

CONFERENCE PROGRAM

C A R O L I N A S G C S A



# CONFERENCE

## & TRADE SHOW

MYRTLE BEACH • MYRTLE BEACH CONVENTION CENTER  
NOVEMBER 14 – 16, 2022



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# 2022 CAROLINAS GCSA CONFERENCE AND TRADE SHOW

..... #carolinasshow2022 .....

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John Deere.....	Back Cover



## 2022 CONFERENCE & SHOW COMMITTEE MEMBERS

**Pete Gerdon**, *Grandfather Golf and Country Club - Chairman*  
**Don Garrett, Jr.**, *CGCS, The Walker Course at Clemson University*  
**Alex Tolbert**, *Orangeburg Country Club*  
**Jim Huntoon**, *Heritage Club*  
**Chris DeVane**, *Country Club of Lexington*  
**Billy Bagwell**, *Callawassie Island Club*  
**Travis Gannon, Ph.D.**, *NC State University*  
**Bert McCarty, Ph.D.**, *Clemson University*  
**Jim Kerns, Ph.D.**, *NC State University*  
**Joe Roberts, Ph.D.**, *Clemson University*  
**Fred Yelverton, Ph.D.**, *NC State University*  
**Jordan Booth, Ph.D.**, *Southeast Region Agronomist, USDA*  
**Tim Kreger**, *Executive Director, Carolinas GCSA*  
**Angie Davis**, *Office Manager, Carolinas GCSA*  
**Melissa Smith**, *Membership Coordinator, Carolinas GCSA*  
**Trent Bouts**, *Tee Media Consulting*

# A MESSAGE FROM OUR PRESIDENT



It's that time of year again, and as our maintenance season slows down, our anticipation rises for the biggest event on the Carolinas GCSA calendar – Conference and Show. Scrolling through the pages of this program, you will see plenty of reasons why you should be as excited as I am to get back to Myrtle Beach, SC in November. We have great courses for the golf championship, an expanded education program and a trade show floor that companies have been eager to fill from the day booth sales opened.

But for all the wonderful nuts and bolts components that help make our show the best regional event in the country, none make as big an impact as the 2,000 or so individuals who turn out every year. The chance to catch up with familiar faces and make new friends reenergizes us after a long hot summer. Sure, it is a busy week, but it is always an exciting one.

As much as there is competition for jobs in our profession, there is even more collaboration. The amount of learning that goes on, not just in the seminar rooms, but on the trade show floor, around the registration area, or over coffee on a break, is just staggering. I don't know of another profession that shares knowledge as freely or as generously as ours.

So, I encourage you to do everything possible to get to the Beach this fall. Shake hands, share your knowledge, ask questions, take notes, expand your network and go back to your facility better for it.

This year's show presents the ideal avenue for that informal exchange of lessons learned. For the first time, our annual Carolinas Night at the Beach will run in conjunction with the trade show on the exhibition hall floor. The goal is to make spending time on the trade show floor as enjoyable and productive as possible – for attendees and exhibitors.

Let's face it, without the incredible support we receive from our – your - industry partners, there would be no Conference and Show as we know it. So, we owe it to them to repay them with the one thing they ask for – the chance to say hello and explain what they have to offer. Without that we could quickly find ourselves signing on to Zoom classes again and wondering what it used to be like when we got together face to face.



**John "Billy" Bagwell**  
*President*

John "Billy" Bagwell  
President Carolinas GCSA  
Callawassie Island Club



# BOARD OF DIRECTORS

## OFFICERS



**Vice-President**  
**Chuck J. Connolly**  
Smithfields Country Club  
Easley, SC



**Secretary-Treasurer**  
**Peter Gerdon**  
Grandfather Golf and  
Country Club, Linville, NC



**Past President**  
**Brian J. Stiehler, CGCS, MG**  
Highlands Country Club,  
Highlands, NC

## HOTEL ACCOMMODATIONS



**Headquarters Hotel**  
**Sheraton Myrtle Beach Convention Center Hotel**  
2101 North Oak Street, Myrtle Beach, SC

**Call 1-888-627-8203 for reservations**

Group Name: CGCSA Attendees 2022  
Carolinas Golf Course Superintendents

**BOOK ONLINE:** <https://www.marriott.com/event-reservations/reservation-link.mi?id=1648565106227&key=GRP&app=resvlink>

**RATES:** \$109 1 King or 2 Double Beds - 2 Adults

\$128 Club Level, 1 King or 2 Double Beds + 16.27% taxes/  
facilities fees

\$5 + Tax Per Night-Self parking in hotel garage

**Cancellation Policy:** At least 3 Days Prior to Arrival or a 1 night  
cancel fee is charged

*The Sheraton MBCC Hotel WILL NOT SOLICIT reservations from  
past guests. If a third party company reaches out to you presenting  
themselves to be with the Sheraton, do not give any personal  
information or a credit card number.*

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**Daryl P. Ewing**  
Carolina Lakes Golf Club  
Indian Land, SC



**Donald C. Garrett, Jr., CGCS**  
The Walker Course at  
Clemson University  
Clemson, SC



**Brian C. Green**  
Lonnie Poole Golf Course  
Raleigh, NC



**James Karl Huntoon**  
Heritage Club  
Pawleys Island, SC



**Ryan D. McClannon**  
Reynolds Park Golf Club  
Yadkinville, NC



**W. Alex Tolbert**  
Orangeburg Country Club  
Orangeburg, SC

## EXECUTIVE DIRECTOR AND STAFF



**Tim Kreger**  
Executive Director



**Angie Davis**  
Office Manager



**Melissa Smith**  
Membership  
Coordinator



**Kim Clark**  
Local Association  
Coordinator



**Trent Bouts**  
Editor  
Carolinas Green



# SUMMARY OF CONFERENCE AND SHOW

## SUNDAY, NOVEMBER 13, 2022

Assistant Superintendent Reception ..... 6 – 9 PM  
Banditos Cantina

## MONDAY, NOVEMBER 14, 2022

Blue Ridge Breakfast ..... 7 AM  
Mammy's Kitchen

Registration ..... 7 AM – 4:30 PM  
Hall of Fame

Golf Championship ..... 11 AM Shotgun Start  
Caledonia Golf & Fish Club, True Blue Golf Club  
and Wachesaw Plantation Club

Seminar Lunch ..... 11:30 AM – 12:30 PM  
Ballroom DE

Sporting Clay Event ..... 12 PM  
Back Woods Quail Club, Georgetown, SC

### MORNING SEMINARS • 8–11:30 AM

- 1 New Strategies for Managing POA to Combat Resistance**  
Jim Brosnan, Ph.D., Professor of Turfgrass Weed Science, The University of Tennessee  
Devon Carroll, Ph.D., Recently Graduated Doctoral Student, The University of Tennessee
- 2 Advanced Weed Management – Warm Season Grasses**  
Bert McCarty, Ph.D., Professor of Turfgrass Science, Clemson University  
Fred H. Yelverton, Ph.D., Professor of Crop and Soil Sciences, NC State University
- 3 Bunker Construction: How to Avoid Digging Yourself Into a Hole**  
Adam Moeller, Director, Green Section Education, USGA  
Earl Sanders, President, Green Tee Golf, Inc. Paducah, KY
- 4 Water Quality – What You Need to Know**  
Grady Miller, Ph.D., Professor and Extension Specialist, Turfgrass Science, NC State University
- 5 I'm Fully Staffed (says no one!) (Session 1)**  
Jodie Cunningham, SPHR, SHRM-SCP, Owner & Talent Optimization Expert, Optimus Talent Partners  
John Cunningham, CGCS, General Manager and COO, Grandfather Golf and Country Club
- 6 Cool Season Turfgrass Insect with Emphasis on the Annual Bluegrass Weevil**  
Rick L. Brandenburg, Ph.D., Department of Entomology and Plant Pathology, NC State University  
Terri Billeisen, Ph.D., Extension Associate, Department of Entomology and Plant Pathology, NC State University

### AFTERNOON SEMINARS • 12:30–4 PM

- 7 Advanced Weed Management – Cool Season Grasses**  
Jim T. Brosnan, Ph.D., Professor of Turfgrass Weed Sciences, University of Tennessee  
Fred H. Yelverton, Ph.D., Professor of Crop and Soil Sciences, NC State University

- 8 Making Herbicides Work or Why Do They Sometimes Fail?**  
Travis W. Gannon, Ph.D., Associate Professor of Crop Science, NC State University  
Bert McCarty, Ph.D., Professor of Turfgrass Science, Clemson University
- 9 Fertilizers – Getting the Right Form and Function**  
Grady Miller, Ph.D., Professor and Extension Specialist, Turfgrass Science, NC State University  
Beth Guertal, Ph.D., Project Director, CEMARCH, Kansas State University
- 10 I'm Fully Staffed (says no one!) (Session 2)**  
Jodie Cunningham, SPHR, SHRM-SCP, Owner & Talent Optimization Expert, Optimus Talent Partners  
John Cunningham, CGCS, General Manager and COO, Grandfather Golf and Country Club
- 11 How Much Shade is Too Much Shade? CANCELLED**  
Mike D. Richardson, Ph.D., Professor of Horticulture, University of Arkansas
- 12 Putting the "Fun" in Fungicides**  
Jim Kerns, Ph.D., Professor and Extension Specialist of Turfgrass Pathology, NC State University  
Lee Butler, Extension Coordinator of Entomology and Plant Pathology, NC State University
- Golf Reception ..... 4 PM**  
Immediately following golf at True Blue Golf Club
- Exhibitor Move-In for Large Equipment ..... 6 – 9 PM**

## TUESDAY, NOVEMBER 15, 2022

Exhibitor Move-In ..... 7 AM – 2:30 PM  
Registration, Hall of Fame ..... 7 AM – 6 PM

### MORNING SEMINARS • 8–11:30 AM

- 13 Plant Growth Regulators for Fine Warm Season Turf**  
Jim Brosnan, Ph.D. Professor of Turfgrass Weed Science, The University of Tennessee
- 14 Holy Grail – POA Management and Resistance for Cool/Warm Season Turfgrass**  
Moderator: Bo Barefoot  
Bert McCarty, Ph.D., Professor of Turfgrass Science, Clemson University  
Fred H. Yelverton, Ph.D., Professor of Crop and Soil Sciences, NC State University  
Brandon Horvath, Ph.D., Associate Professor of Turfgrass Pathology, University of Tennessee
- 15 Understanding Pesticide Behavior to Optimize Applications and Minimize Collateral Damage**  
Travis W. Gannon, Ph.D., Associate Professor of Crop Science, NC State University
- 16 Advanced and Cost-Effective Management of Insect Pests of Warm Season Turf**  
Rick L. Brandenburg, Ph.D., Department of Entomology and Plant Pathology, NC State University  
Matt Martin, Extension Associate, Turfgrass Department of Crop and Soil Sciences, NC State University
- 17 Fundamentals of Wetting Agents**  
Mike Richardson, Ph.D., Professor of Horticulture, University of Arkansas

**18 Getting to the Root of Managing Soilborne Diseases – Warm Season Turfgrasses**

*Jim Kerns, Ph.D., Professor and Extension Specialist of Turfgrass Pathology, NC State University*  
*Joseph A. Roberts, Ph.D., Assistant Professor and Extension Specialist of Turfgrass Pathology, Clemson University*

**19 Aquatic Plant Management: An Introduction to Keeping Your Ponds Free of Unsightly Plants and Algae**

*Rob Richardson, Ph.D., Professor and Extension Specialist, Aquatic and Non-Cropland Weed Science, NC State University*  
*Matthew Cutulle, Ph.D., Assistant Professor of Weed Science, Plant and Environmental Sciences, Clemson University*

**20 The 'Other' Essential Elements, and Some that Might Be!**

*Beth Guertal, Ph.D., Project Director, CEMARCH, Kansas State University*

**21 Current Trends in Research and Innovation from the USGA**

*Jordan Booth, Ph.D., Southeast Region Agronomist, USGA*  
*Cole Thompson, Ph.D., USGA Green Section Director of Research*

**AFTERNOON SEMINARS • 12:30–4 PM**

**22 Strategies for Managing Off-Type Bermudagrass Putting Greens**

*Jim Brosnan, Ph.D., Professor of Turfgrass Weed Science, The University of Tennessee*  
*Bert McCarty, Ph.D., Professor of Turfgrass Science, Clemson University*

**23 Impact of Climate Change on Turfgrass Pests**

*Rick L. Brandenburg, Ph.D., Department of Entomology and Plant Pathology, NC State University*  
*Jim Kerns, Ph.D., Professor and Extension Specialist of Turfgrass Pathology, NC State University*  
*Fred H. Yelverton, Ph.D., Professor of Crop and Soil Sciences, NC State University*

**24 Getting to the Root of Managing Soilborne Diseases - Cool-Season Turfgrasses**

*Brandon Horvath, Ph.D., Associate Professor of Turfgrass Pathology, University of Tennessee*  
*Lee Butler, Extension Coordinator of Entomology and Plant Pathology, NC State University*

**25 Winter Management of Ultradwarf Bermudagrass Putting Greens**

*Mike D. Richardson, Ph.D., Professor of Horticulture, University of Arkansas*  
*Jordan Booth, Ph.D., Southeast Region Agronomist, USGA*

**26 The Challenge of Managing Nematodes in Turf**

*Joseph A. Roberts, Ph.D. Assistant Professor and Extension Specialist of Turfgrass Pathology, Clemson University*

**27 Soil Testing and How to Read Your Report**

*Beth Guertal, Ph.D., Project Director, CEMARCH, Kansas State University*

**28 Management of Ultradwarf Bermudagrass**

*Moderator: Mike Bankert, Superintendent, Legends Golf Club, Myrtle Beach, SC*  
*Adam Charles, Golf Course Superintendent, The Preserve at Verdae, Greenville, SC*  
*Steve Hamilton, CGCS, Golf Course Superintendent, Dunes Golf and Beach Club, Myrtle Beach, SC*  
*Ron Kelly, CGCS, Golf Course Superintendent, The Country Club of North Carolina, Pinehurst, NC*  
*Mark Swygert, Golf Course Superintendent, Palmetto Golf Club, Aiken, SC*

**29 Overseed or Paint? That is the question!**

*Moderator: Jim Huntoon, Golf Course Superintendent, Heritage Club, Pawleys Island, SC*  
*Andrew J. Jorgensen, CGCS, Director of Community Maintenance Operations, On Top of the World Communities, Ocala, Florida*  
*Jay Wade, Golf Course Superintendent, Magnolia Green Golf Club, Moseley, VA*  
*Shawn Emerson, Turf consultant after 30 years as Superintendent, Ethos Club and Leisure*

**30 Spray Masters: Making the Most Out Of All You Apply**

*Travis W. Gannon, Ph.D., Associate Professor of Crop Science, NC State University*

**Seminar Luncheon .....11:30 AM – 12:30 PM**  
*Ballroom DE*

**Turf Bowl Participant Lunch..... 1 PM**  
*Ballroom E*

**Carolinas GCSA Student Chapter Turf Bowl.....2– 4 PM**  
*Ballroom D*

**Student Question and Answer with Assistant Superintendents .....4 – 4:30 PM**  
*(immediately following Turf Bowl)*  
*Ballroom D*

**Trade Show Open ..... 4 – 8 PM**

**Carolinas Night .....4 – 8 PM**

**Women in Turf.....7 – 8 PM**  
*Vereens booth # 2210*

**WEDNESDAY, NOVEMBER 16, 2022**

**Registration, Hall of Fame ..... 7 AM – 2 PM**

**Fellowship Breakfast, Ballroom D..... 7 – 8 AM**

**General Education Session, Ballroom E ..... 8 – 11 AM**

**DSA Presentation, Ballroom E ..... 11 – 11:15 AM**

**Annual Business Meeting, Ballroom E..... 11:15 – 11:30 AM**

**Trade Show Open .....11:30 AM – 2:30 PM**

**Skin Cancer Screenings.....11:30 AM – 2:30 PM**  
*Booth # 3701*

**27-Hole Challenge Prize Giveaway, Exhibit Hall.....2 PM**

**Exhibitor Tear Down .....2:30 – 8 PM**

**Distinguished Service Award Dinner .....6 PM**  
*By invitation only, Dunes Golf and Beach Club*

*\*All seminar locations will be displayed in the registration area.*



## Danny Allen

For a long time, Danny Allen thought being invited to serve on the Carolinas GCSA board of directors was the pinnacle of his career. Then he was elected president. Now he is to receive the Distinguished Service Award, the association's highest honor.

It is a fitting climax to a career in and around golf course maintenance spanning nearly 50 years, recognizing not just what he has done for the profession but also the way he has always gone about it. A man of unwavering faith, Allen lives to serve others and goes to great lengths to do so.

Once, he dived into a pond on the golf course at Camden Country Club, where he worked for 38 years, trying to save a boy who disappeared while fishing. There were other adults on the bank by the time he arrived on the scene, but Allen was the first one in. Eventually, he found the boy on the bottom, but by then it was too late.

His recounting of that day moved grown men to tears at a fellowship breakfast at Conference and Show many years later. But none who knew anything of Allen were surprised at the selfless lengths he went to. He'd long been known as a go-to man in a crisis, whether it was professional or personal. And he didn't need to be asked. He was always stepping forward.

In addition to his dedication to his profession and his colleagues, Allen was similarly devoted to his community, helping out with school ballfields, talking to college groups, teaching Sunday school and volunteering for mission trips.

"I was raised that way and it's something that I believe in," he says. "I'm a Christian and I'm not ashamed to say it. That's what we're here for - to help each other. The good Lord always tells us to think of other people besides us. And to be honest with you, I enjoy it. I get to see and meet all kinds of people. And you never know who you might help."

A major initiative during his year as president was to invest in the region's then 12 local associations. It was his idea



for Carolinas GCSA board members, himself included, to travel and engage in grassroots conversations at local association meetings.

As he said at the start of his year at the helm in 2006: "We have enjoyed considerable success as a regional organization. Now we want to transfer that success as far into the field as we can. We want to make a difference for each of our members and we feel the local associations are in a great position to help make that happen."

Allen was determined to serve every member equally, regardless of their facility's prestige or budget. Some of that stemmed from his own experience in the profession, making his way up from his "bootstraps" and with no

formal education in the field. Some of it also stemmed from his upbringing, as one of two sons of parents who placed equal emphasis on hard work and treating people fairly.

The other son, eight years his senior, was Randy Allen, CGCS, who also served as Carolinas GCSA president and won the DSA. They are the only brothers to lead the association in its 68-year history, and the only superintendent brothers to earn the DSA.





Danny Allen served eight years on his first term on the board and later returned for another four years. In 2020, he and Tricia, his wife of 40 years, moved to Myrtle Beach where he was talked into caring for what is now the Aero Club Short Course, an executive layout originally designed, as fate would have it, by Randy.

The Allens have a daughter, Kelli, and son, Hunter, who now both live in Myrtle Beach. Danny turns 65 in November. That may be retirement age technically, but even if he does choose to step away from the golf course, he won't be done serving others. Any time he gains will be invested in his next calling, as a grandfather.

"The good Lord will put you in the places you need to be," he says.



# 2022 CORPORATE PARTNERS

MONDAY GOLF CHAMPIONSHIP		 	WEDNESDAY FELLOWSHIP BREAKFAST	 	27-HOLE CHALLENGE	  
	GOLF RECEPTION		STUDENT TURF BOWL			  
	CLOSEST TO THE PIN		DSA DINNER	 		
	LONGEST DRIVE		WELCOMING			 
SEMINAR EDUCATION			ON SITE COMMUNICATIONS		ASST. SUPT. RECEPTION	
SPORTING CLAY EVENT		 	TURF BOWL LUNCH		SOCIAL MEDIA	
SEMINAR REFRESHMENT BREAKS			SKIN CANCER SCREENINGS	 	MBCC PARKING SPONSOR	   
MONDAY AND TUESDAY SEMINAR LUNCHEON			REGISTRATION SPONSOR		DEACON	 <p>"For all golf is and all it can be."</p>
			WEDNESDAY GENERAL SESSION		TECHNOLOGY STATION	 
			A STEP AHEAD		E-NEWSLETTER	
						
						

# ASSISTANT SUPERINTENDENT RECEPTION



**SUNDAY, NOVEMBER 13**

**BANDITOS CANTINA**

1410 N. Ocean Blvd. Suite 200

Myrtle Beach, SC

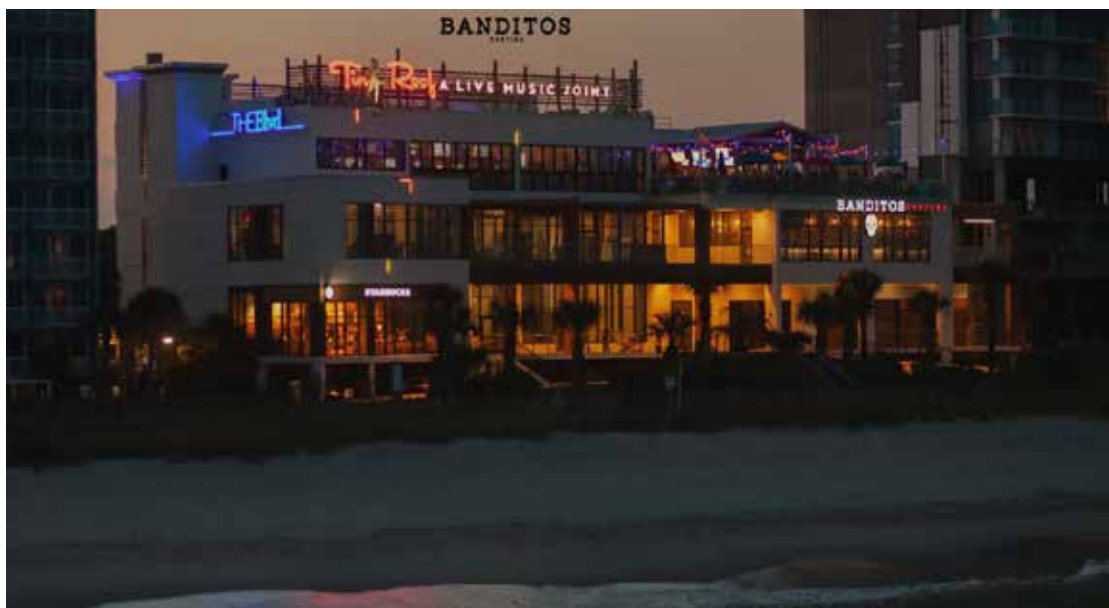
**6 - 9 PM**

*Complimentary: Please register to attend for planning purposes.*

*In Partnership with*



**MOTOROLA SOLUTIONS**  
VALUE ADDED RESELLER



Entertainment  
featuring:  
Daire Barefoot  
and the Siren

# BLUE RIDGE BREAKFAST

**MONDAY, NOVEMBER 14**

**7 - 10 AM**

**MAMMY'S KITCHEN**

1010 NORTH KINGS HWY., MYRTLE BEACH, SC  
(Located right next to the Old Pavilion Parking Deck)

**FREE and OPEN TO ALL CONFERENCE AND  
SHOW ATTENDEES!!!! NOT JUST BLUE RIDGE  
MEMBERS!!!!**

Sponsored by  
Tom Porter - J.K. Morro



# MONDAY GENERAL ACTIVITIES

MONDAY, NOVEMBER 14, 2022

## REGISTRATION

**7 AM - 4:30 PM**

Myrtle Beach Convention Center –  
Hall of Fame

## SEMINARS

**8 AM - 4 PM**

## GOLF CHAMPIONSHIP

**11 AM**

Caledonia Golf & Fish Club, True Blue Golf  
Club and Wachesaw Plantation Club

## SEMINAR LUNCHEON

**11:30 AM - 12:30 PM**

Ballroom DE

## SPORTING CLAY EVENT

**12 PM**

Backwoods Quail Club, Georgetown, SC

## RECEPTION

Immediately following golf  
True Blue Golf Club

## EXHIBITOR MOVE-IN FOR LARGE EQUIPMENT

**6 - 9 PM**

## MONDAY SEMINAR LUNCHEON

**11:30 AM - 12:30 PM • Ballroom DE**

*Lunch is included with two half-day seminars on Monday*

- Fire Braised Chicken with Carolina Gold BBQ
- Carolina Pulled Pork with Tangy BBQ Sauce
- House-Made Cole Slaw
- Creamy Macaroni and Cheese
- Slider Rolls
- Seasonal Fruit Cobbler with Fresh Whipped Cream
- Pre-Set Iced Water



*In Partnership With*





# GOLF CHAMPIONSHIP INFORMATION

MONDAY, NOVEMBER 14, 2022



## Caledonia Golf & Fish Club

Since opening to the public in January 1994, Caledonia Golf and Fish Club has rapidly gained a reputation as one of the premier courses in America. It is the first solo design of late, great golf course architect Mike Strantz. Strantz approached his assignments in a unique way—as an artist, rather than an engineer. His exceptionally creative eye is reflected in the way he sculpted Caledonia's 18 holes, with large, creative greens guarded at times by ponds, streams and imposing bunkers. The same sort of majestic live oak that overhang the entryway into Caledonia similarly frames many of the shots at Caledonia, giving the course a rustic feel. Thousands of annual and semiannual flowers bloom every year throughout the property, further adding to the beauty of the experience. A round of golf at Caledonia has been described as a "beautiful day in a floral nature park."

**Host: Jackson E. Clemons, Jr.**  
*Director of Agronomy*



## True Blue Golf Club

True Blue Golf Club is annually ranked in Major Golf Publications like Golf Magazine, Golfweek and other "Top 100 Lists" True Blue Golf Club represents the class of the expansive golf offerings on The Waccamaw Golf Trail located just minutes south of central Myrtle Beach in Pawleys Island. The dramatic, fun layout is known for its vast fairways, undulating greens and impressive elevation changes. The rolling terrain and native vegetation of this "Nationally Recognized" Mike Strantz design makes for one of the most spectacular settings in golf. And with an 18-acre practice facility, fully-stocked pro shop and inviting grill room, True Blue Golf Club is a must-play on any visit to "The Golf Capital of the World" Myrtle Beach, South Carolina. All are welcome here!

**Host: Kevin Thompkins,**  
*Golf Course Superintendent*



## Wachesaw Plantation Club

Wachesaw was crafted by internationally acclaimed Tom Fazio, Wachesaw was designed to take advantage of the site's inherent beauty and interesting elevation changes not typically found in the Carolina Low Country. The unexpected rolling fairways are thoughtfully designed to weave through the giant oaks strategically placed on the course. This unique setup provides golfers of varying skill a memorable and challenging, yet enjoyable experience.

Come experience the pace of play and privileges that can only be offered at a true private club. "Our goal is to provide Members and their Guests an unparalleled experience through a commitment to gracious hospitality and exemplary service. New members will quickly achieve a sense of belonging due to the atmosphere the staff has created."

**Host: Scott Fretz**  
*Golf Course Superintendent*





# GOLF CHAMPIONSHIP INFORMATION

MONDAY, NOVEMBER 14, 2022

In Partnership with



## Golf Schedule

### 10 - 11 AM CHECK-IN

All golfers must check in at the Carolinas GCSA Registration Desk at assigned course prior to the shotgun start.

### 11 AM SHOTGUN START

### 4 - 6 PM RECEPTION

Reception immediately following golf at the clubhouse at True Blue Golf Club

### COURSE ASSIGNMENTS

All course assignments will be determined one week prior to the event. Course assignments will be posted on the home page of the website, [www.carolinasgcsa.org](http://www.carolinasgcsa.org) and emailed on November 9.

## Championship Flight A & B - Medal Play Tournament

- 1st, 2nd, 3rd place Gross & Net
- Overall Gross
- Carolinas GCSA Superintendent Member Champion (Class A, B and C eligible)
- Overall Gross Carolinas GCSA Affiliate Member Champion (Limited to first 100 entries for purpose of flighting and speed of play)

## Senior Division (age 50 and up) - Medal Play Only

- 1st Place Gross & Net
- Will play in senior flight from senior tees

## Four Ball Flights A & B

- 1st, 2nd, 3rd Place Gross & Net
- Two Person Team Event
- Number of flights based on number of entries (Limited to first 50 team entries)

## Captain's Choice Flights A & B

- 1st Place Gross & Net
- Four Person Captain's Choice Team Event (Limited to first 75 paired entries)

**Tee Gift** - Each participant will receive a logoed leather Koozie and Pouch



**Closest to the Pin:**  
DJI Mini 2 Drone



### Long Drive:

Apple Watch 1 per course  
Series 6 GPS Model



### Hole in One

- Club Car Carryall 502 utility vehicle, 1 per course  
Designated to winning individuals home course/club
- Class A, AA, B & C Members Eligible





## ELIGIBILITY

Players must be registered to attend or participate in the Carolinas Golf Course Superintendents Conference & Show. Superintendents and affiliates will play in mixed foursomes. Contestants will select to play in Medal Play, Senior Medal Play, Four Ball\*, or Captain's Choice\*\* Division.

*\*Four Ball teams sign up with one partner on registration form. If you would like to play in four ball, and do not have a partner, the Carolinas GCSA will assign a partner.*

*\*\*Captain's Choice teams may sign up with ONE partner on the registration form. If you would like to play Captain's Choice, you do NOT have to sign up with a partner, this is just an option.*

## TOURNAMENT FORMATS

### MEDAL PLAY

- This is a stroke play individual 18-hole golf event.
- Each contestant will play his or her own ball out on each hole and report their score.
- There will be two flights divided by handicap once field is set.

### SENIOR MEDAL PLAY

This is identical to the Medal Play with these exceptions: Only contestants over age 50 are eligible; Only 1st place gross and net will be awarded in this flight; Senior players will play from forward tees except on holes designated for long drive and closest to the pin contests.

### FOUR BALL

- This is a two person team event.
- Both players will complete the hole and then select the better of their scores to report for their score on each of the 18 holes.
- There will be two flights divided by combined team handicap once field is set.
- Each team will play alongside another team selected by the Carolinas GCSA.

### CAPTAIN'S CHOICE

- This is a four person team event.
- Two contestants will be allowed to register together, and your other two players will be paired with you by the Carolinas GCSA.
- All four players will execute their desired shot from the teeing ground, then select the best respective shot, and repeat that process until the ball is holed.
- Only one team score per hole will be counted.
- There will be two flights divided by combined team handicap once field is set.

**LOCATION:** The tournament will be played at Caledonia Golf and Fish Club, True Blue Golf Club and Wachesaw Plantation Club.

**GOLF ENTRY FEE:** Member - \$115 by October 17, \$130 after October 17. Non-member - \$140 by October 17, \$155 after October 17 (Per Player) Entry fee includes green fee, cart fee, prizes and reception. Non-Member Onsite - \$180, Member Onsite - \$155.

**ENTRY DEADLINE:** First 300 players will be accepted. No entries will be accepted after the first 300 players or **October 31, 2022**, no exceptions.

**CANCELLATION POLICY:** The Carolinas GCSA must be notified of any cancellations by Monday, **November 7, 2022** in order to receive a refund.

## GOLF CHAMPIONSHIP COMMITTEE

Daryl Ewing, Chair, Carolina Lakes Golf Club, Indian Land SC  
Jim Huntoon, Heritage Club, Pawley Island, SC  
Chuck Connolly, Smithfields Country Club, Easley, SC

Any questions should be directed to Tim Kreger, Executive Director, Carolinas GCSA at 800-476-4272.

# SPORTING CLAY EVENT

## MONDAY, NOVEMBER 14, 2022

In Partnership with



### Sporting Clay Schedule

8 AM .....CLUB OPENS FOR PRACTICE  
11 AM - 12 PM.....REGISTRATION  
12 - 1 PM .....LUNCH  
1 - 3 PM .....EVENT  
3 - 3:30 PM.....AWARDS & PRIZES

### REGISTRATION FEE

Member - \$75 by October 17, \$100 after October 17.  
Non-member - \$100 by October 17, \$115 after October 17.  
Member Onsite - \$115, Non-Member Onsite - \$140.

Includes 100 target sporting clay event; lunch and prizes.  
Pre-registration is required. Limited to 70 shooters.  
Please provide a partner name as pairings will be assigned in advance.



Mills Grant, of Carolina Fresh Farms, with sporting clays 2021 championship winner, Adam Charles, and Cameron Smith, of Bayer.

### LOCATION

Back Woods Quail Club, 647 Hemmingway Lane,  
Georgetown, SC

Located just off SC 51 south at the intersection of SC 24  
and SC 41/51, Georgetown, SC  
(Approximately 1 hour from the Myrtle Beach Convention  
Center).

### ELIGIBILITY

Shooters must be registered to attend or participate in  
the Carolinas Golf Course Superintendents Association  
Conference & Show.

### GENERAL RULES

Shooters must provide their own ammunition and  
hearing and eye protection (standard ear plugs and  
safety glasses). Ammunition, hearing and eye protection  
are available for purchase at the gun club. For safety  
reasons, no shot larger than 7 ½ can be used at the gun  
club (for example #1, #2, #3, #4, #5, and #6 are NOT  
allowed). Back Woods Quail Club will provide gun rental  
for those who need one.

### ENTRY DEADLINE

Pre-registrations must be received by Monday,  
October 31, 2022.

### CANCELLATION POLICY

The Carolinas GCSA must be notified of any  
cancellations by Monday, November 7, 2022 in order to  
receive a refund.

# SEMINAR LINE-UP IN DEPTH

## MONDAY, NOVEMBER 14, 2022 • 8-11:30 AM

1

### New Strategies for Managing POA to Combat Resistance



**Jim Brosnan, Ph.D.,**  
Professor of Turfgrass Weed Science, The University of Tennessee



**Devon Carroll, Ph.D.**  
Recently graduated Doctoral student, The University of Tennessee

This webinar will provide new strategies and techniques to manage POA populations of golf course turf. We will talk about the current status of resistance in POA populations of golf course turf, how resistance can evolve from weed management decisions on the golf course and strategies to mitigate resistance within POA populations on greens, tee, and fairways.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

2

### Advanced Weed Management – Warm Season Grasses



**Bert McCarty, Ph.D.**  
Professor of Turfgrass Science, Clemson University



**Fred H. Yelverton, Ph.D.**  
Professor of Crop and Soil Sciences, NC State University

Agronomic, cultural, and pest management strategies will be discussed for managing and controlling the major weed pests on golf courses. Included are weed biology, herbicide mode-of-action, application timing, effective products, new products, and PGR use. Emphasis will be on integrated weed management that includes herbicides, weed life cycles, and cultural control options. A special emphasis will be on herbicide resistant weeds, how to identify them, and management options to prevent and/or managed such biotypes



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



3

## Bunker Construction: How to Avoid Digging Yourself Into a Hole



**Adam Moeller**  
Director, Green Section  
Education, USGA



**Earl Sanders**  
President, Green Tee Golf, Inc.  
Paducah, KY

Bunker construction methods and sand selection have never been more complex or costly. This seminar will discuss the most important aspects of bunker construction and sand selection, so you can determine the best methods and sands for your course. Liner options for bunkers and their potential benefits and challenges will be a specific focus during this seminar.



GCSAA Ed Points: .30


**PESTICIDE CREDITS**

SC-0 hrs. NC-0 hrs. GA-0 hrs.

4

## Water Quality – What You Need to Know



**Grady Miller, Ph.D.**  
Professor and Extension  
Specialist, Turfgrass Science, NC  
State University

Turf areas include ecosystems which include natural habitats for wildlife populations, wetlands, surface waters and groundwater systems. Irrigation is often used to provide necessary water to sustain turfgrass function and growth. This applied water usually remains on site to recharge water supplies. In some cases, water used for irrigation may not be a high-quality water. This program will familiarize turf managers with water quality language and help them better understand key water quality properties listed on water reports. It will include a discussion on irrigation water quality problems and how these less than ideal quality waters can be best managed for turfgrass uses.



GCSAA Ed Points: .30


**PESTICIDE CREDITS**

SC-2 hrs. NC-3.5 hrs. GA-3 hrs.

# SEMINAR LINE-UP IN DEPTH

## MONDAY, NOVEMBER 14, 2022 • 8-11:30 AM

5

### I'm Fully Staffed (says no one!) (Session 1)



**Jodie Cunningham, SPHR,**  
SHRM-SCP, Owner & Talent  
Optimization Expert, Optimus  
Talent Partners



**John Cunningham, CGCS,**  
General Manager and COO,  
Grandfather Golf and Country  
Club

Please join us for part one of a two-part series on enhancing your people skills!

If you have people problems, you're not alone. Across the country, the lack of applicants and rising labor costs have easily made this topic the number one problem you are likely faced with.

So how do you get in front of this problem? You face it head-on and develop your people strategy. You likely have financial plans, operational plans, agronomic plans – but do you have a people plan? Over the course of two interactive sessions, we will be discussing:

Session #1:

- Planning & Strategy – What are you trying to accomplish?
- The Labor Market – We need to get creative
- Recruitment Fundamentals – Becoming a marketer

If you have problems attracting, retaining, and growing your teams, these sessions are for you.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-0 hrs. NC-0 hrs. GA-0 hrs.

6

### Cool Season Turfgrass Insect with Emphasis on the Annual Bluegrass Weevil



**Rick L. Brandenburg, Ph.D.**  
Department of Entomology  
and Plant Pathology, NC State  
University



**Terri Billeisen, Ph.D.**  
Extension Associate, Department  
of Entomology and Plant  
Pathology, NC State University

This talk will focus on reviewing the biology and ecology of common cool season turf insect pests such as white grubs and cutworms. We will cover the latest management approaches for cost-effective and environmentally-sound control for these insects and examine how environmental conditions can impact product efficacy. Particular focus will be given to the annual bluegrass weevil and how its life cycle can influence application product selection and timing. We will review recommendations for annual bluegrass weevil management in the southeast and explain how they differ from other regions in the US.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

7

## Advanced Weed Management – Cool Season Grasses



**Jim T. Brosnan, Ph.D.**  
Professor of Turfgrass Weed Sciences, University of Tennessee



**Fred H. Yelverton, Ph.D.**  
Professor of Crop and Soil Sciences, NC State University

This seminar will detail weed management strategies for cool-season turf in the Carolinas. Weed control in creeping bentgrass greens will be discussed with an emphasis on *Poa Annua*, Goosegrass, and crabgrass. Also included will be weed management in cool-season fairways, tees, roughs, etc. Weed management with new herbicides will be included as well as new uses of older herbicides. New and emerging weed problems will also be discussed.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

8

## Making Herbicides Work or Why Do They Sometimes Fail?



**Travis W. Gannon, Ph.D.**  
Associate Professor of Crop Science, NC State University



**Bert McCarty, Ph.D.**  
Professor of Turfgrass Science, Clemson University

As professionals, we constantly are asked why herbicides do not work to the level expected. Many times, human error is involved in terms of misapplication timing, application method, not understanding how a particular is designed to work, or using the wrong product(s). We will cover PRE and POST emergence products, how they are supposed to work, and understand reasons why they might not work as expected. We will also cover herbicide resistance, its occurrence, and what measures can be taken to avoid or manage existing resistant weed biotypes. Numerous examples will be covered of all topics with time for questions and in-depth discussions.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# SEMINAR LINE-UP IN DEPTH

## MONDAY, NOVEMBER 14, 2022 • 12:30-4 PM

9

### Fertilizers – Getting the Right Form and Function



**Grady Miller, Ph.D.**  
Professor and Extension  
Specialist, Turfgrass Science,  
NC State University



**Beth Guertal, Ph.D.**  
Project Director, CEMARCH,  
Kansas State University

Science continues to take us forward but if we're not paying attention, we can find ourselves slipping behind. Today's market is full of new fertilizer technologies and materials. Do you know what's out there? Do you know what it's capable of and how to maximize the benefit in your situation? This seminar will cover the basics of fertilizers, including labeling, products and availability to turfgrass. We will also cover best fertilizer rates and application strategies for high quality turfgrass and a protected environment. New and emerging fertilizer technologies will also be covered, including those such as microbial products or amino-acid based materials.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-0 hrs. NC-0 hrs. GA-0 hrs.

10

### I'm Fully Staffed (says no one!) (Session 2)



**Jodie Cunningham, SPHR,  
SHRM-SCP,** Owner & Talent  
Optimization Expert, Optimus  
Talent Partners



**John Cunningham, CGCS,**  
General Manager and COO,  
Grandfather Golf and Country  
Club

This is part two of a two-part series on enhancing your people skills!

If you have people problems, you're not alone. Across the country, the lack of applicants and rising labor costs have easily made this topic the number one problem you are likely faced with.

So how do you get in front of this problem? You face it head-on and develop your people strategy. You likely have financial plans, operational plans, agronomic plans – but do you have a people plan? In the previous session we discussed Planning & Strategy, The Labor Market and Recruitment Fundamentals. In this session we will be discussing:

Session #2:

- Defining the job – Behaviors vs. skills
- Attracting the right people – Using the right bait
- Interviewing smart - Proactive vs. reactive
- Onboarding effectively – the Do's and Don'ts

Never has this topic been more important than now. We will go over Human Resources basics, dig deep into the challenges you face at your organizations and share best practices to build strong teams.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-0 hrs. NC-0 hrs. GA-0 hrs.



11

## How Much Shade is Too Much Shade?



**Mike D. Richardson, Ph.D.**  
Professor of Horticulture  
University of Arkansas

This seminar will cover a range of topics related to light measurement on a golf course as well as research information detailing the amount of light that grasses need to perform at expected levels. The first portion of the seminar will define the types of light that grasses need and how to accurately measure that light on a golf facility. The remainder of the seminar will summarize research findings to define the critical light levels needed for various species of golf course turf and how cultural practices and chemical products such as mowing heights, growth regulators and pigments can influence the minimum light requirements. Finally, the seminar will discuss integrated methods to improve turfgrass performance in limited light environments.



GCSAA Ed Points: .30



PESTICIDE CREDITS

SC-0 hrs. NC-0 hrs. GA-0 hrs.

12

## Putting the "Fun" in Fungicides



**Jim Kerns, Ph.D.**  
Professor and Extension Specialist  
of Turfgrass Pathology,  
NC State University



**Lee Butler**  
Extension Coordinator of  
Entomology and Plant Pathology,  
NC State University

This workshop will focus on the most important aspects of developing a fungicide program while trying to keep this topic fun. Given the plethora of fungicides on the market, the workshop will present a historical overview of the development of fungicides. Then the presenters will cover the factors that govern fungicide performance such as fungicide rates, timing, post-application irrigation, and how fungicides move on or within the plant. The workshop will then move into diseases that are difficult to control such as root diseases, dollar spot, and nematodes. Finally, the presenters will present an overview of the diseases observed the past several years. Each attendee will have the option to use a worksheet the presenters have developed to assist them in putting together a strong fungicide program for both bermudagrass and creeping bentgrass. The presenters will instruct attendees how to use the worksheet and will also offer attendees the opportunity to submit the fungicide worksheets for the presenters to review.



GCSAA Ed Points: .30



PESTICIDE CREDITS

SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



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# TUESDAY GENERAL ACTIVITIES

TUESDAY, NOVEMBER 15, 2022

## REGISTRATION

**7 AM - 6 PM**

Hall of Fame

## EXHIBITOR MOVE-IN

**7 AM - 2:30 PM**

## TUESDAY SEMINAR LUNCHEON

**11:30 AM - 12:30 PM**

Myrtle Beach Convention Center

Ballroom DE

*Lunch is included with two half-day seminars on Tuesday*

- Mixed greens with cucumber, red onions and tomato with choice of dressing
- Vidalia's Meatloaf
- Fried Chicken
- Sauteed Green Beans
- Garlic Whipped Potatoes
- Freshly Baked Rolls
- Pre-Set Iced Water

*In Partnership with*



## TURF BOWL

### PARTICIPANT LUNCH

**1 PM** • Ballroom E

*In Partnership with*



## CAROLINAS GCSA

### STUDENT CHAPTER TURF BOWL

**2 - 4 PM** • Ballroom D

Moderator: Bo Barefoot



*In Partnership with*



Horry-Georgetown's triumphant 2021 Student Turf Bowl team: Prof. Ashley Wilkinson, Jacob Smith, Colin Rosenbaum, Prof. Charles Granger, Harrison Rothwell, Prof. George McCauley, and, kneeling, Michael Miller.

## STUDENT QUESTION AND ANSWER WITH ASSISTANT SUPERINTENDENTS

**4 - 4:30 PM** • Ballroom D

(immediately following Turf Bowl)

## CAROLINAS NIGHT

**4 - 8 PM** • Trade Show Floor

## TRADE SHOW OPEN

**4 - 8 PM** • Exhibit Hall

## WOMEN IN TURF

**7 - 8 PM** • Vereens booth # 2210



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# SEMINAR LINE-UP IN DEPTH

## TUESDAY, NOVEMBER 15, 2022 • 8-11:30 AM

# 13

### Plant Growth Regulators for Fine Warm Season Turf



**Jim Brosnan, Ph.D.**  
Professor of Turfgrass Weed  
Science, The University of  
Tennessee

Plant growth regulators (PGRs) are commonly applied to golf course playing surfaces for an array of different reasons. This presentation will provide an overview of the latest PGR technology for use on warm-season turfgrasses commonly found on golf courses and highlight current research on PGR application scheduling to maximize long-term turfgrass quality. While an emphasis will be placed on PGR programs for use on intensively managed surfaces such as golf course putting greens, effective practices for fairway and rough areas will also be discussed in detail.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# 14

### Holy Grail – POA Management and Resistance for Cool/Warm Season Turfgrass

Moderator: Bo Barefoot



**Bert McCarty, Ph.D.**  
Professor of Turfgrass Science,  
Clemson University



**Fred H. Yelverton, Ph.D.**  
Professor of Crop and Soil  
Sciences, NC State University



**Brandon Horvath, Ph.D.**  
Associate Professor of Turfgrass  
Pathology,  
University of Tennessee

Herbicide resistance is becoming epidemic in the professional turfgrass arena. At the top of the list of resistant weeds is annual bluegrass (*Poa annua*). *Poa* resistance was first documented in the early 1990's to the triazine herbicides but since then, resistance to every major herbicide mode-of-action can be found. Resistance is often erroneously thought to be from a herbicide somehow changing the plant's genetic makeup. This is not the case and the presenters will cover how resistance develops and spreads. The presenters will also cover the latest scientific thoughts on how to prevent, delay, or even avoid resistance by prudent management practices as well as intelligent herbicide program development.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



15

## Understanding Pesticide Behavior to Optimize Applications and Minimize Collateral Damage



Travis W. Gannon, Ph.D.  
Associate Professor of Crop  
Science, NC State University

Pesticides are commonly used to manage weeds, insects, and diseases on the golf course. While pesticides are one component of comprehensive pest management programs, it's imperative for managers to understand how to optimize pesticides without adversely affecting human or environmental health. Overall, participants will have a better understanding of pesticide fate and behavior and how to devise best management practices to minimize off-target pesticide injury and maximize pest control.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

16

## Advanced and Cost-Effective Management of Insect Pests of Warm Season Turf



Rick L. Brandenburg, Ph.D.  
Department of Entomology  
and Plant Pathology, NC State  
University

This seminar will focus on best management practices for turfgrass insects. The seminar will target basic biology to foster an understanding of the conditions that favor insect pest outbreaks. Advanced principles as well as options for highly effective programs and the costs will be discussed in detail for individual pests. Detailed planning will be included through the presentation of case studies.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



Matt Martin  
Extension Associate, Turfgrass  
Department of Crop and Soil  
Sciences, NC State University

17

## Fundamentals of Wetting Agents



Mike Richardson, Ph.D.  
Professor of Horticulture,  
University of Arkansas

Wetting agents are widely-used on putting greens to prevent the occurrence of localized dry spot. However, wetting agents can also affect moisture amounts and distribution in the soil, surface firmness, dew retention, and other factors that can influence health and playability. Wetting agents are also a difficult class of products to evaluate because there is no state-mandated "label" that describes exactly what is contained in the product. As such, testing of products is essential to identify the most appropriate products for your facility. This seminar will discuss testing approaches and current knowledge of commonly-used wetting agents.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# SEMINAR LINE-UP IN DEPTH

## TUESDAY, NOVEMBER 15, 2022 • 8-11:30 AM

# 18

### Getting to the Root of Managing Soilborne Diseases – Warm Season Turfgrasses



**Jim Kerns, Ph.D.**  
Professor and Extension Specialist of Turfgrass Pathology, NC State University

Turfgrass diseases are challenging to manage and pathogens that attack roots, stolons and rhizomes are even more challenging. This seminar will focus on diseases of roots, stolons and rhizomes of warm-season grasses and will cover the current state of knowledge surrounding the cause, epidemiology, and management of these diseases.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



**Joseph A. Roberts, Ph.D.**  
Assistant Professor and Extension Specialist of Turfgrass Pathology, Clemson University

# 19

### Aquatic Plant Management: An Introduction to Keeping Your Ponds Free of Unsightly Plants and Algae



**Rob Richardson, Ph.D.**  
Professor and Extension Specialist, Aquatic and Non-Cropland Weed Science, NC State University

Whether ponds serve as visual focal point for your property or an irrigation source, aquatic weeds can interfere with the appearance and use of the waterbody. Using proper management techniques can keep these weeds at bay and allow full use of your water body. This seminar will give superintendents a complete overview of how to manage their aquatic resources including water quality, aquatic plant identification, and integrated best management practices for control of the major aquatic weed problems. Specific instruction on the newest aquatic herbicides, use of aquatic herbicides in irrigation sources, and management of marginal areas will be emphasized. An overview of relevant rules and regulations that apply to management of aquatic resources will also be covered.



GCSAA Ed Points: .30



**AQUATIC CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.



20

## The 'Other' Essential Elements, and Some that Might Be!



**Beth Guertal, Ph.D.**  
Project Director, CEMARCH,  
Kansas State University

We all know about the 'Big Three': Nitrogen, Phosphorus and Potassium. But what about manganese? Iron? Silicon? This seminar will talk about other essential elements that we may or not need for turfgrass production, including calcium, magnesium and sulfur. We will cover some (but not all – chloride? Really?) of the micronutrients as well. We will also take a look at the 'quasi-essential' elements, which includes items like silicon. If they exist we will talk about rates, sources and soil-test levels. If those numbers do not exist we will talk about that too.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-0 hrs. NC-0 hrs. GA-0 hrs.

21

## Current Trends in Research and Innovation from the USGA



**Jordan Booth, Ph.D.**  
Southeast Region Agronomist,  
USGA

This seminar will provide updates and conclusions from the latest university research funded through the USGA's Turfgrass Environmental Research Program. New information will be presented on turfgrass breeding efforts, pest control, water conservation, and turfgrass management in golf. We will also discuss new innovations and trends in the industry.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-2 hrs. NC-3 hrs. GA-3 hrs.



**Cole Thompson, Ph.D.**  
USGA Green Section Director  
of Research

# SEMINAR LINE-UP IN DEPTH

TUESDAY, NOVEMBER 15, 2022 • 12:30-4 PM

22

## Strategies for Managing Off-Type Bermudagrass Putting Greens



**Jim Brosnan, Ph.D.**  
Professor of Turfgrass Weed Science, The University of Tennessee



**Bert McCarty, Ph.D.**  
Professor of Turfgrass Science, Clemson University

Many golf course superintendents managing ultradwarf bermudagrass putting greens are faced with the challenge of managing off-type grasses that are aesthetically and functionally different from commercial ultradwarf bermudagrass cultivars. This research-based presentation will provide an overview of the off-type issue in addition to covering strategies to manage infestation via optimal use of plant growth regulators.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

23

## Impact of Climate Change on Turfgrass Pests



**Rick L. Brandenburg, Ph.D.**  
Department of Entomology and Plant Pathology, NC State University



**Jim Kerns, Ph.D.**  
Professor and Extension Specialist of Turfgrass Pathology, NC State University



**Fred H. Yelverton, Ph.D.**  
Professor of Crop and Soil Sciences, NC State University

This seminar will expose golf course superintendents and industry personnel on the latest research regarding climate change and current/future impacts on turfgrass management. While much of the national discussion focuses on sea-level rise and tidal flooding, impacts are already occurring over the entire US and world outside of coastal areas. Much of the attention regarding GHG focuses on CO<sub>2</sub> but nitrous oxides (produced from the denitrification process) will be important in turfgrass management. Plants in general, and especially turfgrasses (due to their rapid growth rates) absorb large amounts of CO<sub>2</sub>. Generation of nitrous oxides via denitrification will also be discussed. Changes in turfgrass species due to warming nighttime temperatures are already having an impact on turfgrass selection as more golf courses move from creeping bentgrass to ultradwarf bermudagrasses in the mid-south. A warming climate and climate volatility is having an effect on pest populations as warm-season weeds are moving north and certain turfgrass diseases are increasing in incidence and severity. These trends are likely to continue for the indefinite future.



**GCSAA Ed Points: .30**



**PESTICIDE CREDITS**  
SC-0 hrs. NC-3.5 hrs. GA-3 hrs.

24

## Getting to the Root of Managing Soilborne Diseases - Cool-Season Turfgrasses



**Brandon Horvath, Ph.D.**  
Associate Professor of Turfgrass Pathology,  
University of Tennessee



**Lee Butler,**  
Extension Coordinator  
of Entomology and Plant Pathology, NC State University

Soilborne turfgrass diseases are particularly difficult to diagnose and manage because the pathogens subversively infect and damage roots well before plant symptoms arise. This seminar will describe the soil environment in correlation with the biology and epidemiology of the pathosystem of soilborne diseases infecting cool-season turfgrasses. The course will also explain the crucial aspects of each disease cycle, highlighting where disease control measures can most effectively impede pathogen development.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

25

## Winter Management of Ultradwarf Bermudagrass Putting Greens



**Mike D. Richardson, Ph.D.**  
Professor of Horticulture,  
University of Arkansas



**Jordan Booth, Ph.D.**  
Southeast Region Agronomist,  
USGA

Dr. Richardson will discuss strategies to use covers most effectively to protect greens from winter injury, including when to apply covers and the use of air gaps under the cover. In addition, he will discuss the importance of moisture management and wetting agents on preventing winter desiccation.

Dr. Booth will discuss the impact of fungicides and plant growth regulators on cold tolerance. He will cover some of his research at Va. Tech on covering and core aeration as it relates to winter management and cold tolerance.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# SEMINAR LINE-UP IN DEPTH

## TUESDAY, NOVEMBER 15, 2022 • 12:30-4 PM

# 26

### The Challenge of Managing Nematodes in Turf



**Joseph A. Roberts, Ph.D.**  
Assistant Professor and Extension Specialist of Turfgrass Pathology, Clemson University

Plant parasitic nematodes persist as perhaps the most difficult of pests to manage in fine turf on golf courses. In spite of the introduction of new products in recent years, the overall challenge of the problem persists. Multiple genera and species of several damaging nematodes including sting, lance and root knot and stubby root occur in our sandy soils, whether natural or constructed. Life cycles and nematode behavior will be discussed for these important and damaging nematodes and how and when to sample for diagnostic and predictive purposes. Also discussed will be realistic expectations of effectiveness (or lack thereof) of all available nematicides labeled for turf. Some topics for consideration will include why specified sand based root zones make an ideal habitat for nematodes and what might be done about that regarding modifications.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# 27

### Soil Testing and How to Read Your Report



**Beth Guertal, Ph.D.**  
Project Director, CEMARCH, Kansas State University

It's pages of numbers. LOTS AND LOTS of numbers. What do you do with them, and how does that soil-test report affect your fertilization and turfgrass management?

This session will discuss soil-test reports, using a variety of soil-test reports from samples collected from golf courses, athletic fields and lawns around the nation. We will cover base saturation, cation exchange capacity, soil pH and a raft of other cool information you can glean from your report. From that we will discuss how to use the soil-test report – what do the recommendations mean, and how you might want to adjust the recommended rates of fertilization.



GCSAA Ed Points: .30



PESTICIDE CREDITS  
SC-0 hrs. NC-0 hrs. GA-0 hrs.



28

## Management of Ultradwarf Bermudagrass

**Moderator: Mike Bankert**  
Superintendent, Legends Golf Club, Myrtle Beach, SC



**Adam Charles**  
Golf Course Superintendent,  
The Preserve at Verdae,  
Greenville, SC



**Steve Hamilton, CGCS**  
Golf Course Superintendent,  
Dunes Golf and Beach Club,  
Myrtle Beach, SC



**Ron Kelly, CGCS**  
Golf Course Superintendent,  
The Country Club of North  
Carolina, Pinehurst, NC



**Mark Swygert**  
Golf Course Superintendent,  
Palmetto Golf Club, Aiken, SC

The seminar attendee will have the opportunity to discuss diseases prevalent to ultradwarf bermudagrass greens, how to develop a disease management plan that protects their greens, topdressing sands, winter covering strategies, fungicide application, mowing strategies, growth regulators, green speed and aerification practices while migrating the negative aspects.

With ultradwarf Bermudagrass greens more and more widespread, golfers continue to demand turf managers to produce exceptional ball roll. This seminar will give turf managers insight into different types of surface management techniques and how to protect their greens.



GCSAA Ed Points: .30



**PESTICIDE CREDITS**  
SC-2.5 hrs. NC-3.5 hrs. GA-3 hrs.

# SEMINAR LINE-UP IN DEPTH

## TUESDAY, NOVEMBER 15, 2022 • 12:30-4 PM

29

### Overseed or Paint? That is the question!

**Moderator: Jim Huntoon**  
Golf Course Superintendent,  
Heritage Club, Pawleys Island, SC



**Andrew J. Jorgensen, CGCS**  
Director of Community  
Maintenance Operations, On  
Top of the World Communities,  
Ocala, Florida



**Jay Wade**  
Golf Course Superintendent,  
Magnolia Green Golf Club,  
Moseley, VA



**Shawn Emerson**  
Turf consultant after 30 years as  
Superintendent, Ethos Club and  
Leisure

Superintendent panel on the use and agronomic benefits of colorants. Industry veterans on panel will cover topics to include painting, colorants, application methods, agronomics benefits in the long and short terms, hybrid overseeding, and turf preparation for successful painting.



GCSAA Ed Points: .30



PESTICIDE CREDITS

SC-0 hrs. NC-0 hrs. GA-0 hrs.

30

### Spray Masters: Making the Most Out Of All You Apply



**Travis W. Gannon, Ph.D.,**  
Associate Professor of Crop  
Science, NC State University

Applications of plant protectants through turfgrass sprayers are an integral component of golf course management programs, and considerable time and energy is invested in product selection with regard to safety, efficacy, and turfgrass tolerance. However, it is also important to consider the effects of product formulation and mode of action as well as application factors such as nozzle selection, spray volume, and water quality. This session will cover the fundamentals behind improving product performance by extracting important information from product labels, considering nozzle selection and spray volume, and testing the pH and water quality of the spray solution. Each of these factors can play an important role in success, particularly in areas where superintendents rely on poor-quality ground water and/or reclaimed water.



GCSAA Ed Points: .30



PESTICIDE CREDITS

SC-3.5 hrs. NC-3.5 hrs. GA-3 hrs.

# CAROLINAS NIGHT ON THE TRADE SHOW FLOOR



**TUESDAY, NOVEMBER 15 • 4 – 8 PM**

**OPEN TO EVERYONE ON THE TRADE SHOW FLOOR**

**BARS WILL OPEN AT 4 PM**

(Wine, beer, liquor or sodas) Water coolers will be placed on the outside perimeter of the trade show floor

**COMPLIMENTARY DRINK TICKETS**

available from Tri-State Pump & Control, Inc. and Vereens Turf Products as well as the 27-hole challenge booths

**BARS WILL BE LOCATED AT**

Tri-State Pump, booth #1607  
Vereens, booth #2210

**FOOD STATIONS • OPEN AT 5 PM**

Green Resource, booth #1604  
NanoOxygen Systems, booth #1017  
AgStone LLC, booth #1715

*Additional drink tickets may be purchased from the registration desk onsite for \$10 each*

**IN PARTNERSHIP WITH**

 **AGSTONE**

**Green  
Resource** 

**NanoOxygen**  
SYSTEMS  
OXYGEN DELIVERED

**RAPID WATER**  
TECHNOLOGIES®

**tsp**  
Est. 1994



# WEDNESDAY EVENTS

## Wednesday, November 16, 2022

### FELLOWSHIP BREAKFAST SPEAKER

**C.J. Coy**  
*Turf Warriors 4 Him*

C.J. Coy is the founder of Turf Warriors 4 Him, a ministry focused on spreading the word of hope, faith and the good news of Jesus Christ within the turf industry. A veteran of nearly 25 years in the turf industry, Coy launched the ministry to help colleagues he saw struggling with "the many hours worked, stresses of the workload, families getting the leftovers, trying to make ends meet, and trying to get up every day to do it all again."



"While working my different jobs and positions within the turf industry, no matter where I was, I saw the same thing over and over again," he says. "Seeing men and women in this industry who are very weighed down, have nowhere to turn, and usually turning to other things of this world for comfort."

Before launching Turf Warriors 4 Him in 2016, Coy's industry experience included time with John Deere Landscapes, SePRO and Advanced Turf Solutions. Based in Avon, IN, he and his wife, Kristen, have three children. More than 3,000 people follow him on Twitter - @TurfWarrior4Him.

### REGISTRATION

**7 AM - 2 PM**

*Myrtle Beach Convention Center  
Hall of Fame*

### FELLOWSHIP BREAKFAST

**7 - 8 AM**

*Ballroom D*

*In Partnership with*



- Market Display of Fresh Seasonal Fruits
- Fresh Baked Biscuits with Butter and Assorted Jellies
- Farm Fresh Scrambled Eggs
- Southern Style Grits
- Crisp Applewood Smoked Bacon
- Orange Juice

*Important: Breakfast is Complimentary but please register to attend for food counts.*



# EDUCATION SESSION

## Wednesday, November 16, 2022

**BASF**  
We create chemistry

Wednesday General  
Session Partner

### GENERAL EDUCATION SESSION

Ballroom E



GCSAA Ed Points: .30

**Presiding** – Chuck Connolly, Vice President,  
Carolinas GCSA, Smithfields Country Club

8 AM

#### WELCOME

Billy Bagwell, President Carolinas GCSA  
Callawassie Island Club

8:05 – 8:15 AM

#### WEE ONE FOUNDATION

Luke Cella, Executive Director, Wee One  
Foundation

8:15 – 9 AM

#### WOMEN IN TURF

Devon Carroll, Ph.D., University of Tennessee

9 – 9:30 AM

#### UPCOMING NEW MEMBER BENEFIT

##### Allegacy Benefit Solutions

Chad Huff, VP Sales, Allegacy Benefit Solution

9:30 – 10:30 AM

#### ROUNDS 4 RESEARCH UPDATES

Clemson University and North Carolina State  
University

10:30 – 11 AM

#### USGA SOUTHEAST REGION

##### Highlights of the 2022 Golf Season

Jordan Booth, Agronomist, Southeast Green  
Section

11 – 11:15 AM

#### DISTINGUISHED SERVICE AWARD PRESENTATION

Danny Allen, Carolinas GCSA Lifetime Member  
and Past President

11:15 – 11:30 AM

#### ANNUAL BUSINESS MEETING

**Presiding** – Billy Bagwell, President, Carolinas  
GCSA, Callawassie Island Club

11:30 AM – 2:30 PM

#### TRADE SHOW OPEN

Exhibit Hall

11:30 AM – 2:30 PM

#### SKIN CANCER SCREENINGS

##### Free Screenings at Booth #3701

Attendees will be able to sign up electronically  
the week prior to the show.

In Partnership with



Provided by Grand Strand Dermatology

12 – 2 PM

Concession stands will be open near the  
loading docks

2 PM

#### 27 – HOLE CHALLENGE PRIZE GIVEAWAY

Exhibit Hall Stage Area near John Deere

2:30 – 8 PM

#### EXHIBITOR TEAR DOWN

6 PM

#### DISTINGUISHED SERVICE AWARD DINNER

By Invitation Only • Dunes Golf and Beach Club

In Partnership with



# 27-HOLE CHALLENGE

In Partnership with



**\$7,500 in  
cash  
giveaways**

The Carolinas GCSA is proud to present the 27-Hole Challenge event to superintendents and assistant superintendent members. Complete the 27-Hole tour of the trade show floor and get to know the industry partners who help make this outstanding event possible. (Winner is responsible for any applicable taxes)

*27-Hole Challenge scorecards will be mailed at the end of October. A replacement card can be picked up at the 27-Hole Challenge Booth #3717 during trade show hours.*



**Grand Prize \$3,000 Cash**

**2nd Prize \$2,000 Cash**

**3rd thru 6th Prizes \$500 cash**

**7th thru 15th Your choice of assorted prizes**

**Assistant Superintendent Member Drawing**

**1st Prize \$500 Cash**

**2nd thru 4th Your choice of assorted prizes**

## How to Play

- 27-Hole Challenge participants must be current Carolinas GCSA Class A or B members. Participants in the Next Generation 27-Hole Challenge must be current Carolinas GCSA Class C (assistant superintendent) members.
- 27-Hole Challenge replacement scorecards may be picked up at the 27-Hole Challenge booth #3717 in the exhibit hall during normal trade show hours.
- The event will consist of 27 exhibiting company booths. A hole flag will mark each booth and participants must have their score card stamped at each of the designated booths.
- 27-Hole Challenge booths will be located at various sites throughout the exhibit area and will be designated on the exhibit hall directory, which will be provided on-site.
- Cards must be stamped at each designated booth on either Tuesday or Wednesday during normal trade show hours. All cards must be turned in to the 27-Hole Challenge booth by 2:30 p.m. on Wednesday, November 16.
- All participant scorecards that contain all 27 stamps will be entered in the drawing for prizes.
- Drawing for prizes will be held at the conclusion of the Trade Show on Wednesday afternoon.
- 27-Hole Challenge participants must be present at the Trade Show reception area at 2 p.m. on Wednesday afternoon when the winners are announced in order to be eligible for the prizes.



# GENERAL INFORMATION

## COVID-19 INFORMATION

In order to do our part in keeping everyone safe as we come together for Conference and Trade Show, the Carolinas GCSA will follow all CDC and City of Myrtle Beach guidelines related to COVID-19.

The health and safety of our Carolinas GCSA members, exhibitors, attendees, guests, and staff is our top priority.

Due to the COVID-19 being so contagious, whether you are vaccinated or unvaccinated, we recommend the following as we come together and celebrate. Please:

- Masks are optional during all seminars, on the trade show floor and all indoor activities
- Practice social distancing where possible
- Frequently wash your hands with soap and water or use hand sanitizer
- Do not attend any Carolinas GCSA Conference and Show event if you feel sick or have symptoms of COVID-19
- If you have been exposed to someone with COVID-19, please quarantine

Thank you for your cooperation.

## BADGES AND ADMITTANCE

Official Carolinas GCSA badge must be worn at all Conference and Show events. Badge is included in credential mailing.

## CANCELLATION POLICY

Conference and Show cancellation requests must be in writing and received by Monday, November 7, 2022 to receive a refund. A \$25 administrative fee will be charged for all full and/or partial cancellations. After this date, NO refunds will be made. Special refund note: If your credentials have been mailed at the time of your cancellation, you must return them to the Carolinas GCSA before any refund will be issued.

## CREDENTIAL MAILING

Credential mailing will begin in October 2022. Credentials for registrations received after November 4, 2022, 4:30 PM EST, must be picked up on-site at the registration desk at the Myrtle Beach Convention Center.

## RECOMMENDED DRESS

The dress requirements for all Conference and Show events should either be golf casual or business casual.

- Golf Casual is defined as a nice pair of slacks and a collared or mock neck golf shirt.
- Business Casual is defined as a nice pair of slacks with a collared or mock neck shirt and a blazer or sport coat.
- Under no circumstances should denim jeans or caps be worn at Conference and Show events.

## ADVANCED REGISTRATION BENEFITS

Register in advance by **October 17, 2022** and you will receive these great advantages prior to the event:

- A reduced price for conference and show registrations
- Your badge and credentials will be mailed to you so you can go straight to seminars, general session and the trade show. No waiting in lines.

## COMPLIMENTARY FULL CONFERENCE REGISTRATION

Complimentary registration will be offered to Carolinas GCSA Honorary, AA and Retired members, Educators, and Golf Course Owners. All complimentary registrations should call the office.

## SEMINAR SELECTIONS

Seminar descriptions can be found on pages 16-34. Seminars are NOT included with the full conference package. Class sizes are limited so register early. Trade show pass is NOT included with seminar registration.

## FULL CONFERENCE PACKAGE

Your full conference package includes:

- General Education Session
- Trade Show Pass for Tuesday and Wednesday

## FAMILY REGISTRATION

Complimentary registration is offered to spouses/significant others and children of Carolinas GCSA members. Guests will have access to the trade show Tuesday and Wednesday.

## COMPLIMENTARY PARKING

Complimentary parking in the large lot behind the Myrtle Beach Convention Center is made possible with the partnership by Bayer, Carolina Fresh Farms, Nufarm and Regal.

## NO SMOKING POLICY

The MBCC and all official Carolinas GCSA Conference and Show events will be smoke free.

## ALCOHOL POLICY

Alcohol is only allowed from host bars during Caroliona Night event on Tuesday night.



# MEET THE SPEAKERS

## Terri Billeisen, Ph.D.



Terri Billeisen completed her B.S. and M.S. degrees in turfgrass entomology at Purdue University and moved to North Carolina in 2011 to continue research in the field. She completed her Ph.D. and post-doctoral research in turfgrass entomology under the direction of Dr. Rick Brandenburg. She has been an extension associate at NC State since January 2017.

## Jordan Booth, Ph.D.



Jordan Booth, Ph.D., is the Southeast Region Agronomist with the USGA. He received his M.S. in Plant Pathology from Virginia Tech University under the direction Dr. David McCall. He earned his B.S. degree in Turfgrass Management at Clemson University. Jordan earned his Ph.D. at Virginia Tech. in Plant and Environmental Sciences with research focusing on warm-season putting green management. Jordan's tenure at Willow Oaks Country Club in Richmond, Virginia, as an assistant superintendent and superintendent from 2008-2018 provided him with extensive hands-on experience in all facets of golf course management.

## Rick L. Brandenburg, Ph.D.



Rick Brandenburg, Ph.D., is a William Neal Reynolds Distinguished Professor in the Department of Entomology and Plant Pathology at North Carolina State University. He has conducted research and extension programs associated with turfgrass and crop pest management for over 35 years and for 16 years served as the co-director of the Center for Turfgrass Environmental Research and Education at NC State. Brandenburg has taught for GCSAA for many years and has been invited to speak in more than 20 countries, written more than a dozen book or book chapters, more than 140 research papers, and hundreds of trade journal articles, extension publications and webinars. He has provided weekly educational videos and blogs on his Facebook page Turf, Bugs, and Rock n' Roll since 2011. Brandenburg has been the recipient of numerous national awards recognizing both his research and educational efforts.

## Jim T. Brosnan, Ph.D.



Dr. Brosnan is a Professor in the Plant Sciences Department at the University of Tennessee (UT) and Director of the UT Weed Diagnostics Center. His research focuses on controlling unique and problematic turfgrass weeds, particularly those with resistance to herbicides. His extension programs aim to provide education and diagnostic support to Tennessee's \$5.8 billion turfgrass industry. Dr. Brosnan serves as an advisor to the Tennessee Turfgrass Association Board of Directors, and he is actively involved in the Weed Science Society of America, Southern Weed Science Society, Golf Course Superintendents Association of America, and Sports Turf Managers Association. He has consulted at multiple venues on the PGA Tour (including several major championship host sites) in addition to National Football League franchises. Dr. Brosnan received a B.S. in turfgrass science from Penn State University, an M.S. in plant,

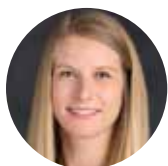
soil and insect sciences (turfgrass) from the University of Massachusetts Amherst, and a Ph.D. in agronomy (turfgrass) from Penn State University.

## E. Lee Butler



Lee manages the Turf Diagnostics Lab while remaining active in the turf pathology field research program. This allows him to work with turfgrass managers to develop effective disease management plans based on his knowledge of current disease activity and observations made in fungicide efficacy trials. After receiving his B.S. in Turfgrass Management from NC State, Lee worked in the golf course and landscape management industries before returning to NC State to pursue a M.S. in Plant Pathology. During his graduate studies, Lee developed effective control recommendations for spring dead spot control in bermudagrass turf. In addition to speaking at various conferences and meetings across the United States, Lee gives guest lectures in the College of Agriculture and Life Sciences and in the College of Natural Resources at NC State University.

## Devon Carroll, Ph.D.



Devon Carroll graduated with her Ph.D. in Plant, Soil, and Environmental Science with a concentration in Turfgrass Weed Science from the University of Tennessee in May of 2022. Concurrent with her Ph.D., she earned a M.S. in Agricultural Leadership, Education, and Communications with a research focus on women in the turfgrass industry. Devon also holds a B.S. in Turfgrass Science and M.S. in Agronomy focused in turfgrass from Penn State."

## Adam Charles



Adam Charles is golf course superintendent at The Preserve at Verdae in Greenville, SC and asset manager with Atrium Hospitality for three other courses in North Carolina and Missouri. During his 14-year tenure, Charles steered a transition to the environmental emphasis The Preserve is now known for. A 2001 graduate of Clemson University, he is a past-president of the Carolinas GCSA and Upstate Turfgrass Association. Charles and his wife, Amanda, live in Greenville with "four children and four dogs, to go with my four golf courses," he says.

## Jodie Cunningham



Owner and Talent Optimization expert, Jodie J. Cunningham SPHR, SHRM-SCP, specializes in workforce analytics, which help organizations get the right people in the right jobs and grow their exceptional talent. Jodie works closely with organizations in a variety of industries to fully utilize the talent they currently employ and ensure smart talent selection in the future.

Jodie is a human resources executive with over 20 years of experience. She started her HR career in the hospitality industry, most recently with Four Seasons Hotels and Resorts. She then transitioned into professional sports as the human resources executive with the Los Angeles Rams. Her strategic workforce planning experience is extensive, creating and executing data-



driven people strategies related to talent acquisition, leadership development, organizational acquisitions, and employee engagement.

With her unique background in high-end luxury hospitality, private golf and country clubs, and professional sports, she brings a wealth of knowledge as a trusted human capital advisor. Her goal is to provide analysis and consulting that effectively balances the needs of the organization with the talent it currently employs.

### John Cunningham, CGCS



John has been involved with some of the finest Clubs in the country, not hosting PGA golf tournaments and Championship golf but also leading major Club improvements and building high functioning teams at Clubs.

John Cunningham, CGCS, received his degree in agronomy from Valencia College in Orlando, Fla., and has been a Certified Golf Course Superintendent since 2003. Cunningham spent the first 10-plus years of his career in Florida, managing championship golf most notably at Black Diamond Ranch a 45-hole, top-100 golf facility and has been a leader in the Club side of the industry for the past 10 years. John also accepted the position as Assistant General Manager/Director of Agronomy at Bellerive Country Club in St. Louis, Mo. He joined Bellerive and helped prepare the Club to host the 2013 Senior PGA Championship and completing course renovations as Bellerive was the host course of the 100th PGA Championship in 2018. He went on to become the General Manager/COO at Aronimink Golf Club, a Top 10 Platinum Golf Club in Newtown Square, Pa. Aronimink was the host site for the 2018 BMW Championship and the 2020 KPMG Women's PGA Championship while spearheading a 30-million-dollar Club improvement plan.

Cunningham is currently the General Manager/COO at Grandfather Golf and Country Club in Linville, N.C. Located in the Blue Ridge Mountains the Club boasts the #2 ranked course in North Carolina, a second par-three/par four golf course, and a full-service private club including tennis and fitness. John is no stranger to giving back to the Industry as he is an annual speaker at the Golf Course Superintendents Associations, Golf Industry Show and part of the Club Management Associations, Golf BMI education team.

### Matthew Cutulle



Dr. Matthew Cutulle is an assistant professor of weed science at Clemson University in the Department of Plant and Environmental Sciences. He is responsible for research and extension weed management projects in vegetables, small fruits, aquatics, and roadside vegetation management. He received his PhD from the Department of Plant Pathology, Physiology and Weed Science at Virginia Tech University, an MS in Plant Science from the University of Tennessee and a BS in Biology at Salisbury University. Prior to joining Clemson University, Dr. Cutulle was an herbicide development scientist with Syngenta Crop Protection focused on safener technology, herbicide resistance, herbicide volatility, and formulation optimization.

### Shawn Emerson



Shawn Emerson has been in the golf course industry for 40 years. Twenty-five of those years were spent at Desert Mountain Golf Club in Scottsdale, Arizona as the Director of Agronomy where Shawn presided over seven golf courses, leading them to achieve the Renovation of the Year (2003) award and an Honorable Mention for Development (2019). In addition to Shawn's management over golf courses, he has also taken care of all aspects of club landscaping, tennis, and pickle court construction/maintenance, and was part of building a world-renowned performance center. He is known for his innovative approach, using technology such as sensors, drones, operation software, and procurement management.

### Travis W. Gannon, Ph.D.



Dr. Travis Gannon is an Associate Professor of Turfgrass Science at North Carolina State University specializing in weed management and pesticide environmental fate and behavior. He obtained his B.S., M.S. and Ph.D. from NC State University in the Department of Crop and Soil Sciences. Dr. Gannon's research program focuses on understanding various pests and optimizing pesticide programs for sustainable turfgrass management. Dr. Gannon currently advises five graduate students investigating various aspects of pest management and pesticide environmental fate and behavior and is actively involved in Weed Science Society of America, Southern Weed Science Society, GCSAA and Sports Turf Managers Association.

### Beth A. Guertal, Ph.D.



Beth Guertal, Ph.D., retired from Auburn University in 2022, and now works for Kansas State University. She is the Director of the CEMARCH Haiti project, which is part of the Sustainable Intensification Innovation Lab at Kansas State University. Prior to that she taught and conducted turfgrass research at Auburn University, with an emphasis on fertilizers. Dr. Guertal received her BS and MS degrees from The Ohio State University, and her PhD from Oklahoma State University. She is a past-Chair of Division C-5 (Turfgrass Management, CSSA), a Fulbright Fellow and a Fellow of CSSA, SSSA and ASA. She is a past President of the Crop Science Society of America.

### Steve Hamilton, CGCS



Steve Hamilton has been certified golf course superintendent at The Dunes Golf and Beach Club in Myrtle Beach since December 2001. Hamilton was president of the Palmetto GCSA in 2007 and served on the Carolinas GCSA board of directors, becoming president in 2013. Taking over from Doug Lowe, CGCS, Hamilton became the second president in a row who had worked under Carolinas Golf Hall of Famer George Thompson, CGCS. Before moving to The Dunes Club, Hamilton, a Virginia Tech graduate, spent several years under Thompson at the Country Club of North Carolina.

# MEET THE SPEAKERS

## Brandon J. Horvath, Ph.D.



Brandon Horvath is an associate professor of turfgrass pathology in the Plant Sciences Department at the University of Tennessee, and is the 2021 Tom Samples Professional of the Year as awarded by the Tennessee Turfgrass Association. He received his

bachelor's degree from The Ohio State University in agronomy with a minor in plant pathology. He received his M.S. and Ph.D. in turfgrass pathology from Michigan State University. He has worked at several championship golf courses and conducts research in the area of turfgrass disease epidemiology that enables turfgrass managers to maintain healthier turfgrass stands with fewer chemical inputs. He is also currently engaged in research that blends the playing of the game with managing the surfaces that the game is played on. He has given over 250 presentations, and published numerous articles about his work.

## Andrew J. Jorgensen, CGCS



Andrew Jorgensen, the director of golf course maintenance operations at On Top of the World Communities in Ocala, Fla., oversees course maintenance at three golf courses – Candler Hills Golf Club, The Tortoise & Hare and The Links, which are all part of On Top of

The World Communities. Jorgensen has held this position since December 2005. He was recently named the recipient of the Golf Course Superintendents Association of America's 2022 President's Award for Environmental Stewardship. He is a two-time winner of the Environmental Leaders in Golf Award and past-President of the Florida Turfgrass Association and current President of the Florida Golf Course Superintendents Association.

## Ron Kelly, CGCS



Ron Kelly, CGCS first went to college to become a forester but discovered the world of agronomy while flipping pages in a course manual in his dorm room. He would go on to become president of the turf club at North Carolina State University. And after interning

for Carolinas Golf Hall of Famer George Thompson, CGCS at the Country Club of North Carolina, he landed a job there in the fall of 1990. In 1994, Thompson rewarded Kelly's efforts with the title of golf course superintendent and when Thompson retired in 2001, Kelly took over as director agronomy at the 36-hole facility. He helped the club achieve designation as a certified Audubon Cooperative Sanctuary in 2003. That designation through the Audubon Cooperative Sanctuary Program for Golf Courses was renewed earlier this year.

## Jim P. Kerns, Ph.D.



Jim Kerns is a Professor and Extension Specialist of Turfgrass Pathology at NC State University. His program focuses on the etiology, epidemiology and management of Turfgrass diseases of both warm and cool-season grasses. His program actively

researches how fungicides move in the root zone after post-application irrigation, take-all root rot etiology and management

and Pythium root rot management. Each year his program conducts 50 to 70 different fungicide efficacy trials and examines over 400 samples for disease in the Turfgrass Diagnostic Lab.

## Matt Martin



Matt Martin is an Extension Associate in the Department of Crop and Soil Sciences at North Carolina State University. He has an Extension-Research appointment with responsibilities for agronomic extension and research education programs for turfgrass in

North Carolina. He also has extensive experience with warm season turf pest management in intensively managed turf systems. His most recent research work has focused on Large Patch in Warm Season Grasses, Bermudagrass Mites, and Ground Pearls.

## L. Bert McCarty, Ph.D.



Bert McCarty is a Professor of Horticulture specializing in turfgrass science and management at Clemson University in Clemson, South Carolina (USA). Previously, he held a similar position at the University of Florida. He has published numerous articles

dealing with all phases of turfgrass management and is an oft requested speaker. He is currently authors or co-authors 11 books, is a co-author for the GCSAA seminars, Weed Control, Advanced Weed Management, Advanced Management of Bermudagrass Golf Greens, and Advanced Management of Bentgrass Golf Greens and is active in a number of professional societies.

## Grady L. Miller, Ph.D.



Dr. Grady Miller is a Professor and Extension Specialist, at North Carolina State University and Co-Director of the Center for Turfgrass Environmental Research and Education. His present University appointment is 50% extension, 25% research, and 25% teaching. In his extension

duties, he works closely with the sod, sports turf, utility turf, and golf course industry to address issues and find solutions to common turf problems. In his career he has taught over 60 university course sections in subjects related to turfgrass culture, golf & sports turf management, and research methodology. His research activities have related primarily to turfgrass nutrition and water issues, cultivar evaluation, and general turfgrass culture.

## Adam Moeller



Adam Moeller joined the Green Section's Northeast Region as an agronomist in 2008, conducting Course Consulting Service visits in Pennsylvania, New York, New Jersey, Connecticut and Ontario. In addition to his role as a consulting agronomist, he serves as

Director of Green Section Education, guiding education and outreach materials related to golf course management. Moeller graduated from Purdue University with a Master of Science degree from the department of agronomy. His graduate research included the investigation of putting green rootzone

management, fertility, PGR's, wetting agents, creeping bentgrass cultivars performance and bunker sands. A Wisconsin native, he received his Bachelor of Science degree in horticulture from the University of Wisconsin. He gained experience working on several golf courses in Wisconsin. Adam is based at USGA headquarters in Liberty Corner, NJ.

### Mike D. Richardson, Ph.D.



Mike Richardson, Ph.D., is professor of horticulture at the University of Arkansas. He earned a B.S. degree from Louisiana Tech University, an M.S. degree at Louisiana State University and his Ph.D. at the University of Georgia. Richardson's research focuses on cultural practices that impact cool- and warm-season turfgrass production in the transition zone and he has been actively involved with research to screen and develop new turfgrass for a wide range of turfgrass environments. Richardson's excellence in the turfgrass industry has been well-documented through the numerous awards he has received, including the John W. White Team Award for the Turfgrass Management Program at the University of Arkansas, the Researcher of the Year from Seed Research of Oregon and elected as a Fellow in the American Society of Agronomy. In Nov. 2015, Richardson received the Fred V. Grau Turfgrass Science Award from the Soil Science Society of America. In addition to participation in many state and regional turfgrass conferences around the United States, Richardson has lectured in China, Italy, and throughout Europe on various topics related to turfgrass physiology and management.

### Rob J. Richardson, Ph.D.



Rob Richardson is a Professor and Extension Specialist at North Carolina State University. His primary appointment focuses on research and extension related to aquatic plant management. Rob has many years of experience in aquatic plant management and advises aquatic managers across the US as well as internationally. He is a Past President of the Aquatic Plant Management Society and Past Editor of the Journal of Aquatic Plant Management. He currently serves as a Board of Directors Member for the Weed Science Society of America and serves as a subject matter expert to US EPA on aquatic plant management.

### Joseph A. Roberts, Ph.D.



Joe Roberts is an Assistant Professor and Extension Specialist in Turfgrass Pathology and Nematology at Clemson University. He joined the Department of Plant and Environmental Sciences in fall of 2019. Current projects in his lab are aimed at understanding microbial relationships across turfgrass systems in an effort to improve turfgrass health. His research and extension programming focuses on plant pathogen interactions and cultural management tools that limit fungal, nematode, and bacterial pathogens of amenity turfgrasses.

### Earl Sanders



Earl Sanders is the President of Green Tee Golf, Inc., a full service Golf Course Construction & Renovation Company that was founded in 2010. Earl has been in the Golf Course Construction Industry for more than 30 years.

### Mark Swygert



Mark Swygert began his career in golf on the playing side, twice making it to PGA Tour Q-school. He'd won the South Carolina Junior Championship in 1989 and the State Amateur in 1994. He did plenty at Clemson to suggest that success would carry on, but a persistent back issue forced him to change direction. Adding a turfgrass degree from Rutgers to go with his economics degree from Clemson, he took his first job on the golf course maintenance staff at Wade Hampton Golf Club. From there, he was recruited by Carolinas GCSA past president Chuck Green to help with a new course in Aiken, SC called Sage Valley Golf Club. After eight years at Sage Valley, he became golf course superintendent at the Country Club of Lexington before moving to historic Palmetto Golf Club in 2017.

### Cole Thompson, Ph.D.



Cole Thompson assists with the administration of the USGA Turfgrass and Environmental Research program, working closely with Dr. Mike Kenna. Cole coordinates with USGA-funded scientists and identifies research areas that have potential to improve playing conditions and golf course management sustainability. Cole earned his bachelor's, master's and Ph.D. degrees from Kansas State University. He was a USGA Green Section intern as an undergraduate and worked as an assistant golf course superintendent before entering graduate school. Prior to joining the USGA, Cole conducted turfgrass research, extension, and teaching activities as an assistant professor at the University of Nebraska-Lincoln and at Cal Poly-San Luis Obispo.

### Jay Wade



Jay Wade is an experienced golf course superintendent with a demonstrated history of working in the recreational facilities and services industry. He is skilled in Budgeting, Golf Course Construction, Landscaping, Turf Management, and Customer Service. Strong community and social services professional with an Associate of Science (A.S.) focused in Turfgrass Management from J. Sargeant Reynolds.

### Fred H. Yelverton, Ph.D.



Fred Yelverton, PhD, has been a faculty member at North Carolina State University for 36 years. Since 1995, he has been a professor of turfgrass science in the Crop Science department at NCSU. His specialties include turfgrass weed management, turfgrass management, plant growth regulators, and weed biology and ecology. His speaking engagements have taken him to 48 states and 25 countries on six continents. He has taught seminars at CGCSA and GCSAA every year since 1995.



# PESTICIDE CREDITS AND GCSAA EDUCATION POINTS

	ID #	Seminar	Instructor	SC	NC	GA	GCSAA Ed.Points.
Monday Morning 8:00-11:30 am	1	New Strategies for Managing POA to Combat Resistance	Jim Brosnan, Ph.D. Devon Carroll, Ph.D.	3.5	3.5	3	0.30
	2	Advanced Weed Management – Warm Season Grasses	Bert McCarty, Ph.D., Fred H. Yelverton, Ph.D.	3.5	3.5	3	0.30
	3	Bunker Construction: How to Avoid Digging Yourself Into a Hole	Adam Moeller Earl Sanders	0	0	0	0.30
	4	Water Quality – What You Need to Know	Grady Miller, Ph.D.	2	3.5	3	0.30
	5	I'm Fully Staffed (says no one!) (Session 1)	Jodie Cunningham, SPHR, SHRM-SCP John Cunningham, CGCS	0	0	0	0.30
	6	Cool Season Turfgrass Insect with Emphasis on the Annual Bluegrass Weevil	Rick Brandenburg, Ph.D. Terri Billeisen, Ph.D.	3.5	3.5	3	0.30
Monday Afternoon 12:30-4:00 pm	7	Advanced Weed Management – Cool Season Grasses	Jim T. Brosnan, Ph.D., Fred Yelverton, Ph.D.	3.5	3.5	3	0.30
	8	Making Herbicides Work or Why do they Sometimes Fail?	Travis W. Gannon, Ph.D. Bert McCarty, Ph.D.,	3.5	3.5	3	0.30
	9	Fertilizers – Getting the Right Form and Function	Grady Miller, Ph.D. Beth Guertal, Ph.D.	0	0	0	0.30
	10	I'm Fully Staffed (says no one!) (Session 2)	Jodie Cunningham, SPHR, SHRM-SCP John Cunningham, CGCS	0	0	0	0.30
	11	How Much Shade is Too Much Shade? <b>CANCELLED</b>	Mike D. Richardson, Ph.D.,	0	0	0	0.30
	12	Putting the "Fun" in Fungicides	Jim Kerns, Ph.D. Lee Butler	3.5	3.5	3	0.30
Tuesday Morning • 8:00-11:30 am	13	Plant Growth Regulators for Fine Warm Season Turf	Jim Brosnan, Ph.D.	3.5	3.5	3	0.30
	14	Holy Grail – POA Management and Resistance for Cool/Warm Season Turfgrass	Moderator: Bo Barefoot Bert McCarty, Ph.D. Fred H. Yelverton, Ph.D. Brandon Horvath, Ph.D.,	3.5	3.5	3	0.30
	15	Understanding Pesticide Behavior to Optimize Applications and Minimize Collateral Damage	Travis W. Gannon, Ph.D.	3.5	3.5	3	0.30
	16	Advanced and Cost-Effective Management of Insect Pests of Warm Season Turf	Rick L. Brandenburg, Ph.D. Matt Martin	3.5	3.5	3	0.30
	17	Fundamentals of Wetting Agents	Mike Richardson, Ph.D.	3.5	3.5	3	0.30
	18	Getting to the Root of Managing Soilborne Diseases – Warm Season Turfgrasses	Jim Kerns, Ph.D. Joseph A. Roberts, Ph.D.	3.5	3.5	3	0.30
	19	*Aquatic Plant Management: An Introduction to Keeping Your Ponds Free of Unsightly Plants and Algae	Rob Richardson, Ph.D. Matthew Cutulle, Ph.D.	3.5	3.5	3	0.30
	20	The 'Other' Essential Elements, and Some that Might Be:	Beth Guertal, Ph.D.	0	0	0	0.30
	21	Current Trends in Research and Innovation from the USGA	Jordan Booth, Ph.D. Cole Thompson, Ph.D.	2	3	3	0.30
Tuesday Afternoon • 12:30-4 pm	22	Strategies for Managing Off-Type Bermudagrass Putting Greens	Jim Brosnan, Ph.D. Bert McCarty, Ph.D.,	3.5	3.5	3	0.30
	23	Impact of Climate Change on Turfgrass Pests	Rick L. Brandenburg, Ph.D. Jim Kerns, Ph.D. Fred H. Yelverton, Ph.D.	0	3.5	3	0.30
	24	Getting to the Root of Managing Soilborne Diseases - Cool-Season Turfgrasses	Brandon Horvath, Ph.D. Lee Butler	3.5	3.5	3	0.30
	25	Winter Management of Ultradwarf Bermudagrass Putting Greens	Mike D. Richardson, Ph.D. Jordan Booth, Ph.D.	3.5	3.5	3	0.30
	26	The Challenge of Managing Nematodes in Turf	Joseph A. Roberts, Ph.D.	3.5	3.5	3	0.30
	27	Soil Testing and How to Read Your Report	Beth Guertal, Ph.D.	0	0	0	0.30
	28	Management of Ultradwarf Bermudagrass	Moderator: Mike Bankert Adam Charles Steve Hamilton, CGCS Ron Kelly, CGCS Mark Swygert	2.5	3.5	3	0.30
	29	Overseed or Paint? That is the question!	Moderator: Jim Huntoon Andrew J. Jorgensen, CGCS Jay Wade Shawn Emerson	0	0	0	0.30
	30	Spray Masters: Making the Most Out Of All You Apply	Travis W. Gannon, Ph.D.,	3.5	3.5	3	0.30
		General Education Session	Pesticide credits applied for				0.30

\*Aquatic Credits



# CAROLINAS GCSA CONFERENCE AND TRADE SHOW NOVEMBER 14-16, 2022

Registration  
Partner



## ADVANCED FEE REGISTRATION DEADLINE: OCTOBER 17, 2022

### REGISTER ONLINE AT:

<https://www.carolinasgcsa.org/Education-Conference/Conference-and-Show/Attendees/Conference-Registration>

**Members:** Click on the url link above  
Select Attendee Member Registration  
Login with username and password

**NonMembers:** Click on the url link above  
Select Attendee Non-Member Registration  
Enter First Name, Last Name and Email  
Follow the onscreen instructions

**Exhibitors:** Click on the url link above  
Select Exhibitor Registration  
Enter Booth Number  
Follow the onscreen instructions  
(Do Not log in as individuals)

If you **forget your username or password** click on Forgot Username or Password and you will be emailed a link to reset.  
The Carolinas GCSA Data System Does Not Show an Individual Password

**ADVANCED FEE REGISTRATION Deadline:** October 17, 2022 4:30 PM EST  
**STANDARD FEE REGISTRATION Deadline:** November 7, 2022 4:30 PM EST  
**AFTER NOVEMBER 7TH YOU MUST REGISTER AT THE EVENT**

■ REGISTRATION OPTIONS						
	Advanced Fee Prior to Oct 17		Standard Fee After Oct 17		On Site Fee	
	Member	Non-Mem.	Member	Non-Mem.	Member	Non-Mem.
<b>Full Conference Package</b>	180	205	195	220	220	245
<i>(Package includes General Education Session, Trade Show, <b>Excludes Seminars</b>)</i>						
<b>SUNDAY</b>						
Assistant Superintendent Reception	0	0	0	0	0	0
<b>MONDAY</b>						
■ SEMINARS SELECTIONS See page 44						
	Member	Non-Mem.	Member	Non-Mem.	Member	Non-Mem.
Mon. (8-11:30)	65	90	80	105	105	130
Mon. (12:30-4:00)	65	90	80	105	105	130
Medal Play	115	140	130	155	155	180
Senior Medal Play (Over 50)	115	140	130	155	155	180
Four Ball	115	140	130	155	155	180
Captain's Choice	115	140	130	155	155	180
Sporting Clay	75	100	100	115	115	140
<b>TUESDAY</b>						
■ SEMINARS SELECTIONS See page 44						
	Member	Non-Mem.	Member	Non-Mem.	Member	Non-Mem.
Tues. (8-11:30)	65	90	80	105	105	130
Tues. (12:30-4:00)	65	90	80	105	105	130
Trade Show Pass (T/W)	95	120	110	135	135	160
<b>WEDNESDAY</b>						
Fellowship Breakfast	0	0	0	0	0	0

# 2022 SUPERINTENDENT IMAGE CAMPAIGN

The Carolinas GCSA greatly appreciates the support of the following companies in promoting awareness and appreciation of the role of golf course superintendents.

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bgemberling@arboguard.com

### **Coastal Floratine, Inc.**

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P. O. Box 30267  
Myrtle Beach, SC 29588  
Phone (843) 215-6652  
coastalfloreatine@gmail.com

### **East Coast Turf Solutions, LLC**

**Matt P. Spatara, Owner**  
8097 Sierra Oaks Blvd.  
Jacksonville, FL 32219  
Phone (904) 615-0288  
matt@eastcoastturf.net

### **Green Resource**

**Jonathan B. Annas, Executive Director**  
5204 Highgreen Court  
Colfax, NC 27235  
Phone (336) 855-6363  
jannas@green-resource.com  
**Robert G. Herring, Director, Sales & Marketing**  
P O Box 429  
Colfax, NC 27235  
Phone (336) 215-5368  
rherring@green-resource.com

### **Helena Agri Enterprises, LLC**

**Marc Allen, Branch Manager**  
120 Settle Road  
Inman, SC 29349  
Phone (864) 706-3927  
allenmd@helenaagri.com

### **J.K. Morro, Inc.**

**Thomas P. Porter, Owner**  
124 Palos Verde Drive  
Mooresville, NC 28117  
Phone (704) 928-9839  
tporter@jkmorro.com

### **Nufarm Americas**

**Cam Copley, Golf National Accounts Manager**  
2104 Countrywood North Road  
Raleigh, NC 27615  
Phone (630) 442-4882  
cam.copley@nufarm.com

### **Revels Turf and Tractor Co.**

**Turner Revels, President**  
**Anthony Revels, COO**  
2217 North Main Street  
Fuquay-Varina, NC 27526  
Phone (919) 552-5697  
Phone (919) 369-7728  
Toll Free (800) 849-5469  
revelscharlest@revelstractor.com  
anthony@revelstractor.com

### **Smith Turf & Irrigation**

**Anna-Lindsay Yarbrough, President & COO**  
P.O. Box 669388  
Charlotte, NC 28266  
Phone (704) 909-3312  
anna-lindsay.yarbrough@smithturf.com

### **Southern Ag**

**Andrew L. Wampler, Sales Representative**  
P O Box 429  
Hendersonville, NC 28793  
Phone (828) 674-2594  
andrew.wampler44@gmail.com

### **Syngenta**

**Ben Peters**  
*Territory Manager, Professional Solutions*  
Phone (919) 214-2054  
ben.peters@syngenta.com  
**Gracee Hendrix**  
*Territory Manager, Professional Solutions*  
Phone (904) 718-1845  
gracee.hendrix@syngenta.com  
**Danny Jones**  
*Territory Manager, Professional Solutions*  
Phone (770) 329-8686  
danny.jones@syngenta.com  
**Larry Feller**  
*Territory Manager, Professional Solutions*  
Phone (843) 693-2187  
larry.feller@syngenta.com

### **Tri-State Pump & Control, Inc. – TSP Turf**

**Tripp Cobb, President**  
1162 Chastain Road  
Liberty, SC 29657  
Phone (864) 843-8100  
tcobb@tsppumps.com

### **The CartPath Company**

**Mark T. Rownd**  
2146 Roswell Road, St. 108-330  
Marietta, GA 30062  
Phone (770) 330-7380  
mark@thecartpathco.com

### **Triangle Turf & Ornamental**

**Terry J. Kallam, Division Manager**  
455 U.S. Highway 70  
P.O. Box 368  
Garner, NC 27529  
Mobile (252) 559-0329  
tjkallam@trianglecc.com

## SILVER CLUB

### **Aqua Aid Solutions**

**Sam Green, President**  
5484 S. Old Carriage Road  
Rocky Mount, NC 27803  
Phone (252) 937-4107  
sam@aquaaaid.com

### **Arborjet/Ecologel**

**Eric Steffensen, Southern Sales Manager**  
228 Annatto Way  
Tega Cay, SC 29708  
Phone (704) 441-2509  
esteffensen@arborjet.com

### **Bulk Aggregate Golf, Inc.**

**Wally Gresham, Sales**  
**Randy Dallas, Sales**  
2931 Paces Ferry Road, Suite 100  
Atlanta, GA 30339  
Phone (770) 438-7955  
Phone (910) 379-4889  
wally@bulkagg.com  
rdallas@bulkagg.com

### **Texas Refinery Corp.**

**Bill Wallin, Independent Lubricants Consultant**  
175 Francis Street  
Salisbury, NC 28147  
Phone (704) 213-4990  
wcwallin@gmail.com

### **The Mazzella Partnership, LLC**

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