



# THE NEWSLETTER

May 2018

of the **Golf Course Superintendents Association of New England, Inc.**

Sponsors and administrators of the Troll-Dickinson Scholarship Fund – Awarded yearly to deserving Turf Management Students.

## Thoughts From Your Executive Director *by Don Hearn*



*From left: Mike Kroian, Melissa Gugliotti, Jason Kennedy, our Host Mike Poch*

This year's Bear Cup tournament was played April 30 at Foxborough Country Club. Our host **Mike Poch**, and Assistant Superintendent **Jason Kennedy** went out of their way to provide good cheer and wonderful hospitality. The entire staff was great to work with. Golf Professional **Lou Rivers** made the raw weather day end smoothly with his handling of the score board and the presentation of the results was a neat package. Function Coordinator **Tammy Edinger** and her teammate Sherry served the food and beverages and made us feel at home. Executive Chef **Nick Dadona** and his staff had the food prepared to the liking of all the players. The results of the day favored the GCSA of New England. When the results were posted declaring the New England team the champs with a winning score of 9 ½ to 6 ½ the GCSA of Cape Cod gave up possession of the Bear Cup after a six year reign. The event was played Ryder Cup style.



*From left: Tom Hoffer, Dan Fuller, Bob Dembek, Tim Crane*



*Jeff Urquhart, left accepts the Bear Cup Trophy from Brian Smoot, President of the GCSA of Cape Cod*

# GCSANE BOARD OF DIRECTORS

## PRESIDENT

**David W. Johnson**  
The Country Club  
191 Clyde Street, Chestnut Hill, MA 02467  
617-456-3972  
Email: Djohnson.wgc@gmail.com

## VICE PRESIDENT

**Jeffrey Urquhart**  
Milton Hoosic Club  
70 Green Lodge Street, Canton, MA 02021  
781-828-2953 Fax 781-828-3220  
Email: jmartin101@gmail.com

## SECRETARY/TREASURER

**Donald D'Errico**  
KOHR Golf  
508-530-2113  
Email: svderrico@icloud.com

## DIRECTOR, SCHOLARSHIP & BENEVOLENCE

**David Stowe, CGCS**  
Newton Commonwealth Golf Club  
212 Kenrick Street, Newton, MA 02458  
617-789-4631  
Email: Newtonmaint@aol.com

## DIRECTOR

**Peter J. Rappoccio, CGCS**  
Concord Country Club  
246 ORNAC, Concord, MA 01742  
978-371-1089 Fax: 978-369-7231  
Email: gcs@concordcc.org

## DIRECTOR, AFFILIATE

**Keith Tortorella**  
Country Club Enterprises  
2D Express Drive, Wareham, MA 02571  
508-982-4820  
Email: ktortorella@cceggolfcars.com

## DIRECTOR

**Bob Dembek**  
Lexington Golf Club  
55 Hill Street, Lexington, MA 02420  
978-870-8669  
Email: lexgc@rcn.com

## DIRECTOR

**Brian F. Skinner, CGCS**  
Bellevue Golf Club  
PO Box 760661, Melrose, MA 02176  
781-248-0216  
Email: brianskinner@bellevuegolfclub.com

## PAST PRESIDENT

**Michael Luccini, CGCS**  
Franklin Country Club  
672 E. Central Street, Franklin, MA 02038  
508-528-6110 Fax: 508-528-1885  
Email: Mluccini@franklincc.com

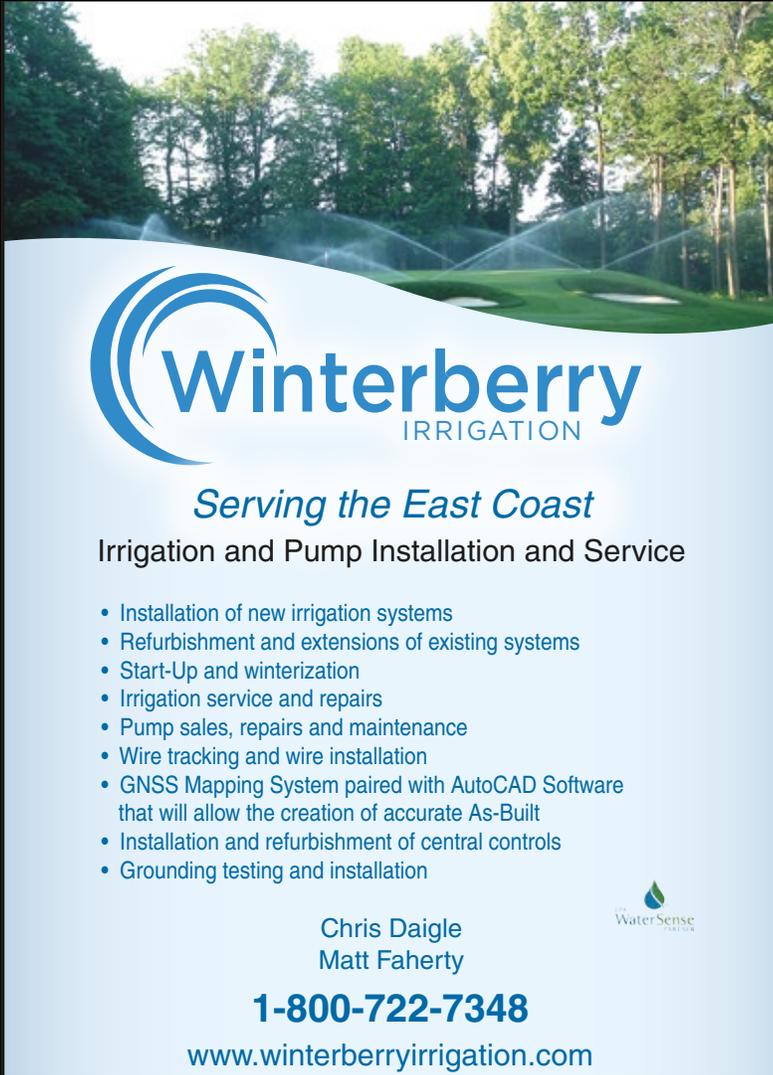
## EXECUTIVE DIRECTOR

**Donald E. Hearn, CGCS**  
300 Arnold Palmer Blvd., Norton, MA 02766  
774-430-9040  
Email: donhearn@gcsane.org

## GCSANE Headquarters

300 Arnold Palmer Blvd., Norton, MA 02766  
Tel: (774) 430-9040  
Web Site: www.gcsane.org

Any opinions expressed in this publication are those of the author and/or person quoted, and June not represent the position of GCSANE. Information contained in this publication June be used freely, in whole or in part, without special permission as long as the true context is maintained. We would appreciate a credit line.



# Winterberry

IRRIGATION

## Serving the East Coast

### Irrigation and Pump Installation and Service

- Installation of new irrigation systems
- Refurbishment and extensions of existing systems
- Start-Up and winterization
- Irrigation service and repairs
- Pump sales, repairs and maintenance
- Wire tracking and wire installation
- GNSS Mapping System paired with AutoCAD Software that will allow the creation of accurate As-Built
- Installation and refurbishment of central controls
- Grounding testing and installation

Chris Daigle  
Matt Faherty

# 1-800-722-7348

[www.winterberryirrigation.com](http://www.winterberryirrigation.com)



## SHELTER HARBOR GOLF CLUB

“ We felt the 9009A was the perfect fit for us here at Shelter Harbor. The quality of cut we got was just second to none. It was unbelievable how well that machine performed.”  
– Mike Dachowski, Superintendent

## QUAIL HOLLOW CLUB

“ I love the A Model mowers, especially the reel technology. I'm even more impressed with some of the adjustments that we can make, thanks to the TechControl display.”  
– Keith Wood, Superintendent

They know the A Model mowers. Do you?

The reviews are in: our A Model mowers will give you more control and more exacting results on your course. Thanks to the TechControl display you can control your operator's turn speed, plug in mow and transport speeds, service reminders and receive diagnostic feedback quickly and accurately. Take it from the best: the power to control your course is now in your hands. To find out more about our new A Models, contact your local John Deere Golf distributor today.

Trusted by the Best



JohnDeere.com/Golf



# JOHN DEERE



# FINCH

SERVICES, INC. Est. 1945  
[www.finchinc.com](http://www.finchinc.com)

## DISTRIBUTOR OF THE YEAR 2017

# *New England Regional Turfgrass Foundation, Inc.*

## *May 15, 2018 Press Release*

---



---

*2018-2019 NERTF Executive Board*

---

*(l to r): Peter J. Rappoccio, CGCS (Vice-Pres.), Jeffrey M. Urquhart (Pres.), Randy S. Weeks (Immediate Past-President). Robert Searle (Secretary) and Mark Mansur (Treasurer) were not at the meeting.*

---

The New England Regional Turfgrass Foundation recently held its 21st Annual Meeting on May 14, 2018 where a new Executive Board was elected. Jeffrey M. Urquhart, Golf Course Superintendent of the Milton-Hoosic Club in Canton, MA has been elected as the 22nd President of the Foundation, succeeding Randy S. Weeks of Laconia Country Club, Laconia, NH.

Jeff, has represented the Golf Course Superintendent Association of New England on the NERTF Board since 2014. Peter J. Rappoccio, CGCS of the Concord Country Club also of GCSANE will serve in the vice-president's seat for this upcoming year. Mark Mansur of Wintonbury Hills Golf Course in Bloomfield, CT will serve as the Treasurer for his second year. Robert B. Searle of the Abenakee Club of the MGCSA has been elected to serve as secretary. Randy will continue to serve on the board as the Immediate-Past President. The foundation consists of 2 delegates from each of the 7 GCSAA

Chapters located in New England, 1 delegate from the Sports Turf Managers Association of New England (NESTMA) and 1 delegate from the Massachusetts Association of Lawn Care Professionals (MALCP). There are two advisory seats filled currently by the University of Massachusetts and the University of Rhode Island respectfully.

The 21st Annual Conference and Show was held in Providence, RI on March 5th through March 8th, 2018. The 2018 winter weather cooperated nicely on Monday and Tuesday opening the doors for attendees and exhibit booths whose sales were very strong. Monday/Tuesday seminar attendance was at its second highest number since seminars were added. The weather did become a challenge to the show goes on Wednesday. Matt Light, retired Patriot and 11yr Offensive Lineman for the team, inspired a large crowd during his keynote address. 71.5 total hours of Education for all attendees was available during the 4 days and the trade show was open a total of 13 hours.

The 2019 show dates for the 22th annual show are: March 5-7, 2019 in Providence, RI. For more information on the show and New England Turfgrass Research please visit our website: [www.nertf.org](http://www.nertf.org).

In other NERTF news, the 7th annual Tee-Up New England rounds of golf auction took place April 9-16, 2018. 112 rounds of golf across New England and one day of tennis at the Longwood Cricket Club were auctioned off. Rounds were collected for the auction by the NERTF and ATG (Alumni Turf Group). All rounds were sold, and little over \$32,000 was raised towards turfgrass research in New England. We thank greatly all of the courses who participated in 2018 and wish to thank everyone for supporting turfgrass research. A list of courses that participated is located at [www.tee-upnewengland.com](http://www.tee-upnewengland.com).

# HOW TO BE A GOOD CUSTOMER *By Don Hearn*

---

I've talked with several company representatives in our industry and asked what is good about what they do and what isn't as good as it could be. For the longest time, I thought the disappointment of not making a sale would be a strong negative. Or, the loss of a sale to a competitor would be crushing. To my surprise, I've been told, without exception, this isn't the negative I thought it was. Not that they like it, but it's part of the daily process they deal with. No different than a superintendent feeling bad when the day doesn't go as planned. Or when something beyond your control happens – you deal with it and move forward.

The greatest disappointment seems to be how some company representatives are treated by their customers. Sure, the customer expects service, and/or they expect a product. But service to the customer does not mean servitude, and selling someone a product does not mean selling one's dignity. Remember the Golden Rule – Treat others as you would want to be treated yourself. Pretty simple. How would you feel if you were on the receiving end of what you are dishing out? Wouldn't like it? Then don't do it!

Some in our industry complain about receiving bad customer service from companies without ever stopping to wonder if they're being a good customer. Keep in mind If you don't have the courtesy of treating your company reps like they are human beings, they won't be motivated to giving you their best. It's a two-way street.

Everyone goofs up at some point or the other. No matter how meticulous a person is, there are days when no amount of coffee will help them out of grogginess. Mistakes will be made and the day could turn out a disaster.

Everyone has days like that. The only problem is that most people just don't seem to remember that other people do too. So, the next time you seek help from a company rep, remember they're people too and have stress in their lives.

No company rep wants to make life miserable; they just want to help in whatever way possible. Company reps shouldn't have to earn the right to be treated with courtesy and respect.

Customer support is still a two-way street. You get what you give. Being a good customer usually ends in a win-win; it brightens a company rep's day and helps you receive good service.

During my many years in the business I have been told stories about poor service or poor attitudes of some in the industry. Of course, I listened from the viewpoint of a fellow customer. Seldom did I consider the problems the sales rep may have encountered trying to deliver the product. The blame was direct. Yup, it was the rep's fault.

Certainly, the representative has a duty to treat the customer with respect and caring – remember the Golden Rule.

Following are some responsibilities of the customer in the customer/representative relationship.

- Separate the person from the performance – people mess up. There's a big difference between an accident and negligence, between a mistake and malice. Many times the person in front of you is trying to do a good job — if so, then cut them a little slack.
  - Don't be a bully. Pushing around a rep by raising your voice, making unreasonable demands, and showing utter contempt for their very being does not make you powerful, it just makes you a bully. Don't push people around just because you think you can.
  - Be available. If you agree to meet with a rep make sure you've set aside time to do so and make yourself available. Telling a person you don't have time for them when they have set aside time to meet with you is disrespectful and a real disappointment. If something unexpected happens let the rep know as soon as you can. A wasted trip is a downer.
  - Adjust Your Expectations — Expecting great service is your prerogative; expecting great service to mean that the company does whatever you want, whenever you want, and for as little as you are willing to pay is not. Adjust your expectations to the realities of the business you are dealing with.
  - If you're worried that sharing your budget will jack up the price, you can do one of two things, offer a range, or find another provider because if the level of trust is that low then other problems will emerge. By sharing your budget, you can help the company rep serve your needs.
  - PAY YOUR BILL. What does paying your bill have to do with working with a company rep? Try not paying your bills promptly and see how responsive he or she is to your next request. While most of us are not directly responsible for the actual payment of the bill, we should realize if it doesn't get paid, you probably won't have what you need delivered when you need it. Some company policies can be personally frustrating; don't shoot the messenger. Chances are they did not create the policy and do not have a choice but to enforce it.
- Don't think of yourself as an island that requires a permit to enter. Don't be full of yourself. Have respect for those who are an important part of our industry. Expectations color our perception—having too many, or the wrong ones, allows for self-deceit and an unnecessary sense of entitlement. There are companies who love their customers, refine their processes, and believe that providing excellent support is just as important as their product or service. Be kind and celebrate great representatives and their companies.

## 2017 Final Project Summary

Project Title: **Evaluation of Rolling Frequency and Fungicide Programs on Golf Course Fairways for Dollar Spot Control**

Principal Investigator(s): James Popko, M.S., Geunhwa Jung, Ph.D.

University: University of Massachusetts, Stockbridge School of Agriculture, Amherst, MA 01003

### Project Overview

The goal of this project was to comprehensively look at effects of fairway rolling on turfgrass quality and disease suppression and provide an overview of how superintendents can practically implement this practice. From 2015-2017, we examined the effect rolling frequency (0, 3, 4, and 6 times per week) on dollar spot severity and different fungicide spray programs (calendar, threshold and untreated) to determine potential fungicide reductions. We also examined the impact of rolling on soil compaction, clipping yield, root density and thatch. Rolling reduced dollar spot in 2015 and 2017

### Objectives:

1. Determine the effect of rolling frequency (0, 3X, 4X, and 6X per week) on the dollar spot severity.
2. Determine if using a threshold based spray schedule compared to a calendar based spray schedule can reduce fungicide applications.
3. Determine the before and after effect of rolling frequency (0, 3X, 4X, and 6X per week) on soil compaction, thatch level and root density.
4. Determine the effect of rolling frequency on clipping yield (dry weight).

### Material and Methods

#### *Location and Equipment*

The field trial was conducted at the University of Massachusetts, Joseph Troll Turfgrass Research Center (South Deerfield, MA) on creeping bentgrass and annual bluegrass mowed three times per week at fairway height (0.5 inches). The soil type was a sandy loam and irrigation was provided as needed. A Smithco (Ultra 10) fairway roller was used and Smithco has been very accommodating and is willing to loan a roller each year. Rolling treatment frequencies were applied as a 3x/wk, 4x/wk (double roll 2 days) and 6x/wk (double roll 3 days). Frequencies were chosen to maximize dollar spot control with an attempt to fit into daily golf course maintenance schedules.

#### *2015 Materials and Methods*

The plot was fertilized with 17-0-17 (1.0 N/1,000 ft<sup>2</sup>) on 9 June and rolling treatments were applied from 8 June-2 October in 2015. Application dates, fungicide rate and application order are listed in Table 2. Fungicide schedules are listed in Table 2. The calendar based spray program was initiated at the same time as the rolling treatments and the threshold spray program was initiated when an average of 5-dollar spot infection centers were observed on threshold plots (all rolling frequencies). Over the course of the study, dollar spot was assessed on a weekly basis by counting infection centers (14 total ratings). We also calculated Area Under the Disease Progress Curve (AUDPC), which uses data from all rating dates and evaluates

season-long dollar spot severity. Turf quality was assessed on two rating dates. Dollar spot incidence was the main force in influencing turf quality ratings. Rolling frequency had little to no effect on turf quality for most of the study. Rooting density was assessed before rolling treatments were initiated (3 June) and towards the end the study (2 September). Soil penetrometer readings were taken after the trial (2 October) to evaluate rolling treatments on soil compaction. Clipping yields were collected (22 September) from a 10" x 10" area in the center of plots following mowing without baskets. The plots had not been mowed for 4 days prior. Soil cores (2-inch width) were taken at the conclusion of the study (2 October). All green tissue was removed and the remaining soil core was dried down and baked in a muffle furnace at 500°C to eliminate all organic matter. The difference in weight was compared to determine organic matter %. All data presented in this summary report were subject to analysis of variance (ANOVA) and Fisher's Protected LSD was used for mean separation. The study was analyzed as 3 (fungicide regime spray schedule) x 4 (rolling frequency) factorial.

2015 Calendar and Threshold spray schedules and application dates.

Calendar Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
June 8	Torque	0.6	---
June 29	Chipco GT	4.0	21 days
July 20	Secure	0.5	21 days
Aug 10	Xzemplar	0.26	21 days
Aug 31	Chipco GT	4.0	21 days

Threshold Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
July 17	Torque	0.6	
Aug 26	Chipco GT	4.0	40 days

**Results**

**2015 Dollar Spot, Rolling Frequency and Fungicide Programs**

Dollar spot was first observed on 6 July, but we did not observe any significant differences among rolling frequency treatments until 3 August. Overall, dollar spot severity was moderate in 2015 and slow to develop in the early portion of the season. In total, significant differences were observed in 9 of 14 rating dates and for AUDPC within the main effect rolling frequency (Table 1). In general, less dollar spot was observed as rolling frequency increased and the 6x/wk rolling treatment reduced dollar spot 66% compared to the non-rolled frequency for season long control (Table 3). Significant differences were observed on every rating date and AUDPC among fungicide programs (Table 2). Except for two individual rating dates, the threshold spray program was statistically similar to the calendar program. This is not surprising, since both rating dates the calendar program outperformed the threshold program coincided with spray dates for the threshold program. Moreover, the threshold program required 3 less applications to achieve a statistically similar level of season-long control as the calendar

program. Lastly, significant differences were observed among the frequency\*fungicide program interaction on 9 of the 14 rating dates and for AUDPC (Table 3). We were more interested in the frequency portion of the interaction, so rolling frequency was examined within each fungicide program (untreated, threshold and calendar). Of the rating dates that contained significant differences within the interaction, 9 of the 11 were observed among frequency within the untreated fungicide program and only 2 rating dates were observed in the threshold program. Simply put, the calendar and threshold programs reduced dollar spot so well, that there was little difference among the rolling frequencies. However, the abundance of statistically significant occurrences within the untreated allows us to determine exactly how much of an impact fairway rolling is having on dollar spot reduction. Overall, the 6x/wk rolling treatment reduced dollar spot significantly more than the 3x/wk on 6 of 10 rating dates and for season long control as well. The 6x/wk rolling treatment reduced dollar spot significantly more than the 4x/wk on 3 of 10 rating dates. We did have one rating date 40 days after the first application (Torque, 0.6 fl oz/1,000 ft<sup>2</sup>) in the threshold program in which we observed significant differences among rolling frequencies. The 6X/wk reduced dollar spot significantly more than the 3X/wk treatment and all rolling frequencies significantly reduced dollar spot more than the non-rolled (Figure 1).

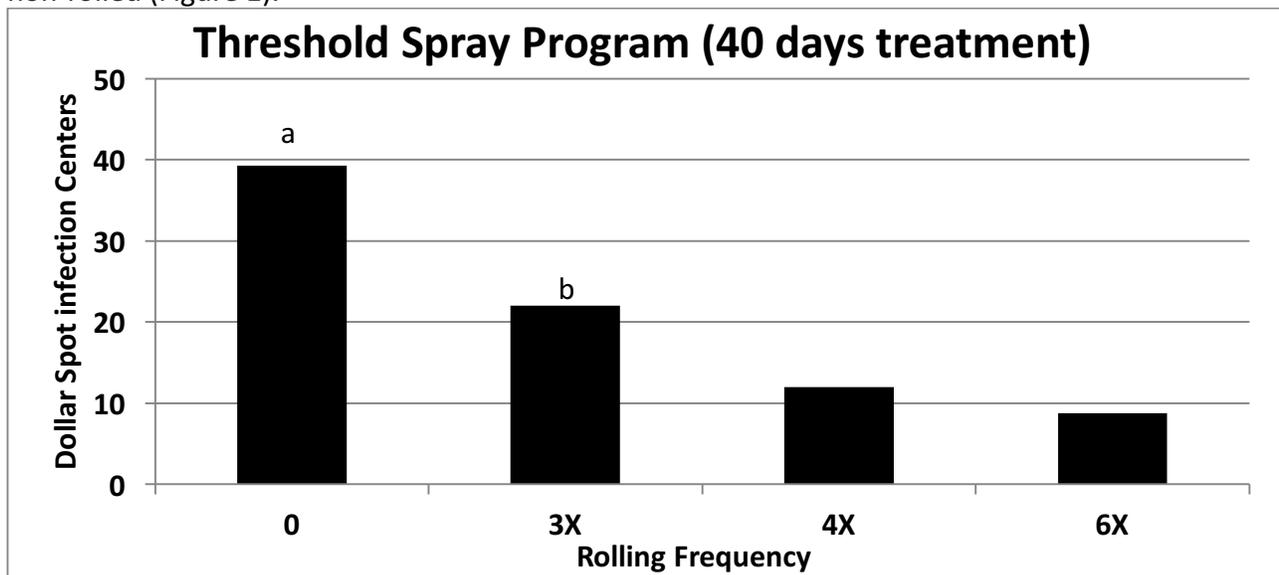


Figure 1. Dollar Spot infection centers 40 days after application of Torque (0.6 fl oz). Data collected on August 26, 2015.



### **2015 Turf Quality, Root Density, Compaction, Clipping Yields, Thatch**

Significant differences in turf quality were observed on 2 October among rolling frequency for the threshold and calendar based spray programs. In both cases, the 6X/wk treatment had the lowest turf quality, however it was still at or above 6 for both fungicide programs (data not shown). Rooting density was assessed before rolling treatments were initiated (3 June) and towards the end the study (2 September). All treatments had similar root density levels during the 2 September sample date, thus indicating fairway rolling had no impact on turfgrass rooting. Soil penetrometer readings were taken after the trial (2 October) to evaluate rolling treatments on soil compaction. Soil penetrometer readings reported that the 4X/wk rolling treatments required the greatest effort to penetrate the soil and the 0X/wk, 3X/wk and 6X/wk were statistically similar. After the 2016 season, we plan to take soil samples and determine the bulk density after the study. Penetrometer readings were taken to non-destructively sample the plot. Clipping yields were collected (22 September) and a significant reduction in clipping yield was observed as rolling frequency increased. No significant differences in organic matter % between rolling frequencies were observed.

### **2016 Materials and Methods**

The plot was fertilized with 17-0-17 (0.5 N/1,000 ft<sup>2</sup>) on 13 May and rolling treatments were applied from 2 June-15 September in 2016. Application dates, fungicide rate and application order are listed in Table 3. The calendar based spray program was initiated at the same time as the rolling treatments and the threshold spray program was initiated when an average of 5-dollar spot infection centers were observed on threshold plots (all rolling frequencies). Dollar spot was observed much earlier in trial (2<sup>nd</sup> week) and disease severity was much higher. Over the course of the study, dollar was assessed on a weekly basis by counting infection centers (13 total ratings) and calculated AUDPC for season-long dollar spot severity. Turf quality was assessed on two rating dates. Dollar spot incidence was the main force in influencing turf quality ratings. Rolling frequency did not decrease turf quality and slightly increased turf quality. Rooting density was assessed before rolling treatments were initiated (3 June) and towards the end the study (10 September). Undisrupted soil samples were collected after rolling concluded (10 November) and bulk density was determined. Soil organic matter in the top inch of the soil was determined to examine the effect of rolling on thatch degradation. All data presented from 2016 were analyzed using the same methods used for 2015 data.

### **2016 Dollar Spot, Rolling Frequency and Fungicide Programs**

Dollar spot was first recorded on 8 June and began appearing earlier that week. This much earlier than the 2015 study and observations from other experiments suggest the timing of disease/rolling start date is critical. Overall, dollar spot incidence was limited in June and following turf recovery, extremely high dollar spot was observed from July until September. Significant treatment differences were only observed from rolling frequency for one rating date and the 3x/wk rolling treatment had significantly higher dollar spot than all other treatments (Table 4). Significant differences were observed on 9 of 13 rating dates and AUDPC among fungicide programs (Table 5). The threshold and calendar based programs were statically

similar on all rating dates. The threshold program required 2 less applications to achieve a statistically similar level of season-long control as the calendar program.

2016 Calendar and Threshold spray schedules and application dates.

Calendar Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
June 4	Torque	0.6	---
June 30	Chipco GT	4.0	26 days
July 19	Secure	0.5	19 days
Aug 5	Xzemplar	0.26	17 days
Aug 26	Chipco GT	4.0	21 days

Threshold Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
June 17	Torque	0.6	
July 5	Chipco GT	4.0	18 days
Aug 15	Secure	0.5	41 days

**2016 Compaction, Turf Quality, Clipping Yields, Thatch**

After the conclusion of the study, soil bulk density was measured from the threshold plots. No statistical differences were observed among rolling frequencies (Supplemental Table 6). A slight increase was observed between the 3X/wk and 6X/wk treatments compared to the untreated, however, these increases in soil bulk density are not likely to cause a biologically significant shift in soil structure. A significant increase in turf quality was observed on 27 July and all rolling frequencies had significantly higher turf quality. A similar increase in turf quality was also noted on 7 Sept, however the difference in turf quality was not significant (Table 6). Clipping yields were not collected for all treatments, because preliminary testing determined that dollar spot incidence severely influenced clipping yield measurements. No significant differences in organic matter % between rolling frequencies were observed (Table 6).

**2017 Materials and Methods**

The plot was fertilized with 17-0-17 (1.0 N/1,000 ft<sup>2</sup>) on 8 May and rolling treatments were applied from 8 May-28 September in 2017. Application dates, fungicide rate and application order are listed in Table 4. The calendar based spray program was initiated on 1 June and the threshold spray program was initiated when an average of 5-dollar spot infection centers were observed on threshold plots (all rolling frequencies) on 25 June. Over the course of the study, dollar was assessed on a weekly basis by counting infection centers (7 ratings) or by assessing the percentage of dollar spot infection (7 ratings). AUDPC was calculated for each rating method for season-long dollar spot severity. Turf quality was assessed on three rating dates and rolling frequency did not decrease turf quality and slightly increased turf quality.

**2017 Dollar Spot, Rolling Frequency and Fungicide Programs**

Dollar spot was first recorded on 16 June. This was earlier than 2015 and later than 2016, roughly 2 weeks for both years. Rolling was started 5 weeks before the first signs of dollar

spot were observed and was similar to the 2015 trial for rolling duration before dollar spot outbreak. Dollar spot incidence gradually rose throughout the season and infection counts were used until 21 Jul. Afterwards, percent dollar spot infection was used to assess dollar spot due to the large amount of infection. Significant differences were observed for the main effect rolling frequency on 6 rating dates (Table 7 and 8). The 6x/wk frequency was the most effective rolling frequency and was followed by the 3x/wk frequency. Overall, rolling provided a 40-60% reduction in dollar spot overall. There was a significant interaction between the main effects fungicide program and rolling frequency on 6 rating dates and rolling frequency was examined within each fungicide program (untreated, threshold and calendar). Of the rating dates that contained significant differences within the interaction, 6 were observed among frequency within the untreated fungicide program. Similar to 2015, the calendar and threshold programs reduced dollar spot so well, that there was little difference among the rolling frequencies. Overall, the 6x/wk rolling treatment was the most effective at reducing dollar spot and 3x/wk was more effective than the 4x/wk rolling frequency (Table 9). Significant differences were observed on 12 of 14 rating dates and AUDPC among fungicide programs (Table 10 and 11). The threshold and calendar based programs were statically similar on all rating dates, except for one (27-Sep). The threshold program required 2 less applications to achieve a statistically similar level of season-long control as the calendar program.

#### 2017 Calendar and Threshold spray schedules and application dates.

##### Calendar Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
June 1	Torque	0.6	---
June 20	Chipco GT	4.0	20 days
July 11	Secure	0.5	21 days
July 31	Xzemplar	0.26	17 days
Aug 20	Chipco GT	4.0	21 days
Sep 27	Xzemplar	0.26	38 days

##### Threshold Spray Schedule

Spray Date	Fungicide	Rate (oz/M)	Interval
June 17	Torque	0.6	
July 21	Chipco GT	4.0	34 days
Aug 16	Secure	0.5	26 days
Sep 27	Xzemplar	0.26	40 days

#### Conclusion

This three-year field study yielded a rollercoaster of results and provided a good insight on the level of dollar spot control that can be achieved with different rolling frequencies. 2015 and 2017 both showed that dollar spot can be reduced by 40-65% with proper rolling start time. Both trials started roughly 5 weeks before the first dollar spot epidemic. On the other hand, the 2016 trial was started less than 7 days before dollar spot was first observed and negative or minimal (12-23%) dollar spot control was observed. Overall, rolling is not a silver bullet for

dollar spot control, but shows considerable merit as a cultural practice that can reduce season long dollar spot by 50%.

Our analysis of fungicide programs suggests that fungicide usage can be reduced if a careful scouting and a threshold based spray program is used. We reduced fungicide applications by 2 or 3 applications per year with the threshold approach. Years with lower disease pressure will offer a greater chance for fungicide application reduction. Furthermore, careful monitoring of low nighttime temperatures, soil moisture, leaf wetness and using the new dollar spot forecasting model are important factors when considering a threshold based fungicide program on fairways.

Our results showed little impact on soil compaction despite rolling the 6X/wk 192 times over two years. Soil compaction was one of the main concerns superintendents had voiced prior to this work. Secondly, turf quality in 2016 was improved over the 2015 in rolled compared to non-rolled treatments, despite drought conditions and frequent high temperatures. We did not see any change in organic matter in the top inch of soil/thatch. We did see changes in where the thatch layer was composed. Rolling pushed the thatch layer down into the soil and created a firmer surface. The UMass research center has low thatch levels and we would like to further examine the potential for thatch reduction on golf courses with more substantial thatch layers. Clipping yield data in 2015 showed reduced clipping yields for rolling treatments.

Overall, rolling shows promise as an effective cultural practice to reduce dollar spot. Rolling start time is a critical factor for good dollar spot control. We recommend starting one month before you expect to observe dollar spot. A good method to track this each year is an untreated plot that helps you see the amount of dollar spot activity at your site. Rolling frequency should be maximized as much as possible. Our best results were with the 6x/wk rolling frequency. The 3x/wk and 4x/wk frequencies alternated for second most effective in 2015 and 2017. Lastly, we did not see any deleterious effects on turf quality and the rolled plots consistently had better turf quality.

Table 1. Effect of fairway rolling frequency on dollar spot infection centers, 2015.

Frequency	Dollar Spot Infection Centers <sup>z</sup>									
	3-Aug	17-Aug	24-Aug	26-Aug	31-Aug	10-Sep	17-Sep	25-Sep	2-Oct	AUDPC <sup>x</sup>
0	19 a <sup>w</sup>	27 a	45 a	56 a	51 a	52 a	52 a	38 a	45 a	2635 a
3X	12 ab	16 b	24 b	36 b	33 b	33 b	26 b	22 b	32 b	1593 b
4X	11 ab	14 b	26 b	32 bc	21 b	28 bc	20 bc	21 b	19 c	1368 bc
6X	6 b	8 b	14 b	21 c	17 b	18 c	14 c	15 c	18 c	906 c
<i>P</i> value	*	**	**	***	***	***	***	***	***	***

<sup>z</sup> All fungicide program treatments were included for analysis (untreated, calendar and threshold programs).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 2. Effect of fungicide programs on dollar spot infection centers, 2015.

Fungicide	Dollar Spot Infection Centers <sup>z,y</sup>													AUDPC <sup>x</sup>
	14-Jul	19-Jul	27-Jul	3-Aug	10-Aug	17-Aug	24-Aug	26-Aug	31-Aug	10-Sep	17-Sep	25-Sep	2-Oct	
Untreated	5 a <sup>w</sup>	11 a	14 a	37 a	35 a	49 a	78 a	89 a	81 a	97 a	82 a	72 a	83 a	4603 a
Calendar	0 b	2 b	0 b	1 b	3 b	0 b	3 b	0 c	1 b	0 b	0 b	0 b	0 b	48 b
Threshold	4 a	4 b	1 b	0 b	0 b	0 b	0 b	21 b	9 b	0 b	0 b	0 b	2 b	225 b
P value	**	**	***	***	***	***	***	***	***	***	***	***	***	***

<sup>z</sup> All fairway rolling frequencies were included in the analysis (0, 3X, 4X and 6X).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 3. Effect of fairway rolling frequency on dollar spot infection centers among untreated plots, 2015.

Frequency	Dollar Spot Infection Centers <sup>z,y</sup>										AUDPC <sup>x</sup>
	3-Aug	17-Aug	24-Aug	26-Aug	31-Aug	10-Sep	17-Sep	25-Sep	2-Oct		
0	58 a <sup>w</sup>	81 a	126 a	130 a	133 a	154 a	153 a	114 a	133 a	7424 a	
3X	36 b	49 b	67 bc	86 b	88 b	99 b	77 b	64 b	92 b	4470 b	
4X	33 b	43 bc	76 b	85 b	57 b	84 bc	59 bc	64 b	56 c	3927 bc	
6X	19 c	24 c	41 c	55 c	48 b	53 c	41 c	46 b	53 c	2592 c	
P value	*	**	**	***	***	***	***	***	***	***	

<sup>z</sup> Only data from the untreated plots was used in this analysis.

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 4. Effect of fairway rolling frequency on dollar spot infection centers, 2016.

Frequency	Dollar Spot Infection Centers <sup>z,y</sup>													AUDPC <sup>x</sup>
	8-Jun	16-Jun	22-Jun	28-Jun	13-Jul	21-Jul	27-Jul	4-Aug	15-Aug	24-Aug	1-Sept	7-Sept	14-Sept	
0	7	15	10	9	16	30	28	50	57	58	67 b	82	73	3589
3X	2	9	6	4	22	53	55	78	89	87	110 a	118	94	5283
4X	3	5	4	3	8	20	24	35	60	45	53 b	65	66	2782
6X	2	4	2	2	12	31	28	53	53	56	58 b	74	63	3170
P value	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	NS	NS	NS

<sup>z</sup> All fungicide program treatments were included for analysis (untreated, calendar and threshold programs).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 5. Effect of fungicide programs on dollar spot infection centers, 2016.

Fungicide	Dollar Spot Infection Centers <sup>z,y</sup>													AUDPC <sup>x</sup>
	8-Jun	16-Jun	22-Jun	28-Jun	13-Jul	21-Jul	27-Jul	4-Aug	15-Aug	24-Aug	1-Sept	7-Sept	14-Oct	
Untreated	5	11	6	5	43 a <sup>w</sup>	100 a	101 a	161 a	169 a	183 a	206 a	243 a	223 a	10456 a
Calendar	1	0	0	0	0 b	0 b	0 b	0 b	0 b	0 b	0 b	0 b	0 b	17 b
Threshold	6	14	11	8	0 b	0 b	0 b	1 b	26 b	1 b	10 b	12 b	2 b	646 b
P value	NS	NS	NS	NS	***	***	***	***	***	***	***	***	***	***

<sup>z</sup> All fairway rolling frequencies were included in the analysis (0, 3X, 4X and 6X).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 6. Effect of fairway rolling frequency on soil bulk density, turf quality and organic matter (thatch), 2016.

Frequency	Bulk Density (g/cm <sup>3</sup> ) <sup>z</sup>	Turf Quality <sup>y</sup>		Organic Matter (Thatch) <sup>x</sup>
	2-Nov	27-Jul	7 Sept	14 Sept
0	1.32	5.1 b <sup>w</sup>	4.6	14.4%
3X	1.38	5.8 a	5.5	15.2%
4X	1.34	5.9 a	5.3	15.0%
6X	1.42	6.1 a	5.5	14.1%
P value	NS	*	NS	NS

<sup>z</sup> Only the threshold fungicide program treatment was included for analysis. Bulk density is reported as a mean of 4 replications.

<sup>y</sup> Turf quality was visually assessed where 1=dead, 6=acceptable, 9=dark green.

<sup>x</sup> Soil organic matter in the top inch of the soil was determined to examine the effect of rolling on thatch degradation.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 7. Effect of fairway rolling frequency on dollar spot infection centers, 2017.

Frequency	Dollar Spot Infection Centers <sup>zy</sup>							AUDPC <sup>x</sup>
	16-Jun	19-Jun	23-Jun	6-Jul	11-Jul	18-Jul	21-Jul	
0	8 a <sup>w</sup>	20 a	25	25	58	76	92	1098
3X	0 b	1 b	10	8	24	35	55	410
4X	0 b	1 b	12	16	28	46	64	509
6X	0 b	0 b	4	8	15	13	28	211
P value	*	*	NS	NS	NS	*	NS	NS

<sup>z</sup> All fungicide program treatments were included for analysis (untreated, calendar and threshold programs).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 8. Effect of fairway rolling frequency on the percentage dollar spot infection, 2017.

Frequency	Percentage of Dollar Spot Infection <sup>zy</sup>						AUDPC <sup>x</sup>	
	31-Jul	10-Aug	16-Aug	24-Aug	30-Aug	14-Sep		27-Sep
0	18	12	15 a <sup>w</sup>	20	15	14 a	30 a	959 a
3X	9	7	8 bc	12	8	11 ab	30 a	664 b
4X	14	12	11 b	16	12	6 c	29 a	741 ab
6X	9	9	5 c	12	13	8 bc	21 b	618 b
P value	NS	NS	***	NS	NS	**	***	*

<sup>z</sup> All fungicide program treatments were included for analysis (untreated, calendar and threshold programs).

<sup>y</sup> Percentage of dollar spot infection per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

**TOPDRESSING SAND**  
- BULK, BAGGED, SUPER SACS

**CART PATH BLENDS**

**BUNKER SANDS**  
- HD, BUFF, PRO WHITE

**DIVOT MIXES**  
- BULK, BAGGED, SUPER SACS

**ROOT ZONE BLENDS**

**ENGINEERED SOILS**

**N.E.S.S.**  
New England  
Specialty Soils

**SCOTT WHITCOMB**  
781-789-8762  
SCOTT@NESOILS.COM

**ED DOWNING**  
978-230-2300  
ED@NESOILS.COM

**BOB DORAN**  
978-230-2244  
BOB@NESOILS.COM

**WWW.NESOILS.COM**

@NESoils @NESpecialtySoil

Table 9. Effect of fairway rolling frequency on dollar spot infection centers and percent dollar spot infection within untreated plots, 2017.

Untreated	DSIC <sup>z</sup>		Percentage of Dollar Spot Infection <sup>y</sup>			AUDPC <sup>x</sup>
	18-Jul	16-Aug	14-Sep	27-Sep		
0	226 a <sup>w</sup>	41 a	38 a	70 a	5834 a	
3X	89 b	19 bc	31 ab	66 a	2778 b	
4X	131 ab	29 ab	19 c	68 a	3460 ab	
6X	37 b	14 c	24 bc	54 b	2329 b	
<i>P</i> value	*	**	*	***	*	

<sup>z</sup> Number of dollar spot infection centers (DSIC) per plot were reported as the mean of 4 replications for 18 Jul rating date only.

<sup>y</sup> Percentage of dollar spot infection per plot were reported as the mean of 4 replications for 16 Aug, 13 and 27 Sep rating dates.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications and calculated from dollar spot infection center and percentage of dollar spot infection.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 10. Effect of fungicide programs on dollar spot infection centers, 2017.

Programs	Dollar Spot Infection Centers <sup>zy</sup>							AUDPC <sup>x</sup>
	16-Jun	19-Jun	23-Jun	6-Jul	11-Jul	18-Jul	21-Jul	
Calendar	0	1	0 b <sup>w</sup>	0 b	0 b	0 b	0 b	13 b
Threshold	0	3	10 b	0 b	0 b	6 b	28 b	101 b
Untreated	6	13	29 a	42 a	94 a	121 a	152 a	1557 a
<i>P</i> value	NS	NS	***	***	***	***	***	***

<sup>z</sup> All fairway rolling frequencies were included in the analysis (0, 3X, 4X and 6X).

<sup>y</sup> Number of dollar spot infection centers per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

Table 11. Effect of fungicide programs on the percentage of dollar spot infection, 2017.

	Percentage of Dollar Spot Infection <sup>zy</sup>							AUDPC <sup>x</sup>
	31-Jul	10-Aug	16-Aug	24-Aug	30-Aug	14-Sep	27-Sep	
Calendar	2 b <sup>w</sup>	0 b	0 b	0 b	0 b	0 b	4 c	65 b
Threshold	0 b	0 b	3 b	1 b	1 b	1 b	15 b	128 b
Untreated	34 a	30 a	26 a	44 a	35 a	28 a	64 a	2044 a
<i>P</i> value	***	***	***	***	***	***	***	***

<sup>z</sup> All fairway rolling frequencies were included in the analysis (0, 3X, 4X and 6X).

<sup>y</sup> Percentage of dollar spot infection per plot were reported as the mean of 4 replications.

<sup>x</sup> Area under the disease progress curve were reported as a mean of 4 replications.

<sup>w</sup> Means followed by the same letter are not significantly different according to Fisher's protected least significant difference test ( $\alpha = 0.05$ ).

# got sand?

We do. About 10 million cubic yards of clean, USGA quality sand.

Mark Pendergast 617-686-5590  
Garrett Whitney 617-697-4247  
Matt Medeiros 508-951-6139  
Ed Downing 508-440-1833



## READ CUSTOM SOILS

AN A. D. MAKEPEACE COMPANY

800-924-5335

# ANTHRACNOSE DOLLAR SPOT BROWN PATCH

## KNOCK 'EM ALL OUT

With One Punch *And* One Rate.

**NEW Tekken™ Broad Spectrum Fungicide** from PBI-Gordon uses two modes of action to deliver dependable control of 21 diseases, including anthracnose, dollar spot, and brown patch. The patent-pending formulation increases turf quality while reducing the risk of turf damage compared to stand-alone DMI applications, and Tekken controls listed diseases for up to 28 days with the same rate, eliminating the guesswork.

**28 Days | 21 Diseases | 1 Rate**

► For more information contact Bill Affinito at 508.250.3821.



Check to see if this product is registered for sale in your state.

[PBIGordonTurf.com](http://PBIGordonTurf.com)

Always read and follow label directions. Tekken™ is a trademark of PBI-Gordon Corp. 1/18 05183

**G** pbi/gordon  
CORPORATION

Employee-Owned

May 2018





## Getting to know the EIFG

The mission of the EIFG is: *The Environmental Institute for Golf fosters sustainability through research, awareness, education, programs and scholarships for the benefit of golf course management professionals, golf facilities and the game.*

But what does this mean to you as a turfgrass management professional? The EIFG works to position golf courses as contributors to the greater good of their communities, and act as professionally managed lands. Supporters of the EIFG know that they are encouraging programs and initiatives which will benefit the game and its environment well into the future. The EIFG works to make funding and resources available to support research, education, and environmental programs which make a constructive difference at facilities.

Research is obviously vital to any industry, turfgrass management included. Research through the EIFG dates back to 1955, when the EIFG was then known as the GCSAA Scholarship and Research Fund. Since that time, the EIFG and research has focused on a variety of topics, including disease management, water quality, as well as turfgrass and insect management to name a few. Many of the research trials have taken place in the Northeast region!

Continuing education is also a cornerstone of our profession. With technology ever changing, and new research being conducted, it's imperative turfgrass managers stay current with the latest trends in the industry. The EIFG recognizes the importance of continuing education and strives to provide opportunities for GCSAA members throughout the year. The Melrose Leadership Academy provides an option for GCSAA Class A and B members to attend the Golf Industry Show at no charge. The MLA is open to any GCSAA member who has been a five-year Class A or B member and who hasn't attended the GIS in the previous five years. New this year saw the introduction of the EXCEL Leadership Program. This three-year program is open to GCSAA Class C members and includes trips to the Golf Industry Show, GCSAA headquarters in Lawrence, Kan., and to the Nufarm facilities in Chicago, Ill. Just this year a dozen members of the Northeast region were benefactors of these great opportunities, 10 Melrose and 2 EXCEL.

Advocacy is another focus of the EIFG. With golf courses continuing to be under the eye of environmental groups and regulators, it's important our industry to band together to tell golf's positive story. Through the EIFG, funding was provided to help support the Best Management Practices Template and Guide, and provide information through the Golf Course Environmental Profile survey series; which both aid heavily in

our advocacy efforts. Scholarships were the backbone of the EIFG when it began in 1955, and continue to be a priority to this day. Currently there are scholarships awarded to turfgrass students and researchers, as well as additional scholarships for GCSAA members and their families.

This is just the tip-of-the-iceberg when it comes to the EIFG, and there are many ways you can get involved. Please consider donating to the EIFG, or participating in Rounds 4 Research. Each year R4R continues to grow, and new partnerships formed with The Golf Channel, GolfNow and Golf Advisor continue to expand this important program. This year's auction will coincide with 'Go Play Week' which will take place April 30-May 6. Chapters in the region have used funds to subsidize meeting costs, assist in building the BMP's, bring in educators for meetings, as well as provide member scholarships to name a few.

### EIFG Fun Facts:

- The EIFG has funded more than \$5.5 million to support research, education and advocacy efforts since 2011.
- The EIFG has funded 457 scholarships and grants for children of GCSAA members, as well as professional development for superintendents since 2011.
- The EIFG has granted funds to GCSAA for more than 30 research projects, including the Best Management Practices and IPM Planning Guides.
- Since its 2012 launch, Rounds 4 Research has helped raise more than \$814,000 to benefit golf's future.
- The EIFG has created a Best Management Practices Grant Program for GCSAA chapters, distributing \$277,500 to 28 states since 2014.
- In 2017, GCSAA completed the second phase of the Golf Course Environmental Profile measuring change and progress.

## **GCSAA Resources and Deadlines** you **Get Cool Stuff** from your **Association Already**

### **Equipment Management Videos**

In an effort to build equipment management resources, GCSAA is seeking brief (3-7 minutes) educational videos that provide hands-on demonstrations for equipment managers, assistants and superintendents interested in learning more about equipment. This collection, called 5-Minute Fix videos, offer quick and simple solutions to equipment-related issues. [Watch and submit 5-minute fix videos.](#)

## Call for nominations

Nominations are due by June 30, 2018

Posted on behalf of Peter J. Grass, CGCS – 2018 GCSAA Nominating Committee Chairman

The following offices will be up for election for the GCSAA Board of Directors at the 2019 Annual Meeting in San Diego, CA:

- President
- Vice president
- Secretary/treasurer
- Director (three positions)

The deadline for nominations for the 2019 GCSAA Board of Directors is June 30, 2018. Click [here](#) for more information

[www.gcsaa.org/education/scholarships](http://www.gcsaa.org/education/scholarships)

## Upcoming FREE webcasts:

May 30: [OSHA 101 How to Prepare for and Handle an OSHA Inspection or Whistleblower Investigation with an Update on the Agency's New Electronic Recordkeeping Requirements](#)  
[Matthew Linton](#)

June 26: [Fertilización y Nuevas Tecnologías en la Nutrición de Campos de Golf](#)  
[José Ángel Sánchez Alcalá](#)

Again, if I can be of any assistance, please feel free to contact me.

**Kevin Doyle**

GCSAA Field Staff

[kdoyle@gcsaa.org](mailto:kdoyle@gcsaa.org)

Follow me on Twitter @GCSAA\_NE

## GCSAA Scholars Competition

These scholarships range from \$500 to \$6,000. Applicants must be enrolled in a recognized undergraduate program in a major field related to turf management, have completed at least 24 credit hours or the equivalent of one year of full-time study in the appropriate major, and be a member of GCSAA. Deadline June 1st.



## Northeast Golf & Turf Supply

*a division of Northeast Nursery, Inc. - Est. 1982*

## Exclusive Distributor for Rain Bird Golf

MA, NH, VT, ME and RI

**RAIN BIRD**



### PRODUCT CATEGORIES

✦ Granular Fertilizers

✦ Control Products

✦ Turfgrass Seed

✦ Specialty Nutrients

✦ Soil Conditioners

✦ Golf Course Accessories



NORTHEAST  
TURF & IRRIGATION SUPPLY  
Dennis Port, MA

NORTHEAST  
CONTRACTOR CENTER  
Peabody, MA

NORTHEAST  
TURF & IRRIGATION SUPPLY  
Londonderry, NH

Learn more about our products and services at: [www.northeastnursery.com](http://www.northeastnursery.com)

May 2018



# **Tanto** **IRRIGATION**

## ***Your Golf Irrigation Specialist***

***Tanto Irrigation has proudly provided  
the Golf Industry with  
Irrigation Services  
for over 50 years.***

**Let us know how we can serve  
Please Contact:**

**Steve Kubicki  
(203) 988-6620**

**Or**

**Paul L. Guillaro  
(914) 262-7324**

***[tantoirrigation.com](http://tantoirrigation.com)***

# Divot Drift

## Welcome New Members:

### Todd Caswell

Affiliate, Natural Tree and Lawn Care

### Lawrence Taylor

Affiliate, Natural Tree and Lawn Care

### Natural Tree and Lawn Care

Friend of the Association

### Precision Laboratories, LLC

Friend of the Association

## WELCOME BACK

### Drew Cummins

Affiliate, Crop Production Services



**OUR PASSION IS YOUR SUCCESS**



*With Tom Irwin, you're not alone.*

Harris Schnare | 800-582-5959 | harris@tomirwin.com

## Back Issues!



As in the past, *The Newsletter* continues to invite Affiliate members to submit a press release about new personnel, new products or a company bio. We will print each and every release **free of charge**. This is a great way to advertise for free. Who said nothing in this world is free? Free advertising to better your company, wow what an offer.

**GCSANE Offers Website Banner advertising at [www.gcsane.org](http://www.gcsane.org)**



The price is \$500 for one year which will be re-occurring annually from your first billing unless otherwise specified.

For more information, please contact Kris Armando at 508-745-8555 or [karmando8@gmail.com](mailto:karmando8@gmail.com)

Past issues of the NEWSLETTER are available using this link: <http://bit.ly/GCSANEnewsletters>.

# Total Solutions

For over 40 years, Turf Products continues to be the single source supplier for all your irrigation and turf management equipment, delivering superior quality and unmatched customer service to the golf industry.



**turf products**

**TORO**



From drainage pipe to chainsaws  
TPC can supply all your golf course needs.  
Pond aerators, ball washers, soil sensors and  
lightning detectors are just a few of the  
thousands of items we carry.

**For All Equipment & Irrigation:**

**PARTS DIRECT: (800) 296-7442**

*Email: [partsdept@turfproductscorp.com](mailto:partsdept@turfproductscorp.com)*

**SERVICE DIRECT: (800) 442-9910**

*Email: [servicedept@turfproductscorp.com](mailto:servicedept@turfproductscorp.com)*

**MAIN OFFICE: (800) 243-4355**

**[www.turfproductscorp.com](http://www.turfproductscorp.com)**



**MTE is a proud GCSANE sponsor, and the award-winning source for all of your turf equipment needs!**

***Smithco***



***JACOBSEN***

**For these and more, visit or call us:  
115 Franklin Street Ext.  
Derry, NH 03038  
(603) 404-2286  
[www.mte.us.com](http://www.mte.us.com)**

# Please patronize these Friends of the Association

## Agresource, Inc.

110 Boxford Rd.  
Rowley, MA 01969

Agresource Inc. is a proud manufacturer and distributor of quality compost, soil, and sand throughout the northeast for over 30 years.

Agresport, a division of Agresource focused on materials and services specifically for the golf and sports fields market working together to enhance and maintain your unique properties

Dave Harding office: (978) 388-5110  
cell: (978) 904-1203

Mike Carignan 978-270-9132  
mcarignan@agresourceinc.com

[www.agresourceinc.com](http://www.agresourceinc.com)

## Allen's Seed

693 S. County Trail  
Exeter, RI 02822

Specializing in quality seed, fertilizer, chemicals, & related golf course maintenance supplies.

1-800-527-3898  
info@allenseed.com

[www.allenseed.com](http://www.allenseed.com)

## Atlantic Golf & Turf

9 Industrial Boulevard  
Turners Falls, MA 01376

Specializing in agronomy through the distribution of fertilizer, seed & chemicals throughout New England.

Chris Cowan (413) 530-5040  
Paul Jamrog (401) 524-3322  
Scott Mackintosh CPAg (774) 551-6083  
[www.atlanticgolfandturf.com](http://www.atlanticgolfandturf.com)

## A-OK Turf Equipment Inc.

1357 Main St.  
Coventry, RI 02816-8435

Lastec, Tycrop, Blec, Wiedenmann, Therrien, Graden, Sweep & Fill, Baroness, & used equipment.

Mike Cornicelli (401) 826-2584

[www.pavewithasi.com](http://www.pavewithasi.com)

## Barenbrug USA

Suppliers of supercharged bentgrasses now with Aquatrols, Turf Blue HGT, Regenerating perennial rye (RPG), and Turfsaver RTE, the only rhizomatous tall fescue on the market.

10549 Hammond Hill Road  
East Otto, NY 14729

Bruce Chapman, Territory Manager  
(401) 578-2300

## BASF Turf & Ornamental

PO Box 111  
West Dennis, MA 02670

"We don't make the turf.  
We make it better."

Pete Jacobson (919) 530-9062  
peter.jacobson@basf.com

## BACKED by BAYER

Building on an already solid foundation of proven products to help you succeed.

Brian Giblin (508) 439-9809  
brian.giblin@bayer.com

[www.backedbybayer.com](http://www.backedbybayer.com)

## Beals & Thomas, Inc.

144 Turnpike Road  
Southborough, MA 01772

32 Court Street  
Plymouth, MA 02360

Civil Engineers—Landscape Architects—Land Surveyors—Planners—Environmental Specialists

Sarah Stearns 508-366-0560  
sstearns@bealsandthomas.com

Beals & Thomas specializes in golf course site design services including irrigation pond analysis & design, drainage & utility improvements, permitting, hydrogeologic evaluations, construction administration, boundary & topographic surveys, master planning & project design.

## The Cardinals, Inc.

166 River Rd., PO Box 520  
Unionville, CT 06085

Golf course & landscape supplies.

John Callahan (860) 916-3947  
Dennis Friel (617) 755-6558

## Cavicchio Greenhouses, Inc.

110 Codjer Lane  
Sudbury, MA 01776

Annuals, perennials, garden mums, ground covers, loam, & mulch.

Darren Young (978) 443-7177

## Charles C. Hart Seed Co., Inc.

304 Main St.  
Wethersfield, CT 06109

Authorized distributor for Bayer, Syngenta, Grigg Brothers foliar fertilizers, & Aquatrols. Specializing in custom seed blends.

Robin Hayes (508) 237-2642

## Country Club Enterprises

PO Box 670, 29 Tobey Rd.  
W. Wareham, MA 02676

Club Car golf cars, Carryall utility vehicles.

Keith Tortorella (508) 982-4820  
Danny Brown (603) 365-6751  
Mike Giles (978) 454-5472

## Crop Production Services

Suppliers of Chemicals,  
Fertilizer, & Grass Seed

(978) 685-3300  
Nick Burchard (401) 601-7213

[www.cpsagu.com](http://www.cpsagu.com)

## DAF Services, Inc.

20 Lawnacre Rd.  
Windsor Locks, CT 06096

Custom pumping solutions. Custom pump controls. Complete pump service. Serving all of New England.

Dick Young (860) 623-5207

## DeLea Sod Farms

486 Church Street  
Wood River Junction, RI 02894

DeLea Sod Farms provides first quality tallgrasses & bentgrass to the landscape & golf markets. Full line of U.S. Silica Greens topdressing & bunker sands.

Scott McLeod 800-344-7637  
smcleod@deleasod.com

[www.deleasod.com](http://www.deleasod.com)

## Dependable Petroleum Service

One Roberts Road  
Plymouth, MA 02360

UST / AST facility maintenance,  
installation & compliance testing.

Bruce Garrett / Francis Turner  
(508) 747-6238

bgarrett@dependablecompany.com  
[www.dependablecompany.com](http://www.dependablecompany.com)

## DGM Systems

153A Foster Center Road  
Foster, RI 02825

Golf & Sports Turf Specialty Products & Services

Office (401) 647-0550  
Manny Mihailides (401) 524-8999  
David Mihailides (401) 742-1177

Visit [www.dgmsystems.com](http://www.dgmsystems.com)



---

## Finch Services, Inc.

Finch Services is your premier John Deere Golf Distributor in the Northeast.

Wesley Weyant (978) 758-8671  
Bill Rockwell (508) 789-5293  
Dan Paradise (978) 853-2916  
Eric Berg (516) 473-3321

Call or visit our website at  
[www.finchinc.com](http://www.finchinc.com)

---

## Five Star Golf Cars & Utility Vehicles

724 MacArthur Boulevard  
Pocasset, MA 02559

E-Z GO Golf Cars, Cushman Utility Vehicles  
Tim Russell (603) 557-3463

---

## G. Fialkosky Lawn Sprinklers

PO Box 600645  
Newton, MA 02460

Irrigation services to golf courses throughout New England.

Gary Fialkosky (617) 293-8632

[www.garyfialkoskylawnsprinklers.com](http://www.garyfialkoskylawnsprinklers.com)

---

## Green Sight Agronomics

12 Channel Street, Ste 605  
Boston, MA 02210

617-855-5021

Turn-key automated turfgrass monitoring using drones. We deliver maps of moisture variation and turf stress daily.

Matt Lapinski 978-551-0093

[www.greensightag.com](http://www.greensightag.com)

---

## Harrell's LLC

19 Technology Drive  
Auburn, MA 01501

Turf & Ornamental supplies.

Chuck Bramhall (508) 400-0600  
Jim Cohen (978) 337-0222  
Mike Kroian (401) 265-5353  
Mike Nagle (508) 380-1668

---

## Helena Chemical Company

101 Elm Street  
Hatfield, MA 01038

National distributors of all your turf chemicals & fertilizers. Extensive line of Helena Branded wetting agents, foliar, micro nutrients & adjuvants.

Louis Bettencourt, CGCS (978) 580-8166  
Chris Leonard (339) 793-3705

[www.helenachemical.com](http://www.helenachemical.com)

---

## International Golf Construction Co.

5 Purcell Rd.  
Arlington, MA 02474

Golf course construction.

Antonios Paganis  
(781) 648-2351  
(508) 428-3022

---

## Irrigation Management & Services

21 Lakeview Ave.  
Natick, MA 01760

Irrigation consultation, design, & system evaluation.

Bob Healey, ASIC, CID (508) 653-0625

---

## Ken Jones Tire, Inc.

71-73 Chandler St.  
Worcester, MA 01613

Distributor of tires for lawn & garden, trucks, cars, industrial equipment, & golf cars.

Gerry Jones (508) 755-5255

---

## Larchmont Engineering & Irrigation

11 Larchmont Lane  
Lexington, MA 02420

Offering a full range of inventory for irrigation drainage, pumps, fountains & landscape lighting products & services for all of your residential & commercial needs.

(781) 862-2550 Susan Tropeano,  
Tim Fitzgerald [tim@larchmont-eng.com](mailto:tim@larchmont-eng.com)

---

## Lazaro's Golf Course Supplies & Accessories

dba Hammond Paint & Chemical Co., Inc.

738 Main St., Suite 223  
Waltham, MA 02154

Complete line for all your of golf course supplies. Par Aide, Standard, Eagle One, turf & ornamentals, aquatics, turf marking paint, safety items, adjuvants.

Joe Lazaro—cell: (617) 285-8670  
Fax: (781) 647-0787  
Email: [jlazaro698@aol.com](mailto:jlazaro698@aol.com)

[www.lazarogolfcoursedesupplies.com](http://www.lazarogolfcoursedesupplies.com)

---

## Maher Services

71 Concord Street  
N. Reading, MA 01864

Well drilling, pump service & well maintenance

Peter Maher cell: (781) 953-8167  
or (978) 664-WELL (9355)  
Fax (978) 664-9356

[www.maherserv.com](http://www.maherserv.com)

---

## Maltby & Company

30 Old Page Street, P.O. Box 364  
Stoughton, MA 02072

Provides expert tree pruning, tree removal & tree planting services. Our two other divisions include Natural Tree & Lawn Care, which treats for winter moth caterpillars, ticks & mosquitoes etc. Forest Floor recycling manufactures color enhanced mulch & natural composted leaf mulch.

For more information or to speak with one of our arborists please call  
Bill Maltby at (781) 344-3900

---

## MAS Golf Course Construction LLC

51 Saddle Hill Rd.  
Hopkinton, MA 01748

Fulfilling all your renovation and construction needs.

Matthew Staffieri (508) 243-2443

[www.masgolfconstruction.com](http://www.masgolfconstruction.com)

---

## McNulty Construction Corp.

P. O. Box 3218  
Framingham, MA 01705

Asphalt paving of cart paths, walkways, parking areas; imprinted asphalt.

John McNulty (508) 879-8875

---

## MTE, Inc. - Turf Equipment Solutions

115 Franklin Street Extension  
Derry, NH 03038

New England's source for equipment: New & pre-owned mowers, tractors, & maintenance items from: Jacobsen, Turfco, Smithco, Ventrac, Redexim, Neary Grinders, Ryan, Buffalo Turbine, Mahindra, Gravely, Standard, Par-Aide & others. Sales, Parts, & Service all brands.

Derry Shop: (603) 404-2286  
Mark Casey: (617) 990-2427 Eastern MA  
Jess Hamilton: (603) 500-3936 NH  
Sean Smith: (207) 385-6684 ME

---

## Mungeam Cornish Golf Design, Inc.

195 SW Main Street  
Douglas, MA 01516

Golf course architects

Office: (508) 476-5630  
Cell: (508) 873-0103  
Email: [info@mcgolfdesign.com](mailto:info@mcgolfdesign.com)

Contact: Mark A. Mungeam, ASGCA

[www.mcgolfdesign.com](http://www.mcgolfdesign.com)

# Please patronize these Friends of the Association

## **New England Specialty Soils**

435 Lancaster Street  
Leominster, MA 01453

Imm. Top Dressing Sand, High Density Bunker Sand, Rootzone Mixes, Tee Blends, Divot Mixes, Bridging Stone, Cart Path Mix, Infield Mixes, Inorganic Amendments, SLOPE LOCK Soil.

Ed Downing (978) 230-2300  
Bob Doran (978) 230-2244  
Scott Whitcomb (781) 789-8762

[www.nesoils.com](http://www.nesoils.com)

## **New England Turf Farm, Inc.**

P.O. Box 777  
West Kingston, RI 02892

Many types of tallgrasses and bentgrass available for golf courses, sports turf and landscapers. Expert installation available.

Office: (800) 451-2900  
Ernie Ketchum (508) 364-4428  
erniesod@comcast.net  
Mike Brown (508) 272-1827

[www.newenglandturf.com](http://www.newenglandturf.com)

## **NMP Golf Construction Corp.**

25 Bishop Ave.  
Ste. A-2, Williston, VT 05495

Golf course construction

Mario Poirier (888) 707-0787

## **Northeast Golf & Turf Supply**

6 Dearborn Road  
Peabody, MA 01960

Complete line of Golf Course, Landscape & Lawn Care  
Construction & Maintenance Supplies

Tom Rowell (978) 317-0673  
Jeff Brown (508) 868-8495  
Dan Ricker (978) 317-7320

## **North Shore Hydroseeding**

20 Wenham St.  
Danvers, MA 01923

Hydroseeding & erosion control services.

Brian King (978) 762-8737

[www.nsbydro.com](http://www.nsbydro.com)

## **On-Course Golf Inc., Design/Build**

16 Maple Street  
Acton, MA 01720

Golf Course Craftsmen. We serve all your remodeling and renovation needs. You can trust your project with us! We make you look good!

Sean Hanley (978) 337-6661

[www.on-coursegolf.com](http://www.on-coursegolf.com)

## **Precision Laboratories**

1428 S. Shields Drive  
Waukegan, IL 60083

Specialized chemistries that enhance plants, seeds, soil and water.

Greg Bennett 978-877-3772

[www.precisionlab.com](http://www.precisionlab.com)

## **Putnam Pipe Corp.**

Hopkinton & Taunton, MA

Distributor of water, sewer, drain and stormwater pipe & fittings. Erosion & sediment control products. Free delivery & 24-hour service.

David Putnam 508-435-3090

## **Read Custom Soils**

5 Pond Park Road, Suite 1  
Hingham, MA 02043

Consistent sand for the next twenty years. Top dressing sands, root zone blends, high density bunker sand, "early green" black sand, divot & cart path mixes.

Mark Pendergrast (617) 686-5590  
Garrett Whitney (617) 697-4247  
Matt Medeiros (508) 951-6139

[www.readcustomsoils.com](http://www.readcustomsoils.com)

## **Saturated Solutions**

18 Evergreen Road  
Northford, CT 06472

Greg Moore (203) 980-1301

Saturated Solutions is the sole distributor of the Air2G2 Machine for sales & contracted services. Replenish your soils with oxygen when it needs it most in any conditions with no disruption.

[saturatedsolutionsllc.com](http://saturatedsolutionsllc.com)

## **Select Source**

3208 Peach Street  
Erie, PA 16508

National, full line distributor of turf, ornamental & specialty products. Exclusive distributor of Prime Source branded pesticides & specialty products.

Mike Blatt, Northeast Territory Manager  
(814) 440-7658

## **SiteOne Landscape Supply, LLC**

300 Colonial Parkway, Suite 600  
Roswell, GA 30076

Offering our customers the most complete line of products, service & expertise in the industry.

Ron Tumiski (800) 321-5325 ext. 6219

## **Sodco Inc.**

PO Box 2  
Slocum, RI 02877

1-800-341-6900

Black Beauty, Tall Fescue, Green & Fairway Height Bent, Short Cut Black Beauty, Short Cut Blue, 90-10 Fine Fescue

Installation options available  
Contact: Pat Hogan, Alicia Pearson

## **SOLitude Lake Management**

Since 1998, SOLitude Lake Management has been committed to providing full service lake, pond & fisheries management services that improve water quality, preserve natural resources, & reduce our environmental footprint. Services, consulting, & aquatic products are available nationwide.

Joe Onorato 508-885-0101

[www.solitudelakemanagement.com](http://www.solitudelakemanagement.com)

## **Southwest Putting Greens of Boston**

P.O. Box 827  
Westford, MA 01886

Synthetic turf, tee lines, practice greens, outdoor & indoor practice facilities.

Douglas Preston (978) 250-5996

## **Sportscapes Unlimited LLC**

PO Box 1686  
Duxbury, MA 02332

Specializing in fairway aeration & cleanup, deep tine aeration, Air2G2 aeration & full seeding services.

Mike Lucier  
617-913-8958  
mijke@sportscapesunlimited.com

[sportscapesunlimited.com](http://sportscapesunlimited.com)



---

## Stumps Are Us Inc.

Manchester, NH  
Professional stump chipping service.  
Brendan McQuade (603) 625-4165

---

## Syngenta Professional Products

P.O. Box 1775  
Wells, ME 04090  
John Bresnahan (413) 333-9914  
Melissa Hyner Gugliotti (860) 221-5712

---

## Target Specialty Products

165 Grove Street, Suite 70  
Franklin, MA 02038  
Supplier of fertilizer, chemicals & grass seed.  
Jim Pritchard, Territory Manager 401-862-1098  
Glenn Larrabee 774-670-8880

---

## Tartan Farms, LLC

P.O. Box 983  
West Kingston, RI 02892  
Dave Wallace (401) 641-0306

---

## Tom Irwin Inc.

13 A Street  
Burlington, MA 01803  
(800) 582-5959  
We bring you a network of professionals and innovative solutions dedicated to your success.  
With Tom Irwin, you're not alone.

---

## Tree Tech, Inc.

6 Springbrook Rd  
Foxboro, MA 02035  
Foxboro, Wellesley, Fall River  
Full service tree service specializing in zero impact tree removal, stump grinding, tree pruning & tree risk assessments by our team of Certified Arborists.  
Andy Felix (508) 543-5644

---

## Tuckahoe Turf Farms, Inc.

PO Box 167  
Wood River Junction, RI 02894  
Many varieties of turfgrass sod for the golf course. Bentgrass, Bluegrass, Fine and Tall Fescues, Blends and Mixes.  
800-556-6985  
Joe Farina 774-260-0093  
jfarina@tuckahoeturf.com

---

## Turf Enhancement Enterprises

Featuring Floratine products, JRM tines and bed knives and Greenleaf Turbo Drop air induction spray nozzles.  
Tom Fox 508-450-9254  
Brian Juneau 781-738-3201

---

## Turf Cloud, Inc.

39 Mountain Gate Road  
Ashland, MA 01721  
Whether you're focused on your turf, your family, your friends, or your hobbies, our goal is to provide administrative assistance to your operation, so you can have just that, more time! Turf Cloud, Inc.'s unique passion for technology, coupled with years of turf grass experience can offer you superior data tracking programs and insight to web strategies to increase your time and productivity. Ask us how today!  
Jason VanBuskirk (774) 244-2630  
jvb@turfcloud.com  
[www.turfcloud.com](http://www.turfcloud.com)

---

## Turf Products

157 Moody Rd.  
Enfield, CT 06082  
Toro Equipment & Irrigation—  
Serving the industry since 1970  
800-243-4355  
Bill Conley, Dave Dynowski,  
Nat Binns (332) 351-5189  
Tim Berge (860) 490-2787,  
Andy Melone (508) 561-0364  
[www.turfproductscorp.com](http://www.turfproductscorp.com)

---

## U.S. Pavement Services

41 Industrial Parkway  
Woburn, MA 01801  
Ken Sprague 781-825-3290  
Providing asphalt paving, cart paths and walkways, line striping and concrete work.

---

## Valley Green

14 Copper Beech Drive  
Kingston, MA 02364  
Phone: (413) 533-0726  
Fax: (413) 533-0792  
"Wholesale distributor of turf products"  
Doug Dondero (508) 944-3262  
Jon Targett (978) 855-0932  
Joe Trosky (860) 508-9875

---

## Winding Brook Turf Farm

Wethersfield, CT and Lyman, ME  
240 Griswold Road  
Wethersfield, CT 06109  
Kathy Arcari (401) 639-5462  
karcari@windingbrookturf.net  
[www.windingbrookturf.com](http://www.windingbrookturf.com)

---

## WinField United

29 Gilmore Drive—Unit C  
Sutton, MA 01590  
Using industry-leading insights to provide you with the products that help you win.  
Mark Guyer 508-372-9121

---

## Winterberry Irrigation

Pump service, installation and sales. Irrigation installation, service, repairs, and sales. Wire tracking, GPS mapping, grounding testing, start-up, and winterization.  
Matt Faherty 860-681-8982  
mfaherty@winterberrylandscape.com  
Visit [www.winterberryirrigation.com](http://www.winterberryirrigation.com)

# Golf Course Superintendents Association of New England The Newsletter—Rate Schedule

## THE NEWSLETTER DISPLAY ADVERTISING ORDER FORM

Company Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Contact Name: \_\_\_\_\_ Email: \_\_\_\_\_

Issues (List month and total number): \_\_\_\_\_

Amount of Check: \_\_\_\_\_ (Made payable to "GCSANE")

<b>Member Rates:</b>	<b>Monthly Rate</b>	<b>4 Times Per Yr. (Save 5%)</b>	<b>6 Times Per Yr. (Save 10%)</b>	<b>8 Times Per Yr. (Save 10%)</b>	<b>Annual Rate (Save 15%)</b>
<input type="checkbox"/> 1/4 page (vertical; 3.75" wide x 5" deep)	<input type="checkbox"/> \$ 90.00	<input type="checkbox"/> \$ 342.00	<input type="checkbox"/> \$ 486.00	<input type="checkbox"/> \$ 648.00	<input type="checkbox"/> \$ 918.00
<input type="checkbox"/> 1/2 page (horizontal; 7.5" wide x 5" deep)	<input type="checkbox"/> \$150.00	<input type="checkbox"/> \$ 570.00	<input type="checkbox"/> \$ 810.00	<input type="checkbox"/> \$1080.00	<input type="checkbox"/> \$1530.00
<input type="checkbox"/> Full Page (vertical; 7.5" wide x 10" deep)	<input type="checkbox"/> \$200.00	<input type="checkbox"/> \$ 760.00	<input type="checkbox"/> \$1080.00	<input type="checkbox"/> \$1440.00	<input type="checkbox"/> \$2040.00
<b>Non-Member Rates:</b> *All payments must be received in full before the ad appears in The Newsletter.					
<input type="checkbox"/> 1/4 page (vertical; 3.75" wide x 5" deep)	<input type="checkbox"/> \$120.00	<input type="checkbox"/> \$456.00	<input type="checkbox"/> \$648.00	<input type="checkbox"/> \$ 864.00	<input type="checkbox"/> \$1224.00
<input type="checkbox"/> 1/2 page (horizontal; 7.5" wide x 5" deep)	<input type="checkbox"/> \$180.00	<input type="checkbox"/> \$684.00	<input type="checkbox"/> \$972.00	<input type="checkbox"/> \$1296.00	<input type="checkbox"/> \$1836.00
<input type="checkbox"/> Full Page (vertical; 7.5" wide x 10" deep)	<input type="checkbox"/> \$240.00	<input type="checkbox"/> \$912.00	<input type="checkbox"/> \$1296.00	<input type="checkbox"/> \$1728.00	<input type="checkbox"/> \$2448.00

\* **Deadline for ads:** *The first of the month for that month's issue.*

### Ad Preparation Specifications:

**File Specifications for Ads Supplied in Digital Format:** Files should be created at 300dpi at the correct size for that ad. Formats preferred are JPG and PDF. Full color is available with all ads. Please send ads to Don Hearn at the email address below.

**Send all Newsletter ads to:**  
Don Hearn, CGCS  
300 Arnold Palmer Blvd., Norton, MA 02766  
Email: donhearn@gcsane.org

