around. Here were the results from the day.

Closest to the pins winners:

Kevin Adams & Brandon Thompson

Long Drive: Greg Lovell

Winning Teams:

I st place Josh Teitsma, Craig Kooeinga & Kevin Adams 2nd place Jeff Hopkins, Jim Johnson, Gabe Ross & Tony Spinks. 3rd place Scott Wilkinson, Brian VanderPloeg, Andrew Dykstra & Graham Rayburn. MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | WWW.MIGCSA.OR

A MESSAGE

olf has many consistent elements..and some not so consistent. Is it possible for those two worlds to coexist? To some.. consistency is important and crucial. The same green speed, same yardages for total 18, water in every ballwasher, etc. It would certainly seem the rules of golf are a standard that should be the most consistent. The game is designed to be an honorable sport that demands the participants call penalties on themselves when they have broken a rule. Consistency would have to be imperitive. However, with massive HD TVs, video recorders and access to the internet professional golfers are now at the mercy of everyone watching, waiting for that moment they can "catch" a mistake and call it in. It is impossible to be consistently fair to one participant who is in contention and being watched by everyone, while the fellow that teed off 6 hrs earlier is racing around the course in order to get on the plane to the next stop. In an effort to enforce all the rules to the letter to which they were written and please everyone who may question the ruling if not enforced, some unforced errors have happened at some of the most recent golf tournaments.

What does that have to do with the MTF?

Updates on the MTF will be addressed below, but first some advice that has no research ..except some common sense. As we head into summer most of you will have a boss or two who will be willing to offer suggestions and remarks on how to improve your facility. Energies are high, expectations are increased and the list of "to do" items is easily a "high priority" of "what you should do." As the list grows, I would like to offer a quote that many should remember that may be more important than any fungicide you would like to experiment with:

> "I cannot give you the formula for success, but I can give you the formula for failure, which is: Try to please everybody." --Herbert Swope

Each of you are professional turf managers.

The most successful turf managers know when to say no. Pleasing everyone is impossible. So don't try being the first.





Have a great summer, and lets pray for mild temps!!

TeeTimes 4 Turf

Many thanks to all the golf clubs that participated in our annual on-auction "Tee Times 4 Turf" that was held April 30 – May 14. This was our 5th year of hosting the event and each year has seen increased revenue from those who participated... both as donors as well as bidders. As of this writing the final financial figures were not available, however, based on our initial response from bidders and supporting clubs we should have another successful auction.

TeeTimes4Turf is one of the most direct ways that MTF members, or anyone interested in supporting turf research, can do to help Hancock Turf Research Center. Nearly 1/3 of all our funding of research is now provided by the on-line auction and it would not be possible without the support of the clubs . We encourage all those who believe the auction is a worthwhile way of supporting the Turf Team to contact the MTF and allow us to put you on the list of clubs for next year.

Again, thank you, to all clubs who offered their facilities to be bid on for this years auction.

Founders Society

At our March meeting the Board of Directors approved a motion from the Founders Society to purchase of a fraze mower that will be used for turf renovation and verti-cutting of research plots at the Hancock Center. In addition to plot renovation, the fraze mower will be used to research renovation practices for golf course tees and fairways and athletic fields where replacing the soil rootzone may not be necessary in converting from one turf species to another.

The Founders Society Endowment was established to provide equipment for research and upkeep of the

Hancock Turf Research Center on the campus of MSU. The Founders Society Chair and MTF Treasurer Doug Johanningsmeier, along with the Founder Society committee is charged with reviewing requests from the Turf Team and making recommendations regarding those requests to the MTF Board of Directors. The MTF is fortunate as well to have Doug in place on the Executive Board. His insight of the finances and overall knowledge of all the functions of the MTF has been significant.

LaFontaine Golf Outing

Our Executive Director, Gordie LaFontaine, will again host his annual Golf Fundraiser to benefit the Endowment that bears his name. This year's event will be held, **Thursday June 22**, at the **Coyote Preserve Golf Club** in Fenton and we are hopeful to have a full field of players. The scramble event is always a highlight for all those attend and the June date is new so please keep it in mind when registering. Registration can be done by visiting our website at: michiganturfgrass. org. Tee sponsorships are available at various levels and registering as a sponsor can also be done on our website.

The LaFontaine Endowment is one of the three endowments that the MTF maintains to benefit turf research. This endowment was created to establish a stable source of funding for basic research in the field of turfgrass science. Basic research tends to be longer term, more involved and more expensive that applied research.

Gordie extends thanks all those who have participated and sponsored this event over the years and he hopes this year's affair will be the most successful ever. He would also like to thank the Osburn Family for hosting the event at their golf club. The Osburn Family has always supported the MiGCSA, the MTF and the entire golf industry in Michigan and we are fortunate to have them as partners in our industry. Thank you for your years of support!

Turf Team update

Many of you have commented positively on the updates, facebook posts and twitter feeds that we have been communicating. The MTF has a goal to expand its messaging and we believe you will notice improvements at many levels. I would like to thank Dr. Kevin Frank for his timely Turf Team Updates and the consistent message that it provides. Dr. Rogers has always been active with his twitter and we will be re-tweeting items as the summer progresses. It was Dr. Rogers who requested the fraze mower for Founders Society consideration and it was an excellent request that will benefit the Hancock Center for many years. I would also like to thank and congratulate, Dr. Thom Nickoli for his recent trip to St. Andrews. Dr. Nickoli received a request to speak at the home of golf and I understand he represented the MSU Turf Team extremely well. Thom also captured a quick video of Gordon Moir (Greenkeeper – St. Andrews) that we will be sending out occasionally as a tickler for the 2018 MTF Turf Conference. Gordon will be one of the speakers at the conference and I am sure many of you will be interested in what he has to say. Dr. Frank and Dr. Nickoli are to be thanked for their efforts at both ends of the ocean for that one.

In closing, the MTF encourages each of you to renew your memberships and support turf research at MSU. There are many ways to renew and you can always reach us with questions at: miturfgrass@gmail.com

Carey Mitchelson

President – Michigan Turfgrass Foundation

Wet Spring and Flooded Turf

BY KEVIN FRANK

March and April were two of the wettest months on record in Michigan. Frequent, heavy rains blanketed Michigan throughout the spring, resulting in streams and rivers overflowing their banks and flooding many low-lying areas. In most cases as floodwaters receded turf showed minimal if any damage. Factors that determine turf survival under water include turfgrass species, submergence duration, submergence depth, water temperature and light intensity.

Turfgrass species differ in their ability to survive flooding. Unfortunately, there are no hard fast numbers such as Kentucky bluegrass will survive five days and creeping bentgrass 15 days under water. Instead, species have been assigned relative submersion tolerance ratings: creeping bentgrass-excellent; Kentucky bluegrassmedium; Poa annua and perennial ryegrass-fair. As submergence depth increases, the potential for injury increases. If leaf tissue is above the water line-even just a little bit-turf will probably survive. On golf courses, many have observed creeping bentgrass floating on the edge and even growing out into a lake. This is a perfect example of turf surviving when partially submerged. The final two factors affecting turf survival are water temperature and light intensity. Both of these factors work in our favor in the spring, as air and water temperatures are cool. Flooding during summer months when

temperatures are higher often result in damage to turf when it's submerged for even a short time.

Following flooding, turf may be yellow or brown. The discoloration is related to turf losing its ability to take up nutrients. It doesn't take long once turf is submerged for soil oxygen levels to decline and root hairs to begin to die. As the root system becomes impaired, nutrient extraction and water uptake will be limited. Keep this in mind once water has receded as turf may benefit from a fertilizer application.

To assess if submersion has caused injury, extract several plants from the flooded site and cut a horizontal cross section through the crown. If the crown is white and firm, it has survived. If the crown is brown and mushy, it's dead. Finally, for those areas that were flooded due to a stream or river overflowing a bank, you are probably dealing with silt or soil deposition. Removal of soil deposition can be difficult and seeding into deposited soil can be an option. Once you've successfully reestablished, soil cultivation such as core aeration or slicing will benefit the turf by breaking through deposited soil layers to facilitate rooting and water infiltration.

WITH YOU WHEN THE GOING GETS ROUGH.

No matter how good you are, sooner or later, you'll find yourself in a tough spot. We'll help get you back on the fairway. With decades of experience, we will use our unmatched product selection to develop a custom solution for your course. From innovative problem-solving to exclusive training, discover expertise that can only come from the green industry's No. 1 supplier. Partner with us, and let's grow Stronger Together.



MiGC

SiteOne.com

JEFF HOLMES, CGCS, Awarded 2017 GAM Superintendent Award of Merit

The 2017 Golf Association of Michigan Superintendent Award of Merit was presented to MiGCSA Past President and Class A Member at Egypt Valley Country Club Jeff Holmes, CGCS, at the GAM Annual Meeting on May 1st at Flint Golf Club. Jeff received this award during lunch served from 12:00 – 2:00. Jeff joins Ted Woehrle, Clem Wolfrom, Fritz McMullen, John Fulling, Jay Eccleton and Steve Cook as recipients of this annual award.







WINFIELD[®] UNITED

Helping You Win

Service. Solutions. Insights.

When it comes to your course, you need a partner that's consistent. Count on us for the right products and the technical insights you need to help your business thrive.

Call your WinField[®] United representative today to learn how we can help you win.

Nick Binder - *Professional Sales Representative* (517) 974-4209 or ndbinder@landolakes.com

adjuvants • dyes/wetting agents herbicides • insecticides • fungicides fertilizers • micronutrients

winfieldunitedpro.com



WinField is a registered trademark of Winfield Solutions, LLC. © 2017 Winfield Solutions, LLC

Complementary products. Convenient Multipaks.

Available for purchase all year long, Multipaks are the best way to save on complementary products that enhance your agronomic program. From our latest innovations to industry-leading brands, you can find a Multipak that enhances your turf. For a complete list of offerings, visit GreenTrust365.com/Multipaks

For more information, contact: Adam Garr | 248-914-4902 adam.garr@Syngenta.com

THE NEWEST MULTIPAKS AVAILABLE:









ortant: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please e or local extension service to ensure registration status. Divanem is a Restricted Use Pesticide. Divanem," Heritage Action," GreenCast; a Frame and the Syngenta logo are trademarks of a Syngenta Group Company. Secure® is a registered trademark of Ishihara Sangyo Kaisha. All other are the property of their respective owners. MW1LGG7011-Multipaks-P1 04/17

Best Management Practices (BMP)

GCSAA, with the support of the USGA and PGA Tour have developed a Best Management Practices (BMP) Planning Guide and Template which was finalized, and introduced at the Golf Industry Show in Orlando, FL this past February. The BMP Planning Guide is an online resource which will allow for the development of best management practices programs for golf courses at the state-wide level.

While BMP programs are not a new concept (several GCSAA chapters and states have implemented BMP programs in the past, including Michigan), the need for state level BMP programs, and, eventually golf facility BMP plans are constantly increasing. Continuously increasing regulatory pressures on the golf industry means it's even more important for the industry to come together and actively endorse the need for best management practices. Utilizing the work which has already been completed by states and chapters, GCSAA presents the opportunity to develop uniform best management practices throughout the country; which will provide continuity to our industry.

This program has been in the works for many years and came to fruition when GCSAA received support from the USGA in 2015, through the Environmental Institute for Golf (EIFG), to develop the BMP Planning Guide and Template. GCSAA connected with personnel from the University of Florida with turfgrass and horticultural knowledge, and who had experience developing the Florida BMP program to compile BMPs which would form the foundation of the BMP Planning Guide and Template. This wealth of information came from numerous sources, state leaders and from existing golf-centric programs. GCSAA also created a task group to further develop the BMP Planning Guide and Template. The task group consisted of industry representative such as superintendents, GCSAA chapter leaders, university professors, environmental professionals and golf course architects.

The goal of the industry is to have all 50 states with best management practices in place by 2020, and the template and guide is providing the framework to achieve just that. The BMP Planning Guide and Template will be a digital template which offer states and chapters the opportunity to work together with state golf associations, universities, watershed organizations and state regulatory departments (to name a few) to put together a document which will position the industry to provide healthy turf, while demonstrating the stewardship of the industry. The goal of the BMP Guide is to be a living document which will evolve and remain relevant as industry regulations and pressures transform.

Often times, the ability to develop the framework, or achieve adequate funding can be stumbling blocks in creating statewide best management practices. The BMP Planning Guide and Template aims to address these concerns by utilizing information and experiences from those who have implemented existing programs, and allow for states to work together to achieve results. The BMP Planning Guide features 12 sections which are preloaded in the digital template, these sections include:

- Planning, Design & Construction
- Irrigation
- Surface Water Management
- Water Quality Monitoring & Management
- Nutrient Management
- Cultural Practices
- Integrated Pest Management
- Pesticide Management
- Pollinator Protection
- Maintenance Practices
- Landscape
- Energy

Additionally, each section features numerous subsections which can be tailored to take into consideration each state's agronomic climates and regulations; all of which are also be preloaded into the template. It is important to note, the template does not provide explicit state or federal regulations, but will allow for state agencies to enter current state regulations.

Future phases of this project aim to have individual golf courses gain access to this guide and implement BMP programs at the facility level. State-wide program are the main goal over the next couple years with many states already forming steering committees and working on implementing the BMP Template and Guide. Once the state-wide best management practices are completed, superintendents will have access to this resource to develop and implement BMP programs at their individual courses. BMP should be implemented as superintendents have long been environmental stewards of the land; this template and guide will help showcase just that.



MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | WWW.MIGCSA.ORG

The 41st Annual Can-Am

BY SALLY ROSS, Executive Director of the Ontario Golf Course Superintendents Association

t was a great day at Essex Golf and Country Club. A couple of days prior to the event, the tournament was indeed in jeopardy. With the consistent rains throughout Ontario, flooding was prevalent almost everywhere, and registrants were waiting to see if the event would even take place.

Thanks to the onslaught letting up a little bit and the hard work of the Essex grounds crew, Superintendent Chris Andrejika and his Assistant Greg Brown, the mop up was completed in time.

With some help from the sun and wind, Monday morning dawned and the course was more than just "golf-able", it was outstanding.

Well over eighty golfers showed up for the event, and they were rewarded with a beauty of a day with greens that were touted as "extraordinary", and a course that could be used for a commercial to display the expertise of the profession.

Many long time OGSA members were present representing the home team, including Ken Wright, Bill Fach, Bob Heron, Randy Hooper, Paul Dermott and Robbie Robinson, but their efforts as well as others, were in vain.

The U.S. won the Can/Am Cup and were happy to take it back to Michigan for the first time in a few years. Scores and handicaps were jokingly questioned, as is usual, and camaraderie between the Michigan and Ontario Superintendents was at an all time high. The overall team scores were USA 39.5, Canada 26.5.

First place teams were for the Americans, Brian Schweihofer and Carey Mitchelson with a low gross score of 154, and for the Canadians, Brad Palmer and Paul Grosvenor with a low gross score of 157.

The low net winners were Kevin Doyle and Jason Boyce with a score of 147, (Jason helping out the U.S. contingent) and for the Canadians, Todd Currie and Ryan Beauchamp, with a score of 140.

In second place, Todd Genske and Jim Higgs for the Americans with a low gross score of 169, and Dan

Friesen and Vince Gagnier for the Canadians, with a low gross score of 165.

Low Net winners were Tim Hornick and Greg Anderson, for the Americans with a score of 147, and the Canadian winners were Angelo Capannelli and Paul Brown.

The two closest to the pin winners were James Raynor and Dan Friesen, and the longest drive winner was Greg Clark.



Can-Am

Essex G&CC

Past President Steve Hammon sporting some team pride with his ptc bow tie

So there we have it – the 41st Can/Am Challenge is in the books, and a great time was had by all.

Special thanks go out to BrettYoung who provided our dinner sponsorship, we can't thank you enough for your support of our association and our members.



44



- Dramatically Improved Sanitation
- Reduced Labor Costs
- Disposable
- No Residual Taste from Cleaning Chemicals

Liners availble for 5 & 10-gallon coolers.

GLOO

Fast-Flow Nozzle for Speedy Dispensing

What's In Your Water?



888.584.4422 saferdrink.com

Everyone Deserves a SaferDrink.

Watch how it works!





Plascon PACKAGING | EQUIPMENT | EXPERTISE MICHIGAN GOLF COURSE SUPERINTENDENTS ASSOCIATION | WWW.MIGCSA.ORG

ASSOCIATION UPDATE



ADAM IKAMAS, CGCS

There are some great things on deck for 2017 but by far the biggest in direct member benefit is the complete renovation of the MiGCSA website. The current site was built in 2008 and was then renovated in 2010. It is really the hub of everything we do as a chapter.

THE NEW MIGCSA.ORG

The driving force behind the new site is the ad hock website committee chaired by Board Member Jesse Shaver at Gull Lake Country Club. He and his committee have been researching other websites form other GCSAA Chapters and their own personal sites they use often. Our hope is to make this the starting page for all member needs both personally and professionally. Some of the ideas and goals for the new site are listed below, these are not all guaranteed to be possible but we are hopeful.

- Mobile Friendly
- Twitter feed on homepage
- Members only forum for sharing ideas and getting questions answered
- More information and resources for Equipment Technicians

- Smoother processing and form for event registration
- Course Conditions Magazine highlights
- Auto renewing memberships
- Smoother membership invoicing and renewal process
- Customizable homepage to your location
- Texting capabilities
- Better and more expansive Classifieds section
- More interactive Auction section

If you have any specific ideas for the new site based on how you use it now or from other sites you use often please Jesse or I know and we would be happy to try to incorporate it. This is a significant investment in the chapter. We could not do this without the support of our industry partners and members. So, when we say support those who support you this is a great tangible reason why.

1. Dama

Adam Ikamas, CGCS MiGCSA Executive Director



JACOBSEN

0

GA600

A Textron Company

6100

ACOL

Reduce aeration time and improve turf condition with the Jacobsen GA600 tractormounted aerator. The Jacobsen AerStrike[™] 4 tine attachment system produces optimal hole spacing and a diamond pattern that reduces aerification time and improves turf condition, all in a single pass. The GA600 with the PerfectStrike[™] tine arms ensure that the tines enter and exit the turf perfectly straight. Contact your local Jacobsen dealer today for more information.



AerStrike 4 Tine attachment System

Discover the next generation of aeration with the new Jacobsen GA600, the industry's only aerator that performs deep and conventional aeration in a single pass.







Premier courses like Baltusrol Golf Club, the host of 16 major tournaments, rely on **Xzemplar** fungicide. This go-to solution for dollar spot provides immediate knockdown plus a 28-day residual. Now, Superintendent Mark Kuhns and his team no longer have to spray every two weeks, and their players can enjoy beautiful, spotless fairways.

To keep your own fairways as spotless as your reputation, visit betterturf.basf.us for more details.



Always read and follow label directions. Xzemplar is a registered trademark of BASF. © 2016 BASF Corporation. All rights reserved.

JACOBSEN"

0

GA600

A Textron Company

6100

ACOL

Reduce aeration time and improve turf condition with the Jacobsen GA600 tractormounted aerator. The Jacobsen AerStrike[™] 4 tine attachment system produces optimal hole spacing and a diamond pattern that reduces aerification time and improves turf condition, all in a single pass. The GA600 with the PerfectStrike[™] tine arms ensure that the tines enter and exit the turf perfectly straight. Contact your local Jacobsen dealer today for more information.



AerStrike 4 Tine attachment System

Discover the next generation of aeration with the new Jacobsen GA600, the industry's only aerator that performs deep and conventional aeration in a single pass.







We've got your **solution** all wrapped up.



Ask your Target Specialty Products Sales Rep today about comprehensive agronomic solutions from Turf Fuel.







Baltusrol Golf Club Springfield, NJ

www.target-specialty.com | 855 737-4339 Novi 855 737-4339 | Grand Rapids 616 877-3744 | Gaylord 855 737-4339



Premier courses like Baltusrol Golf Club, the host of 16 major tournaments, rely on **Xzemplar** fungicide. This go-to solution for dollar spot provides immediate knockdown plus a 28-day residual. Now, Superintendent Mark Kuhns and his team no longer have to spray every two weeks, and their players can enjoy beautiful, spotless fairways.

To keep your own fairways as spotless as your reputation, visit betterturf.basf.us for more details.



Always read and follow label directions. Xzemplar is a registered trademark of BASF. © 2016 BASF Corporation. All rights reserved.