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SPRING 2019

Research Day 2019 Recap

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

WTA 2019
Summer Field Day
Registration on page 12

On a brisk January morning, 60 plus attendees converged on the Pyle Center on the UW-Madison Campus for the WTA Turf Research Day.

The list of speakers was varied and true to the mission “to disseminate research findings to turfgrass professionals in order to help them manage healthier turfgrass and care for the environment.” Our UW speakers were from all four departments that have a stake in the turfgrass work done at the UW.

Dr. Paul Koch-Plant Pathology/Horticulture; Kurt Hockemeyer-Plant Pathology/TDL; Qiyu Zhou-Soil Science Ph.D. student; Michael Bekken-Soil Science Ph.D. student; Audrey Simard-Entomology Masters student. There were also presentations from guests outside of the UW turfgrass staff. Jessica Cebula-University Health and Safety; Dr. Brian Horgan-University of Minnesota; Michael Krupke-Insight FS; Josh Veit-Midwest Athletic Fields had valuable information to talk about.

This diverse line up of speakers presented a wide cross-section of information. The committee worked hard to provide a line-up of topics that would be of interest to a wide range of turfgrass managers. If there is a topic you would like to see covered at next year’s Winter Turf Research Day, please contact one of the Turf Research Day Committee members.

Neil Radatz-Hawks Landing GC nhawkssuper@gmail.com

Josh LePine-Maple Bluff Country Club josh@mbcc1899.com

Grayson Harms-Reliable Property Management graysonh@rpswi.com

Ron Novinska-Oregon School District rjn@oregonsd.net

The day began with donuts and coffee along with a chance to catch-up with friends. Once again it showed no matter how much preparation there are always issues. As Dr. Koch opened up the day with a few announcements and scholarship winners, the problem began to appear. As he began, the AV equipment decided to play hide and seek. As he went through his slides, the screen would change from a slide to blank. When the screen that all the attendees were watching went blank, it reverted to the laptop so only he could see the slide. Unlike in past years when there were issues with the webinar this year the webinar could see the slides. Dr. Koch somehow made it through his announcements and scholarship presentation. Before

the first speaker, the Pyle staff rushed into action. After a very short break, we were set to get back on schedule.

Jessica Cebula, UW Health and Safety, began her discussion of hearing protection, respiratory protection finishing with a re-visit to the silica talk from last year conference. Well, the best-laid plans can go awry. During her presentation the same AV issue appeared, luckily she brought a hard copy of the presentation for her to use as she gallantly gave her presentation. Jessica had done some test work at the O.J. Noer Turfgrass Research Facility two years ago where she took audio decibel readings from all the equipment on site. My staff agreed to wear noise-monitoring equipment to track their exposure during a normal workday. Jessica took the readings back to her office and crunched the numbers a worked with me to create a hearing conservation policy. Her presentation of the data made all of us more aware of the hearing issues we face in our everyday work.

All people that spray plant protectants and other chemicals can be exposed to contaminants and need protection. She discussed different types of respirators, their best use and the guidelines for their use. With the new silica standard that went into effect recently, she also shared her data from the silica study she did at the O.J. Noer Turfgrass Research facility. Her finding showed that the process and equipment used at the O.J. Noer did not surpass the new standards for silica exposure. This does not mean that other equipment or process may not fall over this standard. If you would like to have the issue investigated at your golf course, please let me know and I can supply you with the contact with the State of Wisconsin that will conduct this testing for free.

After Jessica’s presentation, we needed to take a 35-minute break to fix the AV issue. It was determined that a cable in the ceiling was failing so the Pyle Center brought a large screen television and we continued. Not the best when you were in the back of the room but all involved were very tolerant. Thank you to those in attendance for your patience!!!

Michael Bekken, Ph.D. student in Soil Science under Dr. Soldat, presented his early work on “Methods for Quantifying Sustainable Resource Use on Golf Courses.” Thus far the focus has been on golf but as the presentation continued it was very apparent that all these ideas, topics and issues are universal. Every turfgrass manager

Continued on page 3

PRESIDENT'S MESSAGE

Spring of 2019 Has Arrived, Well Maybe

By Paul Huggett, Paul's Turf & Tree Nursery



Well Spring has finally arrived. Every year is different, yet every year has its similarities. For me Spring confirms my belief in the seemingly impossible. Every winter we dormant seed on top of the snow. On wet slow Spring seasons, my faith is tested awaiting the little green fuzz as an indication that plant life has begun, and Spring has finally arrived. My patience for that to happen is short this time of year with because of the

cold start. I need to remember to not get too antsy and wait until all the conditions are right for the glorious start of Spring.

You ever notice that no matter how hard you try to plan; Spring always brings the unexpected. This year is no different as our drivebelt on the skid steer broke, a pallet got jammed in the sod harvester which bent a sensor that took a half day to figure out what was wrong and a water line we just charged up is leaking somewhere. These events test our patience, require quick thinking on your feet and a hit to the pocket book. While temporary, these challenges are rewarding to figure out. On our farm I generally don't look for things to "click" until mid-May. You know that day when everybody shows up on time, the orders are scheduled just so and all the equipment functions as it should.

I hope your Spring goes as somewhat planned. Have a great year. Please check our WTA website for our events. ■



Carl Dowse, CIC, CID, CLIA
Outside Sales Representative

cdowse@SiteOne.com | www.SiteOne.com
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Pauls Turf & Tree Nursery
5146 Ridge Rd
Marshall WI 53559
608-698-3640
paul@paulsturfandtree.com

Vice-President
Neil Radatz '21
Hawks Landing Golf Course
1602 Waterbend Dr
Verona WI 53593
608-957-6763
nsuperhawks@gmail.com

Secretary
Grayson Harms '22
Reliable Property Services
5440 Willow Rd # 122
Waunakee WI 53597
608-709-5546
graysonh@rpswi.com

Treasurer
Mark Kienert '22
Retired
521 19th Street S
Wisconsin Rapids WI 54494
715-697-8067
tomanpak@wctc.net

2019 DIRECTORS

Brad Debels '20
WeedMan
2211 Eagle Dr
Middleton WI 53562
608-824-0043
brad.debels@weedmanusa.com

Josh LePine '22
Maple Bluff Country Club
500 Kensington Dr
Madison WI 53704
608-249-3468
joshi@mbcc1899.com

Aaron Goninen '20
Reinders
4397 Cradle Hill Dr
DeForest WI 53532
414-313-5244
agoninen@reinders.com

Ron Novinska '21
Oregon School District
456 N. Perry Pkwy
Oregon WI 53575
608-835-4048
rjn@oregonsd.org

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Midwest Lawn Care
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Middleton WI 53562
608-824-0043
takurth@gmail.com

Honorary Member
Monroe Miller
Retired
5524 Sandhill Ct
Middleton WI 53562
608-445-4982
groots@charter.net

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can relate to the issues and those ideas may be useful to all turfgrass managers. As Michael's project he can only focus on so much data, hopefully, in time Dr. Soldat might find another student that could continue on with Michael's work as it pertains to other turfgrass markets. Michael's project presents an issue and developing a matrix of how the data is collected and analyzed. As many states begin to develop "Best Management Practices for Turfgrass" this research will provide a strong framework for its success. As you may be aware the Wisconsin Golf Course Superintendents Association in combination with the Golf Course Superintendent Association of America is presently creating a "Best Management" document.

Qiyu Zhou, Ph.D. student Soil Science under Dr. Soldat, began her Ph.D. project last year. Her project is "Effects of Nitrogen Rate, Footwear Traffic and Organic Matter on Creeping Bentgrass Growth." She is attempting to quantify rates of nitrogen required to provide acceptable turfgrass quality under different traffic loads. Plots were established under differing nitrogen rates. In an effort to create real-world wear patterns each plot was walked on for differing amount of time and frequency by Dr. Soldat's staff all while wearing golf shoes with the same spike configuration. I said I would not mention this but it did cause a real stir with the road construction crew when they watched 3-5 people walk back and forth on plots for long periods of time, they were baffled. High traffic plots received 2200 steps per week, low traffic plots received 1100 steps per week and then there were the no traffic plots. Then clippings were collected, plots were rated on quality and then the data sets were compared. The first year presented some new challenges. The method now measuring clipping volume is not the most accurate. We used too much traffic. Clipping data from other greens with various soil organic matter. No annual bluegrass data. A more comprehensive growth model to predict the growth rate.

Audrey Simard, Masters student Entomology, presented her work on the fate of plant protectants when sprayed on

differing's turfgrass community; bentgrass putting green and low mow bluegrass. She explained that the guttation water of these plants could be important water sources for many pollinators, not just bees. The study investigates the presence of any of these plant protectants in the guttation water after application. Are they present? How long are they present in detectable amounts? Can we change our spray methods to modify the detection? These are very important issues for all turfgrass managers, as we become better stewards of the environment.

Dr. Brian Horgan joined us from the University of Minnesota to discuss, "Value of Urban Green space as a Natural Resource." Dr. Horgan's work was not a typical professor presentation about what can we do for better turfgrass quality. He took us on a journey to what are the non-traditional benefits of golf courses to the community as a whole. Are they just green space, water filters, oxygen generators? If they went away would they need to be replaced by other turfgrass areas at a cost to the community? I have to say that when Dr. Horgan was finished I was left with many more questions and a very different view of the great industry I love. The work being conducted by Dr. Horgan and his many colleagues at Minnesota will lay the groundwork for many turfgrass battles to come.

After a satisfying lunch, Kurt Hockemeyer gave the annual Turfgrass Diagnostic Lab (TDL) year in review. The TDL had a very busy year. The lab continues to expand its reach with many samples coming from destinations outside the immediate Midwest states. The TDL exists due to the support of contract members and sample submission. Its survival is dependent on your support.

Michal Krupke, Certified Turf Specialist and Josh Veit, presentation discussed a project they did with Madison Metropolitan School District re-surfaced Mansfield Stadium. The field had fallen into disrepair over many years. Needless to say the field is in need of a complete re-build but in these tough budget times that was not going to be possible for some time. Madison Schools was undertaking the installation of new lights and wanted to see if they could do

something stopgap to improve the field until a complete renovation could be undertaken. The project was to fraise mow the field, leveling off low areas and then re-seeding the field and dealing with *Poa Annua* if possible. One limiting factor was they could close the field in 2018 but required it to be re-opened for play in mid-August. This was a daunting challenge. With all parties involved working together, they were able to improve surface drainage, decrease *Poa Annua* content and have the field ready for play in August. For those of you that are trying to forget the rainfalls of 2018, there were a few rain events that hindered the timeline. Unfortunately, after the field was re-opened there continued to be heavy rains, can you say 10 plus inches in one event. Last fall the field was closed for a few events due to rain but when it was used and used often, held up well. The Madison School District is very happy with the process and the results.

Our last presentation was by Dr. Koch who gave us our first look at his microbiome research. This is new cutting edge work to determine what effect plant protectants could be having on the microscopic critters in our soil systems. It appears that from his early work the more information he gathers the more questions topics he will be investigating. One interesting study is an offshoot of Ron Townsend Masters project on nitrogen effects on Dollar Spot in bentgrass. This project ended in 2017 but this past summer Dr. Koch noticed that some of the old treatments were still showing dollar spot control without any fungicide treatments in the middle of summer. His staff began collecting samples and attempting to identify any microbiome differences in these old treatments. Did the fertilizer treatment effect the microbiome and to what extent? This is all new research in this field and the possibilities could be interesting.

This year's event allowed the WTA to showcase the talents we have at the UW-Madison. The support from members and the industry was noticed and appreciated. Next year, hopefully, many of these same students can return and enlighten us on their findings from 2019 ■

A New Option for Turfgrass Science Education at UW-Madison

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

This year marks the 60th anniversary of the conversation between O.J. Noer and Dr. L.E. Engelbert, which resulted in the founding for the Turf and Grounds Maintenance Specialization in Soil Science. That program, which produced its first two graduates in 1964, has been the academic training grounds for a small but steady stream of turfgrass managers who've gone on to do great work in Wisconsin and beyond. The small numbers of students in the program relative to others was designed to match (not exceed) the demand of turf related job openings in Wisconsin, and the program has typically graduated four or five students a year. However, because of recent changes in the job market, the cost of education, and the economy in general, the enrollment in the program has declined to the point where it has been consistently unable to meet demand. Job searches are going unfilled, and internship offers pile up with fewer and fewer students to accept them.

Because of the very close relationship between the Wisconsin turfgrass industry and the University of Wisconsin, the University felt obligated to try something new. Starting this fall, students interested in learning about turfgrass management will have the opportunity to do that through the UW-Madison's Farm and Industry Short Course. The Farm and Industry Short Course is a historic program that has been going strong for over 130 years. In 1885, the Board of Regents accepted the recommendation that "a shorter course for the winter months confined to the term of two years, would be more popular and appropriate" for the education of farmers. The program was taught by UW faculty like F.H. King, Stephen Babcock, CALS Dean's Henry and Russell, who all have buildings or malls named after them on campus today. When thinking about how to expand our turfgrass program, we wanted to find a way to educate students in a compressed period, but without compromising the quality of the instructors or the content. We felt the Farm and Industry Short Course would be the ideal place to try this new idea.

The Farm and Industry Short Course is in session over two 8-week periods (early-October through mid-December) and (mid-January through mid-March). This timing works well for prospective students who already work in the turf industry and want to their work experience with their Short Course education. We are hoping to draw students

from three main areas: 1) high school graduates interested in a career in turfgrass management, but without the means or desire to complete a four-year degree, 2) working turfgrass professionals interested in a certificate for career advancement, and 3) students that have earned a degree in a different field, but wish to switch careers.

Upon completion, the credential will not be a bachelor's or an associate's degree, but rather two certificates. The first certificate (earned in year 1) will be called the Foundations of Farm and Agribusiness Management, the second certificate (earned in year 2) will be the Turfgrass Management Certificate. The two certificates are designed to be taken sequentially. Students must complete the Foundations of Farm and Agribusiness Management certificate in order to enroll in the Turfgrass Management Certificate.

The Farm and Industry Short Course offers over 40 courses taught by 25 faculty and staff at UW-Madison, all highly regarded in their fields. The faculty teaching the turfgrass courses will be myself and Dr. Paul Koch. While actual schedules will vary from student to student, below is a sample of the course work for the two certificates:

As the program grows, we will be able to add more courses to suit the needs of our students. That said, we feel this is a solid start. While I am not able to quote exact costs for this article, the cost of the program will be significantly lower than the cost of attending UW-Madison's normal turfgrass management program. In-state tuition for each certificate will be less than \$5,000. Students can choose to stay in the dorms for the 16-week period for about \$3,000 a year. Thanks to the overwhelming support of the turfgrass and agricultural industries, over \$140,000 in scholarships are available (some earmarked for turfgrass students only), which will lower the total cost of the education significantly for award recipients.

We are very excited about this new direction but without strong enrollment, it may not be around long. Please help get the word out. Any student interested in enrolling in Fall of 2019 can start by visiting the Farm and Industry Short Course Web Site at <http://fisc.cals.wisc.edu> and/or contacting me at djsoldat@wisc.edu. The enrollment deadline for the fall semester is August 1, 2019. ■

Year One Foundations of Farm and Agribusiness Management	Year Two Turfgrass Management
Introduction to Soils (2 cr.)	Turfgrass Nutrient Management (2 cr.)
Agribusiness Communications (2 cr.)	Precision Agriculture (2 cr.)
Plant Science (2 cr.)	Turfgrass Irrigation and Drainage (1 cr.)
Agricultural Safety (1 cr.)	Farm Power (2 cr.)
Weather and Climate (1 cr.)	Safe and Effective Use of Pesticides (1 cr.)
Business Principles (1 cr.)	Turfgrass Integrated Pest Management (2 cr.)
Agricultural Human Resources Management (1 cr.)	+ Electives
Turfgrass Management (2 cr.)	
+ Electives	
Total: 12 or more credits	Total: 12 or more credits

Thank You To Our TDL Contract Members!

By Kurt Hockemeyer, TDL Manager, University of Wisconsin – Plant Pathology

As the temperatures start to approach 70° F today, I can only imagine every turf manager, lawn care company, and everyone else in the industry gearing up for the 2019 season. I know everyone is starting to get very busy, and that's why I wanted to take the time in this article to thank everyone in the turfgrass industry who has supported the Turfgrass Diagnostic Lab in 2019. Without this support, the lab would not be here to support the industry with timely diagnoses and reports with pictures and recommendations. So without further ado, to the right is a list of every company/facility who has supported the TDL as of 4/8/19. Facilities listed in bold are \$1000 members and an extra thanks goes out to them.

One common misunderstanding that I feel I need to address is confusing the WTA dues with TDL contract memberships. These are completely separate organizations. We support each other and help each other out, but their dues do not come to the TDL, and our contract memberships don't go to the WTA.

While I've been trying to increase our contract memberships this past year, I've heard several ideas and suggestions on how the lab can continue to evolve and adapt. I am going to try and incorporate some of the ideas I've heard into the general operations of the lab. Nothing is set in stone yet, but I'm always happy to hear more suggestions and feedback into how I can run the lab to better serve you, the turfgrass industry. So please let me or Dr. Koch know if you have any suggestions for the lab. Thanks and good luck in the upcoming growing season. ■

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Blackhawk CC	Madison	WI
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The Bruce Company	Middleton	WI
Chenequa CC	Hartland	WI
Country Club Estates GC	Fontana	WI
Eagle River GC	Eagle River	WI
Eau Claire CC	Eau Claire	WI
Edgewood GC	Big Bend	WI
Evansville GC	Evansville	WI
Fox Valley GC	Kaukauna	WI
Green Bay Packers	Green Bay	WI
Hayward Golf Club	Hayward	WI
Helena Chemical	Edgerton	WI
Hidden Glen at Bentdale Farm	Cedarburg	WI
Insight FS	Jefferson	WI
Jasperson Sod	Franksville	WI
Kettle Hills GC	Richfield	WI
Kohler Golf Courses	Sheboygan	WI
LaCrosse CC	LaCrosse	WI
LaCrosse Seed	LaCrosse	WI
Lawnmaster Inc.	Green Bay	WI
Lurvey Sod Farm LLC	Whitewater	WI
Maple Bluff CC	Madison	WI
Milwaukee Brewers	Milwaukee	WI
Milwaukee Parks	Milwaukee	WI
Minocqua CC	Minocqua	WI
New Berlin Hills GC	New Berlin	WI
North Hills CC	Menomonee Falls	WI
North Shore GC	Menasha	WI
Oconomowoc CC	Oconomowoc	WI
Oneida Golf & CC	Green Bay	WI
Paul's Turf and Tree	Marshall	WI
Pine Hills CC	Sheboygan	WI
Racine CC	Racine	WI
Reedsburg CC	Reedsburg	WI
Reinders	Sussex	WI
Reliable Property Services	Middleton	WI
Rhineland CC	Rhineland	WI
Rolling Meadows GC	Theresa	WI
SentryWorld GC	Stevens Point	WI
South Hills CC	Fon du Lac	WI
Springview Landscape	Green Bay	WI
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Superior Turf Services	Eden Prairie	MN
Syngenta	Greensboro	NC
The House on the Rock Resort	Spring Green	WI
The Legends at Bristlecone Pines	Hartland	WI
Tuckaway CC	Franklin	WI
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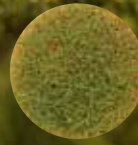
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924 AARON CT
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OFFICE 219-662-1014
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dave_louittit@andersonsinc.com
www.andersonspro.com



Peter Meyer
 Director

877.710.9363(o)
 608.219.3615(m)

peter@nationalgolfgraphics.com
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Disease Profile: Summer Patch

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

Summer patch, caused by the fungus *Magnaportheopsis poae*, is one of the most destructive diseases of intensively managed turfgrass. It is often confused with necrotic ring spot, and the biology of the pathogen is similar to both that of necrotic ring spot and take-all patch. We don't see significant summer patch outbreaks every year in Wisconsin like they do in the Northeast and mid-Atlantic states because we don't experience the consistent heat and humidity that those locations do. In years where heat and humidity persist for prolonged periods of time, like 2018, we do see significant outbreaks of summer patch.

There are several frustrating aspects about managing summer patch. The first, like any root disease, is that once the symptoms appear the damage to the root system has been done and recovery will be slow. Second, the best control of summer patch is prevention through proper cultural practices and a healthy root system. Third, summer patch is often more severe on highly managed turf sites like athletic fields and golf course roughs relative



Figure 1. Summer patch is often more severe in intensively managed turfgrass such as athletic fields.



Figure 2. Summer patch exhibiting the class 'frog-eye' pattern in a Wisconsin home lawn.

Continued on page 8

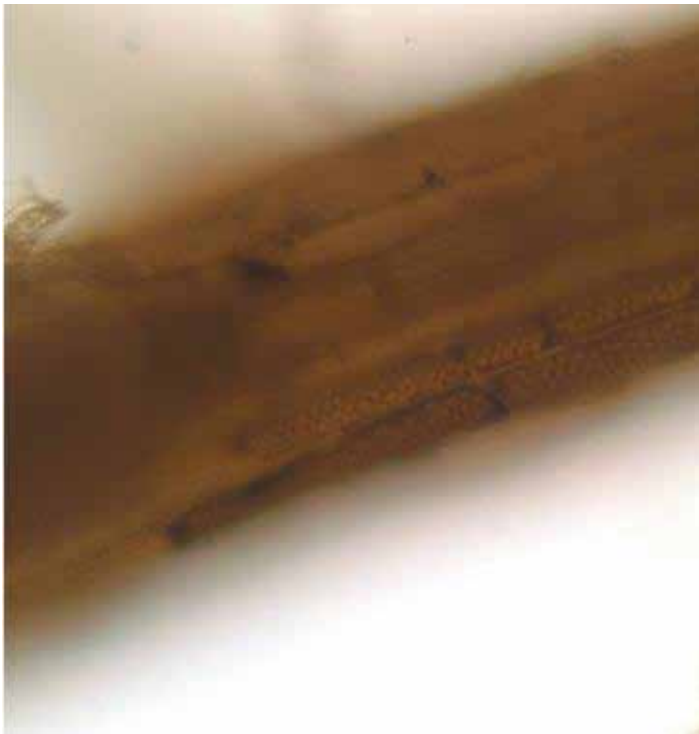


Figure 3. The summer patch fungus causes disease by colonizing and infecting the turfgrass root.

to less managed sites like home lawns or public parks (Figure 1). The reason is that intensively managed sites normally have in-ground irrigation, which keeps soil moisture consistent and provides an optimal environment for the summer patch fungus.

The Disease

Summer patch causes roughly circular patches of brown or tan turf 1 to 3 feet in diameter. Oftentimes grasses or weeds fill in the center of these patches, forming a ring or 'frog-eye' appearance (Figure 2). Patches most commonly appear beginning in late July into August, but this can vary significantly based upon the weather conditions. Infected roots appear darkened and when viewed under a microscope the summer patch fungus can be observed colonizing the root surface (figure 3). Infected roots can no longer transport water and nutrients from the soil up to the plant, and symptoms appear shortly after that.

The fungus begins to infect turfgrass roots in late spring when 2-inch soil temperatures reach approximately 60°F, which typically falls in late May for much of Wisconsin. As temperatures continue to warm into the summer, the fungus continues to grow more aggressively, and if consistent soil moisture is present the fungus will grow even more aggressively. This continued growth at warm temperatures is a key difference from the pathogen that causes necrotic ring spot, which grows well between soil temperatures of 55 and 65°F but goes dormant once soil temperatures reach 65°F. Unlike necrotic ring spot, practices such as fungicide applications targeting the fungus can be effective once symptoms become apparent because the fungus is still actively growing, though they are not normally the most effective means of control.

The disease is most severe on Kentucky bluegrass but can also occur on perennial ryegrass and fine fescues. Differences in susceptibility within the bluegrass cultivars do exist, but a comprehensive analysis of resistant and susceptible cultivars is not currently available.

Managing the Disease

Summer patch is a frustrating disease, and future summers with higher temperatures and larger rainfall events may make summer patch a more consistent threat to Wisconsin turfgrass managers. Below are some general principles to follow that can reduce summer patch severity.

- Maintain optimal root health. This may seem obvious, but the more healthy roots there are on a plant, the more the plant can tolerate to lose some to summer patch infection. These conditions include proper mowing height, drainage, irrigation and management of traffic and soil compaction...all those things you learn in turfgrass 101 (or Horticulture 261 for those of you UW alums).
- Manage thatch. The thatch layer in turf is loaded with organic matter and has less microbial competition relative to the soil...and it's an area that root diseases like summer patch thrive in. If thatch thickness is greater than ¼ - ½ of an inch, an aerification program should be implemented to reduce thatch thickness. Aerification will also alleviate soil compaction and improve root health...an added bonus.
- Use acidifying fertilizers. Summer patch is a disease that likes high pH, and unfortunately most areas of Wisconsin have high pH soils. Reducing the soil pH can be as effective as a fungicide at reducing fungal activity, though reducing the soil pH is easier said than done. Acidifying fertilizers such as ammonium sulfate and sulfur-coated urea can lower soil pH for relatively brief periods of time, but repeated applications may lower the soil pH for long enough to reduce disease.

Continued on page 9

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- Apply manganese. Manganese has long been known to suppress take-all patch, but more recent research out of Connecticut has indicated that it can also reduce summer patch. Not much is needed to have a positive effect, only 3 lbs of manganese applied as MnSO₄ per acre, and the cost is normally negligible.
- Fungicides. If the site is a high value site and severe summer patch has been observed in the past and all of the strategies above have been tried and failed, preventative fungicides can provide effective summer patch suppression. Preventative applications should start in late May or early June and 2 or 3 reapplications should be made at 28-day intervals to provide control until temperatures begin to cool in the fall. Curative fungicide applications made after symptoms develop are normally much less effective because so much damage to the root system has already been done. Product normally needs to be watered in, so unless the site has an effective irrigation system any fungicide application will only be marginally effective.

Recovering from the Disease

Summer patch causes symptoms by rotting away the root system of the plant, which makes rapid recovery very difficult. The first thing you can do is to increase the frequency of irrigation to make up for the lack of water being absorbed by the plant. Note that this will not help severely infected root systems. Light applications of fast-release nitrogen fertilizer can help promote recovery and encroachment from surrounding plants, but this will take time. Affected patches can also be roughed up and reseeded with perennial ryegrass, which will also take significant amounts of time, water, and labor until full recovery is reached. ■

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**THIS IS WHAT HAPPENS
ON OUR HOME TURF.**

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CALENDAR OF EVENTS

2019

June 18th	WGCSA meeting – Hidden Glen at Bentsdale Farms	Cedarburg, WI
July 23rd	WTA Summer Field Day – O.J. Noer Facility	Verona, WI
August 19th	WGCSA & NGLGCSA meeting – Fox Valley G C.....	Kaukauna, WI
Sept. 16th	Wee One Fundraiser – Pine Hills C C.....	Sheboygan, WI
Sept. 30th	WTA Golf Outing	TBD

WTA Members -- If you have an important date you'd like to share with other members, Call 608-845-6536 or email audra.anderson@wisc.edu to include it in the next calendar.

Contact Telephone Numbers

GCSAA	Golf Course Superintendents Association	800-472-7878
Great Lakes	Great Lakes School of Turfgrass Science Online.....	763-767-3518
iLandscape	the Illinois + Wisconsin Landscape Show	630-472-2851
NGLGCSA	Northern Great Lakes Golf Course Superintendents Assoc.....	906-424-4176
Northern	Northern Green	651-633-4987
PAT	Pesticide Applicator Training (Turf and Landscape 3.0).....	608-262-7588
STMA	Sports Turf Managers Association Conference	800-323-3875
TPI	Turf Producers International	800-405-8873
WDATCP	Pesticide Certification & Licensing.....	608-224-4548
Wee One	Wee One Foundation Golf Outing	630-457-7276
WGCSA	Wisconsin Golf Course Superintendents Association	920-643-4888
WGIF	Wisconsin Green Industry Federation	414-529-4705
WPT	WPT Garden Expo.....	608-262-5256
WSPA	Wisconsin Sod Producers Association	262-895-6820
WSTMA	Wisconsin Sports Turf Managers Association	608-792-9264
WTA	Wisconsin Turfgrass Association	608-845-6536

Wisconsin Turfgrass Association

Summer Field Day, Tuesday, July 23rd, 2019

We have received .30 GCSAA education points for this event

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



A birds eye view of the many research plots that are at the O.J. Noer Turfgrass Research and Education Facility.



Learn from vendors during the trade show as they demonstrate how their equipment can make your daily work more efficient and successful.



Learn new ideas for old issues and new ideas for the future that can help you.



Hear the UW – Madison professors and researchers talk about the current projects they are working on.

The registration form and additional details are on the back of this flyer. You may go to www.wisconsinturfgrassassociation.org to register and pay online.

Field Day Schedule

- 8:00am – 9:00 Attendee Registration/Trade Show open
- 9:00 – 9:30 Welcome Session & Honored Guest
- 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

- Abiotic Turf Issues
- Glyphosate Alternative Demo
- Robotic Mowers
- Plant Growth Regulators for General Turf
- Jumping Worms
- Effects of Guttation Water on Pollinators (Bluegrass)

Golf Turf 1:30 – 3:00

- Precision Disease Management
- Clipping Volume to Mass Conversion
- Golf Resource Use Efficiency Survey
- Soil “P” Deficiencies
- Effects of Guttation Water on Pollinators (Bentgrass)
- Nitrogen and Traffic Effect on Putting Green Growth



O.J. Noer Turfgrass Facility Directions
 2502 County Highway M
 Verona WI 53593 phone 608-845-6536

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

Registration Includes

- *Donuts & coffee in the morning
- *Wisconsin style lunch
- *Morning and afternoon turf education
- *Become a brand new WTA member & get free admission to Field Day.

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 16th** to **O.J. Noer Turfgrass Facility / 2502 Highway M / Verona / WI / 53593** or register online at www.wisconsin-turfgrass-association.org.

Add \$5 per person after July 16th postmark.

Name of all Registrants _____

Company _____ email _____

Mailing address _____

City/State/Zip Code _____ phone _____

WTA member - - - - - \$40 = _____

Additional employees from same WTA member organization - - - - - \$25 each x # emps _____ = _____

Not a WTA member - - - - - \$45 = _____

Additional employees from same Non-WTA member organization - - - - - \$35 each x # emps _____ = _____

WTA membership (New member, get one free registration) - - - - - \$150 = _____

GRAND TOTAL = _____