



# The Green Sheet

Central Pennsylvania Golf Course Superintendents Association

Volume 26 Issue 3

Founded ~ April 11, 1939

June 2019

## June Meeting

### Country Club of Harrisburg

401 Fishing Creek Valley Road  
Harrisburg, PA 17112

Host - Scott Fischer

Wednesday June 19, 2019

Registration -10:00 AM

Speaker - 10:30 AM

Lunch Buffet - 11:30 AM

Golf - 1:00 PM Shotgun

Appetizers- Following Golf

*There will be a CPGCSA Board of Directors Meeting  
at 8:30 AM.*

## Country Club of Harrisburg

The Country Club of Harrisburg is the oldest established private club in the Central Pennsylvania area. It was founded in 1896 by a distinguished list of Harrisburg business leaders seeking the social and sports amenities of country club life for themselves and their families. The Country Club of Harrisburg started out as a 9-hole club along the Susquehanna River four miles north of Harrisburg in 1896 before moving to its current location in 1916. William S. Flynn designed the original 18 holes in 1916 for the sum of \$14,189.73. Since then, the golf course has experienced many changes to the original design as well as the routing of the course. The Country Club of Harrisburg is built on the foothills of the Blue Mountains, high above the Susquehanna River in scenic Fishing Creek Valley, just ten minutes from Harrisburg and convenient to both East Shore and West Shore locations.



## Labor: Suggestions For Solutions

By Paul Jacobs, Agronomist, Northeast Region

June 7, 2019

The USGA article, "[Labor: By The Numbers](#)," outlined several reasons why superintendents are struggling to find and retain staff for golf course maintenance. Labor challenges are affecting many industries besides golf, and solutions will vary from one industry to another. If your course is facing labor shortages, consider implementing one or more of the following strategies:



*Investing in autonomous mowers will reduce labor requirements for daily mowing.*

### **Reduce maintenance in nonessential areas.**

The idea of spending less time and money on nonessential maintenance practices has been discussed in many USGA publications and it makes sense to focus resources on priority areas such as putting greens, fairways and tees. Removing intermediate rough, eliminating flower beds and reducing the number of course accessories are great ways to free up resources for other areas. Additionally, developing low-maintenance areas that are only mowed one or two times per year can reduce labor requirements for mowing rough.

### **Implement nontraditional scheduling opportunities.**

Several courses are hiring part-time employees and allowing them to work the hours and days that work best for them. The traditional model requires employees to show up early in the morning, but scheduling a later shift increases the number of potential candidates to hire. One downside to staffing evening shifts is that a manager must be available to coordinate and manage the shift later in the day.

### **Use the Aussie method of bunker raking.**

This method involves raking only the bottoms of the bunkers on a regular basis while leaving the faces smooth. It helps to save time because the faces should only be smoothed again if they are disrupted. This practice also helps to firm bunker faces and reduce the likelihood for buried lies.

### **Invest in golf course renovations that reduce maintenance requirements.**

Fairway regrassing and renovating bunkers are two opportuni-

*...continued on page 14....*

## June President's Message



Greetings Everyone,

Don't look now but I believe we have had a run of almost 4 days with no real measurable rainfall for most of us. I know I probably shouldn't have said anything, but it almost feels like a drought. I know for us here at the Carlisle Barracks it has given us a chance to get caught up on some mowing and detail work that was long overdue. I can only hope the same exists for all of you.

I want to give a huge shout and thank you to Matt Turner and his staff for hosting our May meeting. The golf course was dialed in and those greens were awesome. Thank you Matt! We had a perfect day for weather and I know from everyone I talked to a great time was had by all.

In my previous presidents message I discussed getting the association back to the basics, and at our May board meeting that was a lot of our focus. We discussed some of the reasons for the association's existence and that is what we will be concentrating on moving forward such as networking with other turf professionals at our meetings, scholarship fund, a benevolence fund and the DSL award that is to be given out annually. We will be resurrecting the scholarship and benevolence programs very soon, continuing with the DSL award yearly to recognize those that need recognition and making our meetings the best we can with education and fellowship, whether 30 people show up or 130. Again, we are going to operate the association with a back to basics mentality and for the reasons it was started in the first place.

I do have one punch list item to briefly discuss, and that is the reservation deadline that we must follow on the reservation forms that Wanda sends out for our monthly meetings. Unfortunately we do not have much flexibility when it comes to refunds on registration fees. Basically if you register and pay for the event we cannot refund your money after the reservation deadline. We give the host club our registration numbers on the deadline date and that is the minimum that we are billed for whether you show up or not. We can always add to the number but cannot take back. Member help in getting your forms in with payment by the deadline date will help the day run a lot smoother and avoid a lot of confusion on the day of the event.

Ok, I have rambled on long enough. I am very excited for our meeting in June at Country Club of Harrisburg along with some of our friends from the Keystone association. Thank you Scott for having us and I hope to see a lot of you there. The format for that meeting will be 2 best balls of 4 shamble.

See you at Harrisburg,

Jeff Green  
Superintendent – Carlisle Barracks Golf Course

## 2019 DSL Nominations

The Board of Directors is seeking nominations for the 2019 Rafferty Award. This award recognizes dedication, leadership and service to CPGCSA and its members.

This award is designed to honor current and former superintendents attaining a minimum of 14 years association membership. This is the number of years Dave was a CPGCSA member. All classes of membership shall be eligible to receive the award although superintendent or retired superintendent nominees will receive favored consideration. The award is dedicated to a superintendent who worked hard for our association. Other classes of membership will not be ignored but must show outstanding dedication, leadership and service.

We have many deserving members. Please return nominations by August 31, 2019.

*Applications are included with the June newsletter email or contact [cpgcsa@hotmail.com](mailto:cpgcsa@hotmail.com)*

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## Membership News

The following individuals have applied for membership into our association. If there are no written objections within the next seven days, they will be accepted into CPGCSA at the next meeting.

Tony Gustaitis, CGCS ..... Owner  
Classic Turfgrass Solutions ..... Class AF

Matthew Wolfe ..... Assistant Superintendent  
Lancaster Country Club ..... Class C

If you know of anyone who is interested in membership into the association, please have them contact Wanda at 717-279-0368 or [cpgcsa@hotmail.com](mailto:cpgcsa@hotmail.com).

### Our Deepest Sympathies to:

The family of Greg Fantuzzi on the recent loss of his father.

The family of past member, Michael May. Mike lost his battle to cancer on June 14th.

*Please see a list of our Association Sponsors on Page 16.*

*Please Support Them as they Support Us!*

Membership information is also available on the Central Penn website at: [www.cpgcsa.org](http://www.cpgcsa.org)

## Superintendent Profile

Scott Fischer has been in the golf course industry for over 30 years working up through the ranks at various courses mainly in the Harrisburg region. He went to Cook College at Rutgers University receiving his certificate in turfgrass management. Scott has been a superintendent for about 19 years and spent three years in sales. Scott notes he has had the privilege to work under superintendents such as Mike Benedict, Manada Golf Course; Dave Geis/Brian Heffley, Blue Mountain Golf Club; Bob Jackson, Meadowlands CC; Sam Snyder and the late Alby Gerst, Colonial CC; and last but not least Bill Wall at Dauphin Highlands Golf Course during the construction and grow-in. Scott's first gig as a super was at Red Lion CC for three years before going into sales for Lesco. After sales Scott was the super at Blue Ridge CC for about 8 years before going to his present employer, The Country Club of Harrisburg in 2012.

Scott is happily married (20 years!) to his beautiful wife Michelle and they are blessed with 3 wonderful daughters: Cassidy (16) and twins Jessica and Caitlyn (14). They also have an 8-year-old German Shepherd: JD.



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## “Bluegrass, Buffet and Baseball”

The Reading Fightin Phils are hosting an educational and social event for turf managers on July 24, 2019.

Turfgrass related presentations starting at 10:00 a.m. followed by a baseball game featuring the R-Phils vs. the Binghamton Rumble Ponies (Mets) at 11:35 a.m. with an all-you-can-eat buffet lunch from 11:00 a.m. – 1:00 p.m. and an opportunity to tour the field after the game.



Feel free to invite family, friends, clients, etc.

\$30 per person includes the presentations, buffet and a private group area for the game.

Visit [Bluegrass, Buffet and Baseball](#) for the day's agenda and to purchase tickets.



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## June Education

Our speaker for the June Meeting at Country Club of Harrisburg is Michael L. Agnew Ph.D., Senior Field Technical Manager at Syngenta Turf and Landscapes.

Education: Ph.D. –

- \* Kansas State University (Horticulture/Turfgrass Science - 1984)

Work Experience –

- \* Associate Professor and Extension Turfgrass Specialist, Iowa State University (1984-1994)
- \* Extension State Leader for Horticulture at Iowa State University (1990-1994)
- \* Regional R&D Manager for Ciba-Geigy and Novartis (1994 - 2001)
- \* Senior Technical Manager for Syngenta (2001 to present)

Dr. Agnew's presentation will be "Annual Bluegrass Weevil Review".

1. Annual Bluegrass Weevil Short Review
  - a. Life Stages
  - b. Cultural and chemical control
  - c. Importance of timing.
2. Annual Bluegrass Weevil 2019 thus far in PA
  - a. Review of Country Club of Harrisburg WeevilTrak site and McGraw Research.
  - b. Review of Philadelphia Country Club WeevilTrak site and McDonald Research.
  - c. Review of Fox Chapel Country Club WeevilTrak site and McGraw Research.
3. Annual Bluegrass Weevil 2019 what can be expected in the next 3 months in PA.
  - a. Impact of weather
  - b. Impact of management practices

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## GCSAA Survey Shows Rise in Golf Course Superintendent Salaries

*The nationwide snapshot of compensation also reports income increases for assistant superintendents and equipment managers.*

May 7, 2019 | GCM staff

The average annual salary for golf course superintendents has climbed to more than \$93,000 in 2019.

This and additional data are from the latest biennial Compensation and Benefits Report from GCSAA. The 2019 report shows that the \$93,176 average salary is an increase of 4.5 percent over the average in the 2017 report, continuing the trend of increases in every two-year period since GCSAA began tracking the data in 1993. Superintendents' salaries have more than doubled in the quarter-century since that first report, when the average salary was \$44,500.

Certified Golf Course Superintendents — those who have achieved the highest level of recognition through education, experience and service — have seen a salary increase of more than 1 percent since 2017. Their average salary has risen to \$111,250, an increase of \$1,630 compared with 2017.

Assistant superintendents and golf course equipment managers have also seen increases in their incomes. Assistant salaries have grown 7.3 percent, and equipment managers' average salaries have risen 7 percent compared with two years ago.

“It is heartening to see golf course owners continue to invest in golf course superintendents and their staffs,” says Rhett Evans, GCSAA CEO. “They know the value of these highly educated professionals who oversee the golf facility’s top asset.”

The 2019 Compensation and Benefits Report also offers a profile of GCSAA superintendents and their operations. The average age of a superintendent is 46.5 years, and he or she has spent 16.4 years in the profession. The average number of years a superintendent has spent in his or her current position has stayed steady at 10.5 years.

Between December 2018 and January 2019, the association research firm Industry Insights sent the 2019 survey to all GCSAA Class A and Class B members. The response rate was 45 percent, with a margin of error of plus or minus 1.3 percent and a 95 percent level of confidence.

Get more information about [GCSAA’s 2019 Compensation and Benefits Report](#).



Read more:

<https://www.gcmonline.com/course/environment/news/golf-course-superintendent-salary-2019#ixzz5r2P9yi7N>

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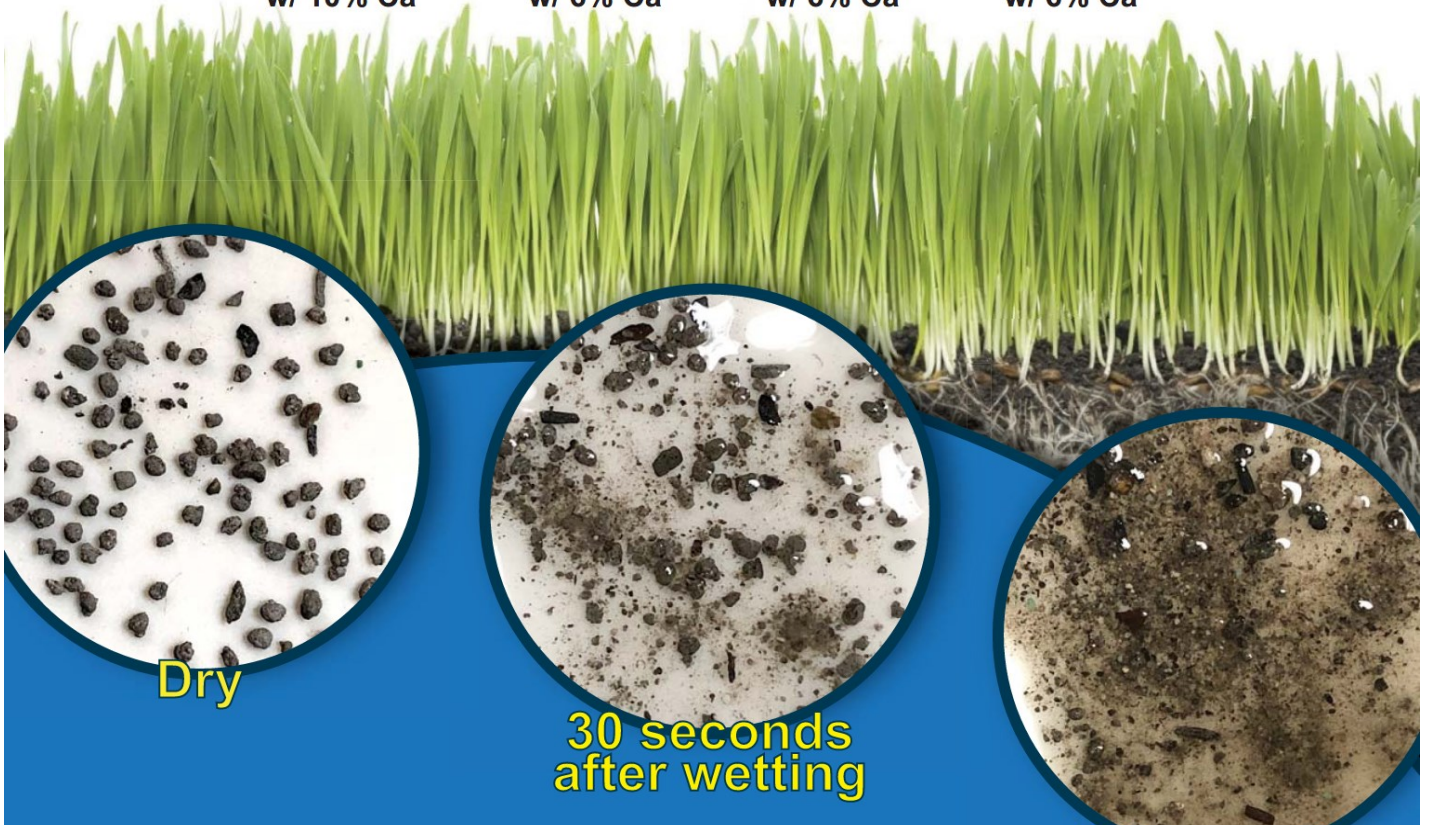
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## Verdure: It's all in the delivery

*Granular vs. foliar fertilizers — researchers tested them alone and in combination to determine their effects on turfgrass quality and soil nutrient levels.*

May 2019 | Beth Guertal, Ph.D.

Turfgrass fertilization sometimes seems to have devolved into two camps: the foliar folks and the granular gang.

So it's always nice when you find a research paper that examines those two methods for nutrient delivery. Recently, turfgrass researchers at Michigan State University used Penn A-4 creeping bentgrass putting greens to examine various combinations of granular and foliar fertilizers, and to determine the fertilizers' effects on turfgrass quality and soil nutrient status.

The six fertilizer treatments were: 1) granular organic fertilizer (soy protein and blood meal) (10N-2P-4K); 2) granular methylene urea (40N-0P-0K); 3) granular urea (46N-0P-0K); 4) foliar nitrogen (N) (18N-3P-4K) applied at 8 ounces product/1,000 square feet (2.5 milliliters/square meter), the recommended labeled rate for the product; 5) the same foliar N product applied at 16 ounces/1,000 square feet (5.0 milliliters/square meter); and 6) a granular and foliar fertilizer combination.

All the granular products were applied at 0.5 pound N/1,000 square feet (2.4 grams/square meter) (per month, May-October) to supply a total of 3 pounds N/1,000 square feet (14.7 grams/square meter) per year. The foliar products were applied twice weekly, applying 0.125 or 0.25 pound N/1,000 square feet per application (0.6 or 1.2 grams/square meter) to supply a total of 1.5 and 3 pounds N/1,000 square feet (7.4 and 14.7 grams/square meter) per year for the low and high rates, respectively.

Finally, the foliar/granular combination treatment had a total of 3 pounds N/1,000 square feet per year applied, with half that N applied as split monthly granular treatments, and the remaining 1.5 pounds N divided as twice-monthly foliar applications (at 0.125 pound N/1,000 square feet per application).

So, with the exception of the lowest rate of the foliar-only treatment (which received only 1.5 pounds N/1,000 square feet/year), all the other treatments received 3 pounds N per year.

Last, there was an unfertilized control treatment. All of this was done on two different putting green mixes: a native sandy clay loam root zone and a USGA-type root-zone mix.

All of these various treatments also applied different rates of phosphorus (P) and potassium (K). Confounding nutrient application with mixed fertilizers is always an issue in fertilizer studies. In this case, the extra applied nutrients were not adjusted to uniformity across the various treatments and were simply applied as supplied in the various fertilizers. Even with these different rates of P and K addition, there were no increasing or decreasing trends in soil P or K over the length of the study, even in the treatments that consistently supplied P or K.

The quality of turfgrass growing in the native soil was almost always better than that of the bentgrass growing in the USGA-type greens mix. The fertilizer treatments affected turfgrass quality in every year of the three-year study. However, there were some turf quality differences between the treatments from year to year.

In the first year, quality was consistently highest in bentgrass to which granular urea had been applied. As the summer progressed, plots that received methylene urea, the foliar/granular mix or the higher rate of foliar fertilizer, also had similarly high quality.

As the second and third years of the study were completed, bentgrass that had received the twice-monthly applications of the foliar/granular combination or the high rate of foliar fertilizer consistently had higher quality than that observed in bentgrass that had received monthly applications of urea, methylene urea or organic fertilizer.

So, for highest turfgrass quality, the key was applying a higher rate of foliar fertilizer or a foliar/granular application every two weeks rather than monthly applications of granular products. And the lower rate of the foliar product, which was also applied twice monthly? Well, even though it did not produce turf of the highest quality, it did produce bentgrass of acceptable quality and was thus considered a successful treatment.

*Source:* Xiao, M., K.W. Frank and T.A. Nikolai. 2018. Foliar and granular effects on creeping bentgrass and soil nutrient levels. *Crop, Forage and Turfgrass Management* 4:170539 doi:10.2134/cftm2017.05.0039

*Beth Guertal, Ph.D., is a professor in the Department of Crop, Soil and Environmental Sciences at Auburn University in Auburn, Ala., and the 2019 president of the Crop Science Society of America. She is a 20-year member of GCSAA.*

Read more: <https://www.gcomonline.com/course/environment/news/granular-foliar-fertilizers#ixzz5r25Irnqz>





# PENN STATE TURFGRASS

## Annual Bluegrass Research at Penn State – Survey Sites Needed

<http://psuturf.com/2019/06/annual-bluegrass-research-at-penn-state-survey-sites-needed/>

June 3, 2019

The Penn State Turfgrass Program is looking for turfgrass managers to assist with a research project focusing on annual bluegrass throughout Pennsylvania. The primary goal of this project is to address potential herbicide resistance in annual bluegrass in managed turf systems.

John Kaminski (Professor of Turfgrass Science) and Kaiyuan Tang (Ph.D. student) are looking for turfgrass sites in Pennsylvania to collect annual bluegrass plants. We are currently interested in collecting samples from sod farms, athletic fields, home lawns managed by professional lawn care services, and golf course fairways where herbicide resistance is suspected or in sites routinely treated with herbicides. Collected plants will be screened for resistance to several herbicides and plant growth regulators typically applied to manage annual bluegrass.

The USDA-SCRI Annual Bluegrass Collective is part of a larger initiative involving faculty, staff and graduate students from fourteen Universities across the United States. If you would like to participate in this research project, please complete the brief survey ([www.bit.ly/ResistPoa](http://www.bit.ly/ResistPoa)) and/or contact John Kaminski at [kaminski@psu.edu](mailto:kaminski@psu.edu).

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## Pythium Research at Penn State – Samples Needed!

<http://psuturf.com/2019/05/pythium-research-at-penn-state-samples-needed/>

May 10, 2019

The Penn State Turfgrass Program is looking to golf course superintendents to assist with a research project focusing on Pythium species causing root rot and foliar blight throughout Pennsylvania and the Mid-Atlantic. The primary goal of this project is to identify Pythium species in soil and plant tissue as it relates to disease development throughout the year. John Kaminski (Professor of Turfgrass Science) and Travis Russell (Ph.D. candidate) are looking for turfgrass sites with a history of root Pythium issues and/or suspected cases of Pythium patch. Pythium isolates from these sites will be included in ongoing evaluations to pathogen biology, disease epidemiology, and best management practices for control. If you would like to participate in this research project, please contact John Kaminski at [kaminski@psu.edu](mailto:kaminski@psu.edu) for more information.



Root Pythium is a common issue on golf course putting greens, but more information about the species causing the problem in Pennsylvania is needed. In addition to root Pythium, the purported new disease Pythium patch (slideshow below) has appeared on several golf courses in the region in the last few years and needs more investigation.



**PENNSTATE**



## Up to Speed: Collar Care

*Follow these guidelines to minimize wear to putting green collars from rolling and to promote collar density and health.*

September 2018 | Thomas A. Nikolai, Ph.D.

<https://www.gconline.com/course/environment/news/putting-green-collars>

During the dog days of summer, putting green collars commonly show wear from environmental stress. Contrary to folklore, research indicates that collars display symptoms of dollar spot and some other turfgrass diseases because the microenvironment of a collar is more humid than that of a putting surface, which is maintained at a lower height of cut (HOC) and therefore has a denser surface.

With that said, mechanical stress from increased lightweight rolling has certainly exacerbated collar wear. Clearly, the numerous benefits of frequent rolling, as revealed by turfgrass research, are worth the extra attention that collars deserve. However, perfectionists see the glass as half-empty, so let's examine methods to minimize collar wear caused by rolling.

Recommendations for promoting putting green collar density and health begin with the operator (or supervisor) of a *sidewinder roller*, who must consider practices that can eliminate spinning or slippage on the collar.

- Consider the position of the drive roller in respect to slopes. As much as possible, the drive roller should remain on the downhill side of a slope, *pushing the roller upslope* (as opposed to pulling the weight of the roller up a slope). This reduces spinning while changing directions on the collar, and it is also an important consideration when approaching a green on a slope.
- Particularly during times of increased environmental stress, the roller operator should *slowly come to a complete stop (and pause) before changing directions*.
- An increasing number of superintendents advocate stopping short of the collar and changing the direction of the roller on the putting surface. This practice violates past recommendations — that is, never change directions or turn on the putting surface with any piece of equipment. This newer practice supports the adage “never say never,” because a tighter HOC on stoloniferous grasses causes less stress from traffic than a higher HOC.
- Decreasing the HOC on collars can also reduce wear caused by rollers and perhaps minimize some environmental stress.
- When possible, a vibratory roller should be used after topdressing to help incorporate sand into the canopy. Research indicates that a single vibratory rolling after sand topdressing increases sand incorporation into the canopy by more than 50% on bentgrass putting surfaces and up to 80% on bermudagrass. This is important because added abrasion from sand on a spinning roller can increase damage to the collar's leaf tissue.
- For those who do not own a vibratory roller that can be lifted before contact with the collar, it may be beneficial to change sidewinder roller direction in the rough when topdressing sand is still visible on the roller. This is done to minimize the abrasion caused by the sand.
- One superintendent told me he seeds perennial ryegrass into his bermudagrass collars when they show wear from rolling. This is not a good fit for all desirable species because of concerns with contamination, but, in a pinch, grass is better than bare ground.
- Use of mats and grates has increased, but there must be enough time and/or labor to accommodate the laying and movement of the mats.
- Avoid getting putting green plant growth regulator (PGR) applications on the surrounding collars. As the HOC of the turfgrass increases, the aboveground growth rate decreases, indicating that the collar has a slower growth rate and therefore slower recovery from stress than the putting surface. The effect of PGRs also lasts longer on grass with a higher HOC. If the same rate of PGRs must be applied to the putting surface and the collars, it is a good idea to *increase the nitrogen rate on the collars* to stimulate growth that is being minimized by the PGRs.

I thank Luke Paddle, assistant superintendent at Oakdale Golf and Country Club in Toronto, and my research technician, Aaron Hathaway, for their input. For those who want to look deeper into PGR growth, I suggest research by Bill Kreuser, Ph.D., at the University of Nebraska.

For those who are wondering why I did not mention bleach and starch — you should not have read this article.

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*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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## *Green Start Academy Application Period Now Open*

*Apply now to learn from the best in the industry at Green Start Academy*

Cary, N.C. (June 05, 2019) – The application process for the 14<sup>th</sup> annual Green Start Academy (GSA) is now open. [John Deere Golf](#) and [Bayer](#), are accepting applications through June 28<sup>th</sup>. Those interested in applying can do so at the [Green Start Academy Website](#).

GSA is open to assistant superintendents from the U.S. and Canada who are looking to advance their careers. Opportunities to develop critical business skills, expand their business network and learn from notable industry experts are provided throughout the two-day event held each October in North Carolina.

“Green Start Academy offers an opportunity for assistant superintendents to get invaluable facetime with notable industry professionals,” said Ren Wilkes, tactical marketing manager for John Deere Golf. “Since 2005, John Deere has taken great pride in contributing to the next generation of superintendents through this program. The relationships created during GSA last a lifetime, and our alumni are a testament to the success of the event.”

Those selected will receive an all-expenses paid trip to the Raleigh, N.C.-area. The chosen assistant superintendents will be notified during the week of August 5th.

“Green Start Academy was designed to cultivate skills in budgeting, leadership and management,” said Mike Hirvela, Customer Marketing Manager, Golf, Bayer. “In addition, Green Start Academy provides a venue for networking and peer to peer interaction. We’re honored to help assistants grow their roles as future leaders of golf course management.”

The event will take place from October 23 – 25, 2019 at the Bayer Development and Training Center in Clayton, N.C., the John Deere Turf Care factory in nearby Fuquay-Varina and John Deere headquarters in Cary, N.C.



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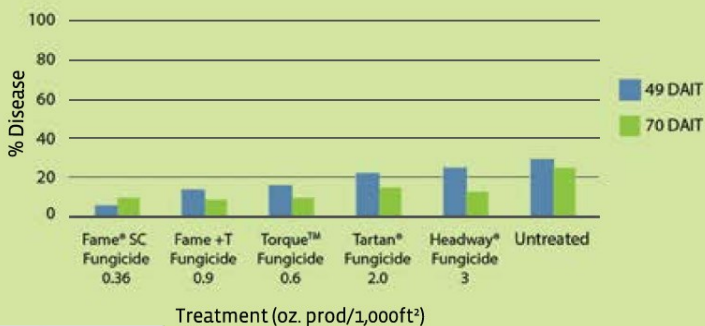
## PLANT HEALTH

- Root mass
- Root length
- Consistent chlorophyll production

### DISEASES CONTROLLED

- Brown Patch
- Fairy Ring
- Leaf Spot
- Necrotic Ring Spot
- Pink Patch
- Pythium Blight
- Pythium Root Dysfunction
- Pythium Root Rot
- Red Thread
- Rust
- Southern Blight
- Spring Dead Spot
- Summer Patch
- Take-All Patch
- Yellow Patch

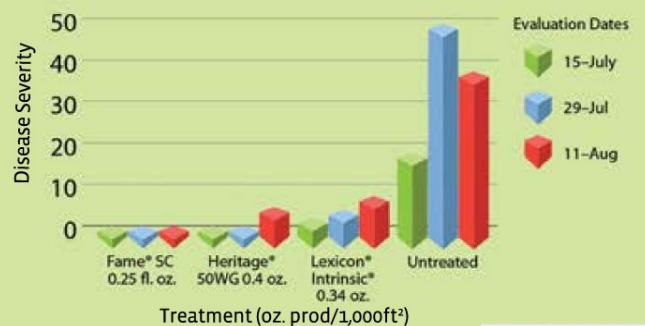
### Fairy Ring Control



Treatment (oz. prod/1,000ft<sup>2</sup>)

Source: Penn State University, 2016

### Brown Patch Control in Tall Fescue



Treatment (oz. prod/1,000ft<sup>2</sup>)

Source: North Carolina State University, 2014



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## Labor: Suggestions For Solutions...*continued from Page 1*

ties to reduce labor requirements and maintenance costs. These changes cost more money than the above solutions, but they should be viewed and analyzed as investments instead of costs because they can pay for themselves through decreased spending after they are implemented. Here are a couple of things to know about these improvements:

- New bentgrass varieties have been developed for improved performance and disease resistance. Regrassing with these varieties can reduce the total number of plant protectant applications that need to be made annually. As a result, less time is spent spraying and less money is spent on these products.
- Bunkers can be expensive to maintain, so simplifying the design and eliminating bunkers that are unnecessary, or that primarily target high-handicap players, can help reduce maintenance costs. For courses with steep-faced bunkers, installing porous aggregate [bunker liners](#) will reduce the frequency and severity of washouts during heavy rain events. Facilities that have installed these liners are certainly experiencing the benefits this spring. Renovating with a flat-bottom design can also help to reduce washouts.

### Utilize new technology such as autonomous mowers and GPS sprayers.

Autonomous mowers are increasing in popularity, especially in regions where the minimum wage has increased significantly and entry-level staff are difficult to find. With autonomous mowers, one employee can perform several tasks – e.g., blowing, bunker raking and ball mark repair – while the green is mowed to improve operational efficiency.

GPS-guided sprayers are being used by more superintendents and can decrease the amount of product used by 10-20 percent in most cases by applying products more accurately. These savings can be reallocated to other areas of the course or used to help increase wages to become more competitive with other industries.

Hopefully, one or more of these techniques can improve operational efficiency at your facility so playing conditions can remain similar with less staff. Or perhaps reducing spending in some areas will make more money available to increase wages, helping to attract and retain staff.

<https://www.usga.org/content/usga/home-page/course-care/regional-updates/northeast-region/2019/labor--suggestions-for-solutions.html>

# May Golf Results - Conestoga Country Club



**1st Place -**  
Chris Martin  
Thom Mahute  
Dan Brickley  
Matt Turner

**5th Place-**  
Stu Hartman  
Tom Ocepek  
Brian Ahrens  
Ted Zabrenski



**Closest to Pin**  
George Manos  
Jeff Green  
Sean Gregson

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# June Education at Conestoga Country Club



Thanks to Darrin Batsky from Bayer for taking the time from his schedule to speak with us about the Science of Managing Poa Annua Seedhead.

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**2019 Meeting Schedule**

**June 19<sup>th</sup>**  
Country Club of Harrisburg

**September 18<sup>th</sup>**  
Huntsville Golf Club

**October 21<sup>st</sup>**  
Moselem Springs Golf Club



**The Green Sheet**

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