



## Join us in Orlando and partake in 103 seminars!

### MONDAY JAN. 27<sup>th</sup> ONE DAY SEMINARS

8 am-5 pm

#### Advanced Weed Management

*Fred H. Yelverton, Ph.D., Professor of Crop Science, North Carolina State University*

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

(060-01) Managing weeds and plant growth is par for the course for all superintendents. This seminar will provide a comprehensive weed management overview and breakdown of plant growth regulator usage on golf courses. The basic understanding of weed biology, ecology, and life cycles of turfgrass weeds is just the tip of the iceberg, along with the cause, prevention and management of herbicide resistant populations. A larger portion of this seminar will focus on types of resistances and tips for identification and management. Attendees will leave this seminar understanding:

- Components of weed biology and ecology used to improve aesthetics and management of weeds
- The impact of less off-target movement of herbicides to reduce turf damage
- The fate and behavior of herbicides and other pesticides on the golf course
- The preparation methods to prevent and manage herbicide resistance
- How to address questions about pesticide exposure across all audiences

#### Advanced Stress Management Strategies for Cool-Season Turfgrasses

*Bingru Huang, Ph.D., Professor, Plant Biology and Pathology Dept., Rutgers University*

*Chris Carson, Golf Course Superintendent, Echo Lake Country Club, Westfield, N.J.*

(450-01) This full day seminar will offer attendees an in-depth, real-world understanding of what's going on inside stressed cool-season turf. After attending this seminar, turf managers will be able to make better and more informed decisions on watering & syringing, fertilization, the use of plant growth

regulators (PGRs) and other cool-season turf management techniques. Advanced topics will be covered, including:

- Major environmental stressors that cause performance decline
- Physiological reasons behind stress injury to turf
- Advanced management strategies to prevent stress injury and improve recovery from damaged turf
- How to determine if the many products and tools available to superintendents are appropriate for their course: what works, what doesn't and why
- A discussion on products that claim to enhance "Plant Health," and how these can be used properly

### **Golf Irrigation Auditor Learning Tour**

**Brian Vinchesi**, President of Irrigation Consulting, Inc., Peppermill, Mass.

(1058-01) This seminar is a one-day, management level class, facilitated by the Irrigation Association and held, in part, at a local golf course. This education offering provides a unique opportunity to gain valuable information while helping prepare attendees to take the Certified Golf Irrigation Auditor Exam. Registration for the exam must be completed by January 14<sup>th</sup>. Please visit the [Irrigation Association website](#) to submit a certification application and [register for the exam](#). (The exam is offered separately from this seminar and will be held Tuesday, January 28<sup>th</sup>, 8 a.m.-noon.) After completing this course, participants will be able to:

- Gather appropriate irrigation water-use data and test the performance of course irrigation systems
- Assess system performance, determine irrigation water requirements, and develop an appropriate irrigation schedule

*Please note after the date of January 14th, anyone wanting to take the test will need to complete the Irrigation Association (IA) registration form and email it to [certification@irrigation.org](mailto:certification@irrigation.org). A \$25 late registration fee will apply.*

### **MONDAY JAN. 27<sup>th</sup> HALF DAY SEMINARS**

#### **Morning Seminars**

### **Communication Skills To Get You To the Top and Keep You There!**

**Mike Jousan**, President, Clear Communication Company, Scottsdale, Ariz.

(227-01) You can position yourself for success and get where you want to be professionally all with how you communicate. Hard work pays off, but it can also go unnoticed due to a lack of communication. Attend this seminar and guarantee your hard work never goes unnoticed by becoming an excellent communicator during presentations, meetings, interviews, and one-on-one conversations with your

peers and superiors. This seminar is beneficial not only to Assistant Superintendents, but all golf course employees looking to advance in their career. Participants who attend this seminar will walk away with a communication “game plan” to continue to enhance communications skills and understand how to:

- Be confident and comfortable in pressure situations
- Convert nervousness into positive energy
- Speak confidently and clearly while presenting information to audiences of all sizes
- Project positive body language and tone of voice in all situations

### **Decision Maker: Stepping into a Leadership Role (Assistant Superintendents only)**

**Aaron J. Patton, Ph.D.**, *Professor and Interim Head, Department of Horticulture & Landscape Architecture, Purdue University*

**Ryan Cummings**, *Golf Course Superintendent, Elcona Country Club, Bristol, Ind.*

(1104-01) Calling all assistants! Sharpen your leadership skills. Learn how to budget, mentor staff and utilize agronomic decision tools for your current, or future, golf course. This seminar will involve several in class activities and interaction while covering various topics, including:

- Tracking your budget, justifying expenditures, purchasing products and allocating labor
- Using data-driven decision tools to enhance your agronomic program
- Hiring and mentoring staff to build strong teams
- Utilizing cloud-based technologies, social media, web-based tools and other software to make informed decisions

### **Find Out What It Takes to Pass the Equipment Management Certificate Program**

**Eric Duncanson**, *Equipment Manager, Pine Needles & Mid Pines Golf Clubs, Southern Pines, N.C.*

**Trent Manning**, *Equipment Manager, Ansley Golf Club, Roswell, Ga.*

(1155 -01) If you are a student, assistant, superintendent or equipment manager planning to take the Equipment Management Certificate Program exam in the future, then you do not want to miss out on this seminar led by two authors of the exams. This presentation will give you an advantage with an overview of what it is going to take to prepare and pass the Equipment Management Certificate Program (EMCP) with flying colors. Join this seminar to learn alongside your peers and have an opportunity to increase your potential success in gaining this industry qualification.

### **How to Understand Yourself and Others...Win the Room and Get What You Want!**

**Phil Helmn**, MG, General Manager Sports Turf & Grounds Goodwood Estate, United Kingdom

**Gina Rizzi**, Principal, Radius Sports Group, Reno, Nev.

(1223-01) Have you ever had a great idea, but no one will buy it? Get denied repeatedly on budget and personnel requests? Or feel depleted and tired of “giving in” to what others want and taking no for an answer? Well it’s time to win the room and get what you want! Learn how to identify and understand your personality type to best interact with others. This seminar will offer strategies, practical tactics, and preparation tools to create a win-win in business and any negotiation. After attending this seminar, attendees will be able to:

- Understand and identify personality styles to improve interactions
- Identify ways to build credibility and strengthen relationships
- Confidently lead negotiations from start to finish pertaining to budget approvals, promotions merit increases, member and community engagement
- Apply negotiating strategies to drive success and maximize outcomes

### **Launching a First Green Field Trip Program at Your Own Golf Course**

**Leann Cooper**, GCSAA Senior Manager, Chapter Services, Lawrence, Kan.

**Jeff Gullikson**, CGCS, Kalispel Golf and Country Club, Spokane, Wash.

**Stephen Kealy**, CGCS, Glendale Country Club, Bellevue, Wash.

**David Phipps**, GCSAA Northwest Regional Representative, Oregon City, Oregon

(1049-01) First Green is an innovative environmental and STEM education outreach program that seeks to attract young minds to environmental stewardship and connect potential future players to golf courses. Share your expertise in environmental stewardship, technical knowledge on managing water quality, animal habitats, soils, plants and grasses with students in your community. This interactive workshop will teach attendees how to launch a First Green local field trip program on their home course. Current superintendents with experience hosting this program will lead learning labs and provide real-world insight.

- Learn how to use the lesson plans and other resources provided by First Green, create learning labs and host students
- Reach out and involve the club’s general manager and leadership team to create a successful field trip that will not negatively impact play
- Use the club newsletter, blog or other media to educate members about this new program and work with First Green to coordinate with local media
- Use First Green to meet the community outreach requirement for certification by Audubon International
- Involve other local community environmental education groups in field trips and promote communication with these environmental education advocates
- Demonstrate the environmental stewardship efforts on your golf course

Take part in this community event. GCSAA and the First Green will be partnering with a local school to participate in this seminar.

*See actual demonstrations on a local area golf course where a portion of this seminar will take place. Transportation to and from the course will be provided for attendees.*

### **Low Maintenance Roughs and Natural Areas for Golf Courses**

**Jared Hoyle, Ph.D.**, Assistant Professor, Kansas State University,

**Jay McCurdy, Ph.D.**, Assistant Professor, Mississippi State University

**Maggie Reiter**, Extension Advisor, University of California

(1098-01) Golf's modern focus on environmental and economic sustainability has led to increased interest in low maintenance roughs. Management of naturalized areas can influence water quality and use, temperature modification, reduced inputs, lower costs and improve wildlife spaces. Attendees of this seminar will:

- Learn how to create and improve low maintenance roughs through selection of grasses (both native and non-native), incorporation of native forest components and pollinator spaces
- Improve aesthetics, pace of play and overall course quality with natural areas
- Learn the science behind selecting and establishing the best plants for low maintenance roughs

### **Optimizing Pesticide Applications with Appropriate Management Strategies on the Golf Course**

**Travis Gannon, Ph.D.**, Assistant Professor, North Carolina State University

(1159-01) Pesticides are one component of comprehensive pest management programs, and it is imperative for land managers to understand how to optimize pesticides without adversely affecting human or environmental health. Participants will learn how to increase pest control while minimizing off-target movement and injury by developing an understanding how biological and chemical attributes of pesticides and how they behave after application. Participants will develop a better understanding of:

- Factors that affect pesticide efficacy fate, and behavior on the golf course
- Specific cases that will be discussed involving off-target herbicide injury as well as the desired turf causes of injury
- How to plan management practices that best fit the needs to minimize off-target pesticide movement and injury on the course
- Reduce pesticide inputs thereby increasing fiscal savings and reducing environmental footprint of the golf course

## So You've Got Earthworms...

**Paige Boyle**, *Doctoral Graduate Student, Utah State University*

**Ben McGraw, Ph.D.**, *Associate Professor, Turfgrass Entomology, Pennsylvania State University*

(1171-01) Earthworms are considered beneficial organisms in most cropping systems, as they aerate the soil, decompose organic matter and thatch layers, and increase the availability of nutrients for plant uptake through decomposition of nutrient-rich fecal matter (casts) within the soil profile. Managing these organisms is of the utmost concern to turfgrass managers around the globe, though management is made difficult in that earthworms remain one of the most poorly understood group of soil macrofauna. Attend this seminar to learn how to confidently win the war against earthworms! This presentation will reveal how to:

- Develop a proactive earthworm management plan for their course
- Forecast issues to better plan equipment and labor needs
- Assess the risks associated with applying certain pesticides on the course
- Communicate and apply casting management options (expenses involved) to the golfing public and committees

## Successful Bentgrass Management on Greens and Fairways

**Chris Tritabaugh**, *Golf Course Superintendent, Hazeltine National Golf Club, Chaska, Minn.*

**Doug Soldat, Ph.D.**, *Professor, Soil Science, University of Wisconsin, Madison*

(1103-01) Learn to successfully manage bentgrass on greens and fairways, while keeping *Poa annua* at a minimum, from the perspective of both a superintendent and soil scientist. Chris will share his cultural and nutritional successes and failures. While Dr. Soldat provides, from the perspective of a soil scientist, the how's and why's of these practices. Tritabaugh's experience as a practitioner, coupled with Dr. Soldat's scientific knowledge and approach will leave you with the ability to manage for and maintain a robust, healthy bentgrass, while simultaneously keeping *Poa* from becoming a major portion of your turf stand.

## The Benefits of Oxygen - How to Maintain Oxygen Levels in our Root Zone

**David L. Doherty**, *CEO & Founder, International Sports Turf Research Center, Lenexa, Kan.*

(1044-01) Explore the basics of physical properties (solids and pores) and organic matter, and the importance of oxygen in root zones. Attendees of this seminar will learn to:

- Quantify the physical properties that are optimal for each green, depending on microclimate and type of turf
- Evaluate the effects of aerification and top-dressing on roots
- Understand the value of oxygen and how to maintain adequate oxygen levels in root zones

## The Business of Golf – A Superintendent’s Guide

**Henry B. DeLozier**, Principal, Global Golf Advisors, Phoenix, Ariz.

(571-01) The golf course superintendent is responsible for the most valuable asset on the balance sheet of the club. To maximize the value that you bring to the golf facility business as a whole, you must be able to comprehend the big picture of the business model at your facility. Upon completion of this interactive seminar, attendees will:

- Understand the basics of how each management area of your facility impacts the bottom line
- Appreciate the role you play in the overall facility management team
- Be able to identify how and where to focus energy to improve the economic value of your facility
- Understand the components of the entire golf facility budget, including how it is developed and how the budget can make the Superintendent more successful
- Consider how you wish to build your legacy at your course

## Understanding and Managing New and Old Weeds of the Mid-Atlantic and Northeast Region

**Matthew Elmore, Ph.D.**, Assistant Extension Specialist, Rutgers University, New Brunswick, N.J.

**Steven McDonald**, Agronomist, Turfgrass Disease Solutions, Spring City, Pa.

(1219-01) We want to help superintendents address their most problematic weed situations within the Northeast and Mid-Atlantic region, as this region is unique in the fact many southern and transition zone weed problems are present in cool-season turf. Let us help you walk through solutions to help your existing weed control programs with an integrated approach to target them in an economical manner. Attendees will learn how to:

- Design economical and effective weed programs for new and old weed problems pertaining to the Northeast and Mid-Atlantic
- Techniques to better identify problematic weeds
- Understand methods to integrate new and old herbicides into weed control programs for fine turf and naturalized areas

## Afternoon Seminars

### Are New Herbicides Better or Just New? (formerly - New Herbicide for Old Weeds)

**Scott McElroy, Ph.D.**, Professor, Auburn University

(1220-01) Superintendents are flooded with new herbicide products and all claiming to be the next best thing every year. New herbicides can be novel, new chemistry not previously used in the turfgrass market, or they can simply just be repackaged chemicals in new mixtures with clever marketing. This seminar will help you be the judge, as it will provide a no-nonsense review and evaluation of the good,

and not so good new herbicides (herbicides only by the way) compared to older products currently on the market. Attendees will learn how to:

- Evaluate and determine best herbicide products (new and old) to address problematic weed conditions
- Apply comparison methods to determine if products are actually “new” pertaining to their ingredients
- Avoid new and old herbicide product pitfalls and make informed decisions while purchasing products

### **How to Prepare for a Golf Course Renovation**

**Jason Sloan**, *Project Manager, GCBA Certified Builder Frontier Golf Inc., Pittsburgh, Pa.*

**Darryl Bartlett**, *Senior Project Manager, NMP Golf Construction, Williston, Va.*

(1241-01) This seminar will help Superintendents and Assistant Superintendents sequence events to properly prepare and meet expectations of building and renovation projects. Attendees will review and understand the necessary steps of starting a renovation project at a golf facility to minimize error and maximize production. Topics that will be covered include:

- Preparation and planning details for starting a renovation project “What do I need to do prior to the start of the renovation?”
- Keys to selecting and ensuring golf course renovations are affordable “What can I do to help my course get the best value?”
- Case studies and outcomes of renovations and projects completed by the Golf Course Builders Association of America “Who has done it already and what lessons can I learn?”

### **Golf Course Tree Management from Top to Bottom**

**John Ball, Ph.D.**, *Professor of Forestry, Forest Health Specialist, South Dakota State University*

(1002-01) Trees can become golf course liabilities, rather than assets, if their placement and care is neglected. This comprehensive program will reveal the essentials of tree care when turf management is the priority. After attending this seminar, attendees will:

- Understand the relationship between trees and turf
- Avoid tree root/putting green conflicts
- Better manage tree canopies for improved performance of turf
- Place and plant trees to enhance, rather than distract, from the golf experience

### **Granular Fertilizer Formulations: How You Can Reduce Costs and Increase Performance**

**Travis Shaddox, Ph.D.**, *Assistant Professor, University of Kentucky*

**Bryan Unruh, Ph.D., Professor, Extension Turf Specialist, University of Florida**

(1163-01) Let's find a solution! Golf course fairways, tees, approaches, and roughs represent the largest fertilized acreage. Many granular fertilizers contain components such as filler, and unusable micronutrients that increase costs without providing agronomic value. Participants will discuss fertilizer formulations, cost and agronomic value of raw materials, particle distribution, and burn potential to make the most informed decision to enhance nutrition management on their course. Attendees will learn how to:

- Apply critical thinking skills and evaluate options to improve their current fertilizer formulations
- Enhance their fertilizer program without increasing costs
- Communicate to stakeholders the value of their fertility program

### **Identification and Management of the Most Problematic Diseases of Cool-Season Grasses**

**Bruce B. Clarke, Ph.D., Extension Specialist in Turfgrass Pathology, Rutgers University**

**Steven McDonald, Owner, Turfgrass Disease Solutions, Spring City, Pa.**

(1096-01) Gain in-depth information for identifying and controlling important turfgrass diseases of cool-season grasses. Topics include:

- Characteristics of the pathogens
- Environmental, cultural and chemical considerations as related to disease management
- Major risk factors for specific, important diseases and how to minimize their impact

Attendees will be surveyed in advance to list the top disease concerns at their golf course and the seminar will be tailored to address them.

### **If You Build it They Will Come: How to Attract, Recruit and Retain Employees!**

**Doug Linde, Ph.D. Professor, Turf Management, Delaware Valley University**

**Bill Maynard, CGCS, Sales Manager/Branch Manager, GCSAA Past President, MTI Distributing Inc., St. Louis, Mo.**

(1168-01) There is an overabundance of information, tips, tricks out there relating to the do's and don'ts of how you should go about recruiting and retaining employees, so let us clear up the grey area and provide the basics for what actually works. This seminar will provide attendees with an opportunity to brainstorm and engage with their peers to explore strategies that really work for facilitating a happy, healthy working environment that not only attracts employees but keeps them there! Participants will walk away with a better understanding of how to:

- Attract larger amounts of potential employees; full-time, part-time, and interns
- Identify and adjust to generational differences in work values

- Problem solve and utilize resources to build a solid and efficient team
- Create a successful onboarding process and develop a working environment that meets employee satisfaction needs

### Keep Moving on Up: A Guide to Career Success in the Golf Industry

**Rodney Crow, CGCS, Golf Course Superintendent, Mount Vintage Golf Club, North Augusta, S.C.**

**Carol D. Rau PHR., Career Advantage, Lawrence, Kan.**

(1132-01) Get the inside scoop on what skill sets and qualities high profile golf course superintendents, managers, and executives are looking for in their next assistant superintendent or superintendent. The information shared in this course is taken from actual interview Q&A results straight from top golf industry management CEOs, presidents, golf course owners, and general managers. Attendees will know how to:

- Understand what golf industry hiring managers are seeking in business skills, and professional qualities
- Tailor and enhance your own professional image to stand out from the competition
- Incorporate in-demand skills and qualities into career search message and documents to win your next job search

### Let's Drive

**Brian Bressler, Equipment Manager, Medinah Country Club, Medinah, Ill.**

(1229-01) Did you know Google Drive can keep all your shop records in one place accessible anytime, anywhere? This seminar will provide a basic overview of Google Drive pertaining to the organization methods of shop information and how to increase efficiency in record keeping processes. **Attendees will need to have access to a G-mail account, and bring a laptop, or tablet in order to have the full ability to participate in this seminar onsite at GIS** and learn how to:

- Create Sheets and Forms in Google Drive from start to finish
- Upload and categorize service, shop, and manual information
- Generate and use QR Codes to access files and information

### Mindful Leadership – Finding Balance Within Yourself and Your Team

**Chris Tritabaugh, Golf Course Superintendent, Hazeltine National Golf Club, Chaska, Minn.**

**Paul MacCormack, Golf Course Superintendent/General Manager, Fox Meadow Golf Course, Stratford, PEI**

(1136-01) A positive work environment leads to better employee satisfaction and retention. This seminar will provide attendees with the principles of practicing mindfulness, which will improve their overall work/life balance, and enhance the ability to be a better leader in the workplace. Participants will walk away with an understanding of how to:

- Implement teambuilding practices to create a better atmosphere for employees
- Embrace and engage millennials in the workplace
- Use mindfulness and relaxation techniques to manage daily stressors

### **New Tools and Technologies for Lake Management**

**Terry McNabb**, *Manager, Aquatechnex, LLC, Bellingham Wash.*

(1221-01) Protect and preserve the lakes on your facility property. A shallow manufactured lake system can rapidly degrade to the point of concern if little to no maintenance efforts are implemented. Don't let this happen to you. Superintendents who attend this seminar will gain the knowledge to:

- Understand and identify lake water quality and weed/algae problems before they become serious
- Apply the science of corrective strategies and integrate them into maintenance practices

### **Plant and Soil Health Supplements: Past, Present, and Future...**

**Cale A. Bigelow, Ph.D.**, *Professor, Department of Horticulture and Landscape Architecture, Purdue University*

**Michael Fidanza, Ph.D.**, *Professor, Plant and Soil Sciences, Pennsylvania State University*

(1165-01) This seminar is for anyone constantly looking for current and new practice improvements, technologies, and products to enhance turf health and playing conditions while attempting to minimize inputs. This presentation will examine some various products and technologies that have been introduced to the turf marketplace and how they may help in overall seasonal program to promote turf persistence. Attendees will have an opportunity to become familiar with the scientific basis and terminology, and ongoing research directions that will continue to expand into the future enhancing turf management practices. This seminar will focus on:

- Gaining a better understanding of contemporary terminology associated used in marketing of natural organic/biological products
- Identifying materials that best fit into your program to maximize efficacy
- Improving purchasing decisions based on nutritional knowledge with respect to "supplemental" products

### **Turfgrass Operations for Equipment Managers**

**Gary Bogdanski**, *Equipment Manager, The Sharon Golf Club, Sharon Center, Ohio*

**Nick Christians, Ph.D.**, *Professor, Department of Horticulture, Iowa State University*

**Frank Wong, Ph.D.**, *Sen. Regulatory Affairs Consultant, Bayer, Research Triangle Park, N.C.*

(1161-01) This seminar will benefit turf technicians and equipment managers looking to advance their understanding of the turfgrass operations and EMCP preparation. Attendees will walk away from this seminar with the ability to:

- Determine necessary safety programs and training for equipment operation, chemical handling and application, and service area activities
- Identify resources that will strengthen safety practices
- Apply top management strategies methods for reducing environmental impacts on the course
- Understand the basic principles of turfgrass management operations

### **Zoysiagrass Management on the Golf Course**

**Aaron J. Patton, Ph.D.**, *Professor and Interim Head, Department of Horticulture & Landscape Architecture, Purdue University*

**Anthony Robertson**, *Golf Course Superintendent, The Pfau Course at Indiana University, Bloomington, Indiana*

(1222-01) Let's discuss zoysiagrass management on the golf course: what works well and what does not as far as improving management techniques and addressing problematic situations to enhance current and future zoysiagrass management programs at your golf course. Attendees will be able to:

- Implement solutions and modify existing zoysiagrass management programs as needed at their facility
- Experiment with new zoysiagrass cultivar and management practices to select best practices at their facility
- Enhance networking skills and troubleshoot with peers through zoysiagrass problems and solutions

## **MONDAY JAN. 27<sup>th</sup> 1 HOUR AND 45 MINUTE SEMINARS**

**8-9:45 AM**

### **Customer Awareness Retention Engagement Training**

**Jamie Taylor**, *CEO, JT Mobile Training, Sanford, Fla.*

(1234-01) The golf industry is facing a major problem and only you can fix it! More than half of non-golfers anticipate that in visiting a golf course will be an unpleasant experience according to a research study conducted by the National Golf Foundation. Good news is that you can take the steps to fix this problem by making a welcoming environment and educating golf facility employees by using the

principles of “CARE” Customer, Awareness, Retention, and Engagement training. Attendees will learn how to:

- Improve business relationships and customer service satisfaction at your golf course
- Understand and broaden awareness of social diversity and barriers that impact how you communicate with all audiences (i.e. members, staff, etc.)
- Develop an action plan to engage, attract and retain a diverse membership base

### **Let’s Troubleshoot and Diagnose those Turf Equipment Problems!**

**Cory Phillips**, *Equipment Manager, Golf Club of Georgia and Horseshoe Bend Country Club, Alpharetta Ga.*

(1151-01) Diagnosing a silent patient can seem near impossible. Learn to manipulate the situation toward your strengths for a quicker diagnosis of equipment machinery. Perfect the art of understanding the strengths and weaknesses in the troubleshooting process and you will be able to diagnose and repair machinery quicker! If you are an equipment manager, you won’t want to miss this opportunity hone your skills, work one-on-one as well as within a peer group setting through real life troubleshooting situations and discover solutions together to take back to your facilities and improve efficiency.

### **Master Greenkeeper Workshop**

**David Langheim, MG**, *Golf Course Manager, Wimbledon Park Golf Club, London, England*  
**Matthew Wharton, CGCS, MG**, *Golf Course Superintendent, Carolina Golf Club, Charlotte N.C.*

(1233-01) The Master GreenKeeper Certificate is awarded to members of British and International Golf Greenskeeper Association (BIGGA), who have achieved the highest standards of excellence in greenkeeping and golf course management. This seminar will provide a brief summary of the 3 stages to passing and completing the Master Greenkeeper (MG) certificate. Attendees will walk away with proper information and expectations for what it takes to pass the Master Greenkeeper exam and certificate program, including:

- Golf course policy process and management detail risk assessment cost
- Health and safety scenarios and topics
- Technical questions and case studies for review

**10:15 AM-NOON**

### **Better Ingredients, Better Turf: Cool-Season Grass Edition**

**Cale A. Bigelow, Ph.D.**, *Professor, Department of Horticulture and Landscape Architecture, Purdue University*

**Gregg Munshaw, Ph.D.,** Associate Professor & Extension Specialist – Turf Science Program, University of Kentucky

(1212-01) There are numerous cool-season grasses used for golf turf, each with different strengths and weaknesses. The “old-school” ways of managing inputs by indiscriminately using pesticides, fertilizers and water have changed dramatically. Modern golf course superintendents increasingly work toward being better environmental stewards and to combat the public perception that golf courses are environmentally harmful. Turf breeders continue to develop new grasses and varieties that require fewer inputs, and therefore superintendents now have better tools to adjust to the increasingly volatile legal landscape related to environmental stewardship. Thus, golf course superintendents must continue to adapt, and problem solve in order to find and use best practices while keeping turf playable, persistent, and aesthetically pleasing. Planting and maintaining superior grasses will help meet these goals. Attendees will discuss and learn:

- Pros and cons of new cool-season turfgrass breeds specifically for reduced inputs
- How to properly select the cultivars proven to utilize less fertilizer, chemicals, and water
- Management strategies and practices to achieve desired improvement outcomes with cool-season turfgrasses

### **Cultivating Passion Is as Important As Cultivating Healthy Turf!**

**Kelly Sauerman,** Skills Development and Training Facilitator, The Turfgrass Academy of South Africa, Johannesburg, South Africa

(1211-01) The proof is in the pudding, there is a clear relationship between upskilling staff and cultivating a passion in them for what they do everyday at your facility. Superintendents participating in this seminar will see the connection between upskilling staff, motivating, cultivating passion in them and the rewards that will follow on the golf course. Participants will learn to recognize strategies to upskill their staff even when the budget doesn't necessarily allow for formal training programs and walk away with skills to obtain results that include:

- Motivated and enhanced skilled staff
- Better-quality staff/facility performance and productivity
- Healthier working environment and staff retention

### **Disease Suppression without Fungicides, Can It Be Done?**

**John Dempsey, Ph.D.,** Golf Course Superintendent, Royal Curragh Golf Club, Kildare, Ireland

(1209-01) Until recently, chemical fungicides were the foremost tool used for disease prevention and management of amenity turfgrasses, but recent legislative restrictions have now prohibited their use... so now what do we use? If you are a superintendent seeking additional control tools, focusing on non-chemical controls and resources this seminar might be for you. Participants will leave this seminar with the knowledge to determine and combine cultural, nutritional, and defense enhancement methods into a program for your specific site in order to reduce disease incidence.

## Tactics for Successful Sodium Management in Turfgrass Soils

**Paul Cushing**, Owner – Agronomist, *Paul Cushing Agronomic Turfgrass Services, San Diego, Calif.*

(1210-01) Giving superintendents the tools they need to understand and learn the ins and outs of sodium management in any turfgrass region is the goal of this seminar. This presentation will also offer solutions and methods to aid in establishing long term sustainability in soil management at attendees' golf course facilities. Participants will develop a better understanding of how to:

- Diagnose sodium issues; properly test and interpret soil and tissue results.
- Identify the right product and solutions to combat sodium issues
- Implement a long-term sustainable program for sodium management on a golf course

**1 PM-2:45 PM**

## Cutting Edge Irrigation for Salinity Management

**Marco Schiavon, Ph.D.**, Assistant Professor, *Institute of Food and Agricultural Sciences - Environmental Horticulture Department, University of Florida*

**Matteo Serena, Ph.D.**, Assistant Professor, *Department of Plant and Environmental Sciences, New Mexico State University*

(1213-01) Calling all superintendents looking to expand their knowledge of techniques to better manage turfgrass soil and irrigation salinity on the golf course. Attendees will explore numerous techniques, and research-based evidence ultimately focused on the interactions of irrigation water quality, quantity, and soil salinity to accurately interpret soil and water tests in order to make the right maintenance and management decisions. Participants will learn how to:

- Accurately interpret soil and water test results
- Calculate leachate fractions with better accuracy
- Identify products available to best alleviate symptoms of salinity in stressed turf

## Knowledge is Power: Train Your Crew on Chainsaw Safety and Operation

**Trent Manning**, Equipment Manager, *Ansley Golf Club, Roswell, Ga.*

(1148-01) When working on a golf course there are times when use of a chainsaw is necessary to clean up and maintain the course's trees. Do all your crew members know the proper safety techniques while operating a chainsaw when the time comes? Not sure? This seminar will give you the tools and training techniques to ensure that chainsaw safety operation is known amongst all grounds crew members on

your golf course. Attend this seminar to understand the proper protective equipment required to operate a chainsaw from start to finish. Participants will leave this seminar prepared to:

- Properly start and safely operate a chainsaw
- Apply proper techniques for felling a tree on the course and processing the tree once on the ground
- Implement skills and equip all crew members with the knowledge to operate a chainsaw safely

**3:15 PM-5 PM**

### **A Guide to Bluemuda for Beginners**

**Gregg Munshaw, Ph.D.**, Associate Professor & Extension Specialist – Turf Science Program, University of Kentucky

(1200-01) What is Bluemuda? Is it right for you? Join this seminar and find the answers to all your questions about this year-round mixture of bermudagrass and Kentucky bluegrass, that has grown increasingly popular across the transition zone. Attendees will learn about:

- Success and failure of bluemuda implementation projects at a facility
- Research based tips for managing inputs and maximizing facility goals
- Best cultivars and how to establish maintenance practices that work

### **Emotional Intelligence for the Turf Professional**

**Darrin Batisky**, Area Sales Manager, Bayer, Research Triangle Park, N.C.

(1216-01) What is the most important person, place, or thing that effects your daily life and work? Drum roll please... it's your Emotional Intelligence! If your answer was anything different, you may want to register for this seminar. This seminar will provide an overview of how you can effectively identify and manage your emotions as they are happening, as well as understand the impact those emotions on others and vice versa. Attendees will learn skills to increase their emotional intelligence and build solid, positive and professional relationships geared for success! This seminar will focus on:

- Identifying and use of emotions (positive and negative) in real time
- Skills for self-management and deescalating heightened states of emotions in all situations
- Tips for how to build and maintain professional, diverse, and productive relationships

### **Help Wanted!**

**Tyler Bloom**, Director of Grounds, Sparrows Point Country Club, Baltimore, Maryland

(1217-01) Labor continues to be a top issue in the golf industry, and how to attract good-quality employees is equally problematic. If this is an issue you see in your future or something you are

currently facing this seminar is for you. Explore different solutions for staff succession planning to create a viable and sustainable employee development program at your facility. Attendees will learn:

- How to leverage industry career opportunities through networking and Career and Technology Education (CTE) program and apprenticeship can help
- Simple recruiting methods and materials to gain interest and approach high schools
- Tips for developing relationships with education administrators and key figures at high schools
- Utilize academic partnerships and certifications to boost employee development and performance steps

## **TUESDAY JAN. 28<sup>th</sup> ONE DAY SEMINARS**

**8 am-5 pm**

### **Advanced Management of Ultradwarf Bermudagrass Golf Greens**

***Bruce Martin, Ph.D.,** Emeritus Professor, Turfgrass Pathology, Soil and Plant Sciences, Clemson University*

***Bert McCarty, Ph.D.,** Professor, Turfgrass/Golf Course, Clemson University*

(458-01) The recent conversion by many golf courses to ultradwarf bermudagrass cultivars for golf greens means creating a completely new plan for successful management. This daylong seminar will leave attendees with a full understanding of the agronomic, physiological, and pest management needs of ultradwarf bermudagrass. Topics that will be discussed include:

- Construction options and cultivar choices
- Irrigation regimes
- Fertility rates and methods
- Disease, nematode and weed management
- Overseeding/transition methods

## **TUESDAY JAN. 28<sup>th</sup> SIX HOUR SEMINAR**

### **Tradition and Innovation – Where the Golf Industry Is and Where It is Going The ASGCA Winter Meeting at GIS**

**Jan Bel Jan,** American Society of Golf Course Architects

(1239-01) The American Society of Golf Course Architects (ASGCA), in its first year as a Presenting Partner of GIS, is holding a day-long, multi-presentation seminar all rolled into one seminar for architects, superintendents, builders, owners, golf industry vendors, and all other golf development industry professionals. There will be several featured presentations and speakers with intention to help provide a variety of information to help golf development industry professionals better

understand today's changing and challenging marketplace, with practical advice for navigating through uncharted territories. The Presentations within this seminar include:

**Morning Presentations:**

**Experiential Economy**

**Keynote Speaker to be announced**

**Low Hanging Fruit: Management and Renovation Practices of Superintendents at Courses Nationwide**

**Drew Barnett**, Superintendent, Knollwood Club, Lake Forest, Ill.

**Steve Datwyler**, Golf Course Superintendent, The Club at Ravenna, Littleton, Colo.

**Timothy Hiers**, CGCS, Golf Course Superintendent, White Oak Conservation Golf Course, Yulee, Fla.

**Bill Salinetti**, CGCS, Golf Course Superintendent, National Golf Links of America, Southampton, N.Y.

**Sean Tully**, Golf Course Superintendent, Meadow Club, Fairfax, Calif.

**Community Links: Examples of How Golf and Community Make one Another Stronger**

**Todd Schoeder**, ASGCA, Golf Course Architect, iCon Golf Studio, Broomfield, Colo.

**Andy Staples**, ASGCA, President and Owner, Staples Golf Design, Scottsdale, Ariz.

**Afternoon Presentations:**

**Alice Dye Retrospective** - *Lunch Hour Presentation*

**Moderator: Matt Ginella**, The Golf Channel

**Collaboration: How and Why Working Together Works**

**Moderator: Ron Whitten**, Architecture Editor, Golf Digest, Lenexa, Kan.

**Curtis James**, Golf Course Superintendent, Old Elm Golf Club, Highland Park, Ill.

**Drew Rogers**, ASGCA, Golf Course Architect, JRD Design Group, Toledo, Ohio

**Steve Weisser**, ASGCA, Golf Course Architect, Rees Jones, Inc., Montclair, New Jersey

**Curtis Tyrrell**, CGCS, MG, Founder and President, The Course Reports and Canon Golf, Medinah, Ill.

**Leveraging Big Data**

**Jon Last**, Founder & President, Sports and Leisure Research Group, White Plains, N.Y.

## TUESDAY JAN. 28<sup>th</sup> HALF DAY SEMINARS

### Morning Seminars

#### Behind the Scenes at Bay Hill - Learning Tour

*Chris Flynn, Director of Grounds, Arnold Palmer's Bay Hill Club & Lodge, Orlando Fla.*

*John Owen, Assistant Superintendent, Arnold Palmer's Bay Hill Club & Lodge, Orlando, Fla.*

*Alex Hills, Assistant Superintendent, Arnold Palmer's Bay Hill Club & Lodge, Orlando, Fla.*

*Albert Sizemore, Equipment Manager, Arnold Palmer's Bay Hill Club & Lodge, Orlando, Fla.*

(1243-01) Curious to see how other facilities handle tournament preparations, irrigation system implementations, or even maintenance facility operations? Look no further than this half day educational opportunity that will all take place onsite at the Arnold Palmer's Bay Hill Club & Lodge. Attendees will see how Bay Hill addresses common and unique challenges faced in the golf industry. As an added bonus, a hands-on Foley grinding demonstration walks through everything you need to know for reel and bedknife grinding to help you make the most informed grinder purchases. Participants will be given a firsthand look at

- Tournament preparation processes and procedures at Bay Hill
- Review of Bay Hill's new irrigation system and short game practice area
- Bay Hill maintenance facility tour and operations
- The latest Foley Grinding technology and demonstration from start to finish

Space will be limited and registration for this learning tour will not be available onsite. Check in will begin at 7:30am and buses will depart promptly at 8:00am. Please arrive on time for check in, be aware that if attendees miss the check-in deadline, alternate transportation to and from Bay Hill Club & Lodge will not be provided. Attendees are encouraged to wear walking shoes and comfortable apparel.

#### Business Strategies for Every Golf Course Superintendent

*Michael D. Vogt, CGCS, Certified Golf Irrigation Auditor, St. Charles, Mo.*

(1162-01) In order to be the best golf course superintendent you can be, you must continuously reinvent the wheel, and be sure you are using the most effective labor and business planning strategies available. Attend this seminar to change up conventional thinking methods when planning and executing a golf course labor strategy and strategic goal-oriented business plan. Superintendents who participate in this seminar will walk away with:

- Strategic thinking skills to attain achievable golf business goals
- Techniques to track and make important business decisions
- Tips to electronically track labor and expense planning
- Skills and techniques for crafting a well written budget and execute business plans

## Development of a Topdressing Program for Golf Course Turf

**Nick Christians, Ph.D.**, Professor, Department of Horticulture, Iowa State University

**Adam Thoms, Ph.D.**, Assistant Professor, Iowa State University

(1125-01) Learn what it takes to build a successful topdressing program for your facility. After attending this course attendees will have a better understanding of the proper methods of calculating topdressing rates, pitfalls of improper topdressing programs, and the latest proven research methods for recycling of cores and proper topdressing techniques. Attendees will leave this seminar ready to:

- Apply hands-on calculations for improvements to your topdressing program
- Implement cost savings related to ordering and using better proportion amounts of topdressing
- Identify new equipment and methods to positively impact your topdressing program

## Equipment Cradle to Grave

**Eric Duncanson**, Equipment Manager, Pine Needles & Mid Pines Golf Clubs, Southern Pines, N.C.

**David Prekop**, Equipment Manager, Secession Golf Club, Beaufort, S.C.

(1226-01) Getting the most bang for your buck is important all the time, and especially when it comes to purchasing equipment on the golf course. Attend this seminar and take an in depth look at managing equipment across the board starting from the selection process, maintenance and recording cost of ownership. Attendees will develop a better understanding of:

- How to research and select the right equipment
- Return on Investment and Cost of Ownership
- Assess pros and cons of leasing vs. buying equipment

## Fact, Myth or Legend - Soil and Water Edition

**Beth Guertal, Ph.D.**, Professor, Agronomy & Soils, Auburn University

**Glen Obear**, Director of Innovation, Tria Global Solutions, Crystal Lake, Ill.

(1224-01) As a superintendent, you have likely heard at least one of the many long time-used fertility statements for example, "Apply potassium to help your turfgrass get through stress..." or "Gypsum is the best treatment for compacted soils..." etc., but how many of these statements have science and facts to support them? This fast-paced seminar will run through a series of fertility myths vs. facts and research to support it. There will be coverage of diverse geographies and growing environments relevant to all audiences. Attendees will have the opportunity to learn and discuss:

- Methods for selecting fertilizer nutrients to improve efficiency and costs at your course

- Evaluating unfounded product claims vs. the facts
- Identify research resources to assist in best product selection and fertilizer practices supported by facts

### Green Renovation and Grow-In: Rebuild or Resurface

**Charles B. White**, *Senior Vice President of Agronomy, Arnold Palmer Golf Management, Dallas, Texas*

(1048-01) Scientifically evaluate the need for rebuilding or resurfacing greens and address the pros and cons of each alternative for any given golf course. Learn how to select the best resurface technique based on current construction type. Modify techniques to seamlessly tie collars and surrounds back to renovation areas and efficiently grow-in new turf areas. Attendees of this seminar will discover how to:

- Evaluate current green construction and select the best renovation type based on budget and needs
- Ensure the correct sand selection is made for resurfacing
- Guarantee the best construction details are utilized and carry out the most efficient grow-in program

The book “Turf Managers’ Handbook for Golf Course Construction, Renovation and Grow-in” is recommended for this seminar.

#### Afternoon Seminars

### Key Success Strategies – Communicating with Confidence, Clarity, and Credibility

**Laura Katen**, *Author, Keynote Speaker, Consultant, Executive Coach, and President of KATEN CONSULTING, New York, N.Y.*

(1075-01) In an industry full of smart, educated, tech-savvy professionals, how do you distinguish yourself? One way.

Effective communication skills and the ability to present oneself with credibility, professionalism and make a positive impression are critical to professional success. Research consistently shows the direct connection between the ability to communicate well and the level of success that someone experiences. Participants will increase their awareness to four key aspects needed to make a credible and polished impression on others, especially in a first contact and/or interview situation. Emphasis will be placed on the skills required to effectively interact with general managers, course owners, and high-profile club members.

Visit with Laura, who will be hosting a book signing on Wednesday, Jan. 29<sup>th</sup>, at 10:30am on the tradeshow floor in booth #2000 next to the GCSAA bookstore.

## **Liderar con Swing – El Arte de Liderar a Través del Golf (Leading with Swing – The Art of Leading Through Golf)**

**Rafael Maratea**, Owner, Maratea Training, Buenos Aires, Argentina

**Jorge Croda**, President & Owner, Croda Consulting, Fort Worth, Texas

(1244-01) Leading with Swing is a perfect analogy between roles, attitudes and leadership skills in business and the game of golf. This seminar will aid superintendents by outlining ways to identify, refine, and grow their leadership talents and be the best they can be. Attendees will leave this seminar with the skills needed to become or enhance their strengths as a successful leader. Topics covered include:

- How to recognize and support significant leadership roles within your team
- Apply practices to prioritize and balance leadership duties while ensuring the success of your team and staff
- Effectively lead others in an environment of camaraderie and fit only for high-performance teams

Liderar con Swing es una analogía perfecta entre roles, actitudes y habilidades de liderazgo en los negocios y el juego de golf. Este seminario ayudará a los superintendentes al describir formas de identificar, refinar y hacer crecer sus talentos de liderazgo y ser lo mejor que puedan ser. Los asistentes saldrán de este seminario con las habilidades necesarias para convertirse o mejorar sus fortalezas como un líder exitoso. Los temas cubiertos incluyen:

- Cómo reconocer y apoyar roles de liderazgo significativos dentro de su equipo
- Aplicar prácticas para priorizar y equilibrar los deberes de liderazgo al tiempo que garantiza el éxito de su equipo y personal
- Dirigir efectivamente a otros en un ambiente de camaradería y solo para equipos de alto rendimiento.

## **Pathways to Warm Season Insect Management and Environmentally Balanced Programs**

**Rick L. Brandenburg, Ph.D.**, Professor of Entomology, North Carolina State University

(1232-01) Helping superintendents develop a cost-effective and environmentally friendly insect management program in turfgrass is critical to upholding a successful golf facility. The ultimate goal of this seminar is for attendees to learn how to:

- Communicate and address public concerns or misinformation to gain social acceptance and community support
- Develop cost-effective and socially acceptable friendly insect management programs
- Problem solve and find environmentally friendly solutions to managing specific insect pests

## **Preparing to Become a Certified Golf Course Superintendent**

**Stephanie Confer**, GCSAA Certification Manager, Lawrence, Kan.

**Bill Maynard, CGCS, Sales Manager/Branch Manager, GCSAA Past President, MTI Distributing Inc., St. Louis, Mo.**

(358-01) Are you a golf course superintendent? If you answered yes and want to achieve certification status as part of a personal or professional goal, then this seminar is for you. If you are considering beginning the certification process, this seminar will get you started on the right track by reviewing the process and eligibility requirements. After attending this seminar, participants will understand:

- How to effectively utilize GCSAA's online self-assessment tool
- Guidelines to follow to create a passing certification portfolio
- Content of the written examination
- Expectations during the course/facility evaluation

### **Take Control; Meteorology for the Modern Golf Course**

**Kevin P. Breen, CGCS, La Rinconada Country Club, Ca.**

**Sara Croke, President, Weather or Not Inc., Shawnee, Kan.**

(682-01) Utilize current analytical tools and findings to better manage and pin-point weather accuracy to benefit your daily job duties. This seminar will review the most current agronomic weather case studies and hands-on exercises, so you will be able to:

- Quickly find all weather data necessary to make your own forecast for your course, and customize agronomic challenges to weather solutions for your course
- Evaluate weather resources including apps, blogs and social media for integrity and accuracy
- Gain a working knowledge to analyze weather components such as: satellite, radar, surface features, and upper air charts (aka jet stream)
- Document data to match your actual weather to budgeting – numbers without excuses

### **The Art and Science Behind Teambuilding, Performance Management, and Giving Effective Feedback**

**Jodie Cunningham, Optimus Talent Partners LLC, Philadelphia, Pa.**

(1141-01) Building a high-performing team can be challenging and does not happen by accident. As a manager or supervisor, it can be extremely challenging to have tough conversations with team members. However, with the right techniques, you can do it with ease and improve your team's performance. Attendees will learn how to:

- Prepare and apply concepts to administer productive feedback
- Practice utilizing and incorporating data into your feedback discussions
- Increase team performance and engagement as a result of giving effective feedback

## The Do's and Don'ts of Rebuilding Greens

**David L. Doherty**, CEO & Founder, International Sports Turf Research Center, Lenexa, Kan.

**Robert Oppold**, Vice President of R&D, International Sports Turf Research Center, Lenexa, Kan.

(1115-01) The decisions involved with rehabilitating (repairing or rebuilding) golf course greens are complex. Don't waste your time, your budget and risk your reputation making the wrong ones. This seminar will provide superintendents with the decision-making tools they need to make the best choices for each individual green. This seminar will delve into:

- Re-grass or rebuild, the decision matrix
- Root zone and Drainage Integrity analysis
- Types of greens (USGA, California style, modified soil, etc.)
- Impacts of micro-climates on greens and water quality on greens
- Soil aeration/oxygenation – how to determine if the turf is stressed by anaerobic conditions

## The Impact of Transformational Leadership and Successful Staff Communication

**Lori Hoffner**, Professional Speaker, Trainer and Consultant, Supporting CommUnity, Inc. Littleton, Colo.

(1227-01) The power of leadership is the key to future success on the golf course. We all have an ability to be exceptional leaders and inspire others to achieve greatness. Some of us just need to understand different leadership styles that will help us develop a successful leadership role. As a superintendent, your job to communicate and lead a team is vital to the success of the golf course and the golf industry. Attend this seminar and discover your leadership strengths and enhanced communication skills that will result in overall increased performance and satisfaction for you and those around you. Attendees will walk away understanding of:

- Differences in leadership styles and impact on communication successes and failures
- How to approach critical conversations and utilizing various communication models to best address them across a diverse audience
- Applying communication and leadership methods to ensure employee and facility productivity and satisfaction

## The Sustainability Narrative: A Story of How Golf Courses Positively Impact their Communities

**Rick Fredericksen**, CGCS, Golf Course Superintendent, Woodhill Country Club, Wayzata, Minn.

**Parker Anderson**, Consultant, Greener Golf Group, Santa Barbara, Calif.

(1225-01) What is the sustainability narrative? It is what can help superintendents explain the positive environmental, social, and economic impacts on our communities thanks to the existence of golf courses. After leaving this seminar attendees will be ready to answer the question of what sustainability

means and why golf courses are important to maintain and keep around for the good of their community from a holistic perspective and approach.

### **Trenching, Compaction & Safety – How to Protect Your Assets Below and Above Ground**

**Eric Gonzalez, P.E.**, Regional Engineer, Advanced Drainage Systems, Inc., Miami, Florida

**Dr. Mike Hurdzan**, Golf Course Architect, Hurdzan Design, Columbus, Ohio

(1242-01) Let this seminar help you avoid pitfalls on do it yourself (DIY) projects on your golf course when it comes to trenching and compaction. This presentation provides the do's and don'ts when it comes to completing a successful project, avoiding accidents or injuries, sunken ditches, settle and slumping fills etc. which all have potential to wreak havoc on your facility and budget. Topics that will be covered, include:

- Site analysis and decisions in performing the work in-house or by an outside contractor
- OSHA Guidelines and emergency preparedness
- Pipe and soil interaction, soil types, and backfill material selection, testing, installation guidelines, flexible pipe vs. ridge pipe

### **Water Movement in Soils and Soil Surfactants**

**Stanley Kostka, Ph.D.**, Professor, Plant and Soil Sciences, Pennsylvania State University - Berks

**Michael Fidanza, Ph.D.**, Professor, Plant and Soil Sciences, Pennsylvania State University – Berks

(1197-01) Today, there are approximated 200 soil surfactant products available in the US golf and sports turf markets and Superintendents are bombarded with a plethora of soil surfactant product claims. It can be overwhelming and exhausting hunting for the right product as soil surfactants can be crucial in treating a mass of turf related conditions such as dry spots, mitigate soil water repellency, rootzone water delivery, water use efficiency, and the list goes on and on. This seminar will provide research-based guidance help make those decisions by clearing up confusion or misconception regarding product claims. Attendees will learn how to:

- Identify variances in surfactant classes and their impacts on plants, microbes, and soils
- Understand what surfactants can and cannot do in soil water management and water repellency
- Select the best soil surfactant product for water and soil management practices at their facility

### **Afternoon Seminars**

#### **Bermudagrass Fairway Management: Cultivars, Winter Overseeding and More!**

**Cale A. Bigelow, Ph.D.**, Professor, Department of Horticulture and Landscape Architecture, Purdue University

**Gregg Munshaw, Ph.D.**, Associate Professor & Extension Specialist – Turf Science Program, University of Kentucky

(1167-01) Attend this seminar to discover how to make the most informed decisions and maximize operational resources related to bermudagrass fairway management. Bermudagrass is often the species of choice for golf course fairways and tees among the South and transition zones across the United States due to the fact it provides a dense, aesthetically pleasing surface that tolerates frequent mowing with an excellent recuperative capacity. Although it has many strengths as a fairway species it can also come with major limitations with adoption in the northern climates. Explore and learn the effects of various management inputs like nutritional programs, mowing, and the use of plant growth regulators to improve the quality of your course bermudagrass fairways in northern climates. This research-based presentation will give attendees the opportunity to:

- Apply critical thinking skills regarding bermudagrass as a species for golf turf, and if it is a best fit the facility
  - Discuss best management strategies to maximize bermudagrass health, where winter-kill is a concern
  - Receive research-based tips for managing inputs (mowing, supplemental irrigation, nutrition, etc.) affecting bermudagrass health to maximize facility goals
- Registered participants will be surveyed prior to attending this GIS 2020 seminar about facility, challenges and usage of new cultivars related to winter-kill, spring dead spot and winter over-seeding.
- Attendees are strongly encouraged to send questions via social media in real time during the seminar and in return those will be answered as they are received.

### **Data-Driven Irrigation Management**

**Ben G. Wherley, Ph.D.**, Associate Professor, Dept. of Soil & Crop Science, Texas A&M University

**Joseph Young, Ph.D.**, Assistant Professor, Dept. of Plant and Soil Sciences, Texas Tech University

(1228-01) In the past, when water availability and costs were not as great of a concern as they are in today's environment, superintendents could afford to rely more on 'feel'. Now, real-time weather data, soil moisture sensors, and spectral sensing technology offer today's superintendents with an array of resources and tools to more effectively manage water. Attendees will learn:

- Practical approaches for use of weather-, soil moisture -, and spectral-based technologies
- Apply most informed agronomically sound irrigation management decisions
- Successes and challenges using various water management tools, technologies and strategies from real-world golf course case studies

## Don't Smoke this Weed: Encouraging *Poa Annua* on Your Golf Course

**Ben McGraw, Ph.D.**, Associate Professor, Turfgrass Entomology, Pennsylvania State University

**John Kaminski Ph.D.**, Associate Professor, Turfgrass Science, Pennsylvania State University

(1127-01) Annual bluegrass is a common turfgrass species on golf course putting greens, and while many facilities manage it as a weed, others have shifted their focus away from eradicating it to managing it as a desirable species. This seminar will focus on the practice of maintaining health annual bluegrass and optimal conditions, which is a different approach than managing other commonly grown, cool-season species like creeping bentgrass. In this hands-on seminar, attendees will:

- Understand the impact of individual and programmatic approaches for managing high quality annual bluegrass turfgrass swards
- Gain useful strategies to minimize turf loss during stressful conditions
- Develop advanced and proactive planning methods for managing *Poa Annua* on the golf course

## Get with The Program: Tips to Build a Weed Control Program for Your Facility

**Jim Brosnan, Ph.D.**, Professor, Department of Plant Sciences, University of Tennessee

**Matthew Elmore, Ph.D.**, Assistant Extension Specialist, Rutgers University, New Brunswick, N.J.

**Gerald Henry, Ph.D.**, Professor, Department of Crop and Soil Sciences, University of Georgia

**Aaron J. Patton, Ph.D.**, Professor and Interim Head, Department of Horticulture & Landscape Architecture, Purdue University

(1231-01) Developing an effective weed control program is a skill that has become increasingly important for golf course superintendents to be successful. This seminar will assist attendees to think programmatically and explain various practices to build an effective (northern and southern) weed program at their facility. Attendees will develop a better understanding of topics below:

- Timely integration of herbicide applications and suitable cultural practices to minimize weed infestation
- Benefits and capabilities of rotating herbicide modes of action to prevent resistance
- Strengths and weaknesses of newest herbicides entering the turfgrass marketplace

## Getting to Next

**Laura Katen**, Author, Keynote Speaker, Consultant, Executive Coach, and President of KATEN CONSULTING, New York, N.Y.

**Bill Maynard, CGCS**, Sales Manager/Branch Manager, GCSAA Past President, MTI Distributing Inc., St. Louis, Mo.

(1230-01) Progress your success by Getting to Next! the next step of your goal, the next phase of your career. Whether you are looking to advance within the profession or simply brush-up on resumé's and interviewing skills, you'll want to attend this hands-on learning opportunity that explores key strategies for career advancement. Attendees will:

- Explore the Do's and Taboos of Cover Letters, Resumes, and Thank You Notes
- Increase Awareness to Key Interviewing Techniques and Mistakes
- Engage in Mock "Hot Seat" Interviews
- Learn the Subtle Secrets that Can Immediately Distinguish You

### **"In-House" Drainage**

**Stephen Ami**, Professional Drainage Engineer, Kelly Ami Inc., Dorval, Quebec, Canada

**John Kelly**, Professional Drainage Engineer, Kelly Ami Inc., Dorval, Quebec, Canada

(1083-01) Not all golf courses have the budget to hire contractors for drainage projects. This seminar will be a practical course on how to plan and install drainage projects with "in-house" staff. The following topics will be covered:

- Which components of a drainage project can be done "in-house" and which are better left to a specialized contractor
- Identifying the nature of the drainage problem(s) and selecting the appropriate drainage solution(s)
- Review design principles for fairway drainage and bunker drainage
- Planning of drainage projects
- Identifying an outlet for the drainage system and planning for any required improvements (ditch deepening, pond water level lowering, connection to an existing drain, etc.)
- Tips and tricks for installing drains

### **Municipal Golf Course Strategies – Enough Talk!**

**Josh Heptig**, Golf Course Superintendent, County of San Luis Obsipo, Calif.

**Andy Staples**, ASGCA, President and Owner, Staples Golf Design, Scottsdale, Ariz.

(1138-01) It's time to take action and do something to improve your municipal golf course! The municipal golf course market consists of over 5,000 courses throughout the United States, and most of them lose money. Most of the ones that continue to be successful, have implemented a variety of improvement projects based on realistic costs and high return on investment. For those that still show signs of failure, and have not yet improved their course, enough is enough. It's time to make course improvement plans, expand the user group, and increase revenue. This interactive workshop uses a variety of case studies from municipal golf courses across the nation to empower attendees to bring solutions back to their course and take action. Attendees of this seminar will:

- Engage in discussion and brainstorm why municipal courses are failing
- Explore operational structures, and their limitation factors
- Strategize implementation of long-term master improvement plan with quantifiable action items and milestones and sell the vision to course stakeholders
- Identify strengths and weaknesses as well as growth opportunities for your facility
- Determine how to engage your community and cultivate those relationships

### **Navigating Turfgrass Selection for Renovations and New Construction**

**Stacy Bonos, Ph.D.,** Professor, Department of Plant Biology, Rutgers University

**John Holmes,** President, Atlas Turf International, LaGrange, Ga.

**Paul Raymer, Ph.D.,** Professor, The University of Georgia

**Chas Schmid, Ph.D.,** Director of Agronomy, Mountain View Seed, Salem, Oregon

(1240-01) Turfgrass selection during renovations and new construction can be quite the intimidating challenge. This seminar will help golf course superintendents navigate through the process of finding the right turf for any project. Both warm and cool season turfgrasses will be discussed along with topics including:

- National Turfgrass Evaluation Program (NTEP) trials and outcomes
- Selection and purchase of seed and sod with golf course design in mind
- Tips for interseeding into existing turf
- Collaboration tips and efforts to maximize your turfgrass goals with your contractor

### **Plant Growth Regulators for Fine Cool-Season Turf**

**Bill Kreuser, Ph.D.,** Assistant Professor and Turfgrass Extension Specialist, Agronomy and Horticulture, University of Nebraska, Lincoln

**Adam Van Dyke, M.S., CPAg,** Professional Turfgrass Solutions LLC, South Jordan, Utah

(1077-01) This seminar will discuss Class A, B, C and E PGRs (Plant Growth Regulators) for use on cool-season, fine turf. Specific attention will be given to multi-year research results on how to use growing degree days (GDDs) to schedule PGR applications for consistent shoot and seedhead growth suppression as applied to creeping bentgrass, annual bluegrass, and Kentucky bluegrass. Topics covered in this seminar include:

- Mode of action, formulation, use rates
- Frequency of application and Tank mixing compatibilities
- Developmental effects (shoots, roots, stems) and Physiological effects (non-stressed and stressed)
- Seedhead control strategies

## Regrass Those Fairways! Save Costs and Improve Playing Conditions

**Elliott Dowling**, USGA Agronomist, Northeast Region

**Zach Nicoludis**, USGA Agronomist, Central Region

(1170-01) This seminar will breakdown primary challenges with managing turf species vulnerable to decline and poor playing conditions. Improved turfgrass species are readily available, but golf courses have been slow to undergo regrassing projects due to concerns with disruption. This presentation will focus on research-based outcomes that can support efforts in effectively communicating to course decision-makers on how they can successfully complete a regrassing project with the least amount of revenue loss and overall risk. Subject matter that will be covered includes:

- How maintenance costs and unreliability of current grasses jeopardizes health and fairway playability
- Risks and benefits involved when switching from cool-season to warm-season
- Why fairway regrassing is beneficial and how to execute a success project at your facility that will result in improved playing conditions, cost savings, and fewer maintenance inputs

## Soil Chemistry and Organics Can Lock Up a Green – A Case History of Remediation vs. Reconstruction

**Carlos Arraya**, CGCS, Golf Course Superintendent, Bellerive Country Club, St. Louis, Mo.

**Robert Oppold**, Vice President of R&D, International Sports Turf Research Center, Lenexa, Kan.

(1126-01) This seminar will illustrate the cause and effect of high Ph water application over time and the resultant effects of Ph on solid chemistry, nutrients, and soil physical properties, and how they all impact turf health. Attendees will review a real-world, two-year case study where extreme turf loss occurred and see how the chemical problem was identified, remedial programs, and post remediation success. Walk away knowing how to:

- Identify the difference between chemical and physical properties problem before experiencing turf loss
- Learn remedial turf practices to reduce and solve soil chemistry issues
- Apply testing methods that can highlight progress at your facility

## Understanding Mowing Technology and Its Effects on Quality of Cut and After Cut Appearance

**Jim Nedin**, Jim Nedin Consulting Services, York, Pa.

**Greg Turner**, Sales Manager, Foley United, River Falls Wis.

(1137-01) Turfgrass professionals understand just how much the quality of cut affects the quality of turf...this seminar will explore the vital relationships between reel mower applications, quality of cut and after cut appearance. Attendees will have the opportunity to participate in small-group sessions with

Q&A from industry experts focusing on how to properly identify and resolve quality of cut and after cut appearance issues. Participants will leave this seminar with a better understanding of:

- How to properly set up cutting units to resolve quality of cut issues
- Preventative measures to use to avoid quality issues
- Identification of turf plants, health and reactions that come from setup and mowing activities

### Understanding Turf Fungicides

**Richard Latin, Ph.D.**, *Professor of Plant Pathology, Purdue University*

(574-01) Do you use fungicides to maintain healthy turf? This unique seminar offers real-world scenarios to help explain how fungicides work, why they work, and why (sometimes) they do not work. Gain a comprehensive understanding of fungicides to make better disease control decisions. Learn to communicate about chemical control issues with administrators, employees, golf patrons, and the public at large. Although this seminar will not focus on lists of diseases and fungicides, questions about specific products for turf disease control are welcome and are often addressed during the general discussion. Specific topics include:

- Fungicide movement in turf plants - How and why is that important?
- Fungicide mode of action - How do fungicides work on turf pathogens? How can the targeted scheduling of applications provide optimum control?
- Fungicide resistance - How does resistance evolve, and how to avoid rapid changes towards resistance?
- Factors that affect fungicide performance - How do deposition factors, depletion factors, and disease pressure influence fungicides over time?

### TUESDAY JAN. 28<sup>th</sup> 1 HOUR AND 45 MINUTE SEMINARS

**8 AM-9:45 AM**

### Better Thoughts for Better Living

**Lisa Goatley**, *Licensed Professional Counselor, The Cascade Group, Blacksburg, Va.*

(1152-01) What you think is what you feel...just think about it! The constant running commentary in our minds (also known as the cognitive narrative) is what forms our perception of the world and our experiences in it. Errors in thinking can lead to over-reacting, negative feelings, and overall unhappiness. Attend this seminar to learn ten strategies that can help eliminate those errors and cultivate a more rational framework to help navigate both professional and personal relationships. Participants will develop the skills needed to:

- Identify the relationship between thoughts and feelings
- Implement healthier thinking habits for a healthier life
- Apply the "Rules of Better Living" to improve professional and personal relationships

## Get Uncomfortable

**John P. Cunningham, CGCS**, General Manager, Aronimink Golf Club, Newtown Square, Pa.

(1204-01) Your current education level, age, and professional title will never excuse you from the need to learn or try new things. No one likes feeling uncomfortable but it's a key part of improving your performance, creativity, and development. This seminar will prove why a little bit of discomfort goes a long way in terms of personal development, whether you are a long-time golf course superintendent or just starting your professional journey, there is never an excuse not to "get uncomfortable" and grow. Topics that will be discussed include:

- Why we stay in the comfort zone and why it is important to get out of it
- Real life experiences of growth from uncomfortable scenarios
- How to embrace the feeling of getting uncomfortable and positive outcome it can provide

## Seashore Paspalum, How to Use and Manage It

**Paul Raymer, Ph.D.**, Professor, The University of Georgia

**Clint Waltz, Ph.D.**, Professor, The University of Georgia

(1201-01) Have you ever heard of Seashore Paspalum? Now, would you like to know more about this warm-season turfgrass that is broadly adapted for use on golf courses especially in tropical and sub-tropical geographical locations? If the answer is yes, then this seminar is for you as it will discuss primary uses of Seashore Paspalum as turfgrass, as well as benefits and limitations when used on golf courses. Participants will also discuss the latest research advances that will impact superintendents' ability to manage this species. General topics that will be covered include:

- The history, characteristics, and uses of Seashore Paspalum
- Agronomics and best management strategies for Seashore Paspalum
- Pests of Seashore Paspalum and their management
- Salt management concepts and practices

## Winter Covering and Protection Strategies

**Eric DeBoer**, Graduate Research Assistant, Department of Horticulture, University of Arkansas

**Jared Nemitz**, Director of Golf Course Grounds, The Peninsula Club, Cornelius, N.C.

(1194-01) This seminar will cover and provide guidance on how to meet the growing demands for superintendents to produce ultradwarf greens that are visually appealing and conditioned to produce exceptional ball roll on their courses. Participants will learn the balance of how to effectively manage and protect ultradwarf bermudagrass greens simultaneously from a showcase of research-based

solutions and practical observation test outcomes to help reduce chances of winter kill on bermudagrass putting greens as well as decrease labor costs for golf course facilities.

#### **10:15 AM-NOON**

#### **Economy vs. Agronomy – What is Sustainable?**

**John Bladon**, Director and COO, Turf Proffit and The Chimera Group, Ontario, Canada

**Matthew Gourlay**, CGCS, Director, Golf Operations, Colbert Hills Golf Course, Manhattan, Kan.

(1203-01) Have you found the right balance when it comes to agronomy and economy? This is a challenge all superintendents and golf facilities face every day and it is called the golf “business” for a reason. Refine your focus in striving to balance playability values within the context of a budget. There will be discussion of theory and real-world examples to take a deeper look at elements of golf operations and minimize any bias that you may have developed over time. Learn how to drive and embrace change and bring sustainability into focus at your facility. Attendees will learn how to:

- Prioritize data and integrate sustainable processes
- Reduce risks to the golf course asset and business
- Identify efficiencies that provide value at your facility

#### **From Construction to Maintenance: Putting Green Physical Properties**

**Brian Mavis**, Consulting Agronomist, Mavis Consulting, Ltd., Edgerton, Ohio

(1199-01) If you are a superintendent looking into renovating, constructing or just maintaining putting greens, then this seminar is for you. This seminar will offer tips gathered from nearly twenty years of real-world physical data from hundreds of golf course putting greens, to help you better evaluate greens mix selections and cultural practices. Learn how to avoid putting green construction problems and establish site specific desired values. Attendees will discuss and review these topics and more:

- How to collect representative samples
- Proper testing methods and data evaluation
- Putting green root-zone selection and construction methods
- Awareness and confidence to implement alternative practices to save time and costs while improving playing conditions

#### **Pesticide Label Review from a Regulatory Standpoint**

**Joshua Weaver**, Agriculture Compliance Specialist, Ph.D., Candidate, Clemson University

(1205-01) In the world today as a superintendent you must be very conscious when it comes to pesticide use. This seminar will help clear up any of the unknowns and provide a better understanding of why the label is the law and how to abide by it. After attending, superintendents will be able to

- Properly select pesticides for use their golf course
- Keep an organized and detailed record of pesticide use

- Accurately read and identify label ingredient details

### Real Life Stories – Managing Native and Out of Play Areas Successfully

**Matthew Ceplo, CGCS, Superintendent, Rockland Country Club, Sparkill, N.Y.**

**Jay Randolph, CGCS, Superintendent, Ben Geren Golf Course, Fort Smith, Ark.**

**Kyle Sweet, CGCS, Superintendent, The Sanctuary Golf Club, Sanibel, Fla.**

**Bryan Unruh, Ph.D., Professor, Extension Turf Specialist, University of Florida**

(1246-01) Out of Play and Native/Naturalized Areas are an important part of the golf course's green space. Planning, developing and maintaining these areas takes professional education, skill and practices to ensure success within the golf environment. Attendees will explore GCSAA's Best Management Practices for native areas while three successful superintendents will share their experiences from private and public courses alike. Participants will walk away with a better understanding of:

- Science based and successful BMPs for native or out of play areas
- Planning, implementing and maintaining quality native areas with important collaboration
- Educating members or golfers while promoting the valuable greenspace golf courses provide

### Winter is Coming: Preparing Warm-Season Turfgrasses for Cold Stress

**Gerald Henry, Ph.D., Professor, Department of Crop and Soil Sciences, University of Georgia**

(1196-01) This seminar is for superintendents who want to learn to reduce winter injury and encourage quick recovery for warm-season turfgrasses growing within the transition zone and areas further north. The goal of this course is to inform attendees about low temperature stress and proper management strategies they can use to enhance warm-season turfgrass acclimation to winter conditions. Participants will discuss and learn about topics including:

- Impacts of cultural practices on the onset of turfgrass dormancy
- Symptomology of freezing injury
- Cultural practices and techniques to reduce winter injury
- Recovery and spring-green up techniques following stressful winter conditions

**1 PM-2:45 PM**

### Lead Your Team

**John P. Cunningham, CGCS, General Manager, Aronimink Golf Club, Newtown Square, Pa.**

**Patrick R. Finlen CGCS, General Manager, GCSAA Past President, The Olympic Club, San Francisco, Calif.**

(1121-01) During this interactive seminar Pat and John share proven leadership strategies that have helped to solidify and energize their organizations. Learn effective leadership skills that you can take back to your course and implement.

- Identify and develop strong leadership qualities
- Determine desirable traits needed to enhance leadership at your facility
- Implement improvements to enhance the workplace culture and environment

### **Pump Station | End User Scenarios**

**Greg Lush, Founder, Last Mile Worker Solutions, Dove Canyon, Calif.**

(1198-01) If you are a superintendent it is critical that you can approach pump station emergencies with elevated confidence and awareness. Participants who attend this seminar will have the opportunity to learn how to effectively troubleshoot, correct, and prevent pump station problems in order to increase productivity and efficiency on the golf course. This seminar will also provide discussion of common barriers, issues, and troubleshooting measures that can be successfully implemented at your facility, including:

- Troubleshooting low or no flow water conditions
- Identifying red flags leading up to equipment failure
- Standards and rules to implement and increase safety
- Tips to quickly resolve pump station and equipment failure to decrease costs and equipment downtime

### **GCSAA Best Management Practices Part I: Developing Your Facility BMP Manual; It's Easier Than You Think**

**Bryan Unruh, Ph.D., Professor, Extension Turf Specialist, University of Florida**

(1247-01) Saying you're a professional just doesn't cut it anymore and most people don't understand everything that is involved in providing a quality golfing experience. Best Management Practices (BMPs) for golf are science based and the proven means to success on the golf course. Having a documented resource demonstrates the superintendents' professional landscape efforts and helps GCSAA advocate for you and the golf industry. Get started on your facility plan by learning about nutrient management, pesticide selection, and Integrated Pest Management BMPs.

- Nutrient Management BMPs: How properly implementing nutrient management BMPs can deliver quality playing surface as well as demonstrates a commitment to environmental protection.

### **Reduce Liability Claims on the Course: Superintendent Edition**

**Forrest Richardson, Golf Course Architect, ASGCA, Phoenix, Ariz.**

**Brian Kerns, Attorney, Bonezzi Switzer Polito & Hupp Co. L.P.A., Cleveland, Ohio**

(1214-01) As a superintendent, you do all you can to ensure that the success of the course is protected as well as the safety of all employees and customers, but are you doing enough? The bad news is that given the nature of the business in sporting and outdoor recreation, it is inevitable that someone or something will be injured or damaged. The good news is there are practices you can implement to lessen liability when accidents occur at your facility and provide a layer of protection from the impact of unfortunate incidents. This seminar will present real-life liability claims and what could have been done to prevent the problems that follow. Topics will include:

- Errant ball injury and damages
- Tree injuries
- Drownings
- Slip and fall claims
- Golf cart accidents

**3:15 PM-5 PM**

### **GCSAA Best Management Practices Part II: Pesticide Selection and Integrated Pest Management Practices**

**Adam Dale, Ph.D.**, Assistant Professor, Entomology & Nematology, University Florida

**Bryan Unruh, Ph.D.**, Professor, Extension Turf Specialist, University of Florida

(1248-01) This seminar will explore Integrated Pest Management (IPM) BMPs and Pesticide Selection BMPs and why they are important for your course, the profession and the industry. Attendees will be presented with information including:

- Integrated Pest Management (IPM) BMPs: Understand how essential elements of IPM can ensure success on the golf course, saving time and money
- Pesticide Selection BMPs: Understand key aspects of selecting active ingredients in light of resistance, focused effectiveness, and potential environmental impacts

### **Life Hack: How to Evaluate Career Opportunities**

**Tommy Witt, CGCS**, Director of Golf Course Operations, Northmoor Country Club, GCSAA Past President, Highland Park, Ill.

(1218-01) If you were offered a new exciting job opportunity tomorrow, would you know whether to take it or not? Would it be a step up or equivalent to your job role? Attend this seminar to answer that question with confidence, after all the average individual will change jobs 3-5 times or more throughout their career. Let's talk about how to:

- Adequately, realistically, and honestly evaluate a job offer
- Identify how different job opportunities can affect your career as a superintendent

### Step by Step: Establishing and Managing Native and Naturalized Roughs

**Dave Kaplow**, *President, Eco-Management, Inc., Petaluma, Calif.*

**Marcus Gray**, *Monarchs In The Rough Program Manager, Audubon International, Troy, New York*

(1207-01) Look no further than this seminar to help equip you with the necessary tools and information to take on a native roughs project. Attendees will leave with a better understanding of what to anticipate when planning and implementing a native roughs project, as well as what to expect during the transition and establishment phases. Topics covered include:

- Essential components to plan and implement a native project (i.e. site analysis, plant selection)
- Standards for meeting environmental requirements and wildlife habitat preservation
- Realistic short- and long-term budgeting expectations

### The Daily Grind: A Look Into a Shop Schedule and the Equipment Manager

**Cory Phillips**, *Equipment Manager, Golf Club of Georgia and Horseshoe Bend Country Club, Alpharetta Ga.*

(1124-01) How long will it take? This question is not only frequent but can also be a challenge for many equipment managers and technicians to answer on a regular basis for daily, weekly, monthly and yearly tasks within the shop. This seminar will provide attendees with tools and techniques to help plan a day, week, month, and year in their shop. After attending this seminar participants will have a better understanding of how to:

- Strategically plan maintenance schedules and track machine use
- Implement and improve methods of communication regarding machine availability and repair schedules
- Implement processes and procedures to improve shop repair scheduling and flexibility
- Utilize technology to relax the brain

### Turfgrass Defenses to Pathogen Challenge...Resistance Is Not Futile

**John Dempsey, Ph.D.**, *Golf Course Superintendent, Royal Curragh Golf Club, Kildare, Ireland*

(1195-01) The interactions between plants and their pathogens is complex, involving a wide array of defense strategies. It is important for superintendents to know how these turfgrass pathogens infect turfgrasses in order to potentially recognize first signs and take the necessary steps to respond with intervention or enhance turfgrass defenses to reduce disease infection spread and recovery. Attendees will learn:

- How turfgrass pathogens infect turfgrasses
- Identify first signs of infection and treatment resistance
- Short term rapid responses to infection in turfgrasses to lessen disease incidence

## WEDNESDAY JAN. 29<sup>th</sup> HALF DAY SEMINARS

### 8 AM-NOON

#### **Nutrición Mineral en Céspedes y Enfermedades de Céspedes (Positive or Negative? Find out how mineral nutrition affects Plant Health and Disease)**

**Alfredo Martinez, Ph.D., Professor and Extension Plant Pathologist, University of Georgia**

(1178-01) Join this seminar to discover the valuable tools necessary to prevent, avoid, and manage plant diseases. This presentation will cover in-depth detail of the chemistry and physiological roles of nutrients in soil and turfgrass plants. Come learn all there is to know about the relationships between nutrients, disease, plant health, disease avoidance, and toxicities. The ultimate goal of this seminar is for attendees to walk away with the knowledge needed to combat and understand plant health and disease prevention.

En este seminario describiremos los componentes y papel de los minerales esenciales, su química y el rol fisiológico en el suelo y la planta. Así mismo se enfatizará la relación entre nutrientes específicos, sanidad de las plantas, enfermedades, prevención y toxicidad. El objetivo primordial es el proveer a los profesionales del césped con herramientas valiosas que les ayuden a prevenir y controlar enfermedades.

### 1 PM-5 PM

#### **Alternativas Prácticas para la Reducción de Plaguicidas en los Campos de golf (Practical Alternatives for the Reduction Pesticides on Golf Courses)**

**Jose Angel Sanchez Alcala, Golf Course Superintendent, Rio Real Golf, Malaga, Spain**

(1245-01) El control de plagas es un campo muy establecido y ha desempeñado un papel fundamental en la industria del golf a lo largo del tiempo, sin embargo, ha cambiado completamente en los últimos años debido a las nuevas líneas de investigación y los resultados del estudio de impacto ambiental. Asista a este seminario para revisar estudios de caso y discutir las opciones para abordar las nuevas regulaciones de pesticidas y comprender nuevas soluciones destinadas a reducir el uso de pesticidas en su campo de golf.

Pest control is a very established arena and has played a critical role in the golf industry over the course of time, however that has completely changed in recent years given the new lines of research and environmental impact study outcomes. Attend this seminar to review case studies and discuss the options for addressing the new pesticide regulations and understand new solutions aimed at reducing the use of pesticides on your golf course.

## WEDNESDAY JAN. 29<sup>th</sup> 1 HOUR AND 30 MINUTE SEMINARS-Tradeshow Floor

### 10:30 AM-NOON

#### **How Much Shade is Too Much Shade?**

**Michael D. Richardson, Ph.D., Professor, Dept. of Horticulture, University of Arkansas**

(1134-01) It has been estimated that as much as 25% of all turfgrass sites are experiencing shade stress. This seminar will cover several methods that attendees can use to measure the amount of light received on various locations of your golf course. Participants will gain the foundation concepts of how to:

- Apply scientific measurement techniques to measure light at your course
- Understand how much light your turf requires to function and perform
- Provide data and solutions to memberships based on quantitative measures

### **Making a Financial Case for Golf Development**

**Moderator: Jeffrey D. Blume**, ASGCA, Managing Partner/Senior Architect, Jeffrey D. Blume Limited, Magnolia, Texas

**Presenters: Bill Bergin**, ASGCA, President, Bergin Golf Designs, Atlanta, Ga.

**Lester George**, ASGCA, President, George Golf Design, Midlothian, Va.

**Mark Hollinger**, ASGCA, Principal, JMP Golf Design Group, Belmont, Calif.

**Forrest Richardson**, ASGCA Vice President, Principal, Forrest Richardson & Associates, Phoenix, Ariz.

**Rick Robbins**, ASGCA, President, Robbins & Associates International, Leland, N.C.

**John Stanford**, ASGCA, President, Sanford Golf Design, Jupiter, Fla.

**Jason Straka**, ASGCA Treasurer, Principal, Fry/Straka Global Golf Course Design, Dublin, Ohio

(1238-01) Everyone in the golf industry has heard the tired story that golf is not a good financial risk. But many models exist where golf is a strong investment. Join members of the American Society of Golf Course Architects (ASGCA) and their clients to hear first-person accounts of golf developments that have delivered strong Return on Investment (ROI). Each attendee will receive a copy of ASGCA's new book, *Profitable Golf: Case Studies in Financial Success*.

**1 PM-2:30 PM**

### **Noteworthy Tips for Assistants to Win the Job Interview and Succeed as a New Superintendent**

**Chris Carson**, Golf Course Superintendent, Echo Lake Country Club, Westfield, N.J.

(1208-01) It is critical for the growth of the golf industry that Assistants have the knowledge and skills it takes to win job interviews and thrive in the role as a new head superintendent. This seminar will identify the steps of how to get there and succeed when you arrive! Attendees will learn how to:

- Adequately prepare for and communicate during a successful job interview
- Recognize and utilize your strengths to stand out during the candidate selection process
- Understand and identify business concerns of stakeholders and ways to address them among

selection committees, members, and owners in your role as a new superintendent

### **Topdressing 101: Organic Matter Management for Cool Season Putting Greens**

**Roch Gaussoin, Ph.D., Professor, Agronomy and Horticulture, University of Nebraska-Lincoln**

(1182-01) One of the more common practices used to provide optimal playing conditions on golf course putting greens is sand topdressing. Beyond playability, the agronomic benefits of topdressing are plentiful. The layer of organic debris, stems, crowns, and roots in the upper rootzone, (i.e. thatch/mat) is often problematic to plant health. Organic matter dilution is a targeted outcome of superintendents when applying sand to the putting surface. This seminar will focus on topdressing strategies proven effective in managing organic matter accumulation on cool season putting greens, attendees will:

- Develop a better understanding of topdressing advantages and pitfalls targeted to effective organic matter management in cool season putting greens
- Effectively use topdressing and associated cultivation to manage organic matter
- Understand how to minimize surface and play disruption
- Evaluate and apply research-based topdressing strategies for organic matter management at your facility

**3 PM-4:30 PM**

### **Managing Stress and Avoiding Burnout (Tradeshow Floor)**

**Lisa Goatley, Licensed Professional Counselor, The Cascade Group, Blacksburg, Va.**

(1149-01) You chose your career because you have a passion for the golf industry. The multitude of stressors in your professional life can rob you of this passion. It is difficult to meet the expectations of your greens committees, owners, customers, and even yourself; the uncertainties of Mother Nature create stress; budgetary and labor limitations are problematic; long and uncertain hours at work make balancing family demands nearly impossible at times. This seminar will address techniques to assist you in managing stress in order to avoid burnout. Don't let stress interfere with your ability to have a long and satisfying career. Attendees will learn, how to:

- Identify signs of stress and burnout in the beginning stages
- Develop tools and strategies to manage stress in order to avoid getting to the point of burnout
- Create an action plan to avoid burnout
- Apply skills to address stressors that negatively impact job performance and overall job satisfaction

**THURSDAY JAN. 30<sup>th</sup> 1 HOUR AND 30 MINUTE SEMINARS-Tradeshow Floor**

**9:15 AM-10:45 AM**

### **The Demons of Greenkeeping**

**Paul MacCormack**, *Golf Course Superintendent/General Manager, Fox Meadow Golf Course, Stratford, PEI*

(1236-01) You are not alone if you are a golf course superintendent who feels an increased pressure to perform and produce success in all aspects of your job. It is natural for us to feel as though the weight and success of the golf course facility is on our shoulders. Even though that's not the truth, just the idea of that weight can drag us down to where we don't know how to get back on top. This seminar can help ease the burden of the load you carry by focusing on correcting negative tendencies and habits that we fall into, leading us down the path of burnout and dissatisfaction in all areas of life. Attendees will:

- Recognize negative thought forming habits and methods to correct or prevent them developing in the future
- Identify solutions and management techniques to refresh and elevate unwanted negativity
- Refocus, reset and recharge personal well-being to become a more effective leader

### **Wetting Agents and Their Effects on Putting Green Surfaces**

**Douglas Karcher, Ph.D.**, *Professor, Dept. of Horticulture, University of Arkansas*

(1032-01) Localized dry spots on sand-based putting greens are common throughout the world. Wetting agents are an effective treatment for localized dry spots, but superintendents often question whether their use will result in greens that are either too wet or dry. Identify the cause of localized dry spots; learn how wetting agents work to overcome water repellent root zones, and how soil moisture content is affected following wetting agent application. Attendees will discuss recent research data outcomes and learn:

- How various wetting agent products suppress localized dry spot and affect rootzone moisture distribution
- How various wetting agent products affect putting green surface characteristics (i.e. firmness, ball roll, and ball mark characteristics)
- How wetting agents are classified and availability of research data to support wetting agent classes (i.e. "penetrant" and "retainer")
- How application timing, spray volume, and post-application irrigation affects wetting agent efficacy and putting green surfaces

**11 AM-12:30 PM**

### **Considerations for Facility Computerized Maintenance Management System (CMMS) Implementation**

**John Patterson**, *Equipment Director, Atlanta Athletic Club, John's Creek, Ga.*

(1206-01) Are you considering implementing a Computerized Maintenance Management System (CMMS) at your facility? Find out how to get started in the process and learn all there is to know about the benefits and challenges of CMMS implementations. Attendees will develop a better understanding of:

- Positive implementation results with using a CMMS to strengthen facility and shop operations
- How to select and utilize different types Computerized Maintenance Management System(s)
- Preparation steps before and after to ensure successful CMMS implementation

### Strategies for Taming Ultradwarf Putting Greens

**John Sorochan, Ph.D.**, Professor, Department of Plant Sciences, University of Tennessee

**Josh Cook**, Golf Course Superintendent, Pensacola Country Club, Pensacola, Fl.

(1215-01) Managing ultradwarf putting greens can be tricky! This seminar will take you through the in's and outs of implementing management practices to successfully manage grain, organic matter, accumulation, thatch, and putting quality. Attendees will have the opportunity to discuss and review research findings on topics of:

- Grooming brushes
- Covers for winter survival
- Mowing height, frequency of clipping, and rolling for putting green speed

**1:30 PM-3 PM**

### Flocking Wildlife Management

**Rebecca Gibson**, Owner, Flyaway Geese, Stanfield, N.C.

(1237-01) This seminar will help superintendents who work daily to clean up the mess and repair damage that geese do on their golf courses. The goal of this presentation is to give attendees the necessary information to make educated, legal, humane, and effective decisions in managing wildlife. Come explore solutions and discuss options for the problematic flocking wildlife on your golf course. Topics covered include:

- Tips for creating and writing a management plan for nuisance wildlife at your facility
- How to obtain egg addling and nest management permits
- Educational opportunities for golf course staff and members to understand legalities of managing geese and wildlife on the course

### The Putting Surface Doesn't Stop at the Collar!

**Charles B. White**, Golf Course Consultant, Conroe, Texas

(1202-01) According to GAME GOLF data, from 100 yards and in, the putting green complex is where 60 percent of the game is played. The 'green complex' is typically considered to be the area about 60 feet beyond the collar, depending on course design and terrain, and encompasses majority of the shots played by the average handicap golfer, thus maximum conditioning and maintenance efforts of this area is critical to the golfing experience. This seminar will walk superintendents through options and techniques to achieve best results all while reducing water use, labor, and overall environmental impacts. Participants will learn how to:

- Implement proper maintenance adjustments and solutions to enhance green complex condition and appearance as needed
- Maximize playability without necessarily increasing budget costs
- Prepare for future demands and establish a master plan for green complexes at a golf facility

**Room Numbers available via the GIS website**

**[seminar description pages and](#)**

**Coming Soon via the GIS App**