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The Par 4 third hole at The Oaks Golf Course in Cottage Grove plays 552 yards from the back tees.

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I will tell you privately it's not going to get better, it's going to get worse all the time, but don't fret. Remember, we 'play the ball where it lies,' and now let's not talk about this, ever again By American Golfer and Lawyer Robert Tyre Jones Jr. 1902-1971 Jones said this when asked about his declining health from syringomeyelia. His words can serve as a reminder to us to play our "ball" where it lies as we move through our daily lives.

## THE GRASS ROOTS

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

> David A Brandenburg, CGCS **Rolling Meadows Golf Course** PO 314 Theresa, WI 53091 grassroots@wgcsa.com



2017 WGCSA OFFICERS AND DIRECTORS Front Row: Jim Van Herwynen, Jon Canavan, Josh Lepine, Jeff Barlow, Scott Anthes. Back Row: Rob Johnson, Garrett Luck, Benjamin LeBarre, Andrew Noll, Mike Bremmer, Joe Sell, Brett Grams. (Andrew Noll left the board to take a new position and has been replaced by Brian Bonlender.)

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## Tell Your Story!

By Jon Canavan, Golf & Recreation Turf Manager, Milwaukee County Department of Parks, Recreation & Culture

The longer I stay in the golf business the more stories I hear about how golf has changed people's lives. We've all seen the ad campaigns put on by the EFIG, PGA, USGA, GCSAA and many others. In my position with Milwaukee County Parks I find myself being a cheerleader, doing several media interviews talking up the great game of golf. I have found that we are the best story tellers of how golf affects the community.

I was extremely humbled last summer when I had a military vet from the First Gulf War approach me and discuss the maintenance of a free driving range. He would not talk on the phone, he would only meet in person, that way he could look me in the eye and say what he had to say! During the meeting with him he told me that he had started a program working with vets who were suffering with PTSD. He stated that getting the vets out and swinging a golf club had improved their mental state. These are the kind of stories that need to be told!

Social media is also a very effective way to convey the integrity of the sport. Being on Twitter I have interacted with many of you – along with hundreds of golfers, fellow superintendents, turf professors and the public in general all over the world. It's nice to be able to tweet out a concern or problem that you are having at your course and within minutes you have several responses from people you hardly know but can potentially have a great professional connection with.

As you read this I am sure you can think of several stories about how the game has had an effect on the community, your golfers or yourself. I ask that you share these stories with golfers, your board, the owner of your course, or even your neighbors. You might just make a new friend as you talk about your experiences with golf.

With the spotlight of the U.S. Open coming to Erin Hills in June, the WGCSA has partnered up with the WTA, WPGA and the GCSAA to run ads throughout the week. The ad campaign will touch on the environmental benefit of golf courses, the green industry, and how to propagate the game. The ads will be displayed on electronic billboards around the Milwaukee metro area. I would personally like to thank the members of each board for coming together and supporting this great cause. I have included a few of the ads for your viewing.





## PRESIDENT'S MESSAGE





Samples of billboards that will be on display in Milwaukee markets during the U.S. Open to promote the benefits of golf and encourage playing this great game. The boards are a joint effort with the WTA, WPGA and GCSAA.



## PRESIDENT'S MESSAGE



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## UNITED STATES GOLF ASSOCIATION

## **MODERNIZING GOLF'S RULES: KEY CHANGES**

The R&A and the USGA released a preview of golf's proposed Rules, which are due to take effect January 1, 2019. Here are five of the most significant changes.

#### How to Drop a Ball

You will be able to drop a ball from any distance above the ground, provided it doesn't touch anything and falls through the air when dropped.



#### Time for Ball Search

If you make a

ball hits the

no penalty.

flagstick in the

Three minutes will be the maximum allotted time to earch for a ball, rather than the current five minutes.



It will be OK to repair spike marks and any other damage done by shoes, damage from a club and almost all other damage on the putting green.

#### Leaving Flagstick in the Hole



#### **Relaxed Rules in Penalty Area**

You are allowed to ground your club and move loose impediments in a penalty area (an expanded concept of water hazards that does not include bunkers).



### Tell us what you think about the proposed Rules changes.

We welcome feedback at usga.org and randa.org through will go into effect January 1, 2019.

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R&A

USGA

The Royal and Ancient Golf Associaiton and the United States Golf Association have agreed to consider some changes to the rules of golf. This editor thinks this is a good start to simplify the often confusing rules book. Many golf fans have said they agree with these but the tours also need to stop taking phone calls from TV viewers on possible rules violations and implementing them after the fact.

## WISCONSIN PATHOLOGY REPORT

## Diseases To Spray For and Diseases To Let Go

By Paul Koch, Ph.D. Department of Plant Pathology, University of Wisconsin - Madison

There are over 50 potential turfgrass diseases that could be devouring your turf at this very moment, according to a quick count of the diseases listed in the Compendium of Turfgrass Diseases, 3rd edition. When coupled with all the other headaches on your plate that number of possible diseases sounds overwhelming. But as you know, the number of diseases you actually have to worry about is much lower, probably somewhere around a dozen or so.

So which ones do you really have to worry about and which ones are more of a nuisance? For most courses in the state, it doesn't make financial sense to control every single disease that could occur throughout the year. Some diseases are relatively rare or isolated but are difficult to get rid of once they develop and should be targeted for preventative applications. Others are extremely common but don't do any lasting damage and can either be ignored or sprayed curatively. As always, expectations and budgets differ at every course, but below are some diseases I feel are best to spray preventatively, others to keep an eye out for, and still others to let go in most situations.

#### SPRAY AWAY!

**Dollar spot:** This one is pretty obvious, and in my opinion there should be some level of dollar spot protection in any spray that goes out between June 1st and October 15th (longer in some years!). Curative control of dollar spot is not usually that difficult to achieve, but you'll typically need higher fungicide rates and tighter reapplication intervals to get the disease under wraps. The ideal compromise is to implement 'just-in-time' preventative applications with the aid of a predictive model...but you guys are probably sick of hearing about our work on that by now.

**Snow mold**: Another obvious disease for preventative control unless you're reading this from Florida. We've got one chance to get snow mold protection



Figure 1: We don't mess around with snow mold in Wisconsin.

Plant Pathology at the University of Wisconsin-Madison

right, and hoping for a mild winter isn't an effective strategy (Figure 1). With that said, I do feel that many courses in southern Wisconsin can get adequate protection for their fairways with just a single DMI in the tank.

Anthracnose: We don't get the severe anthracnose that our colleagues out east do, but I have still seen some nasty anthracnose cases in Wisconsin over the years. Most of the nastiest cases were on annual bluegrass greens with VERY low nitrogen programs, below 1 lb of N per 1000 ft2. Once you have anthracnose it is often difficult to get rid of it, so build preventative fungicide applications into your cultural program that includes frequent topdressing, rolling, and annual nitrogen rates of 2 lbs or higher.

Patch diseases: Root diseases like

take-all patch and summer patch aren't normally that severe over a widespread area, but once the symptoms appear they are a chore to get rid of. If you have seen either take-all or summer patch on the course before, especially on the greens, it's best to implement a preventative program with two applications in the spring once soil temperatures hit 55 to 60°F for a period of 5 straight days. If you haven't observed them in the past, or haven't seen them in several years, there may not be a need to spray.

**Fairy ring**: Fairy ring is similar to the patch diseases in that it rarely causes widespread problems, but once it does it's very difficult to get rid of. In fact, the same applications in the spring targeting take-all patch and/or summer patch can be used to target fairy ring.

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## WISCONSIN PATHOLOGY REPORT

#### HAVE PRODUCT ON HAND AND BE READY TO GO, BUT...

**Brown patch:** I see brown patch almost every year in Wisconsin, but rarely is it very widespread, long lasting, or damaging. Avoid urea applications (or other fast-release nitrogen) during periods of extended heat and humidity, and if a prolonged heat wave is predicted put down a QoI (ie Heritage or Insignia). But in most years, brown patch is a minor disease for us.

**Pythium blight**: Similar to brown patch, Pythium blight is rarely a significant issue in Wisconsin if you're not dealing with a new seeding (Figure 2). However, Pythium blight can kill plants very rapidly, so consider applying a preventative fungicide if nighttime lows are forecasted to be above 72°F for 3 days or more. QoI fungicides provide some Pythium protection, and in most years enough protection for our needs, but if a St. Louis heat wave comes our way then have some Subdue Maxx, Stellar, or Banol on hand.

**Pythium root rot**: Pythium root rot is similar to Pythium blight, it just occurs on the roots during warm and very wet periods. I rarely see a need to apply preventative applications targeting Pythium root rot, but during very warm and wet periods an application of a Pythium-specific product may be warranted...but be sure to water the product in!

#### IN MOST CASES, JUST LET IT MELLOW ...

**Brown ring patch**: Also known as Waitea patch, this disease can be significant in some years on annual bluegrass surfaces. But rarely do we reach the severity that they see on the west coast or in the mid-Atlantic. If you have had significant brown ring patch in the past I would recommend a fungicide application, but for most of us the disease doesn't stick around for longer then a week or two and any damage is usually shortlived and superficial.

Leaf spots: Leaf spots are an umbrella term that includes a host of different individual diseases, with Bipolaris and Drechslera being the two main ones on turf. In certain cases preventative fungicide applications are absolutely required, the most obvious cases being those who still manage some of the older vegetative bentgrasses, which are VERY susceptible to Bipolaris. For most superintendents in Wisconsin, though, leaf spots can cause some irregular discoloration for a period in the spring or maybe a couple of patches during wet periods in the summer. Damage is typically minor and once conditions dry out the turf typically recovers pretty rapidly.

**Microdochium patch in the spring**: Microdochium patch is that rare snow mold disease that doesn't require snow cover to cause disease, and we often have cool and wet periods in the spring that can favor Microdochium patch development. When snow cover isn't present in the spring Microdochium patch normally develops as small, reddish-colored spots (Figure 3). We rarely have the extended periods of cool, wet weather that other areas of the country have (i.e. Pacific Northwest) that can lead to widespread disease outbreaks. In most cases around Wisconsin, by the time you get your sprayer loaded up and out on the course the conditions have changed enough to naturally suppress disease. However, Microdochium patch outbreaks in the fall SHOULD be controlled prior to snow cover since they will likely lead to increased levels of snow mold over the winter.

**Yellow patch:** Also known as cool-season brown patch, this circular patch of faint off-yellow or light brown can sometimes be confused with early development of take-all patch symptoms. However, there is usually a more defined yellow or brown edge to the patch and if incubated overnight in a moist chamber there will be some foliar mycelium that develops (though not nearly as much as develops when brown ring patch is incubated overnight). Again, symptoms are normally isolated and any damage is short-lived and superficial.



Figure 2: Pythium blight can be a severe disease on new seedings. This picture was taken in July within a year of establishment...but for most of us Pythium is a relatively minor disease.



Figure 3: Microdochium patch in the spring is relatively common, but typically doesn't result in widespread or long-lasting damage.



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## MADTOWN MUSINGS

## Boston

By Jake Schneider, LMD Production Manager, The Bruce Company

As many of you know, I suffer from the confounding addiction of enjoying voluntarily running long distances. Thankfully, most sane individuals don't have this incurable malady, and from my experiences, it's only mildly contagious. In my case, Peggy Schneider is at least partially to blame whether it's genetics or positive (?) encouragement.

Growing up, I didn't particularly enjoy running more than the average kid, and aside from some hurdling—yes, I could actually jump over them—in middle school and a senior year foray into pole vaulting, track wasn't my jam. At some point during my teenage ex-

istence, my then 40-year old mom suddenly took up running and is still going strong. That she could be gone running for several hours seemed completely impossible, awful, and illogical. She's now completed over 20 marathons and continues to amaze me 25 years later.

In some way or another, I'm sure that my mom's influence caused me to pick up some running shoes when I was winding down my undergraduate studies at UW, and I quickly found running to be great, temporary release from the stresses (cough, cough) of college life. Within short time, the itch to compete in a race struck, and after completing a 10K in Madison, I found out that this dainty



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body is pretty decent at running. A half marathon was next, and the addiction was now full blown.

My first marathon came when I was 24, and although I probably didn't know what I was doing, I finished in 3:15. At the time, the Boston Marathon qualifying time for 18-34 year old men was 3:10, and although I hadn't considering it prior to toeing the line, running the world's most famous 26.2 miles suddenly didn't seem out of reach. Over the next winter, I was training for the spring Green Bay Marathon when I painfully discovered that I wasn't a 21 year-old kid who didn't need to stretch,

and a few weeks prior to marathon number two, my IT bands flared up so much that they put running on an indefinite hold. Between this injury, starting full-time work at Blackhawk CC, and entering into my first serious, long-term relationship, running fell to the wayside for a few years before the addiction returned.

During my hiatus, the Boston qualifying time dropped to 3:05, and it again seemed out of reach. After two more warm/slowerthan-hoped attempts, I ran a five minute personal best at the Fox Cities Marathon and still had some gas in the tank at the end. It's amazing what this did for my confidence, and getting to Boston before I turned 35 once again seemed doable. At the 2015 Grandma's Marathon, the breakthrough finally happened as I ran a 3:03 in spite of an Achilles tendon that hurt when walking for a week prior to the race. Finally, I had qualified; well, kind of.

Turns out that being allowed to submit an entry for Boston doesn't guarantee acceptance as they still take the fastest of the fast from the qualifying pool. Essentially, the further under your target time are, the better are your chances for getting in, and two minutes below the qualifying time wasn't fast enough. This wasn't a huge surprise, but it was nonetheless disappointing. It was obvious that I needed to break 3:02 to just about guarantee entry, and the goal was shifted. Leading up to the 2016 Green Bay Marathon (which had turned out to be my nemesis), training had gone well, and I knew that a fast time was possible if my body and the weather cooperated. Although it was still warmer than preferred, the race went well, and I managed to run a 3:01. With that, I pretty much knew that I'd be heading to Massachusetts in 2017, and the goal that I'd been chasing for several years finally became reality. There are very few times in my 34 years of life that I've been as excited as when I crossed that finish line outside of Lambeau Field.

Boston itself was a grandiose experience on a scale that I'd never experienced. Between the city, people, and race itself, being surrounded by so many fellow addicts was truly amazing. As for how it went—well, the first 21 miles went as planned, and the last 5.2 were a slow decline thanks to above average temperatures and a mediocre training cycle. However, the post-race beers tasted awfully good. With that, one goal has been achieved and next one is to break 3:00. I need to find a new hobby.

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ACOBSEN

## Brian Ferrie and Adam Suelflow

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

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

#### Name: Brian Ferrie

Company Position: Golf Course Superintendent, Horseshoe Bay Golf Club, Egg Harbor, WI

Years as WGCSA Member: 22 Membership Classification: A

### 18 holes with Brian Ferrie

1. How did you get started in the turfgrass industry? I was intrigued watching the guys maintain the little nine hole course back home playing golf with my Dad at the age of 13-14. At 15 I was working there part time.

**2. What is the most rewarding part of your career?** I think it's the short quiet moments on the golf course at sunrise and sunset when everything just look just right.

**3. What would you consider to be your greatest career challenge?** Early in my career I feel like I struggled to find a work/home balance. Today I worry that we work in an industry that relies exclusively on others discressionary spending.

**4. Which three adjectives describes you the best?** Optimistic, Honest, Determined

**5. Tell us about your family.** My wife, and high school sweetheart Kris, is an X-ray Tech with Door County Medical Center. My daughter Alexa will be a junior at the University of Minnesota. My son Logan will be a sophomore at St Norbert College.

**6. Any pets?** Maggie. Age 12. She a springer spaniel we adopted from the Humane Society when she was 8 months old. She's come to work with me every day since.

7. What drives/motivates you every day? Age 59.5

8. Who Would You Admire? My Mom and Dad.

9. Who is the person in history you'd most like to meet?

FDR (Franklin D. Roosevelt)



Logan, Alexa, Brian and Kris Ferrie at Fall Fest

Mistakes are part of the game. It's how well you recover from them, that's the mark of a great player.

10. What's a fun fact that people don't know about you? I can sing.
11. What do you do in your spare time, favorite hobbies? Boating
12. If you could go anywhere in the world on vacation, where would you go? Bora Bora
13. What is the one thing you would like to learn/accomplish someday? Playing Guitar
14. What is your favorite turf management related tool or technique? Putter
15. Favorites:

TV Show: American Pickers Movie: The Hangover Food: Seared Ahi Tuna

Sports Teams: Minnesota Vikings

**16. Do you golf? Handicap? Best shot or golf story?** Yes. 17.5. I Got to hang out and talk with Charlie Pride during a rain delay.

**17. Top Bucket List Item?** Spend a year on a beach somewhere tropical.

**18. If you could provide one piece of professional advice, what would it be?** Be humble and kind.



Maggie helping Brian on the course!



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

#### Name: Adam Suelflow

Company Position: North Course Superintendent, Woodmont Country Club, Rockville, MD Years as WGCSA Member: <1 Membership Classification: B

### 18 holes with Adam Suelflow

1. How did you get started in the turfgrass industry? I grew up in the very small town of Brodhead, WI. I am the youngest of 4 boys in the family. Our house was right down the street from Decatur Lake GC, so golf has played a big role in my life since I was young.

After high school I went to MATC in Madison to get my Associates Degree in Liberal Arts. After working a handful of years in the golf shop at Decatur Lake GC, I realized I wanted to try a different side of the golf industry.

From there I decided to go to Rutgers for Turf Management and earned a 2-year certificate. Once I was in the turf industry working as an assistant at Woodmont CC in Rockville, MD, I decided to enroll in the online Golf Enterprise Management program at UW-Stout. I completed my internship at Woodmont Country Club in 2011 and have been here for 6 years now.

**2. What is the most rewarding part of your career?** The most rewarding part of my career is having been given the opportunity to host sectional qualifiers for the US Open each of the 6 years I have been at Woodmont.

**3. What would you consider to be your greatest career challenge?** The greatest challenge so far in my career has been attempting to make the move from the Mid-Atlantic back to the Midwest. With the job markets being as tight as they are, it is proving to be a difficult move to make.

## 4. Which three adjectives describes you the best? Dedicated, Respectful, Caring

**5. Tell us about your family.** My parents still live in Brodhead, but the majority of my family lives in the Milwaukee area. I have 3 older brothers who were all in the golf industry for different periods of time; two as assistant professionals, and one is currently an assistant superintendent at Bethpage. **6. Any pets?** No Pets

7. What motivates you every day? Seeing the final product and receiving positive feedback from members.

8. Who Would You Admire? I admire my grandfather.

**9. Who is the person in history you'd most like to meet?** Seth Raynor



Adam Suelflow

## Spray Only Where You Should!

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



**10. What's a fun fact that people don't know about you?** I have been to 14 different national parks.

**11. What do you do in your spare time, favor-ite hobbies?** My hobbies inlcude: hiking, fishing, and cooking.

12. If you could go anywhere in the world on vacation, where would you go? Alaska

**13. What is the one thing you would like to learn/accomplish someday?** I would like to obtain certification through GCSAA.

14. What is your favorite turf management related tool or technique? TDR-300 moisture meter. Our moisture meters are used daily in conjunction with soil probes to help set up greens in the morning and to monitor how much moisture has been lost throughout the day.

15. Favorites:

TV Show: Seinfeld

Movie: Pursuit of Happiness Food: Pulled Pork

Sports Teams: Green Bay Packers

**16. Do you golf? Handicap? Best shot or golf story?** I play but not as much as I used to. Currently a 14 handicap.

**17. Top Bucket List Item?** Thru hike the Appalachian Trail.

**18. If you could provide one piece of professional advice, what would it be?** Don't settle for "good enough".





Woodmont Country Club has been a US Open Sectional Qualifier site for 29 of the past 30 years. This event has been a great opportunity to showcase the conditions and green speeds Woodmont offers to its members on a regular basis.



### LAUGHTER ON THE LINKS

Four old men went into the pro shop after playing 18 holes of golf. The pro asked, "Did you guys have a good game today?" The first old guy said, "Yes, I had three riders today." The second old guy said, "I had the most riders ever. I had five." The third old guy said, "I had seven riders, the same as last time." The last old man said, "I beat my old record. I had 12 riders today." After they went into the locker room, another golfer who had heard the old guys talking about their game went to the pro and said, "I've been playing golf for a long time and thought I knew all the terminology of the game, but what's a rider?" The pro said, "A rider is when you hit the ball far enough to actually get in the golf cart and ride to it."

## Down To The Root: Fungicides And Patch Diseases

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

Root diseases can be some of the most destructive diseases of high value turf. There are several reasons why this is the case. Because the infection occurs belowground, turf managers are not able to see anything unless they were to dig up some plants and look at the roots.

This also means that by the time aboveground symptoms exhibit themselves, the root system has already been compromised. Another factor that contributes to the destructive nature of root diseases is the difficulty of locating effective fungicides down into the rootzone.

Thatch layers and organic matter can adsorb fungicide molecules and keep them from moving further down to the roots. If the fungicides at our disposal were true systemics, then the molecules could travel through the plant down to the roots.

At one time, fungicides were thought to move from leaves to roots, where they would suppress existing fungal infections and protect roots from new infections. More recent research has shown that few fungicides will move down the plant to roots. And those few fungicides that actually are true systemics are not effective against many of the root pathogens.

Most fungicides are classified as either contacts, local penetrants, or acropetal penetrants. Contact fungicides were among the first fungicides developed. They are not absorbed into plant tissues but instead form a protective layer on the outside of the plant.

Local penetrant fungicides have an affinity for the waxy cuticle layer located on the outside of the turf leaf blade. This means that a fungicide deposit on the top of a turf blade will transfer through the leaf to the bottom side. This type of mobility is referred to as translaminar movement.

Acropetal penetrants are xylem mobile fungicides. Xylem is the water conducting tissue of plants. Therefore, these fungicides follow the movement of water throughout the plants, from roots to shoots, hence the name acropetal.

Fungicide performance is based on three factors: use of an effective active ingredient, a fungitoxic concentration of the effective fungicide coming into contact with that pathogen, and adequate persistence in the turf environment (1). Because effective active ingredients are not downwardly mobile and because root pathogens are located in thatch and soil, disease control can only be achieved by ensuring delivery of active ingredients to the rhizosphere where they will act on the fungal community.

Many research studies have been conducted on the fate of fungicides in the turf environment. The consensus of these studies is that the leaves and thatch intercept and retain a large portion of pesticide residues and allows very little residue to infiltrate the soil.



## TURFGRASS DIAGNOSTIC LAB

These studies have also shown that pesticides dissipate very rapidly in a turf environment compared to agricultural environments. Once these fungicides have been applied there are many factors that influence how quickly they dissipate. Physical movement of the fungicides can occur through leaching or run off of water or volatilization. Physical processes can degrade fungicides, like photodegradation from sunlight. But the largest factor influencing persistence is microbial activity. The thatch and soil are very good environments for very active microbial communities.

There are many aspects to this relationship between root diseases of turf and their control. The bottom line is that anything you can do to ensure delivery of fungicide residues to the root system are going to help with disease control. Applying in a larger water volume and watering applications in are among the most common practices to ensure this effective delivery.

1. Latin, R. 2011. A practical guide to turfgrass fungicides. APS Press, St. Paul, MN



Turfgrass Diagnostic Lab O. J. Noer Turfgrass Research & Education Facility 2502 Highway M, Verona, WI 53593-9537 www.tdl.wisc.edu E-mail:hockemeyer@wisc.edu Phone: 608-845-2535 Fax: 845-8162



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## The Oaks Host The 2017 Super Pro

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

Superintendent Tony Hudzinski, PGA Professional Shaun Finley and The Oaks Golf Course hosted the 2017 Super Pro on April 26th. Morning rain gave way to a good day of golf despite some colder temperatures and wind moving in for the later holes.

The mixer event featured 64 players from the WGC-SA and WI PGA playing in a alternate shot format.

WGCSA member Mike Kactro and PGA Progessional Craig Czerniejewski from Washington County Golf Course scored a net 64.25 to lead the first division. Travis Krauklis and Michael Crowley from Morningstar Golf Club fell 1.1 shots behind to take second place.

In division 2 Mark Coeller and Mark Kockhart of Golf Galaxy scored at net 64 to win by 1.5 over John Shipshock and Adam Wepfer from Bishops Bay Country Club.

The Oaks was designed by architect Greg Martin and sits on a rolling property just east of Madison in Cottage Grove. The layout features elevations changes, wetlands and the Koshkanong Creek.

The course opened in 2003, plays to a par 71 and has yardages from 5,071 to 6,763. It is unique in having 6 par 3 holes and 5 par 5 holes. The greens were seeded to L93 while the fairways are a mix of L93 and SR119.

A big thank you to the event title sponsors Darrin DiChristopher and Steve Fischer, Premier Golf & Utility Vehicles and supporting sponsor Prestwick Golf Group.

## PAST DIVISION 1 CHAMPIONS

- 2017 Craig Czerniejewski / Mike Kactro (Washington County)
- 2016 Skip Simonds / Patrick Sisk (Milwaukee)
- 2015 John Freeman / Jeff Millies (Edgewood)
- 2014 John Freeman / Jeff Millies (Edgewood)
- 2013 Charlie Brown / John Feiner (Johnson Park)
- 2012 Seth Jamison / Craig Filley (Nakoma)
- 2011 Eddie Terasa / Randy DuPont (North Hills)
- 2010 Charlie Brown / John Feiner (Johnson Park)
- 2009 Tom Dolby / Jay Pritzl (Timber Ridge)
- 2008 Tom Dolby / Jay Pritzl (Timber Ridge)
- 2007 Charlie Brown / John Feiner (Johnson Park)
- 2006 Don DuChateau / Jim Van Herwynen (South Hills)
- 2005 Charlie Brown / John Feiner (Johnson Park)
- 2004 Eddie Terasa / Randy DuPont (North Hills)
- 2003 Fred Hancock / Jeff Barlow (Waupaca)
- 2002 Charlie Brown / John Feiner (Johnson Park)
- 2001 John Freeman / Jeff Millies (Edgewood)



Wisconsin Section

Hole 18 as shown from the fairway (left) and behind the green (below) plays 547 yards and is well guarded by wetland and the river.





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Top Left: Jim VanHerwynen presents host golf course superintendent Tony Hudzinski with a commemerative flag.

Top Right: Division 1 champions Craig Czerniejewski and Mike Kactro from Washington County Golf Course.

Right: Par 3 Seventh Hole with a great view of the clubouse.

Below Left: Tom Wentz, Mike Skenandore, David Radaj and Brian Baker

Below Right: Mark Robel, Joe Shirk, Mike Schmieden and Gibby Maas.







THE GRASS ROOTS May / June 2017









Top Left: Joel Weitz, Ben Steeger, John Freeman on the 6th green.

Top Right: Hole 6 plays 467 yards as a Par 4.

Right: Casey Kopf, Jason Jaack, Luke Scharf and Jim VanHerwynen on their last hole, the par 3 seventh.

Below: The Par 3 tenth Hole plays 174 yards from elevated tees.





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## 2017 WTA Summer Field Day

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

Well it is that time of year, the irrigation system is ready, summer staff is returning and summer weather is on the horizon. For many this has been a very busy spring dealing with staffing, rain and canoe rentals. There is hope for some sanity and it arrives on July 25th at the O.J. Noer Research Facility, the WTA Summer Field Day!

It is never too early to plan your schedule and make sure you attend the biggest gathering of turfgrass managers of the summer. You spend the winter months planning for the growing season, buying plant protectants, equipment repair / replacement and staffing issues. The professors and WTA have also been planning for Summer Field Day. The Summer Field Day planning group has assembled a great day of training and displaying their cutting edge research.

Arrive early and visit with the most recognized vendors in the industry and visit with your peers while enjoying donuts and coffee. Attend the opening session and listening to updates about the happenings and findings from our research team and others in the turfgrass business. Enjoy the morning tours that will include:



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- Lawn & Sports Turf Snow Mold Control
- Herbicide Evaluations
- Hose End Sprayer Calibration

• Mosquito and Other Nuisance Pest Abatement

After the morning tours, spend some time engaging our great vendor supporters and solve all the world's problems with your peers. Take a break for lunch with our summer BBQ. Bring along you tennis gear and take on a world ranked tennis champion, John Powless, on our 1/8 inch height tennis court.

After all this morning fun, the afternoon is filled with plot tours lead by our team of professors and graduate student presenting their latest research. Seeing the research first hand is more rewarding than reading about it when the results are published in the off-season. This is the perfect time to ask each researcher questions about the research you are seeing and many other issues. These projects as scheduled to cover:

• Dew Removal Impacts of Fungicide Efficacy

• Potassium on Bentgrass

• Agronomic and Economic Evaluation of Liquid Fertilizer

- Earthworms Management Options
- Cultural Dollar Spot Control

There will be many other research projects on display. The day ends mid-afternoon and you can be back home late afternoon to check on your course and still be home for dinner. This is a great way to reward your assistant and other high performing staff for a job well done.

The day has shaped up with timely topics and information. See all of you here at the O.J. Noer Turfgrass Facility in Verona on July 25th.



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## Wisconsin Turfgrass Association

## 2017 Summer Field Day, Tuesday, July 25th

O.J. Noer Turfgrass Research and Education Facility in Verona









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Meet the new Manager of the Turfgrass Diagnostic Lab (TDL) on July 25<sup>th</sup>. Learn why you should be a TDL Contract member.

The registration form and additional details are on the back of this flier. You may go to <u>www.wisconsinturfgrassassociation.org</u> to register and pay online.

## **Field Day Schedule**

8:00am – 9:00 Attendee Registration/Trade Show open

- 9:00 9:30 Welcome Session
- 9:30 11:00 Lawn Care & General Turf Tours
- 11:00 1:30 Trade Show Only time
- 12:00-1:15 Lunch
- 1:30 3:00 Golf Turf Tours

### Lawn Care & General Turf 9:30 - 11:00

- Reduced Risk Herbicides
- Low input turf selections
- Lawn & Sports turf Snow Mold control
- Herbicide Evaluations
- Hose end sprayer calibration
- Mosquito and other nuisance pests abatement

## Golf Turf 1:30 - 3:00

- Dew removal impacts of Fungicide efficacy
- Potassium on bentgrass
- Agronomic and econmonic evaluation of liquid fertilizer
- Earthworms management options
- Cultural dollar spot control

## **Registration Includes**

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- \*Wisconsin style lunch
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Contact Audra for details at audra.anderson@wisc.edu or 608-845-6536.

— cut here and return registration form with payment –

#### **Registration Form**

Mail registration form and check payable to WTA by July 18<sup>th</sup> to O.J. Noer Turfgrass Facility / 2502 Highway M / Verona / WI / 53593, or register online at <u>www.wisconsinturfgrassassociation.org</u>. Prices valid if postmarked by July 18<sup>th</sup>. Add \$5 after July 14<sup>th</sup> and for on-site registration. Name of all Registrants

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From Madison Beltline US-12 & 18 Take Mineral Point Road exit Go West on Mineral Point Road 0.7 mile to Pleasant View Road roundabout Exit roundabout going South on Pleasant View Rd Continue 2.5 miles to O.J. Noer Facility



## **Nutrient Profile: Iron**

By Dr. Doug Soldat, Department of Soil Science, University of Wisconsin - Madison

I ron is one of the four most common elements found in soils along with oxygen, silicon, and aluminum. It is highly insoluble, which is part of the reason why we find iron in soils – because it can remain insoluble after millennia of rainfall. More soluble compounds (like calcium carbonate, and even quartz) can be eventually washed away. We only find soils with calcium carbonate in young soils or in areas that receive very little rainfall. Soils in Wisconsin are relatively young (about 10,000 years old) and we have a moderate amount of rainfall so we can find calcium carbonate in some of our soils.

However, if you travel to North Carolina, for example, where the rainfall is greater and the soils are much older (because the glaciers didn't reach there) you will find red clay soils that are high in iron oxides and clay. We call those soils Ultisols and they are found all over the Southeastern US. Add another million years of rainfall and the remaining clay will be transformed to iron and aluminum oxides and then you'll have the classic soils of the tropical rainforest – Oxisols.

This characteristic insolubility of iron is what makes it difficult for plants to extract it. Only tiny amounts are required for optimum plant growth, typically 100 times less the amount of nitrogen. That means if you remove three pounds of nitrogen per thousand square feet per year by removing clippings, you are removing only about 0.03 pounds of iron (half an ounce). But evolution is a powerful force, and plants have evolved the ability to extract iron from which ever soils they evolved in. The problem arises when humans showed up and started taking plants from one environment to another. If the plant evolved in an iron rich environment and was transplanted to an iron poor soil, it would show signs of iron deficiency unless fertilized. A classic example is the River Birch.

But before we can get to that story, we need to talk about the two forms of iron. Iron has two primary oxidation states in soil: Fe2+ and Fe3+, the only difference is that Fe2+ has one more electron than Fe3+. Electrons are a premium in soils low in oxygen. If you put Fe3+ into a low oxygen soil, an electron will be quickly "stolen" from it and the iron will become Fe2+. If that soil becomes well oxygenated at some future point, the Fe2+ is likely to morph back into Fe3+. This is called a redox reaction. Fe2+ happens to be slightly more soluble than Fe3+. Another issue that affects iron solubility is pH. Iron solubility (and solubility is related to plant availability) decreases by 100 to 1000 times for every increase in pH unit. That means iron may be 1000x less available at pH 7 than pH 8. Increasing pH also facilitates the conversion from Fe2+ to Fe3+. Iron will be least plant available in well oxygenated, high pH soils.



## WISCONSIN SOILS REPORT



Figure 1. Iron deficiency symptoms at the leaf level (left, healthy leaf on top) and field level (right).

Back to the River Birch. It is native to wet soils. Wet soils are dominated by Fe2+ over Fe3+. That means that River Birch never had to work very hard to obtain its iron during its evolution. Because the River Birch is a beautiful tree, it is often used in landscaping. Sometimes those landscapes are on well drained soils where Fe3+ is the dominant form of iron. When this happens, the River Birch will often show classic iron deficiency symptoms which are easily corrected with iron fertilization.

Obviously we plant turfgrass in a wider range of soils than they evolved on. Fortunately, however, many grasses evolved in nutrient poor soils and as a result are fairly good at scavenging nutrients with their incredibly fine roots that have massive surface area. In addition, grasses have evolved a pretty good physiological mechanism for solubilizing iron from the root zone.

You are probably familiar with the term chelate or chelating agent. A chelate is a claw-like molecule that "grabs" metal ions (like calcium or iron) and keeps them soluble in soil solution at higher concentrations than would be possible without the chelate. The chelate can be taken up by plants, or the plant can take up the iron after the chelate "drops" the ion as a result of several mechanisms. The most common chelate is EDTA, but there are even better chelates for iron like HEDTA, EDDHA which hold iron better at higher pHs than EDTA, thus making iron more available in the conditions where it is most needed (high pH soils).

Grasses make their own chelating agent. They excrete it through the roots and then absorb the chelate which has hopefully "grabbed" some iron. However, it remains possible that iron deficiencies show up in grasses – particularly when the roots are stressed. Iron is important for electron transport in the cell, which is the way the plant generates energy from the sun. Chloroplasts are the organelles that harvest energy from sunlight. They contain chlorophyll, the pigment that captures light. In iron deficient plants, the chloroplasts are tiny. Tiny chloroplasts mean less chlorophyll and, therefore, a less green plant. Iron deficiency at the leaf level and the field level is shown in **Figure 1**.



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## WISCONSIN SOILS REPORT

Dr. Nick Christians and graduate student David DeVetter at Iowa State documented a condition called summer-induced iron chlorosis which appears on Kentucky bluegrass on high pH soils in mid-summer (DeVetter, 2007). In mid-summer, Kentucky bluegrass roots are not fully functional because of the heat. Reduced rooting means less soil can be explored, and the turf's ability to excrete natural chelating agents may be impaired. This condition is rare, and I've only encountered it once in Wisconsin. Let's face it, the vast majority of iron applications are not correcting or preventing iron deficiencies, but the applications have some other important effects.

Larry Lennert earned his M.S. in Soil Science under Dr. Wayne Kussow in 1990. At that time in golf course management, nitrogen rates were quite low compared to what they are today, and superintendents were turning to iron to mask the nitrogen deficiency. Larry's work demonstrated that the masking effect was purely cosmetic, and the green color imparted by iron application had no effect on plant physiology. At the time, it was thought that the greener color was also increasing photosynthesis. However, Larry's work showed bentgrass leaves treated with iron were actually covered in tiny black deposits (**Figure 2**). The black deposits make the grass look more green from a distance.

My former M.S. student Glen Obear demonstrated this again using a device that measures green wavelengths of light. Glen applied different rates of iron to a bentgrass green. The plots looked strikingly different to the naked eye, but when we measured the green light reflected off the grass using the chlorophyll meter the green light was identical regardless of iron application rate (Obear et al., 2017). Iron will only increase photosynthesis when it is deficient in the plant. Adding more to a plant with enough iron will not improve photosynthesis.

#### **Using Iron**

The effect you get from an iron application is dependent on the form or iron (chelate vs sulfate) and spray volume. Larry Lennert's Master's work showed us that the color enhancement from a 1.5 ounce per thousand square feet application was greater if the spray volume was lower. You can play with application rates and spray





Figure 2. Creeping bentgrass leaves turn black in response to iron application. This image was taken by Larry Lennert from his MS work on iron.

volumes to get the desired effect. Or, if you change your spray volume, you will need to modify your spray rate of iron accordingly to keep the color effect the same.

Iron rates range greatly depending on the goal. For nutritional purposes only, you can get away with never applying iron or at most you may need a fraction of an ounce per thousand square feet per year (split into smaller doses). For color enhancement, you will likely want to be in the 1-3 ounces per thousand square feet range. For disease suppression, rates are much higher. For example, we were able to show suppression of dollar spot at rates of 20 oz. per 1000 square feet applied every other week on Penncross at the O.J. Noer Facility. Researchers at Virginia Tech showed dollar spot suppression at 16 oz. per thousand square feet (McCall et al., 2017). Oregon State University researchers have suppressed pink snow mold with 32 ounces of iron sulfate per thousand square feet (Mattox et al., 2015). In my opinion, these rates are not practical or sustainable. I believe that dollar spot suppression is possible at much lower application rates, but the data have yet to be generated. Paul Koch and I have begun a trial to examine how rate influences dollar spot pressure on a bent/poa fairway at the O.J. Noer Turfgrass Research Facility.

For these high application rates, iron can be quite difficult to solubilize. The two main sources of iron sulfate are iron sulfate heptahydrate and iron sulfate monohydrate. The heptahydrate is easier to solubilize of the two. Hot water and agitation help quite a bit. I also recommend testing different sources of iron from various suppliers if solubilizing is an issue, or going with an iron sulfate product that comes in a liquid form.

Keep in mind that iron is a toxin at high rates. In fact, Iron HED-TA is the main herbicide used to kill broadleaf weeds in lawns in the several Canadian provinces that have banned conventional herbicides. It is applied at approximately 25 oz/1000. Grasses are more tolerant of iron, and hence the selectivity of the herbicide. In our trial where we applied 20 oz/1000 square feet every other week, the Penncross bentgrass was noticeably thinner and less healthy by the end of the season. Keep in mind that this was iron sulfate, if we used chelated iron at this rate we would have done even more damage. The Virginia Tech researchers did not find reductions in quality following 16 oz. per thousand square feet of iron sulfate, but they did observe turf quality decline in plots that received 4 oz. per thousand square feet of chelated iron. The chelate made the iron more plant available, which caused toxicity. I encourage you to be very cautious when experimenting with high rates of iron (particularly chelated iron).



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## WISCONSIN SOILS REPORT

In addition to being potentially toxic to your grass, iron may reduce the efficacy of the other chemicals in your spray solution. Agricultural research has shown that iron sulfate tank mixed with glyphosate can decrease the efficacy of glyphosate. We don't have much data on turf chemicals, but I would not be surprised if iron sulfate is antagonistic to some or many. A superintendent recently commented that he was convinced that his growth regulator performance was negatively affected by iron sulfate addition to the mix.

Glen Obear did some excellent work at UW-Madison on iron oxide layers at the sand/gravel interface of USGA putting greens. He is continuing that work for his Ph.D. at the University of Nebraska-Lincoln. At UW, Glen attributed the formation to the wet sand sitting on top of a dry gravel layer. The wet sand contained Fe2+ which could have originated from the soil itself, iron fertilizer, and/or iron in the irrigation water. That Fe2+ was converted to Fe3+ when it reached the dry, oxygen rich gravel layer. At Nebraska, Glen has gone on to discover that the iron layer is exacerbated by low pH sand sitting over high pH gravel. While there is still a lot of work to do in this area, it seems that low pH sand and gravel would be good choices for new putting greens. For existing sites, check for any indication of a reddish layer at the sand/gravel interface. If you see color, it would be in your best interest to stop applying iron fertilizer. If iron deficiencies are present, correct those deficiencies with very light applications of chelated iron.

This article turned out to be longer than I anticipated. In summary, Iron is found in high quantities in soils, but it's not very soluble. Plants need 100x less iron to survive than nitrogen. Your turf is pretty good at extracting enough from the soil without your help because it makes its own chelating agent. That said, it may need help in high pH soils (pH 8+) or when rooting is compromised. The main reason you should consider using iron is to enhance color and suppress disease (especially dollar spot). We are still working on identifying the optimum application rates for these benefits. The annoyances of iron are many include mixing, tank incompatibilities, and likely reduced efficacy of tank mixed chemicals. The dangers of iron include potential toxicity to turf and accelerated formation of iron layering at sand/gravel interfaces on putting greens.

#### References

DeVetter, D.M. 2007. Summer-induced iron chlorosis on Kentucky bluegrass turf. MS Thesis. Iowa State University. Ames, IA.

Lennert, L.L. 1990. The role of iron in turfgrass management in Wisconsin. MS Thesis. University of Wisconsin-Madison. Madison, WI.

Mattox, C., A. Kowalewski, and B. McDonald. 2016. Fungicide alternative management practices for Microdochium patch. Oregon State Research Update. Online.

McCall, D.S., E.H. Ervin, C.D. Shelton, N. Reams, and S.D. Askew. 2017. Influence of Ferrous Sulfate and Its Elemental Components on Dollar Spot Suppression. Crop Science. 57:1-6.

Obear, G.R., W.C. Kreuser, K. Hubbard, B. DeBels, and D.J. Soldat. 2017. Plant colorants interfere with reflectance-based vegetation indices. Crop Science. 57:595-601



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## West Bend Country Club Hosts May Meeting

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

Brian Bonlander and the rest of the staff and members at West Bend Country Club hosted our May Meeting with terrific weather and a incredible layout. Brian and longtime assistant Rick Weiterman had the course in great condition for our group.

West Bend's first 9 opened in 1928 and was designed by William Langford and Theodore Moreau. A second 9 was built in 1960 by David Gill with renovation work by Roger Packerd in the 70's, Arthur Hills in 2002 and work continues to today with the help of Kye Goalby from the St. Louis area to bring the back 9 closer in design to the front.

The course features a challenging layout with incredible mix of steep banks, deep bunkers and contoured greens. The greens and fairway landing areas are generous in size but ball placement is important. The property is on glacial till left behind by the glaciers that formed the earth features. The benefit is most areas drain well, the drawback is the steep slopes can be a challenge for mowers and golfes alike.

I was paired with Bruce Schweiger, Peter Meyer and Seth Brogen so I expected nothing less than first place. However we left ourselves some long putts that we almost made and coasted in with a 66 only 7 shots behind the first place team of **Jim Gaugert, Greg Shernecker, Jeremy Dahl and Joel Baxter.** 

We did have a great time talking turf, youth baseball and campus politics while cheering at some shots and crying about others.

Winning the net division was **Craig Sondegaard**, **Mike Handrich**, **Jeff Christophers and Matt Booker** with a 56.10. Everyone in attendance had a great time on a great layout and we look forward to seeing you at our next meeting at Grand Geneva.

WEST BEND COUNTRY CLUB GOLF COURSE SUPERINTENDENTS 1928 - 1931 Phillip Wagner 1933 - 1935 Tom Fowler 1935 - 1936 O.C. Williams 1937 - 1948 Jim Gosse 1949 - 1953 Moe Mariucci 1954 - 1962 Harry Gill 1963 - 1973 William Kootnz 1974 - 1978 Dennis Willms 1979 - 2014 Bruce Worzella 2015 - Present Brian Bonlender



Our hosts for the day, Rick Weiterman and Brian Bonlender



Above: The second hole green complex shows some of the steep banks golfers and staff have to contend with. The Par 4 plays between 332 and 406 yards.

Right: Hole 14 was revised in 2012 with new bunkers, countours and tree removal. This Par 4 plays between 286 and 356 yards from elevated tees.











Above: This sculpture dedicated in 2005 greets golfers near the 1st tee.

Left: Jon Canavan, Tim Wegner, Troy Tietjens and John Holberton on the 3rd tee.

Below: West Bend Country Club is doing their part to promote pollination. The club is working with Dr. Chris Williamson and Dr. David Hogg from the University of Wisconsin Entomology Department.





Left: Greg Shernecker, Jeremy Dahl, Joel Baxter and Jim Gaugert took the Gross Division with a score of 59.

Center: Mike Handrich, Craig Sondergaard, Jeff Christophers and Matt Booker won the Net Division with a score of 56.10.

Below Left: Tim Wegner, Cubby O'Brien and Jeff Millies compare putting green notes.

Below Right: Pete Meyer tries to hit a bomb on the National Golf Graphics Long Drive Hole.

#### WEST BEND COUNTRY CLUB FLAG EVENT WINNERS

Closest To The Pin: Hole 8 - Jon Canavan Hole 13 - Mark Robel

Longest Drive: Hole 1 - Andy Braun Hole 15 - Matt Booker

Longest Putt: Hole 9 - Steve Abler Hole 18 - Steve Abler









On cue this deer and his partner ran in front of the 17th green. The par 3 hole plays between 140 and 183 yards downhill.



## Spring? Where Are You Spring?

By David A. Brandenburg Editor, The Grass Roots



Sadly we are reporting the death of Jacob Williamson, son of Dr. R. Chris and Amy Williamson. The 20 year old was involved in a traffic accident on May 7th.

Jacob was all time leading tackler for the McFarland High School football team and an devoted Ohio State fan. Our prayers and thoughts go out to Jacobs family and friends.

Another unexpected death in our turf family really reminds us how life can change in a instant and that bad things can happen to good people.

\*\*\*\*\*\*\*\* In golf course news the University Club of Milwaukee has merged with Tripoli Country Club giving members from both organizations new benefits and opportunities. Golf began at Tripoli in 1928 and the course hosted the Miller Open Golf Tournament from 1956 to 1960 and the Greater Milwaukee Open in 1971 and 1972.

#### \*\*\*\*\*\*\*

According to the North Wilkesboro bases Wilkes Journal-Patriot a employee at the Countryside Golf Course in Elkin, N.C. died when a 64 year old employee was smoking a cigar while fueling carts.

Investigators believe the cigar ignited the fuel fumes causing a explosion and fire that destroyed a 60x40 storage barn with 25 carts as well as mowing equipment.

#### \*\*\*\*\*\*

Keep your equipment and buildings locked as golf courses in Minnesota have seen a number of golf cart thefts in recent weeks. 12 carts were stolen from Heritage Links Golf Club in Lakeville marking the third time carts were taken since last fall. Three other area courses also have reported cart thefts.

Golf courses tend to be easy targets for thieves and vandals so stay diligent and review your security features.

#### \*\*\*\*\*\*\*

In Northern Great Lakes Golf Course

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Helena - Page 17 T.J. Emmerich Inc. - Page 32 Superintendents Association news Todd Clendenning, Superintendent at Tribute Golf Course, Wausau is the new President for the association. Ed Hoover is the Vice President and Jay Pritzl is the Secretary and Treasurer.

The NGLGCSA recently held the Turf Research Outing at Greenwood Hills, Wausau where approximately \$1,500 was raised for turf research.

#### \*\*\*\*\*\*\*\*

WGCSA member Pete VanDeHey and his wife Kathy were recently recognized by the Green Bay Area Chamber of Commerce per an article I read in the March 20th issue of "Business News"

Pete and Kathy own and operate Mid Valley Golf Course and are well known in the Green Bay and entire Fox Valley business and golf communities.



Mike and Karen Handrich have a new grandson, Arthur James Goetz born to Jessi and Ryan on May 8th. The big guy is being held by cousin Leila and was 7.4 lbs and 20" long. Congratulations to the Goetz and Handrich families.



Tim Adas, Superintendent at Lake Ripley Country Club and his wife Jenna and 2 year old daughter Adelynn welcomed Westin John into the world on April 8th. Westin came in at 8 pounds, 7 ounces and was 20 inches.

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THE GRASS ROOTS May / June 2017

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On May 20th Erin Hills offered a book signing for the book "Erin Hills" written by Gary D'Amato (Right) and Illustrated by Paul Hundley (Center). Architect Dana Fry (left) also joined the group. D'Amato who recently became only the 3rd writer to join the Wisconsin Golf Hall of Fame also has a series of articles on the making of Erin Hills through the Milwaukee Journal Sentinel. We were not allowed on the course but were able to see some of the bleacher construction on hole 1 from the back porch.





## **Event Schedule!**

June 20 - (Tuesday) June Golf Meeting, Grand Geneva, Lake Geneva July 25 (Tuesday) WTA Summer Field Day, OJ Noer Facility, Verona Aug 21 - (Monday) Joint WGCSA - NGLGCSA Meeting, Green Bay Country Club, Green Bay September 18 (Monday) - Wee One, Pine Hills Country Club, Sheboygan October 2 - WTA Golf Fundraiser - Chenequa Country Club, Hartland November 4 (Saturday) Couples Dinner - Harley Davidson Museum, Milwaukee November 29 & 30 (Wednesday / Thursday) Golf Turf Symposium, American Club, Kohler

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



#### THE GRASS ROOTS May / June 2017



The 90 day preceptitation and temerpature departure from normal maps from the Wisconsin State Climatology Office show we have been above normal in rain but temperaturs have been near normal. The facts may not lie, but many in the local golf industry would question the accuracy of the temperature map as it seems we have just left the wettest and coldest spring season in memory.

Here I am on June 4th rushing to get this issue out. This one is a week later than desired just due to the lack of time to get it done. I would think with the cold wet weather I would have had plenty of indoor time to get it done but that has not been the case. Thank you to the writers for getting their things in on time. And to our advertisers who make this all possible.

#### **GOLF TO WATCH IN WISCONSIN**

\*\*\*\*\*\*\*

June 15-18: USGA - U.S. Open, Erin Hills, Erin

June 23-25: Champions PGA Tour - American Family Insurance Championship, University Ridge Golf Course, Verona

July 6-9: LPGA - Thornberry Creek LPGA Clasic, Thornberry Creek Golf Club, Oneida

July 17-20: WSGA - Wisconsin State Amateur Championship, Oconomowoc Golf Club, Oconomowoc

August 14-16: WI PGA - Wisconsin State Open, North Shore Country Club, Mequon

What a spring, outside of the past 4 days and that stretch of 5 days back in February it has been cold and wet. And actually yesterday, Saturday June 3rd a good part of the state had rain in the morning and afternoon while other parts had hot and humid conditions. Hopefully that is behind us and a normal weather with no extremes either way will bless us for the next 5 months to keep cash registers ringing and golfers golfing.

#### \*\*\*\*\*\*\*

With the U.S. Open just a few days away you can feel the excitement building in the golf community. There are many great articles and features about the open, the maintenance staff and Erin Hills but I would recommend you grab your tablet and go JSonline and read Gary D'Amato's 7 part series titled "The Making of Erin Hills". Gary gives a in-depth look at the property and its development.

With the biggest show in golf coming to town don't forget the other opportunities we have to watch and volunteer to help at either the American Family Insurance Championship at University Ridge or the Thornberry Creek LPGA Classic at Thornberry Creek.

There is also the state open and amateur to visit and see some great golf of the local variety.

As we enter the summer season good luck to you and your staffs as you prepare your course for local play and your clubs big events.

Be happy, be safe and remember to play your ball as it lies in life and golf.

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