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EXECUTIVE
DIRECTOR
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TALKING



TURF

Fall 2017

The President's Perspective

**Victor Heitkamp
Fargo Park District**

Greetings everyone, I hope this message finds you all in good health. I am sure we are all at the point in our seasons where we are ready for a little down time. Some much needed rest and relaxation. It's hard to imagine as I write this that it is already the middle of October. It seems like I spent most of the summer wondering if the golf season would ever end, and with the snap of a finger here it is. Now I spend the days wondering what happened to the summer. The presence of fall and the impending season of winter keeps us busy, and with the same snap of a finger our outdoor facilities will be put to bed for winter and we will be able to take a deep breathe.

A time for some of us to sit back and reflect, for others, a transition into the next job assignment, but where ever our winter obligations take us it's a much needed time to re-energize and start the planning for the next upcoming season.

In September I had the privilege to play in our annual golf tournament at the beautiful Maple River Golf Club. It was a great day to get together with colleagues, meet new people, and spend time with our great sponsors. The golf course was in fabulous condition and played really well.

Continued on pg. 2

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NCTGA
33rd ANNUAL
CONFERENCE & TRADE SHOW
FEBRUARY 27,28, March 1st, 2018
Fargo Holiday Inn
FARGO, ND
Pesticide Recertification • Education • Trade Show • Silent Auction

President message continued

Thank you Larry and to all the staff for the great work that you do. Thank you to the pro shop and restaurant staff as well. Dave and his crew run a great facility and your hospitality is appreciated. And finally, thank you to those who participated in the fun filled day. This is a great tournament! Your continued support keeps the NCTGA going strong and the money raised is a great way for us to give back and help pave the way towards a solid future in the turf industry through our scholarship program. If your golf course is interested in hosting the tournament in the future please let Rene' know, or contact one of the board directors. It truly is a great day!

Just a quick update on the new website. Rene' has been working hard with the design team to make sure the website is set up and functions to suit our needs. They are getting close, so watch your emails for the announcement of the launch date.

You will also find in this newsletter the lineup for the annual education conference and trade show. We have been working hard to put together another great show. Mark your calendars now, February 27, 28 and March 1, 2018. We have a great venue and a great lineup of speakers. I look forward to seeing you all at the show.

In closing, remember to take that deep breathe. Life is too short to not take time to enjoy the little things in life. With the holidays right around the corner enjoy some time with family and friends. On behalf of the NCTGA I would like to wish you all a very blessed and safe holiday season.

2018 Pesticide Training Schedule

November 29	Fargo FargoDome
January 19	Jamestown Jamestown Civic Center
February 1	Dickinson Ramada/Grand Dakota Hotel
February 8	Carrington Research Ext Center Hettinger Research Ext Center LaMoure Bowells Burke County Extension Watford City Mckenzie County Extension
February 15	Minot North Central Research
February 22	Grand Forks Grand Forks Public Safety Center
March 8	Williston Williams County Broadway Commons Mohall Renville County Ext Fessenden Wells County Ext LaMoure LaMoure County Ext Linton Emmons County Courthouse Langdon Research Ext Center
March 2	Moorhead First Presbyterian Church
March 22	Devils Lake
March 27	Bismarck State Capital Building
March 29	Harwood Community Ctr

Do to scheduling conflict, there will not be a date before or after the conference. Please check the schedule for dates close to you.

2018 NCTGA CONFERENCE SPEAKERS

SUPER TUESDAY Dr. Brian Horgan



University of Minnesota
Professor and Extension Turfgrass
Horticulturist
254 Alderman Hall
1970 Folwell Ave
Saint Paul MN
bphorgan@umn.edu
612-624-0782

Brian Horgan, Ph.D., is a professor and associate head in the department of Horticultural Science at the University of Minnesota. He holds degrees from Michigan State University, North Carolina State University and the University of Illinois. Horgan's research interests focuses on the fate and transport of pesticides and nutrients, water conservation strategies, and low-input turfgrass systems. He is the science editor for Turf News, associate editor for the Crop Science Journal, European Turfgrass Journal and the International Turfgrass Research Journal. Horgan was recently named the 2015 Environmental Communicator of the Year from the turfgrass and ornamental communication association.

Tuesday, February 27th, 2018

8:45 AM— 10:15 AM	Fate And Transport of Pesticides And Nutrients
10:30 AM— 12:00 PM	Water Conservation
1:00 PM—2:30 PM	Low-input Turfgrass Systems
3:00 PM - 4:30 PM	Evolution of Nitrogen And Phosphorus Transport



Fargo Park District

Sam DeMarais

Park Forester

Sam has been the Park Forester for the Fargo Park District for the last 3 years. Prior worked was for the city of Fargo forestry department throughout college. I also work with a nonprofit association called North Dakota Urban and Community Forestry Association (NDUCFA). I grew up in Fargo and graduated from NDSU with a degree in Urban Forestry. I am an avid bow hunter and enjoy anything outdoors.

Wednesday, February 28th, 2018

1:00 PM—2:00 PM Trees 101



GCSAA

Steve Randall

Director of Chapter Outreach

Phone: 800-472-7878 ext. 5146

srandall@gcsaa.org

Randall, a native of Wahpeton, ND oversees the field staff program and other chapter services, which aim to strengthen the awareness, access and engagement of GCSAA programs and services. Randall and his team help advance chapter operations and chapter leadership which support GCSAA at the local and regional level. Prior to working at GCSAA, Randall was the executive director of the Sun Country Amateur Golf Association (New Mexico/West Texas Golf Association) and worked for the Minnesota Golf Association in regional affairs, media relations and junior golf operations. Randall received a bachelor's degree in business management and communications from St. John's University in Collegeville, MN and a master's degree in mass communications from the University of South Dakota.

Wednesday, February 28th, 2018

10:00 AM –11:30 AM “Staying Relevant in a Changing Profession.”

12:00 PM State of The Industry



University of Minnesota Crookston

Kristie S. Walker, Ph.D.

**Assistant Professor of Agronomy
Golf and Turf Management Program**

Kristie S. Walker is currently an Associate Professor of Agronomy in the Agriculture and Natural Resources Department at the University of Minnesota Crookston. She is head of the Golf and Turf Program at UMC and teaches all courses related to turfgrass management and soil science. In addition, Dr. Walker is the advisor for the Turf Bowl Team, Turf Club, and the Soils Judging Team. Dr. Walker received her Ph.D. and M.S. from

Purdue University in August 2008 and May 2006, respectively in Agronomy specializing in turfgrass management and soil fertility. Her current research interests include: carbon footprint determination of golf courses, irrigation regimes that conserve water, nitrogen fertilization effects on above ground responses and soil nitrogen losses, and cultural management practices that reduce turfgrass wear and soil compaction.

Wednesday, February 28th, 2018

8:15 AM —9:45 AM Pre-Game Agronomic Field Safety Assessment for Sports Fields: Future Implications of Risk Assessment Interpreting

10:00 AM—11:30 AM Soil Test Data to Develop Annual Fertility Management Plans

St Paul Saints

Nick Baker

Head Groundskeeper of CHS Field

Nick Baker graduated from Iowa State University with a Bachelors Degree in Horticulture with a Turf Grass Management Emphasis in 2011. During his time at Iowa State Nick interned with the New York Mets at Citi Field and The Iowa Cubs at Principal Park. After graduation Nick took a position with the Minnesota Twins and was there until the 2014 Season. Nick left the Twins to take a job as an Assistant Sports Turf Manager position with the University of Minnesota Athletics Department in June of 2014. In November of 2014 Nick took over as Head Groundskeeper of CHS Field, Home of the St.Paul Saints and Hamline Piper. Nick resides in St.Paul with his wife Emily and children Adeline and Flynn.



Thursday, March 1st, 2018

8:00 AM —9:00 AM Ballfields 101 Keeping It Simple For You
Q & A to Follow Their Talk

"Guest Speakers" continued from pg. 5



Profile Products
Jeff Forsberg
Regional Sales Manager Profile
Products

JForsberg@profileproducts.com
Jeff is a graduate from Iowa State University with a degree in Horticulture focused on Turf Management. He currently works as a Regional Sales Manager for Profile Products covering eight states. He resides in Chaska, Minnesota.

Wednesday February 28th, 2018

8:15 AM —9:45 AM Making Your Ballfields Look Like The Pros On A Budget

Thursday March 1st, 2018

10:00 AM —11:00 AM Jeff Forsberg Maintaining Your Ballfield



John D. Spaulding
Territory Manager
Turf & Landscape
Syngenta

john.spaulding@syngenta.com
mobile (816) 674-7053

BS Horticulture Iowa State
Bayer Environmental Science –
positions in sales, national accounts
PBI Gordon – positions in marketing,
product management



Matt Cavanaugh
Assisant Superintendent
Rush Lake Golf Club
Maple Grove MN

A few turf classes at Kansas State & the University of Minnesota have provided gainful employment for 15 years in the turfgrass industry. Assistant superintendent, grounds manager for a school district (I don't want to talk about it), sales rep for PBI Gordon, turfgrass research scientist at the University of Minnesota (I'm not that fancy) and now back as an Assistant Superintendent at Rush Creek Golf Club in Maple Grove, MN. I enjoy learning, talking and sharing about turf.

Thursday, March 1st, 2018

8:00 AM– 9:30 AM Maintenance and establishment of fine fescue native areas
Q & A Session following their talks.



Tim Jallen

FM Redhawks

Director of Field and Stadium Operations

tjallen@fmredhawks.com

701-478-9209

I was a 2011 graduate of North Dakota State University where I played baseball and received a Bachelor's of Science Degree in Zoology with emphasis in Fisheries and Wildlife. During the final few years of college I also started working at the Moorhead Country Club in Moorhead, MN. That is when my interest in turfgrass management and the golf course industry as a whole really began. In the Fall of 2009, along with my Zoology credits, I also started studying in the Sports and Urban Turfgrass Management program at North Dakota State University. Upon graduation in 2011 I traveled to New Jersey and Colorado to expand my working knowledge and experiences in different environments and climates. After much thought, I decided to change my focus and direction to the world of baseball, as it has been a passion of mine since a very young age. I have been the Director of Grounds at Newman Outdoor Field since the Spring of 2014 taking care of on-field operations; mainly baseball games but also concerts and other small events. I was born and raised in Bismarck, ND but attended high school in Scottsdale, AZ. My parents, sister, and niece currently live in Bismarck, ND. I reside in Fargo, ND with my black lab, Chipper.

Thursday, March 1st, 2018

8:00 AM —9:00 AM Ballfields 101 Keeping It Simple For You
Q & A to Follow Their Talk



Fargo Park District

Jennifer Satter – PHR/SHRM-CP

Director of Human Resources & Payroll

Jenny was hired as the first Director of Human Resources & Payroll with Fargo Parks in September of 2015. As Director of the HR department, she oversees recruiting, performance management, payroll and benefits and employee relations. Jenny has 20 years of experience in human resources and maintains her PHR and SHRM-CP certifications in the field. Jenny lives in south Fargo with her spouse Tony and their children Paige and Ty. She enjoys her book club, golfing and watching her children participate in their sports.

Wednesday February 28th, 2018

1:00 PM—2:00 PM Hiring, Training, Maintaining the Employee



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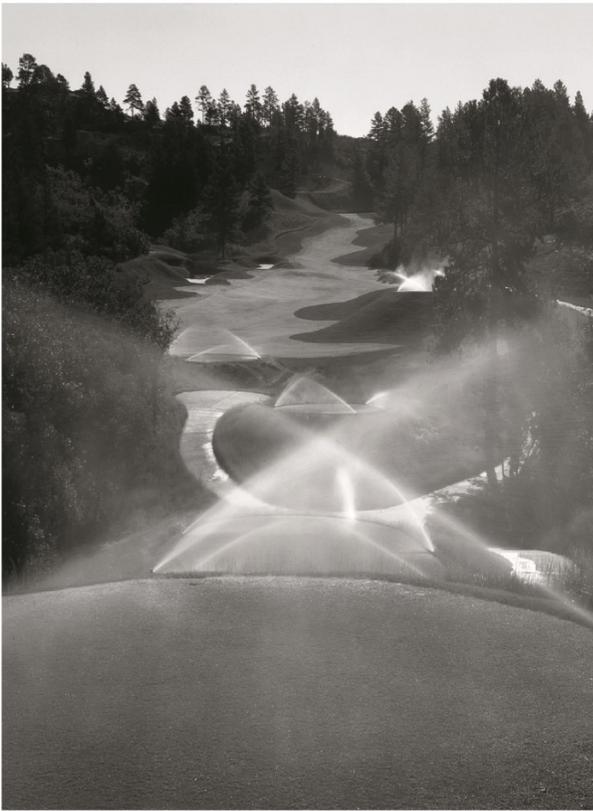


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— IF THE —
Plan
DOESN'T
WORK
- CHANGE THE PLAN -
BUT NEVER THE
GOAL

GETTHEHEALTHY™

KEVIN NORBY COMPLETES MAJOR RENOVATION AT FLOD RAVEGED MEADOWBROOK GOLF CLUB

Meadowbrook Golf Club is located in Hopkins, Minnesota and is one of five courses owned and operated by the Minneapolis park & Recreation Board. The course was originally designed by William Foulis Jr. and opened in 1924. In June of 2014, the golf course was closed when more than 11 inches of rain caused the Minnehaha Creek to overflow its banks and submerger the golf course under uo to five feet of water. The damage included 64 acres of dead turf, washed out cart paths and bunkers, nearly 110 drowned trees, flooded irrigation satellites and damage to four greens. Funding from the Federal Emergency Management Agency (FEMA) paid for repairs to the course.



In response, the Park Board hired golf course architect and ASGCA member Kevin Norby to assist them with navigating the FEMA process and reconstructing the golf course. According to Norby, just one year earlier, this process wouldn't have been possible. In September of 2013, FEMA issued a policy change bulletin that provided federal funding for damaged turf on golf courses. Prior to that change in policy, FEMA would only pay for repair of damage to infrastructure such as public buildings or irrigation components. of the damage. Norby estimated the damage at Meadowbrook at nearly \$2 million. Norby added, the first thing that needs to happen in order to be eligible for FEMA assistance is that the governor has to declare a disaster and request funding from the federal government.

Once that has happened, our first step was to prepare a cost estimate and a hole by hole assessment of the damage. Norby estimated the damage at Meadowbrook to be \$2 million dollars, Norby added, the first thing that needs to happen in order to be eligible for FEMA assistance is that the governor has to declare a disaster and request funding from the federal governmentt Meadowbrook at nearly \$2 million.



Norby said, we've probably got more experience with FEMA funded golf course reconstruction projects than anybody in the country. Norby recently completed a \$5.5 million FEMA funded renovation at Coal Creek Golf Course in Colorado. In addition, Jon Schmenk, an associate architect at Herfort Norby, was involved in the reconstruction of Joseph Bartholomew Golf Course in New Orleans after hurricane Katrina.

According to Norby, when working with FEMA, it's important that you understand and follow their procurement process. They require multiple bids and advertisement of the work nationwide to minority and women-owned businesses. Norby noted, failing to follow those guidelines can result in denial of funding.

The bunkers were the most involved part of the project, said Norby. The faces had eroded and collapsed and the drain tiles were plugged. Because the course was closed for so long, the bunkers had become overgrown with weeds. Norby said, we rebuilt the faces and restored them to a look and style that is consistent with the golden-age character of the course.



Since FEMA would only participate in reconstruction of elements that were damaged by the flood, the Park Board funded the reconstruction of the remaining undamaged bunkers. We wanted the course to look and play consistently when they reopened. We eliminated a few bunkers and actually reduced the overall square

footage by nearly 30 percent. Norby stated that his goal was to "make the course more playable and more enjoyable for the masses while providing the strategy and challenge that the more skilled golfer would appreciate." to "make the course more playable and more enjoyable for the masses while providing the strategy and challenge that the more skilled golfer would appreciate."



Kevin Norby is the owner and senior designer at Herfort Norby Golf Course Architects. Kevin can be contacted at (952) 361-0644 or knorby@herfortNorbyGolf.com for more information.

Quotes That Make You Think!!

Don't cry because it's over, smile because it happened."

— [Dr. Seuss](#)

"You only live once, but if you do it right, once is enough."

— [Mae West](#)

"In three words I can sum up everything I've learned about life: it goes on."

— [Robert Frost](#)

"There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle."

— [Albert Einstein](#)

"Good friends, good books, and a sleepy conscience: this is the ideal life."

— [Mark Twain](#)

"I'm not afraid of death; I just don't want to be there when it happens."

— [Woody Allen](#)

"Life isn't about finding yourself. Life is about creating yourself."

— [George Bernard Shaw](#)

"Life is like riding a bicycle. To keep your balance, you must keep moving."

— [Albert Einstein](#)

"Who are you to judge the life I live? I know I'm not perfect -and I don't live to be, but before you start pointing fingers... make sure your hands are clean!"

— [Bob Marley](#)

"Finish each day and be done with it. You have done what you could. Some blunders and absurdities no doubt crept in; forget them as soon as you can. Tomorrow is a new day. You shall begin it serenely and with too high a spirit to be encumbered with your old nonsense."

— [Ralph Waldo Emerson](#)

"I speak to everyone in the same way, whether he is the garbage man or the president of the university."

— [Albert Einstein](#)

"If you don't know where you're going, any road' will take you there"

— [George Harrison](#)

"Anyone who lives within their means suffers from a lack of imagination."

— [Oscar Wilde](#)

"A life spent making mistakes is not only more honorable, but more useful than a life spent doing nothing."

— [George Bernard Shaw](#)



**33rd Annual Conference and Trade Show
February 27 & 28th—March 1st, 2018
Holiday Inn
Fargo, ND**

Individual Pre-Registration Form

Registrant Name _____
Registrant Name (please print clearly as you would like your name to appear on badge)

Company Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ E-mail _____

Please Help Us Update Our Records With Your E-mail Address:

Super Tuesday Fee — \$90.00
Registration Fee —\$120.00
Student Registration Fee —\$25.00
Registration Fee For All Three Days — \$180.00
Registration After January 15th, 2018
Super Tuesday Fee After January 15th, 2018 —\$150.00
Student Registration After January 15th, 2018 — \$40.00
Registration Fee For All Three Days After January 15th, 2018— \$220.00

2018 Membership Dues = \$90.00
(Membership Dues must be paid for at least one representative per company/organization)

Total Due = _____

Registration fee includes social, educational sessions, trade show, coffee break and lunch.

Hotel Information

**Holiday Inn
3803 13th Ave S.
Fargo, ND 58106**

Standard Room Rates (King or Queen)— \$109.00 plus tax for by January 27, 2018

- To make your reservation call:
 - 1-701- 282-2700
- Ask about NCTGA Room Block



33rd Annual Conference and Trade Show
February 27 & 28—March 1st, 2018
Holiday Inn
Fargo, ND

Exhibitor Registration Form

Company Name _____

Address _____

City, State, Zip _____

Phone _____ Email _____

Vendor Representative (1st Person included in booth fee) _____

Vendor Representative (2nd Person \$90.00) _____

Additional Representatives (\$50.00/person) _____

Manufacture Representative (\$200.00/person) _____

Total Amt. Due for Registration of Representatives \$ _____

2018 Membership Dues Must be Paid at this time: \$90.00 x No. of Memberships _____ = \$ _____

Booth Space (8' x 10')

_____ 1st Booth Space = \$400.00

_____ No. of Additional Booth Space (Additional Booth Space = \$175.00 per/booth)

Total Amt. Due for Booth Space
\$ _____

Sponsorship

_____ Coffee Break Sponsorship = \$175.00

_____ Lunch Sponsor = \$375.00

_____ Social Sponsor = \$275.00

_____ Speaker Sponsorship
Gold \$300.00-\$500.00
Bronze \$200.00—\$299.00
Silver \$100.00—\$199.00

Total Amt. Due for Sponsorship
\$ _____

Will You Donate a Silent Auction Item Yes _____ No _____

If yes, please indicate the item and value _____

Total Red = Amt. Due

NCTGA 33rd Annual Conference & Trade Show Schedule

Due to scheduling conflicts there will not be a recertification before or after the conference, please check page 2 for dates near you. Arrangements for Recertification are Scheduled With NDSU Extension Dept.

SUPER TUESDAY

Tuesday, February 27th, 2018

7:00 AM—8:30 AM	Registration	
8:30 AM— 10:00 AM	Brian Horgan	Fate And Transport of Pesticides And Nutrients
10:00 AM— 10:15 AM	Break	
10:15AM— 11:45 AM	Brian Horgan	Water Conservation
12:00 PM - 1:00 PM	Lunch	
1:00 PM - 2:30 PM	Brian Horgan	Low-input Turfgrass Systems
2:30 PM - 2:45 PM	Break	
2:45 PM - 4:15 PM	Brian Horgan	Evolution of Nitrogen And Phosphorus Transport

Wednesday, February 28th, 2018

6:00 AM – 7:30 AM	Registration	
6:00 AM—1:00 PM	Vendor Set-up	
7:30 AM—7:45 AM	President's Opening Remarks	
8: 15 AM—9:45AM	Dr. Kristina Walker	Pre-Game Agronomic Field Safety Assessment for Sports Fields: Future Implications of Risk Assessment
8:15 AM —9:45 AM	Jeff Forsberg	Making Your Ballfields Look Like The Pros On A Budget
9:45 AM—10:00 AM	Break	
10:00 AM—11:30 AM	Dr. Kristina Walker	Interpreting Soil Test Data to Develop Annual Fertility Management Plans
10:00 AM—11:30 AM	Steve Randall	Staying Relevant in a Changing Profession.
11:30 AM—12: 00 PM	Lunch	

Conference & Trade Show Schedule Continued

12:00 PM	Steve Randall	State of The Industry
12:15 PM—1:00 PM	NCTGA Annual Meeting	
1:00 PM—2:00 PM	Jenny Satter	Hiring, Training, Maintaining the Employee
1:00 PM—2:00 PM	Sam DeMarais	Trees 101
2:00 PM—8:00 PM	Trade Show	
6:30 PM _ 8:00 PM	Social	

Thursday, March 1st, 2018

7:00 AM—8:00 AM	Coffee	
8:00 AM— 9:30 AM	Matt Cavanaugh, John Spaulding	Tall Fescues Becoming More Popular Q & A Session following their talks.
8:00 AM—9:00 AM	Tim Jallen / Nick Baker	Ballfields 101 Keeping it Simple For You Q & A to Follow Their Talks
9:30 AM—10:30 AM	Tim Jallen / Nick Baker	Building and Maintaining Mounds and Home Plate
11:00 AM — 12:00 PM	Jeff Forsberg	Maintaining Your Ballfield
12:00—1:00 PM	Lunch	
1:00 PM—2:00 PM	Educational Points Distribution	
2:00 PM—5:00 PM	NCTGA Board Meeting	

*The Conference & Trade Show Schedule is subject to change.

Sponsorship Opportunities

Coffee Break Sponsor—\$175.00

Social Sponsor—\$275.00

Lunch Sponsor—\$375.00

Speaker Sponsors

On behalf of the NCTGA Board of Directors we have developed a speaker sponsorship program for our Annual conference and trade show. The vendor support is very important to the high level of speakers that we bring in. Below are the three levels of sponsorships, Please indicate which level of sponsorship you would like and again Thank You for your support!

THANK YOU FOR YOU CONTINUED SUPPORT

_____ **GOLD \$300.00—\$500.00**
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 _____ **SILVER \$100.00 — \$199.00**

Bully Pulpit Course Copes With Driest Season Yet!!

The Bully Pulpit Golf Course in the Badlands of western North Dakota is experiencing its driest season yet, but the greens and fairways are still postcard perfect.

Featured in Bismarck Tribune

Casey Moen, golf pro at Bully Pulpit Golf Course south of Medora, talks about the three large storage ponds near the golf course used to water the 18-hole public golf course. The water was pumped from the adjacent Little Missouri River before June 1, Moen said.

The Bully Pulpit Golf Course in the Badlands of western North Dakota is experiencing its driest season yet, but the greens and fairways are still postcard perfect.

The course gets its water from the Little Missouri State Scenic River, which is flowing by the golf course at rates significantly below normal as the region copes with extreme drought conditions.

But Bully Pulpit is not in danger of running out of water for irrigation because water is pumped from the river in the spring and stored in ponds.

The Theodore Roosevelt Medora Foundation has a permit from the North Dakota State Water Commission to pump water for the golf course from the Little Missouri between March 1 and July 1.

“By pumping in the spring, they're able to take advantage of the higher flows and more volumes of water as a result of spring rains and snowmelt,” said Daniel Farrell, hydrologist manager for the State Water Commission.

The permit allows for 400 acre feet of water at a rate of 5,000 gallons per minute, as long as the river flows at the Medora gage don't drop too low and certain conditions are followed.

This season, dry weather and hot temperatures have forced Bully Pulpit to irrigate more often, using more than 500,000 gallons of water each day to keep 90 acres of turf grass in good shape, said Bully Pulpit golf pro Casey Moen.

“Our system is basically at max capacity,” Moen said.

Rainfall is significantly down this year, with Medora recording 0.33 inches of rain in June, compared to a normal June rainfall total of about 3 inches, according to National Weather Service.

So far in July, Medora has recorded high temperatures that average 91.6 degrees, 10 degrees hotter than the average high temperature in July, according to the National Weather Service.

The ideal temperature for the turf grass is between 60 and 80 degrees, Moen said. “So when you get however many days above 80 degrees, some 90 and close to 100, the plant itself almost is in survival mode,” he said. Bully Pulpit, which opened in 2004 south of Medora and Theodore Roosevelt National Park, has been ranked one of the top 100 public golf courses in the country. “To have a national park backdrop as far as scenery goes is unbelievably unique,” Moen said. To keep up with that reputation, which attracts golfers from around the world, staff members have had to change how they approach course maintenance during this dry season, including relying more on irrigation. The course has three storage ponds that hold 320 acre feet of water, Farrell said.

Moen said that's enough to last the golf course two years. This year, the course stopped pumping out of the river as of June 1, Moen said. If the river flows are below 20 cubic feet per second at the Medora gage, which has been common since mid-June, the golf course is unable to pump water, according to conditions of its permit. The permit also gives priority to other irrigators that have held water permits longer and states that the golf course's irrigation cannot exceed 3 acre feet of water per acre. Allan Andersen, a golfer from Scranton, said the Little Missouri is the lowest he's seen since Bully Pulpit opened. He recently enjoyed the course for the third time this season. “It's in pretty nice shape for as dry as it is,” Andersen said. About 17,000 rounds of golf are played at Bully Pulpit each year, down from a peak of 20,000 rounds in 2015 when the region had more oil workers, Moen said.

Hot temperatures haven't kept golfers away this season, but many schedule their tee times earlier, Moen said. The course also has had to cope with the opposite extreme, with flooding of the Little Missouri in 2011 requiring the reconstruction of several holes, Moen said. “I'd much rather fight warm temperatures than floods,” he said.

Up to Speed: Rough mower looking for work

Sep 2017 | Thomas A. Nikolai, Ph.D.

My bio states, "10 years working on a golf course prior to entering the world of research in 1989." For five of those years, I was on the crew, was an assistant for one year, and spent four years as a superintendent.

My greens management program essentially consisted of mowing and changing cups daily, top-dressing every three weeks, core cultivation in the shoulder seasons, applying 4.5 pounds of nitrogen per year for growth and color, applying 6 pounds of potassium for improved wear tolerance and winter hardiness, irrigating by guess, and preventive spraying for disease. For insect outbreaks, my arsenal included chlordane, which killed almost everything regardless of timing. For snow mold control, I applied mercury-based Calo-Clor. Both of those pesticides carried the "Danger" toxicity label, and, like most applicators of the day, I was applying them without personal protective equipment, which often resulted in a pounding headache.

Like many superintendents, I searched for less toxic options, so when a salesman informed me that *Bt* (*Bacillus thuringiensis*, a natural bacterium insecticide) had a "Caution" label, I was an easy sell. Fortunately, today, as a result of government regulations and demands from superintendents, most turfgrass pesticides are far less toxic than they were 30 to 40 years ago.

To support that statement, I contacted three major pesticide manufacturers. All agreed that toxicity levels in turfgrass pesticides have decreased dramatically over the past 30 to 40 years, though none knew the exact numbers. The current breakdown of toxicity labels from the three manufacturers is: 61% Caution, 36% Warning and 3% Danger; 83% Caution, 6% Warning and 11% Danger; and finally, 95% Caution, 5% Warning and 0% Danger.

A direct result of decreased toxicity concentrations in agricultural pesticides includes a drop in the number of animals on the endangered species list, which first appeared in 1967. The American eagle, peregrine falcon and brown pelican are among the animals that have been removed from the endangered species list specifically because of decreases in pesticide toxicities. Other species taken off the list include the alligatorbears, wolves and Canada geese, but the population increases in those species are more closely connected to conservation efforts than to changes in pesticides.

When I returned to college in 1990, I learned *Bt* was only effective when applied during the early stages of the target's life. In reflection, I know the *Bt* application I made provided nothing more than spending money for the salesperson. I also know my nitrogen rates and potassium levels were too high for cool-season grasses, and I most likely overwatered daily — all of which can encourage pests.

Reduced pesticide toxicities are good for the applicator, sensitive individuals and the environment, but they also demand that current superintendents be far more educated than we were in my day. An understanding of a pest's life cycle is necessary to achieve maximum effectiveness with many of today's pesticides, and successful superintendents now use cultural practices to encourage turfgrass health. The pesticides I used were analogous to dropping a nuclear warhead on a house — effective, but overkill. Since 1990, I have performed well over 1,000 research studies, reviewed many scientific papers and attended numerous conferences. Like all other turfgrass researchers, I have focused primarily on one discipline to become an expert. For me, that discipline has been cultural and mechanical practices. Given the facts, I am certain about one thing: I am no longer qualified nor capable of being a golf course superintendent, because I lack the diversified skill set required for the position. That's also true of my researcher peers and most consultants. So, when you're seeking their advice, know their area and level of expertise, which will help you know whether they're guessing.

Many of the big hammers I had in my pesticide arsenal are gone, while others are now formulated at active ingredient (ai) concentrations that decrease toxicity. That's why you can purchase the ai 2,4-D under a "Danger" or "Caution" signal. Today, superintendents have many options, and that's a very good thing. In any event, if anybody is looking for an employee to mow their rough when I retire, give me a call. I think I'll still be qualified.

Thomas A. Nikolai, Ph.D., the "Doctor of Green Speed," is the turfgrass academic specialist at Michigan State University in East Lansing, Mich., and a frequent GCSAA educator.

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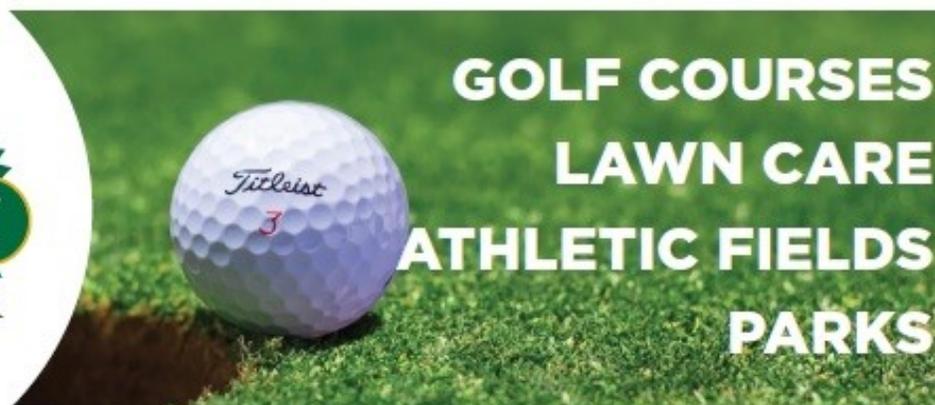


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2017 Golf Tournament Winners

First Flight

Ist

**Ryan Otto
Charles Swallows**

2nd

**Brock Graff
Tyler Nelson**

3rd

**Cory Holter
Erik Hanson**

Second Flight

Ist

**Kevin Guber
Ben Arvidson**

2nd

**David Wood
Jesse Lund**

3rd

**Dave Lorentz
Mike Walker**



2017 Scholarship Golf Tournament

This years tournament was held at the Maple River Golf Club, on September 18th, 2018. The day was sunny and a nice 70 degrees, with our North Dakota winds blowing at 20 mph. We had 44 players, and 20 vendor sponsored holes, three vendors sponsored registration lunch, and one vendor sponsored the dinner. The course played excellent and everyone said that it was a great day. The day was ended with a burger buffet and prizes handed out. The NCTGA, would like to thank all the players, the sponsors, and Maple River Golf Course for a great day.



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