Sportsfedd Management

November 2024

Vol. 40 No. 11

The Official Publication of the Sports Field Management Association

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"Among Robotic Mower Owners," My Take, 2023.

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Editor's Note



John Kmitta Associate Publisher / Editorial Brand Director jkmitta@epgacceleration.com 763-383-4405

Nine years ago, my family and I adopted a puppy from a local shelter. She was only 13 weeks old, covered in black fur and was the runt of her litter. The shelter listed the puppies in her litter as "lab/terrier mix." As she grew, we assumed she had some pit bull in her (hence the "terrier" part), but the lab portion was questionable.

No matter what she's made of, she has been the best dog I've ever had and has been great with our kids – growing up right alongside them. But we were always curious about her breed, and finally decided to ask our vet about DNA testing. We decided to have her tested, and we recently received the results. It turns out that our beloved lab/terrier is nearly 50% American Pit Bull Terrier, 30% Doberman Pinscher and much smaller percentages of Chow Chow, German Shepherd, American Bulldog, Labrador Retriever and even some Chihuahua. We were surprised at the results, but excited to finally know more about our dog.

I share this story for a few reasons: 1) I love talking to others about my dog and asking them about theirs; 2) it is the big news in my household this month; and 3) because it serves as a handy analogy for the point I wanted to make this month about it never being too late to learn something new. This issue of *SportsField Management* is our annual SFMA Conference & Exhibition preview. The industry's premier event will be held January 13-16, 2025, in Palm Springs, California, and this year's theme is "Oasis of Knowledge."

As such, SFMA is inviting everyone in the industry to go west to the California desert to reconnect with industry friends and colleagues, make new connections, and, ultimately, to quench one's thirst for knowledge.

The SFMA Conference features multiple education tracks, as well as forums, a general session, keynote and even the Seminar On Wheels. Those who attend will no doubt learn something that can help with their day-to-day operations, personal and professional enrichment, and long-term growth.

As professionals, it might be easy to think that you are set in your knowledge base and you are already well equipped to do your job. After all, it's easy to stick with the status quo and be content with what you already know.

Instead, I invite you to look through the conference preview in the pages that follow, find an education track (or tracks) that interests you and register for the 2025 SFMA Conference (if you haven't done so already). It may be daunting, but you might be surprised at what you learn. **SFM**



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SFMA EDITORIAL COMMITTEE

Chair: Brad Thedens, CSFM Vice Chair: TJ Brewer, CSFM Board Liaison: Chase Straw, Ph.D. Members: Matthew Arms, CSFM; Joe Churchill; Cliff Driver, CSFM; Kate Garassino; Rebecca Knapp, CSFM; and Tony Koski. Hello SFMA, happy fall! I hope this edition finds you well, beginning to recover from your intense sports season and settling in for a time of recovery. I know we have a lot of colleagues who aren't quite at the end of their seasons yet, but there is light at the end of the tunnel.

The fall sports season is beginning to slow down here, the leaves have fallen, and most of our clocks have fallen back. As our coolseason grass settles into dormancy for the winter, there is some relief that there is recovery time in sight.

I've heard talk of burnout a lot this year, and experienced it as well. I think it's important to remember that without passion for what we do every day — and the drive to provide top-notch playing surfaces — we wouldn't care enough to get to the burnout stage. The saying, "you can't pour from an empty cup" is a reminder that there is great importance in filling your cup first, and only then will you have the ability to apply your passion to being a great sports field manager.

As our busiest season starts to slow down, I settle into the month of thanks and realize my term as president is also winding down.



Sun Roesslein, CSFM SFMA President Sun.Roesslein@jeffco.k12.co.us

There are many people that I need to express my appreciation for, who fill my cup. First, my wife Tracie for jumping in on this adventure. My parents, who are my rocks. My multi-talented coworker, Christi Clay, CSFM, for keeping the NAAC train on track at the #BestOffice. Paula Sliefert for being an incredible mentor and sounding board. Nina Oldenkamp - you're simply the best! Chris Ball, Evan Fowler, Nick McKenna, Josh DeJong, Matt Anderson, Adam Thoms, Drew Miller — thank you for being my turfgrass brothers. The Women In Turfgrass Team for constantly motivating me to keep growing. All the members of the board of directors whom I've had the honor to serve with over the years, I've learned so much from each of you. Finally, our truly incredible HQ staff — Leah, Nora, Whitney, Jennifer and Madison — your dedication and passion are inspiring!

Have an amazing November everyone! **SFM**

Sun Roesslein, CSFM

Invest in Your Future: Join SFMA Today



The Sports Field Management Association (SFMA) is the recognized leader in championing the sports field industry and its professionals.

MEMBERSHIP CATEGORIES

SFMA has specific membership categories for every professional in the sports field management industry.

Sports field manager: If you are primarily responsible for managing or maintaining sports fields.

Sports field manager associate: If you are primarily responsible for managing or maintaining a sports field(s) and your organization already has an SFMA sports field manager member employed.

■ Affiliate: If you are indirectly or on a part-time basis involved in the maintenance/management of sports fields (coaches, athletic directors, volunteers, etc.).

■ Academic: If you are in teaching, extension or research.

Student: If you are a full-time student.

■ Commercial: If you work for a company engaged in a commercial enterprise providing services and/or products to the sports field management profession (consultants, architects, designers, contractors, management companies, distributors and manufacturers, etc.).

Commercial associate: If you are the second person (or more) from a commercial company (must first have an SFMA commercial member at their company before this lower-dues category can be selected).

■ **Retired:** If you are retired and no longer seeking fulltime employment within the scope of activities of any SFMA membership category, and have been a member for a minimum of five years, you may become a non-voting member of SFMA and are not eligible to hold elective office.

THE THREE MOST IMPORTANT REASONS TO JOIN SFMA

 Job security: SFMA's programs and services proactively enhance your value to your employer.
 Career success: SFMA's education and information help prepare you to take that next step in your career.
 Recognition of your professionalism: In addition to the individual recognition you receive because of your good work, SFMA's advocacy with groups such as athletic directors, parks and recreation directors, coaches and parents enhances the image of the entire profession.



BENEFITS YOU RECEIVE AS AN SFMA MEMBER

- A network of peers who share their best practices.
- Opportunities for education.
- Quick access to information and resources.
- A monthly electronic newsletter that

communicates association and industry information. • Access to the Member's Only section of sportsfieldmanagement arg, which has a real time.

sportsfieldmanagment.org, which has a real-time membership directory and hundreds of technical educational resources.

■ Access to Michigan State's Turfgrass Information File, a resource for up-to-date technical information.

• Ability to enter your field in the nationally recognized Field of the Year awards program.

 Opportunity to become a Certified Sports Field Manager (CSFM) and to have your facility certified as environmentally responsible.

■ Significant savings on registration to SFMA's annual and regional conferences, and discounts to other organizations' education.

■ Opportunity to participate in volunteer leadership positions.

• Opportunity to join one of SFMA's affiliated chapters for a strong local network. (Each chapter sets its own local dues.)

- Purchase SFMA branded apparel.
- SportsField Management Magazine each month.
- The ability to apply for scholarships (students only).

Discounted exhibitor booth at the annual conference (commercial members only).

For more information, visit https://www. sportsfieldmanagement.org/why-join-stma/ SFM



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Available in 240Wh and 660Wh capacities, Kress' CyberPack batteries charge rapidly and on the go. Paired with the CyberTank, Kress' DC-DC charger that charges in only four hours overnight, your equipment can be powered for the entire day. The CyberTank alone can replace as much as two gallons of gas, providing a more economical solution for your power needs. Kress Commercial batteries also feature the following benefits:

• 8-minute charge time: Power up your CyberPack batteries with the industry's guickest recharge time of just eight minutes¹, empowering landscape crews to seamlessly move between jobsites with minimal downtime.

• Longer lifespan: With up to 3,000 life cycles, Kress

CyberPack batteries outlast conventional alternatives²,

CyberLite Charger

reducing the need for frequent replacements. For even more portability, Kress now offers a lighter, more portable charging option - the

CyberTank Lite DC-DC Charging System. Charging with the CyberTank Lite DC-DC Charging System is facilitated by the CyberLite Charger, which transfers power from the new 1.5kWh CyberCapsule battery to CyberPacks on-the-go. Learn more at kress.com.

Comprehensive warranty and financial advantages

Kress believes in the quality of their products, which is why they offer industry-leading warranties for all equipment, batteries and chargers. Kress Commercial CyberPack batteries guarantee extreme longevity and are backed by a six-year or 3,000 life cycle warranty³. The Kress CyberTank is covered for six years, or 2,000 life cycles and Kress Commercial equipment is covered for up to three years⁴.

Kress' battery technology not only offers top-of-the-line advancements and warranties but allows landscapers to start saving on day one with reduced fuel costs, minimal maintenance costs and flexible financing options. With reduced downtime due to faster charging, fewer battery replacements and enhanced tool function, crews are saving an average of \$2,000 per year⁵.

Push mowers are backed by a two-year warranty.



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Register with your local dealer for a no commitment. 10-day trial today.



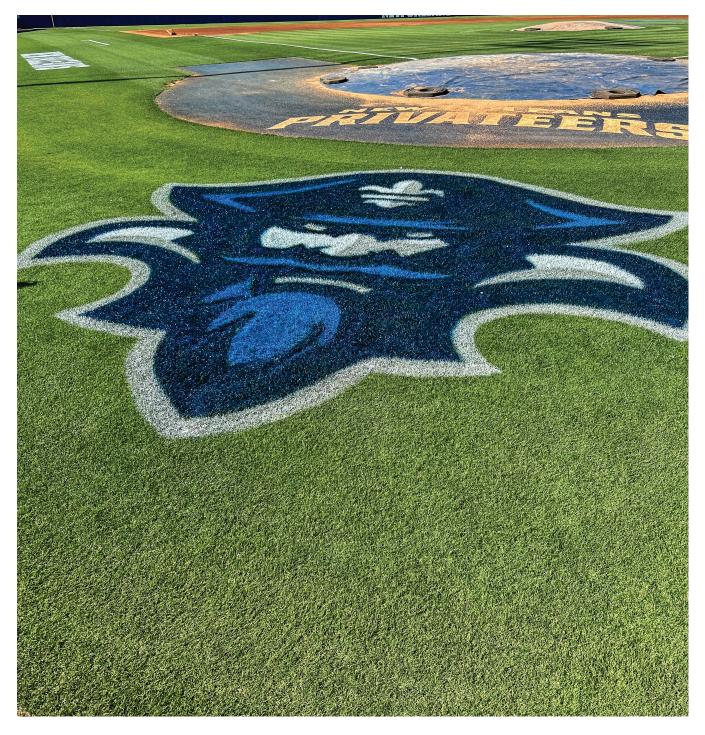
296 The only choice for commercial landscapers to replace gas

Charging time of the Kress Commercial 8-minute batteries when charged with the CyberTank charger on Flash Charge. Cooling just-discharged batteries before recharge is not required. Charging in Flash Charge is designed for one battery at a time to ensure maximum charging speed

³ The 3.000-cycle lifespan is based on tests conducted under high-capacity C discharge rates, indicative of very high output power that reflects real-world commercial landscaping applications.

³ The Kress 3,000-cycle warranty is applicable when the battery's residual capacity falls below 70% of its nominal capacity.

⁵ Typical savings for a full-time landscaping crew of 3 users operating handheld power tools for 180 days per year



MAESTRI FIELD

UNIVERSITY OF NEW ORLEANS

The Field of the Year Awards program is made possible by the support of sponsors Carolina Green Corp., Precision Laboratories, John Deere, and World Class Athletic Surfaces.

FIELD OF THE YEAR COLLEGE BASEBALL

When ABM Industries and I took over this field, it was not a safe surface — nor an acceptable surface for Division I baseball. When it came to dirt and grass transitions, the dirt was inches lower than the grass; the infield turf took bad hops; and the mound did not meet specifications (just to name a few issues). I knew I had my work cut out for me, and there was nobody else that could do it other than me. I took everything I learned up to that point in my career and turned it around to one of the best natural surfaces in the country. I embraced the challenge of doing it all myself. I wanted it to become one of the best fields in the state of Louisiana and in the south. I eliminated any grassto-dirt transition issues, continuously topdressed the infield to improve ball roll, and dialed in all mounds and plate areas to meet spec. I continuously worked warning track edges to make for smooth transitions, and found what worked for our fertilizer program. I improved how the infield skin played by great attention to maintenance of the skin. To add to the aesthetics

of the field, I added a logo behind home plate — the university's Privateer logo — and added the New Orleans lettering down left and right foul territory. This all took place with zero full-time staff and limited seasonal help. ABM Industries trusted in my work ethic and knowledge of how to maintain an exceptional surface, bought into my processes and supported me. Without their support, I could not have turned this into what it has become. We face some challenges that very few other colleges face, including hurricane season and very hot, humid and wet summers. These weather challenges require great communication among the athletic department and around-the-clock knowledge of what the weather is doing. We also put a lot of effort into growing sports field management knowledge in south Louisiana by hosting an annual field day event at Maestri Field. This is an award not for me. but for everyone associated with Maestri Field and the program, and to recognize their dedication.

— Scott Blanchette, sports turf manager





Level and category of submission: College Baseball

Field manager: Scott Blanchette

Title: Sports turf manager

Education: Masters of Business Administration

Experience: I did not go to school for sports field management. I started my career in low-A Quad Cities as an intern, and eventually as the head groundskeeper. As I wrapped up my master's degree, I knew to grow my career I needed to go somewhere else to learn different techniques, climates, bigger facilities, etc. I moved to Arizona and worked for the Dodgers at their spring training facility, while also working part time at Chase Field. I eventually moved to Triple-A New Orleans. The team left New Orleans, which led me to the University of New Orleans and Maestri Field.

Original construction: 1979

Turfgrass: 419 Bermudagrass

Rootzone: Sand

Drainage system: Pipe drainage

FIELD OF THE YEAR COLLEGE BASEBALL



SportsField Management (SFM): Congratulations on the Field of the Year win. What are you most proud of with this win, and/or what do you think stands out most about the winning field?

Scott Blanchette: What makes me most proud of this win is that I achieved it by myself. As the sports turf manager, I had zero full-time staff and two seasonal game day staff. My seasonal game day staff was awesome, and I appreciate the time they took to come help me, as they had other full-time jobs or school. It took tremendous time management and effort to turn Maestri Field around. I could not have done it without the support of my employer, ABM. One thing that stands out to me is the respect players, coaches and staff have for the surface. In a conference full of artificial turf, I am constantly receiving compliments and questions regarding the surface. An athlete from a visiting team once said to me, "I am going to miss playing here."

SFM: What attracted you to a career in sports field management, and what has been your career path through the industry?

Blanchette: I think what attracts me to being in sports turf is the well-rounded individual you need to be to be successful. You deal with a lot of different situations, people and workloads, and it forces me to be a good manager. Add baseball to the mix, and I feel it is a perfect fit for me.

My career path started in Minor League Baseball in the Midwest. Once I knew I wanted to keep working in the sports turf world and advance my career, I moved to Arizona and worked at spring training sites. As time went by, and I felt I was ready to continue to advance my career, I took a job as head groundskeeper for Triple-A New Orleans. They eventually moved the team out of New Orleans, but I elected to stay in Louisiana and eventually landed at the University of New Orleans.

SFM: Who were your mentors in the industry and/or what is the best piece of advice you have received? Blanchette: In my time working on baseball fields, there are some people who have really helped advance my career, and I wouldn't be where I am today without their support. Joey Fitzgerald and the staff I worked with at Camelback Ranch Spring Training – Los Angeles Dodgers are always at the top of my list. I learned a lot from them, and it really shaped me into the type of sports turf manager I am today. Glenn Lucas has also been great support and has a wealth of knowledge, being in the sports turf industry for 25 years. Some advice I received from Joey was to always keep getting better, and always be looking to find ways to get better. I have tried to apply that to every aspect of the playing surface, and I believe it has helped me tremendously.

SFM: What were the biggest challenges you have faced with the winning field, and how have you approached those challenges? Blanchette: Maestri Field's surface is an older surface — it was new after Hurricane Katrina in 2005. Therefore, over the years there have been some grade issues that have arisen with the



field. Due to tight budgets, I had to find ways to make the improvements. We did not have the means to just rip out the infield and start over. It takes being a great manager and finding ways to keep improving. **SFM**

CONFERENCE PREVIEW



2025 SFMA Conference and Exhibition, Palm Springs, California

The 36th SFMA Conference & Exhibition will be held at the Palm Springs Convention Center in Palm Springs, California, January 13-16, 2025. This year's theme is "Oasis of Knowledge," and the sports field management industry's premier event will feature seven education tracks, a full trade show with more than 160 exhibiting companies, networking opportunities, keynote address, SAFE fundraisers, the SFMA Student Challenge, Seminar on Wheels, and much more.

"We're thrilled to be back in California for the first time since 2016," said Whitney Webber, SFMA sales and marketing manager. "The return to the West Coast has brought a lot of excitement, but I'm especially looking forward to our newly rebranded FIELD Forum, previously known as the Women's Luncheon. Tara Furiani's session 'Game On: Leveling the Playing Field in Sports Field Management' promises to be a real highlight."

Webber added that the General Session — featuring John Sorochan, Ph.D., Trey Rogers, Ph.D. and Alan Ferguson — will offer exclusive insights into the preparations and field management strategies for World Cup 2026. In addition, SFMA has increased its focus on networking opportunities and diverse education sessions.

"Being in Palm Springs adds a unique flair to the event, especially for those attendees who haven't been to a West Coast conference before," said Webber, who added that Palm Springs should draw a more diverse crowd, which provides a great atmosphere for networking.

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"The networking opportunities are invaluable, and I always look forward to hearing about the latest developments and innovations in the industry through the educational sessions," said SFMA Academic Director, Chase Straw, Ph.D. "The conference is a great way to stay updated while building meaningful relationships."

Matthew Arms, CSFM, grounds superintendent at Spartanburg High School, enjoys that the SFMA Conference moves to different locations each year, and is excited to travel to Palm Springs for its scenic views and renowned golf courses.

Joe Churchill, fields and grounds specialist for Reinders, Inc., is interested in the education sessions presented by talented professionals. "They are the main reason I attend," he said. "It's also a great way to reconnect with industry friends."

The Palm Springs weather, the Seminar On Wheels, educational opportunities, new equipment, industry trends and the opportunity to connect with friends are all things Rebecca Knapp, CSFM – West Technical Manager, Arborjet, is looking forward to as well.

"It's a great way to immerse yourself into the industry and meet like-minded people who are passionate about professional playing surfaces," said Knapp.

According to Straw, one of the best aspects of attending SFMA Conference is the sense of rejuvenation he feels afterward.

"It's not just about catching up with everyone in the industry, but also about seeing how supportive and collaborative this community is," he said. "I always leave knowing I have a strong network of people I can reach out to whenever I need advice or help. "I encourage first-time attendees to try to participate in all the social events, as well as the educational sessions and trade show," Straw added. "Don't be afraid to start conversations; everyone is welcoming and eager to help."

Arms recommends that attendees plan out the education sessions they most want to attend.

"I have learned so much and broadened my view on many things at these conferences over the years," he said. "It is definitely a clear career builder. Take advantage of any and all events possible to network within the industry. Creating a portfolio of contacts in the industry is invaluable when it comes to your career success."

Said Webber, "There's so much to gain from networking, educational sessions, and exploring the trade show floor. It's incredibly rewarding to watch our members come together, share knowledge and collaborate. The energy is contagious!"

The following preview provides in-depth insight into the 2025 SFMA Conference & Exhibition, but for more information or to register, visit *www. sportsfieldmanagement.org/conference.*











SCHEDULE AT A GLANCE

(For tracks and detailed descriptions of each session, visit SportsFieldManagement.org/Conference.)

MONDAY, JANUARY 13

6:30-8 a.m.: Continental Breakfast

7 a.m.-3 p.m.: SAFE Golf Tournament — A fundraiser for the SAFE Foundation. (Transportation and lunch provided. Additional fee required.)

7 a.m.-12:30 p.m.: Half-Day Seminar on Wheels. Visit West Coast Turf Sod Farm and Empire Polo Club. (Transportation provided. Additional fee required.)
1-5 p.m.: Volunteer Field Rebuild — Demuth Park, Palm Springs, California. (Transportation provided.)
1:15-5 p.m.: Pre-Conference Education

6-9 p.m.: SAFE Bowling Tournament — A fundraiser for the SAFE Foundation. (Transportation and dinner provided. Additional fee required.)

TUESDAY, JANUARY 14

6:30-8 a.m.: Continental Breakfast

8-9:30 a.m.: General Session — FIFA. John Sorochan, Ph.D., Trey Rogers, Ph.D., and Alan Ferguson (see page 20 for more details).

9:45-10:45 a.m.: Conference Education

■ The Hole Truth: Aerification Myths and Methodology — Gerald Henry, Ph.D.

■ Data-Driven Sports Field Management — Dan Sandor, Ph.D., and Tyler Carr, Ph.D.

■ Irrigation Scheduling: Dialing It In, Getting it Right — Brad Jakubowski

■ Optimizing Turfgrass Growth for Reduced Light Stadia — John Sorochan, Ph.D., and Conlan Burbrink

■ Your Next Career Move: Presented by Dream Job Ouitters — Ryan DeMay, CSFM, and Stephen Lord, CSFM

■ Providing Opportunity for the Future - Drew Miller, Ed.D., and Danny Losito, CSFM

11 a.m.-Noon: Conference Education

■ Nitrogen Fertilizers — Old to New - How to Use - Beth Guertal, Ph.D.

■ The Importance of Being Sharp — Danny McConnell and Trent Manning, CTEM

 Autonomous Mowing Strategies Impact on Turfgrass Quality and Disease — Jason Henderson, Ph.D., and Vickie Wallace

■ Sustainable Turfgrass: Can Sports Fields Be

Maintained with Fewer Inputs? — Gregg Munshaw, Ph.D. Soft Skills: Essential Skills for Interpersonal Success

– Mike Goatley, Ph.D., and Lisa Goatley

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JOHN MASCARO'S PHOTO QUIZ





CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:

Large brown areas occurring overnight with rectangular areas with no damage

TURFGRASS AREA: Library lawn

LOCATION: Mountain Top, Pennsylvania

TURFGRASS VARIETY: 80% Perennial ryegrass and 20% Kentucky bluegrass

Answer on page 33

John Mascaro is president of Turf-Tec International

Slay Leaf Cleanups with Billy Goat's High Productivity Duo

Special Goatoberfest Financing to build your Goat Herd

Leaf Dragon Leaf Loader True curbside set up offers 45 sq. ft. of clean-up coverage, 2x that of other units on the market No-tool 2-pin door closure accesses impeller and liner for quick inspection 12" wide, 10-gauge soft angle steel discharge chute better spreads the load and offers reduced wear 37 gross HP* Vanguard® EFI for easy automotive-type cold weather starting and **fuel savings** up to 25%** 6900 CFM and 16" diameter intake for high productivity Belt driven with longer belt for increased life Road-ready DOT trailer is integral Add a Hurricane to double down on nroductivity HURRICANE +Financing subject to credit approval *All power levels are stated gross horsepower at 3600 RPM per SAE J1940 as rated by Briggs & Stratton **Closed-loop EFI system fuel savings may vary based on debris loading conditions and other factors. Waladiaka Call 800-776-7690 or visit billygoat.com

CONFERENCE PREVIEW

CONTINUED FROM PAGE 16



 Managing Common Disease and Insect Pests in Cool-Season Sports Fields — Geoffrey Rinehart

12:15-1:45 p.m.: Chapter Leadership Training

12:45-1:45 p.m.: ICEV Workshop — Dave Grossman and Marc Moran, CSFM

2-3:15 p.m.: Conference Education

■ Predict & Diagnose Field Problems, Followed by the Ultimate Quiz — Pamela Sherratt

■ Leveling the Playing Field: Building an Inclusive Culture for Your Sports Field Management Team — Alpha Jones, CSFM

■ Maximize Your Resources to Improve Field Quality and Playability — Brian Holtzapfel and Joe Breiding

■ Pull Up a Chair: Securing a Seat at the Table — Meg Kruger

■ Trends in Athletic Field Rootzone Cultivation: WTF!!! What's the Focus? — Cale Bigelow, Ph.D., and Barry Stewart, Ph.D.

Benefits of GPS Sprayers and Spreaders on Sports
 Fields — Weston Floyd, CSFM, and Mark Kruse, CSFM
 3:30-5 p.m.: Conference Education

■ The Future is in Secondary Education — Drew Miller, Ed.D., and Seth Cameron

Bermudagrass Evaluation — More than Just Traffic and Cold Tolerance — Barry Stewart, Ph.D., and Marta Pudzianowska, Ph.D.

■ Does Hybrid Stitching Work: What the Research Shows — Kyley Dickson, Ph.D.

Knowledge Gained from 23 Years of Q&A

- Grady Miller, Ph.D.

■ The Road to Recovery: Win the Turfgrass Battle vs. Wear — Keith Winter

■ Fostering Gender Diversity: Empowering Women in Sports Turf Leadership -— Maritza Martinez

5:30-6:30 p.m.: First Timers/International/CSFM Reception 6:45-7:15 p.m.: Live Auction benefitting the SAFE Foundation

7:30-10 p.m.: Welcome Reception

WEDNESDAY, JANUARY 15

6:30-8 a.m.: Continental Breakfast

8-9 a.m.: Conference Education

■ Native vs. Sand Root Zones: Compaction, Aeration, & Infiltration — Bryan Hopkins, Ph.D.

■ Solving Drainage Problems with Certainty: Both Surface and Subsurface — James Puhalla

CONFERENCE PREVIEW





■ Various PGR Scheduling Strategies for Sports Fields — Bill Krueser, Ph.D.

■ The Art of the Game: Best Practices in Field Painting — Nick McKenna, CSFM, and Brad Finn, CSFM

Panel Discussion: Strategies for Poa annua Management in Sports Fields — Gerald Henry, Ph.D., Pam Sherratt, Scott McElroy, Ph.D., and Chrissie Segars, Ph.D.

■ The Little League World Series — Best 2 Weeks in Baseball — Matthew Duncan, CSFM, and Jeffrey Fowler **9:15-10:45 a.m.:** Conference Education

■ Managing Infield Ball Speed: An Update for Professional Baseball — Larry DiVito, CSFM

■ A New Field in Under a Week: No Problem?! — Rob Sikma, and Scott Lupold

Understanding and Working with the Soil
 Microbiome — Jason Eberhard, John Brooks, Ph.D., Cale
 Bigelow, Ph.D., and Barry Stewart, Ph.D.

■ Where's My Water? Understanding Distribution Uniformity and Improving Irrigation Efficiency — Dan Sandor, Ph.D., and Jada Powlen, Ph.D.

■ Hybrid Field Maintenance — Robert Heggie



■ Going Organic: Alternative Pest Management and Impacts on Playability — Joseph Roberts, Ph.D. **10:45-noon:** Conference Education

 Diving Into the Sales Representative-Turf Manager Relationship — Michael Kerns, Josh Koss, CSFM, Stephen Lord, CSFM, Mitch Hooten, and Matt Webber

■ The Science Behind Successful Turfgrass Establishment by Seed — Pam Sherratt, Leah Brilman, Ph.D., and Brad Park

■ Strategies for Controlling Problematic Perennial Weeds — Gerald Henry, Ph.D.

■ Better Mental Health: What Works; What Doesn't — Lisa Goatley

■ The Connection Between User Health, Environmental Impact and Economic Investment — Vickie Wallace, and Tyler Carr, Ph.D.

 Severe Weather and Lightning Safety: Some Things May Shock You! — Brad Jakubowski
 12:15-1:15 p.m.: SFMA Annual Meeting and Lunch
 1:30-4:30 p.m.: Baseball Symposium
 1:30-6:30 p.m.: Trade Show
 2-4:30 p.m.: Student Challenge

THURSDAY, JANUARY 16

6:30-8 a.m.: Continental Breakfast

7:30-8:30 a.m.: FIELD Forum Breakfast Session: Game On: Leveling the Playing Field in Sports Management — Tara Furiani (see page 20 for more details)

8:45-10 a.m.: Conference Education

 Mentorships: Helping the Next Generation Grow in the Turf Industry — Jason DeMink, CSFM, Daniel Kiermaier, Brad Finn, CSFM, Mira Emma, and Carson Cornelius

■ What's New? Sports Field Management in the Transition Zone — Gregg Munshaw, Ph.D., Cale Bigelow, Ph.D., and Mike Goatley, Ph.D.

■ Fighting the Freeze: Winterkill and Spring Dead Spot Management Strategies — Tyler Carr, Ph.D., Mingying Xiang, Ph.D., Wendell Hutchens, Ph.D., and Ryan DeMay, CSFM



 Toolkit for Increasing Diversity in Green Industries — Meg Smolinski, Paula Sliefert, Sun Roesslein, CSFM, and Warren Gorowitz

 Designing/Building a Sports Field with the Grounds Manager in Mind — Nick McKenna, CSFM, Mark Baginski, Sam Titchener, and Casey Scheidel, CSFM

10 a.m.-1 p.m.: Trade Show & Lunch

12-1 p.m.: Student Luncheon

1:30-3 p.m.: Conference Education (Repeat Sessions)

■ The Hole Truth: Aerification Myths and Methodology — Gerald Henry, Ph.D.

Sustainable Turfgrass: Can Sports Fields Be
 Maintained with Fewer Inputs? — Gregg Munshaw, PhD.

Data-Driven Sports Field Management — Dan Sandor, Ph.D., and Tyler Carr, Ph.D.

 Mentorship as a Lever for Equity: A Deep Dive from 'Leveling the Playing Field — Tara Furiani
 1:30-4:30 p.m.: Baseball Symposium
 6:30-7:30 p.m.: Pre-Banquet Reception
 7:30-10 p.m.: Awards Banquet

GENERAL SESSION

COUNTDOWN TO THE WORLD CUP 2026 – BEHIND-THE-SCENES LOOK AT RESEARCH AND PREPARATION TO PULL OFF THE WORLD'S LARGEST TOURNAMENT

Presented by John Sorochan, Ph.D., Trey Rogers, Ph.D. and Alan Ferguson

To successfully stage the world's biggest sporting event, FIFA funded a collaborative research and development effort between Michigan State University and the University of Tennessee to prepare pitches for the 2026 FIFA World Cup. This presentation offers an in-depth overview of the research, which began in 2021, with a focus on the challenges and progress in developing temporary playing surfaces for eight of the 16 stadiums. It will also highlight results from indoor testing conducted for the five domed venues and explore how the research has been applied to real-world scenarios.

FIELD FORUM

GAME ON: LEVELING THE PLAYING FIELD IN SPORTS FIELD MANAGEMENT

Presented by Tara Furiani

"Game On: Leveling the Playing Field in Sports Field Management" is a dynamic keynote designed to inspire and motivate industry professionals to champion equity and inclusion. Through a mix of pop culture references, storytelling, and actionable strategies, participants will discover how subtle shifts in behavior and mindset can create a more diverse, innovative, and successful workplace. This high-energy session empowers attendees to take immediate steps toward building inclusive teams and fostering a more equitable sports field management industry, while having fun along the way. Participants will gain insight into the present state of diversity in the sports field management industry, focusing on the underrepresentation of women and marginalized groups, and how this impacts team dynamics, innovation, and industry growth. Learn practical strategies for promoting equity through subtle yet impactful shifts in language, team roles, and behavior. Attendees will leave with actionable steps they can apply immediately to create more inclusive teams. Discover effective ways to attract diverse talent from high schools and colleges, fostering early inclusion through mentorship programs, internships, and partnerships with educational institutions.

STUDENT CHALLENGE

The SFMA Student Challenge is presented in partnership with the SAFE Foundation, founding partner Hunter Industries, and supporting sponsor Ewing. Each year, students from 2-year and 4-year colleges and universities throughout the country compete in an exam that challenges knowledge in the sports field management industry. The winning teams receive a cash award, a plaque, and medallions for each team member. The prize money benefits the institution's turfgrass program and creates opportunities for students pursuing a career in sports field management. The Study Guide for the 2025 SFMA Student Collegiate Challenge is available online. Be sure to thoroughly review the Study Guide in preparation for the exam. The 2025 contest will take place Wednesday, January 15, from 2-4:30 p.m. at the SFMA Conference and Exhibition in Palm Springs, California. A maximum of four undergraduates can compete on a team and must declare if they are rep-

CONFERENCE PREVIEW

resenting a two-year or four-year institution. Competitors receive complimentary conference registration. You must be an SFMA member to participate. All Student Challenge competitors are REQUIRED to register online before December 15. No paper registration forms will be accepted.

EARN CEUS AT SFMA 2025

Increase your professionalism by taking advantage of the continuing education units (CEUs) offered at the SFMA Conference. Earn up to 1.5 CEUs through SFMA. In addition to SFMA, the following professional organizations may be providing CEUs for attending education sessions at the conference:

- American Sports Builders Association (ASBA)
- National Recreation and Park Association (NRPA)
- Golf Course Superintendents Association of America (GCSAA)
- Irrigation Association (IA)
- Professional Grounds Management Society (PGMS)
- National Association of Landscape Professionals (NALP)

■ Pesticide Recertification Credits: California, Nevada and Arizona (Pending Approval)

Note: Pesticide Recertification credits are only available for the states listed above. If you are attending from another state and need pesticide recertification credits, you are responsible for contacting your state's Department of Agriculture for approval.

EXHIBITION HOURS

Wednesday, January 15: 1:30-6:30 p.m. Thursday, January 16: 10 a.m.-1 p.m.

Note: Conference Education will continue for four weeks postconference via webinar: January 21 - February. 18 (every Tuesday, 2-3 p.m. ET and 3:15-4:15 p.m. ET). These will consist of eight virtual sessions included with a full conference registration! Visit SportsFieldManagement.org/Conference for more information.

Visit SportsFieldManagement.org/Conference to register. See student rates, one-day packages, trade show-only, and optional activities. **SFM**





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An inside look at the SFMA Conference host city

Palm Springs, host city for the 2025 SFMA Conference and Exhibition, is world renowned for stylish hotels, midcentury-modern architecture, great weather and stunning views. The core shopping district is on Palm Canyon Drive, which features vintage boutiques, interior design shops and unique apparel. It also has locally owned restaurants — many with beautiful outdoor dining patios.

Palm Springs offers a wide range of outdoor activities, including hiking, biking and horseback riding trails. For those reasons, Palm Springs has long been the preferred desert retreat of Hollywood royalty, presidents, wellness seekers and sunworshippers. The permanent year-round population is about 45,000; however, it doubles during the winter season.

Palm Springs enjoys more than 350 days of sunshine a year. You are at low risk of rain ruining your Palm Springs trip. That is because the beautiful San Jacinto mountain range, visible from anywhere in the Coachella Valley, protects Palm Springs from the coastal weather. The desert easily lends itself to a wide range of itineraries. Some folks turn up solely to tune out, spending hours at the pool, spa or on a porch with a cocktail, mesmerized by the purple glow of dusk. Others book their days end to end with activities that start with early morning hikes and finish at a nightclub.

UNA.

Below you will find a detailed list of things to see and do while in Palm Springs for the 2025 SFMA Conference. For a list of many more activities in the Palm Springs area, visit https://visitpalmsprings.com/

CULTURAL ATTRACTIONS AGUA CALIENTE CULTURAL PLAZA

The newly unveiled Agua Caliente Cultural Plaza is a vibrant cultural hub featuring the Agua Caliente Cultural Museum and The Spa at Séc-he. This state-of-the-art plaza celebrates the sacred Agua Caliente Hot Mineral Spring. It includes a Gathering Plaza, lush gardens, and the scenic Oasis Trail. The Cultural Plaza's design reflects Agua Caliente traditions, with influences from basket weaving, pottery and desert landscapes. Highlights include Andreas Canyon rock formations, a serene stream, and *Washingtonia filifera* palm trees. The Oasis Trail is an interpretive green belt offering a cultural learning experience. The new Agua Caliente Cultural Museum is approximately 48,000 square feet and features a main gallery, a changing gallery and an art gallery. The Spa at Séc-he utilizes Agua Caliente Hot Mineral Spring water, estimated to be more than 12,000 years old.



ARCHITECTURE AND DESIGN CENTER

Located in downtown Palm Springs, the Architecture and Design Center, Edwards Harris Pavilion stands as the first historic building in the U.S. to be repurposed into a dedicated architecture and design museum. This modern structure, part of the Palm Springs Art Museum, highlights the region's unique architectural heritage. E. Stewart Williams, a key figure in the modernist movement, designed this architectural marvel. The building's exterior boasts a sleek, clean design with a



white façade that contrasts beautifully with the desert landscape. Inside, the center offers an open, airy environment filled with natural light. The Architecture and Design Center features a range of exhibitions showcasing various architectural and design aspects. Visitors can explore the work of renowned architects and the evolution of design styles, gaining a deeper appreciation for the creative processes behind these impressive structures.

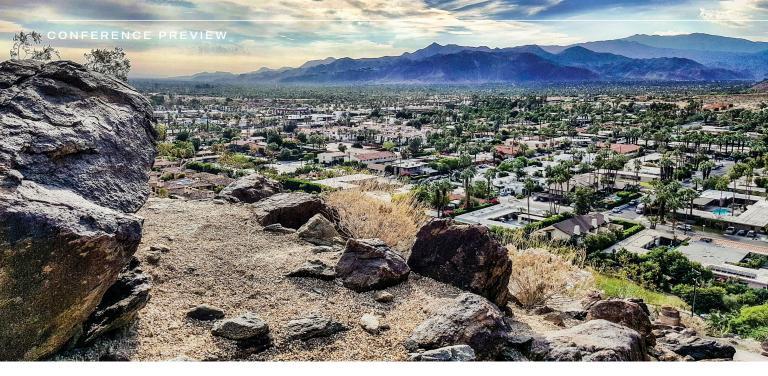
PALM SPRINGS AIR MUSEUM

The Palm Springs Air Museum is home to one of the world's largest collections of static and flyable aircraft from WWII through the war on terror. Unlike many other museums, the air-conditioned hangars have no ropes to keep you from interacting with the exhibits. In addition to the aircraft, exhibits and activities allow visitors of all ages to gain a fresh perspective of the history of U.S. military operations from the last 100 years. The Palm Springs Air Museum also has a 12,700-volume research library located upstairs above the main lobby. In the outer room of the library are computer flight simulators to entertain and teach the principles of flight to people of all ages. (Will require transportation from PSCC.)



PALM SPRINGS ART MUSEUM

Founded in 1938, the Palm Springs Art Museum serves many communities in the Coachella Valley through its compelling art exhibitions and wide range of community programming. Located in downtown Palm Springs, the museum's extensive permanent collection



includes significant works by western, contemporary and glass artists, and features temporary exhibitions from internationally acclaimed artists. One of the most surprising aspects of this museum is its stunning diversity of art, sculpture and objects from a vast variety of genres. Everything from drawings to paintings, each with a fascinating backstory and history laid out.





SHOPPING

PALM CANYON

Palm Canyon is the main street through Palm Springs and is packed with shopping, boutiques, restaurants, and more. It is about a 10-minute walk from the PSCC.

VILLAGEFEST

Join thousands of visitors and locals in beautiful downtown Palm Springs for VillageFest on Thursdays for the valley's finest event. As you step into VillageFest, prepare to be greeted by a sensory overload. The air is laced with tantalizing aromas from





the diverse food vendors lining the streets. From gourmet food trucks to international delicacies, there is something to tempt every palate. Savor mouthwatering BBQ, indulge in tasty desserts, or sample exotic cuisines from around the world. One of the highlights of VillageFest Palm Springs is the opportunity to support local artisans and shop for unique creations. Stroll through the rows of artist booths that showcase an impressive array of handcrafted jewelry, paintings, ceramics, clothing and more. From talented musicians to mesmerizing street performers, VillageFest offers a delightful lineup of live entertainment.

NATURE AND SITESEEING PALM SPRINGS AERIAL TRAMWAY

The Palm Springs Aerial Tramway — the world's largest rotating tram car — travels over two-and-a-half miles along the cliffs of Chino Canyon, transporting visitors to the pristine wilderness of the Mt. San Jacinto State Park and Wilderness Area. During this 10-minute journey, tram cars rotate slowly, offering spectacular vistas of the valley below. (Transportation required to get to the Valley Station.)



INDIAN CANYONS

Visit Indian Canyons, home to the Agua Caliente Tribe. Undisturbed natural beauty is combined with remarkably easy access — the canyons are located just minutes from downtown Palm Springs. Admission gives access to Palm Canyon, Andreas Canyon and Murray Canyon for hiking and sightseeing. (Note: This requires transportation, but is only about a 10-minute drive from the PSCC. Uber or a taxi will not work because of the long walk from the entry to the canyons.)

THE FOREVER MARILYN STATUE

The Forever Marilyn statue in Palm Springs is an iconic landmark that captures the essence of old Hollywood glamour. This 26-foot-tall sculpture, created by artist Seward Johnson, depicts Marilyn Monroe in her famous pose from the 1955 film The Seven Year Itch. The statue is a must-see visitor attraction in the heart of downtown Palm Springs and a popular spot for photos.

PALM SPRINGS DOWNTOWN PARK

The brand new Palm Springs Downtown Park, nestled in front of the Palm Springs Art Museum, is a beautifully designed public space that promises a refreshing



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experience for both locals and visitors alike. As you step foot into Palm Springs Downtown Park, you're greeted by an oasis of greenery and pristine desert beauty. Native palm trees provide shade and a sense of tranquility throughout the park. The manicured landscape invites visitors to relax, soak up the sun, or enjoy a leisurely picnic with friends and family.

FOOD AND DRINK

Within a 15-minute walk of the Palm Springs Convention Center you will find a variety of dining options that cater to different tastes and budgets. Whether you're in the mood for a quick bite, a leisurely meal or a stylish cocktail, these nearby restaurants offer everything from classic American dishes to vibrant international flavors, all set against the backdrop of Palm Springs' unique desert charm. (Walking distance from convention center in parentheses with each listing).

KOFFI - CENTRAL

650 E Tahquitz Canyon Way (7 min.)

Closest independently owned java option with a large hot coffee menu, plus cold brew fusion, iced cappuccino, coffee freeze and iced mocha, all made with beans roasted down valley at their Rancho Mirage kitchen. Also on offer are hot and cold teas, Koffi-made baked goods, breakfast sammies and salads.

THE STEAKHOUSE AT AGUA CALIENTE CASINO PALM SPRINGS

401 E Amado Road (7 min)

Award-winning al la carte steakhouse offering prime cuts, seafood, grill chicken, roasted duck. veal chop, and rack of lamb.



V WINE LOUNGE & MARTINI BAR

600 E Tahquitz Canyon Way (7 min.)

V Wine has a cool midcentury modern design and offers a large selection of wines, as well as beer, and fun specialty cocktails. Next to Koffi, the menu is very casual and sharable with selections like flatbreads, wraps, meatballs, salads, and cheese boards. Live music or karaoke during most weekday evenings.

THE TROPICALE

330 Amado Road (8 min.)

Tropicale in Palm Springs is a vibrant, tropical-themed restaurant known for its lively atmosphere, eclectic menu and retro-chic décor. The restaurant offers a mix of American and international cuisine. Lunch includes salads, sandwiches, pizza, and specialty entrees like salmon and flat iron steak. Dinner entrees change, but you can expect selections like brisket burger, skirt steak, fried chicken, salmon and pasta.

ALICE B.

1122 E Tahquitz Canyon Way (10 min.)

The menu evolves frequently with the seasons. You will discover an incredible bounty of vibrant Mediterranean influences. Bar menu is available at 4 p.m. and dinner reservations begin at 5 p.m. There is live entertainment on select nights.

EL PATIO

139 E Andreas (10 min.)

With authentic Mexican flavors from Guadalajara, El Patio is locally owned and family run. Enjoy classics like burritos, fajitas and tacos. Has indoor and outdoor seating.



SHERMAN'S DELI

401 E Tahquitz Canyon Way (10 min.)

Sherman's Deli in Palm Springs is a classic New Yorkstyle deli that has been a local favorite since 1963. Known for its generous portions and authentic flavors, Sherman's offers a wide range of traditional deli fare, including towering sandwiches, hearty breakfasts and homemade pastries. The menu highlights include a wide range of breakfast selections, their famous Reuben sandwich, matzo ball soup, and a variety of freshly baked cakes and pies.

RUBEN & OZZY'S OYSTER BAR

241 E Tahquitz Way (11 min.)

This lively and casual dining restaurant celebrates fresh seafood and classic American favorites. The lunch menu is served from noon to 4 p.m. and features soups, seafood tacos, sandwiches, oysters and a variety of other fresh seafood entrees. Dinner is elevated with menu selection like the Surf N' Lobster, Cajun lamb chop, grills swordfish and seafood kabob.

CLANDESTINO

175 N Palm Canuyon Drive (12 min.)

Modern Mexican menu including street tacos, empanadas, tamales, burritos, salmon and ceviche. There are a number of vegan menu options. Enjoy a large outdoor patio with views of the San Jacinto mountains and downtown park.

BONGO JOHNY'S BAR & GRILL

301 N Palm Canyon Drive. Second floor. (12 min.)

American classic menu including gourmet burgers, salads, wraps, sandwiches, mac & cheese, fish tacos and fish & chips.

TONGA HUT RESTAURANT & TIKI BAR

245 N Palm Canyon Drive (second floor) (12 min.)

Tonga Hut in L.A. is the oldest Tiki Bar, since 1958, and Palm Springs has its sister. This retro oasis offers an immersive experience with thatched roofs, bamboo accents and tiki torches. The menu features a range of expertly crafted tropical cocktails, including classics like the Mai Tai and the Zombie, served in vibrant tiki mugs.

For more nearby restaurants, visit https:// visitpalmsprings.com/restaurants-by-the-palmsprings-convention-center/ SFM

Inspecting for Decay



A grandstand is an important target when trees are nearby. Photos provided by John C. Fech.

By John C. Fech

Big trees can be a great asset to campus grounds or a sports field facility. Their provision of shade and stateliness is hard to beat. However, big trees with extensive decay are not an asset; they contain a defect that could be a ticking time bomb. Decay threatens the structural stability of a shade tree like termites jeopardize a house. So, how do you estimate how much decay is there and what can you do about it?

WHAT IS DECAY?

Decay is the result of pathogenic fungi activity, working to soften tree tissues — causing loss in structural capacity of tree trunks and limbs. Decay fungi reduce wood strength

and may kill storage and conductive tissues in the sapwood. As they infect a tree, these fungi degrade the cell wall components — most notably the lignin, cellulose and hemicellulose. While almost all species of woody plants can be affected by decay, older, weaker or stressed trees are most susceptible.

There are many specific pathogens — such as white rot and brown rot — but all produce the same results. Some decay species affect mostly sapwood and conductive vessels, while others are active in the heartwood.

CONSEQUENCES OF DECAY

Decay is not only a biological phenomenon. It also has potential ramifications for a sports field or campus landscape. The most common consequence is when a tree branch or whole tree falls onto a target — a person or valuable piece of property (truck, grandstand, building, fence or bench) — causing injury or damage that needs to be repaired or replaced. At first glance, decay can be a bit of a puzzle, but after further investigation, it becomes obvious that trunks and limbs become unable to support their own weight and fall down — especially in wind and rainstorms.

HOW TO SPOT DECAY

Noticing decay symptoms is the first step in addressing the defect and determining if the tree in which it is found is hazardous or relatively sound in the short term. Fruiting structures that form on trunks, root plates, roots and branches are the most obvious indicator that decay is present in a tree. Called mushrooms, brackets or conks, outgrowths of decay tissue that break through the bark are readily visible to the naked eye. They take on various shapes, sizes and colors and are often considered to be quite decorative. However, like the tip of an iceberg, they are a sign that there is a much larger concern inside the tree and/or tree part. Some structures are produced annually, while others grow for two or more years, adding additional tissue as time goes on.

Conks, mushrooms and brackets are not always present when decay organisms infect a tree. If they are not visible, it's wise to look for other signs and symptoms such as surface sponginess in locations such as where limbs were previously removed, frost cracks, lightning injury spots and damaged areas from mowers or string trimmers at the base/root plate of the tree.

Decay is often hidden by intact bark, sometimes necessitating inspection by an experienced arborist to spot it. Sounding, drilling and probing are techniques that can be helpful in this regard. In addition to the loss of integrity in the short term, the seriousness of the malady is that there is no way to lessen the effects in the long term — other than to notify stakeholders of the seriousness of the defect.

INSPECTIONS AND MONITORING

The solution to preventing damage to targets and, perhaps more importantly, lawsuits is regular inspection. The first step is training all staff members on how to spot it in the landscape. The second is to investigate any suspicious wounds or trunk/branch areas that don't look normal.

Inspection can be performed as a part of a regular scouting program by all staff or by dedicating a few people to regularly looking closely at signs and symptoms



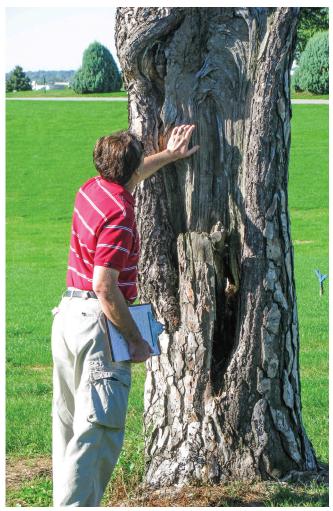
Many conks are quite colorful, almost like a piece of artwork.



Surface sponginess is also an indicator of tree decay.



Decay hidden by intact bark.



Regular inspection and constant monitoring is an essential step in preventing damage from tree decay.

as part of their weekly routine. Whichever approach works best at your facility, keeping simple notes on the status of each tree helps greatly with investigating possible decay.

HOW TO DETERMINE HOW EXTENSIVE IT IS

Once an inspection and monitoring routine is set up, it's important to implement some key techniques for decay detection. The most basic and often most helpful technique is simply probing with a screwdriver. As simple as it sounds, pushing a standard or Phillips screwdriver against any area that looks soft or punky and seeing how far it can be pushed into the bark or sapwood is very telling in terms of whether decay is present.

How much is too much? It depends. If it's a big tree and a screwdriver can be pushed in an inch or two, it's probably not a significant amount of decay. However, if it can be pushed in 6 inches or more, then it should be







The seriousness of tree decay is greatly increased if a tree has other defects such as severe leaning.



Use of a resistograph tool for advanced decay detection.

evaluated with the overall diameter of the branch or trunk in mind. Some arborists are comfortable with the probe extending halfway into the tree's heartwood, while others get alarmed if it goes in 1/5 or 1/4 of the way. Many arborists use 1/3 as a standard; however, all — especially those with Tree Risk Assessment Oualification (TRAQ) credentials — take many other factors into consideration. Such factors include proximity to targets, the presence of other pests, the age of the tree, the softness of the wood related to species, and any abiotic factors involved (cracks, leaning and co-dominant leaders).

In addition to testing with a screwdriver, probing with a small-diameter drill can also be insightful. Of course, a drill bit can create or enlarge a wound on its own, but investigation of this type is usually worthwhile in terms of the information learned. If the tree is especially important because of historical significance, testing can be done by a Certified Arborist using a resistograph tool, ground detecting radar or sonic tomography. The technique of "sounding" can be utilized, but it's generally considered tricky to use. It involves using a rubber mallet being struck against the suspected area of decay and listening to the sound that occurs after striking. In many cases, the sound is described as a "thud' or a "hollow echo." At best, sounding is a subjective determination and never used alone when attempting to determine if decay is present.

NEGLIGENCE

You might be wondering whether regular inspection is really necessary. After all, if a branch falls off or a tree falls over, we'll probably just clean it up and go about our routine with a half-day delay. Unfortunately, that would be the best-case scenario. What happens if a heavy tree part falls on the maintenance shed or pump house — or worse, on a spectator, student or athlete? When a tree fails with the result of striking a target, the word "negligence" enters the picture.



The most common consequence of decay is when a tree branch or whole tree falls and causes injury or damage.

As a sports field or campus landscape manager, you have a responsibility to care for the facility in a responsible manner. Doing so involves preventing injuries due to influences such as trip hazards, excessive turf slippage and, yes, trees falling onto targets. If something bad happens and you didn't take reasonable steps to prevent it, you're negligent.

The good news is that negligence can be greatly minimized by taking prudent steps to properly manage trees in the landscape. Hiring an ISA Certified Arborist to inspect trees that you have flagged in your regular inspections is a very responsible action that would be favorably viewed by the courts in a legal proceeding. Being upfront and honest with your insurance agent and facility risk management people is another.

WHAT TO DO ABOUT IT

Unfortunately, there is no cure or treatment for decay. It would be great if trunks and branches could be injected with a fungicide or at least a fungistat to control or stop the spread of the fungus. Alas, this is not the case. Even though there isn't a product-related treatment, at least three steps can be taken to minimize negative consequences of tree decay. **1.** Evaluate and judge the threat of tree failure. Once decay is spotted, determining how advanced each incident is and estimating the potential negative outcomes would be is a good first step in management.

2. Prioritize removal and remediation based on the present and the future function/aesthetics of the tree. Each tree in the landscape has a different level of importance in terms of the benefits it provides and the risks it poses.

3. Try to prevent it in the future using good pruning cuts, choosing decay-resistant tree species and avoiding mower blight when maintaining the turfgrass growing close to tree trunks. **SFM**

John C. Fech is a horticulturist with the University of Nebraska-Lincoln and Certified Arborist with the International Society of Arboriculture. The author of two books and more than 400 popular and trade journal articles, he focuses his time on teaching effective landscape maintenance techniques, water conservation, diagnosing turf and ornamental problems, and encouraging effective bilingual communication in the green industry.

JOHN MASCARO'S PHOTO QUIZ

ANSWER

From page 17

This large brown area that occurred overnight on a municipality's library lawn also had several rectangular areas with no damage is the result of a bubble party. The Kirby Sutherland Library is a hub of activity inside and outside throughout the year. The "Bubble Guy" is part of the children's library activities and has been thrilling children and adults for the past three years. This event was a surprise to the grounds manager when he drove to the library to maintain the grounds the day after the activity. "I just about died when I saw the lawn," he said. He jumped out of the truck and got on his hands and knees looking for the problem. The following day he contacted the children's librarian to get information on the activity. The green rectangles are where several booths cover the grass where the "bubble man" works his magic. The bubble material removes the cuticle layer on the grass; and, when sunlight hits it, its history. The wear and tear on the grass from all the feet slipping and sliding does not help matters. The crown of the grass is not severely damaged and will regrow by itself. Some dethatching, additional seeding, and applying a starter fertilizer also quickens the return to normal.

Photos submitted by George Albright, owner of Albright's Glen Summit Floral Co. and Grounds Manager of Mountain Top area Little League; and Marian Sutherland, Kirby Library in Mountain Top, Pennsylvania.

John Mascaro is president of Turf-Tec International

If you would like to submit a photograph for John Mascaro's Photo Quiz, please send a high-resolution digital photo to John Mascaro via email at *john@turf-tec.com*. If your photograph is selected, you will receive full credit. All photos submitted will become property of *SportsField Management* magazine and the Sports Field Management Association.



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Assessing application error on sports fields across varying levels of sprayer technology and operator experience



Figure 1. The experienced operator making an application using the GNSS sprayer at Veterans Park

By Weston Floyd, CSFM, Megan Muesse, Hailey Tucker, Opeyemi Alabi, Jacob Winger and Chase Straw, Ph.D., Department of Soil and Crop Sciences, Texas A&M University

The demand for precise input application and operational efficiency in turfgrass has driven the development of Global Navigation Satellite System (GNSS)-equipped sprayers, which offer several advantages over conventional systems. Features such as individual nozzle control and automated operation within preset boundaries reduce the need for manual boom control, while enhancements such as sub-centimeter precision correction and autosteer further minimize human error.

Despite these benefits, GNSS sprayers have seen limited adoption in the broader turfgrass industry, with increased interest primarily in the golf course sector. Early adopters report benefits such as reduced treated area, shorter application times, less reliance on operator expertise, and improved accuracy. However, testimonials remain scarce in sports field management, where skepticism about the technology's value persists.

As the sports field management industry increasingly embraces sustainable practices and faces rising labor costs, the demand for technological solutions is expected to grow. Overcoming hesitancy toward new technologies will require extensive demonstrations to promote adoption. Currently, there is limited unbiased data on the benefits of GNSS-equipped sprayers for sports field managers.

This research aims to fill that gap by quantifying application errors on sports fields using different sprayer technologies and operator experience levels. The hypothesis is that as technology advances, discrepancies in misses, overlaps and overspray will decrease, reducing the total sprayed area and minimizing differences between experienced and inexperienced operators.

STUDY DESIGN, EQUIPMENT AND APPLICATION PROCESS

Research was conducted from winter 2022 to summer 2023 in College Station, Texas, at Veterans Park and Athletic Complex and Southwood Athletic Park. Identical studies were performed on softball/baseball and soccer fields at both locations. Using a crossover design, six treatments manual, GNSS, and GNSS + autosteer sprayer technologies, each operated by both experienced and inexperienced operators — were applied to three fields of each type at both locations. Each field received all six treatments to evaluate technology performance across operator skill levels. At Veterans Park, a Toro Workman 200 Spray System (18-foot boom) with Ninja GPS Spray Control, a Smart7 GNSS receiver, and Polaris autosteer was used (Figure 1). At Southwood Athletic Park, a John Deere ProGator with an Above Par Tech sprayer (20-foot boom), a GPS 7500 GNSS receiver, and SteadySteer autosteer was employed (Figure 2). Both sprayers featured correctional services, individual nozzle control, automatic rate control, on-screen guidance and adjustable spray parameters.

One experienced operator with nearly 20 years of sports field spraying experience, including three years with GNSS and autosteer, was assigned to each location. Four inexperienced college students — new to both spraying and the technology — were assigned to specific locations and field types, ensuring their inexperience remained consistent. Each student received a 30-minute training session on sprayer controls before their first application.

Field boundaries were georeferenced once using the sprayers' GNSS receivers to establish consistent target areas for all fields, aiding in GNSS and GNSS + autosteer treatments. The average target areas were 74,899 ft² for Veterans Park's softball fields and 37,631 ft² for Southwood Athletic Park's baseball fields, with soccer fields averaging 88,244 ft² and 33,644 ft² at Veterans and Southwood, respectively. Water was used for treatments at 65 gallons per acre, and designated level areas were marked for filling and draining the sprayers. Sprayers were filled to 150 gallons for Veterans and 80 gallons for Southwood, based on field size.

At Veterans Park, the dual-nozzle sprayer used FastCap 422FC11004 and 422FC11006 nozzles, while Southwood



Figure 2. An inexperienced operator making an application using the GNSS sprayer at Southwood Athletic Park

Athletic Park used a single-nozzle sprayer with COMBO-JET SR110-08 nozzles. The accuracy of the water volume in the tank was confirmed by measuring in five-gallon increments and validating the flow meters against the computer outputs before the initial treatments.

Treatment applications occurred from December 2022 to May 2023 at Veterans Park and from June to July 2023 at Southwood Athletic Park, depending on field availability and weather. To prevent tire tracks from being used as a guide, sufficient time was allowed between applications for the tracks to disappear. Sprayers operated at 2.5 mph, controlled by a speed regulator.

For manual treatments, monitors were covered, and foam markers guided operators, who manually controlled the booms. GNSS treatments used foam markers and onscreen maps, while GNSS + autosteer treatments added autosteer. Both GNSS treatments featured individual nozzle control, with a 100% overlap setting. After each treatment, remaining water was drained via valve and hand pump. Spray data were stored in the sprayers' computers and later exported for analysis.

DATA PROCESSING AND ANALYSIS

The study measured target area misses, overlaps and overspray. Data downloaded from the sprayer computers included field boundaries, sprayer paths and coverage. The percentage of target area missed and overlapped was calculated by comparing the spray coverage to the field boundaries, excluding non-target areas. Missed areas were identified where no spray was applied, and overlaps where sections were sprayed more than once. These percentages were then calculated as a proportion of the total target area. Overspray was calculated by subtracting the amount of water left in the tank after spraying from the initial volume. The percentage of overspray was determined by dividing the actual volume applied by the intended volume for the target area, then multiplying by 100. Any values over 100% indicated overspray.

The percent total volume saved between treatments was determined by subtracting the lower percentage from the higher one, dividing the absolute value of this difference by the higher percentage, and then multiplying by 100 to convert it into a percentage. For example, if treatment A used 105% of the intended volume (i.e., 5% overspray) and treatment B used 110% of the intended volume (i.e., 10% overspray), then the total volume savings by using treatment A is 4.6%, calculated as ((|105-110|)/110)*100 = 4.6%.

THE RESEARCH PLAYBOOK

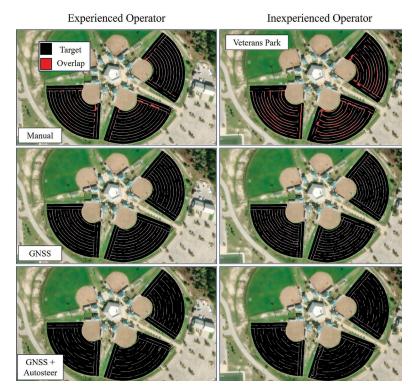


Figure 3. Maps of target area overlapped on softball fields at Veterans Park across manual, GNSS, and GNSS + autosteer sprayer technologies (rows) and operator experience (columns).

Only the 422FC11004 nozzles were used at Veterans Park in manual mode because individual nozzle control could not be turned off when dual nozzles were active — resulting in a lower spray volume since the sprayer isn't designed for single-nozzle operation. Therefore, the percent target area overspray was analyzed separately by location, as the manual total volume applied data from Veterans Park was unreliable. However, this issue did not affect the percent of the target area missed and overlapped, as spatial spray data were recorded for all treatments.

MISSES, OVERLAPS AND OVERSPRAY ON SOFTBALL/BASEBALL FIELDS

The results for percent target area missed were similar across locations, so data were combined for treatments and locations. Inexperienced operators using manual sprayers had the highest percentage of missed areas (3.7%), while experienced operators showed no major differences across sprayer technologies. There was also no difference in missed areas between GNSS and GNSS + autosteer, regardless of operator experience. Southwood Athletic Park had more missed areas (2.4%) compared to Veterans Park (1.4%).

For percent target area overlapped, results differed by location, so data are presented separately for each. At Veterans Park, the manual sprayer used by inexperienced operators caused the highest overlap (8.3%). In other cases, both experienced and inexperienced

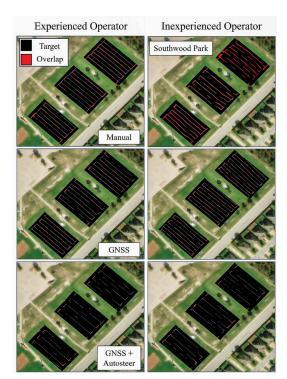


Figure 4. Maps of target area overlapped on soccer fields at Southwood Athletic Park across manual, GNSS, and GNSS + autosteer sprayer technologies (rows) and operator experience (columns).

operators performed similarly across sprayer technologies. As technology advanced, overlap decreased, with GNSS + autosteer reducing overlap to less than 2% (Figure 3).

At Veterans Park, overspray was similar between operators within each technology level, but advanced technology reduced overspray. GNSS + autosteer led to 2.1% overspray compared to 6.3% with GNSS, saving 4% of the total water volume. For inexperienced operators, autosteer reduced overspray by 3.3%.

At Southwood Athletic Park, there were no significant differences in overspray between operators within each technology level, but experienced operators generally had higher overspray. While there wasn't a clear advantage between manual and GNSS or GNSS and GNSS + autosteer, switching from manual to GNSS + autosteer significantly reduced overspray. For experienced operators, overspray dropped from 11.5% with manual to 6.5%; and for inexperienced operators, it dropped from 9.7% to 5.7%, resulting in a 3.7% reduction in total water used.

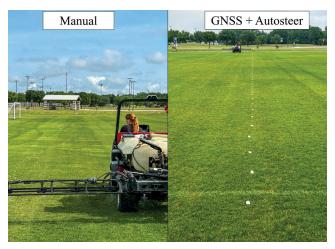


Figure 5. An inexperienced applicator making a pass using manual mode (left) and GNSS + autosteer (right) on soccer fields at Veterans Park.

MISSES, OVERLAPS AND OVERSPRAY ON SOCCER FIELDS

The results for percent target area missed on soccer fields were consistent across locations, so data were combined for treatment analysis. The manual inexperienced operator had the highest percentage of missed target area (2.8%), which was higher than all other treatments. There were no differences in missed areas among experienced operators across any level of sprayer technology. Additionally, there was no difference in missed areas between GNSS and GNSS + autosteer, regardless of operator experience.

Similarly, the results for percent target area overlapped were consistent across locations, so data were pooled for analysis. The manual inexperienced operator had the highest overlap (6.4%), significantly more than the manual experienced operator (4.3%). The manual experienced operator's overlap was similar to that of the GNSS inexperienced operator (3.6%), and both operator types showed similar results within the GNSS and GNSS + autosteer technologies. Overlap decreased as sprayer technology advanced, with both operator types achieving less than 1% overlap using GNSS + autosteer (Figure 4).

The results for percent target area oversprayed differed slightly between locations, so data are presented separately. At Veterans Park, operator experience did not affect overspray with the GNSS sprayer, with both experienced and inexperienced operators having similar overspray rates (6.2% and 6.5%, respectively). However, the addition of autosteer reduced overspray to 2.3% for experienced operators and 3.8% for inexperienced operators, resulting in total water savings of 3.7% and 2.5%, respectively. At Southwood Athletic Park, overspray results were similar between operators within each sprayer technology level, though the inexperienced operator consistently had slightly higher overspray. For experienced operators, overspray decreased from 11.1% with manual to 8.3% with GNSS, but there was no further reduction with GNSS + autosteer (6.2%). For inexperienced operators, overspray dropped from 12.1% with manual to 10.2% with GNSS and further to 7.0% with GNSS + autosteer.

Overall, both operator types saw a reduction in overspray as sprayer technology advanced. Moving from manual to GNSS technology reduced overspray by 2.8% for experienced operators and 1.9% for inexperienced operators. Upgrading from GNSS to GNSS + autosteer reduced overspray by 2.1% for experienced operators and 3.2% for inexperienced operators. Switching from manual to GNSS + autosteer technology resulted in total water savings of 4.4% for experienced operators and 4.6% for inexperienced operators.

RECOMMENDATION FOR SPORTS FIELD MANAGERS

Inexperienced operators using manual spray mode had the highest rates of misses and overlaps, except for overlaps on Southwood Athletic Park's baseball fields. GNSS and autosteer technologies significantly reduced these errors across all locations and field types (Figure 5). Standard deviations of misses and overlaps decreased with advanced technologies, especially when comparing inexperienced manual mode to GNSS + autosteer, indicating more consistent applications. Additionally, advanced technology reduced overspray and the total volume applied. Investing in GNSS-equipped sprayers with autosteer minimizes reliance on experienced operators, reduces errors and enhances consistency. This study used factory settings, so further improvements might be possible by adjusting overlap parameters.

ACKNOWLEDGEMENTS

The authors wish to extend their gratitude to the Texas Turfgrass, Research, Education and Extension Endowment for providing funding for this study. They also want to express their thanks to GLK Turf Solutions and Traqnology for providing the Above Par Tech sprayer and real-time kinematic correction service, respectively, for use in the study. Additionally, appreciation goes to Stephan Richardson, parks operations manager of the City of College Station; Curtis Richmond, Southwood Park supervisor; Keith Fails, Veterans Park supervisor; and Ken Rost and Cam Schafer from Frost, Inc. for their support of this project. **SFM**

Preparing for Winter

Best practices for equipment maintenance, planning and communication

As the temperatures drop, green industry professionals face the critical task of transitioning their operations from the warm months of summer to the cold demands of winter. This transition is not merely about swapping out equipment; it's a process involving maintenance, strategic planning, and clear communication.

Winterization and storage of equipment and supplies that won't be utilized during the winter months starts with thorough cleaning, said Matthew Hawk of Matthew's Mowing.

"I ensure that all equipment is blown free of dry debris, washed and then blown dry," said Hawk. "Fuel stabilizer is added, and I check all maintenance parts — such as spark plugs, air filters and batteries. I also inspect high-wear areas for any unusual movement or cracks. This process ensures that when spring arrives, the equipment is in good condition and ready to go."

Snowrato

Nick Schomer, director of category management at SiteOne, added that it is important to drain fuel, and perform basic maintenance including belts, tine and blades. "You'll thank yourself in the spring," he added.

According to Schomer, winter is also a good time to evaluate your equipment and supplies decisions.

Photo provided by SiteOne.

"What do you want to accomplish next year? Do you want to get more efficient at the jobs you have or are you looking to expand? This should help guide your next equipment decisions," said Schomer.

Added Hawk, "I want to make sure my equipment is fully ready when I need it. I regularly check over equipment to ensure smooth operation after it has been idle for a few months. I also monitor weather forecasts to gauge product needs and make informed decisions about potential equipment upgrades. Strong relationships with dealers and distributors are vital to ensure timely access to supplies and support."

According to Schomer, it is important for dealers to stock the latest product introductions during the winter, as

this is a time for pros to kick the tires on new equipment for the coming year. He added that winter is a good time for green industry professionals to look at electrification.

For those operating in cold-weather climates, ensuring that equipment is checked and cleaned after every snow event is also crucial, said Hawk.

Transitioning into winter requires careful planning and execution. From thorough equipment maintenance and strategic stocking to effective communication, each aspect plays a crucial role in ensuring a successful winter season. **SFM**

This article originally appeared in OPE+ magazine, sister publication to SportsField Management.

Winterizing Battery-powered Equipment

By Katy Springfield

As winter approaches, it's essential to prepare battery-powered equipment for storage to ensure a seamless transition to spring. Effective winterization not only protects your investment but also sets the stage for growth and success during the winter months.

Battery-powered equipment has become increasingly popular due to its ease of use, low maintenance, and environmental benefits. However, like any equipment, it requires proper care to ensure longevity and optimal performance. Neglecting winter preparation can lead to reduced efficiency when spring arrives.

Critical steps for winterizing battery-powered equipment include cleaning, inspection and maintenance checks.

CLEANING AND INSPECTION

The first step in winterizing your battery-powered equipment is thorough cleaning. Remove any dirt, debris or grass clippings that may have accumulated during use. This helps prevent corrosion and ensures that your equipment is in top condition when spring arrives. After cleaning, inspect each piece of equipment for any signs of damage, such as worn-out components. For example, check mower blades for dullness or chips that could hinder performance. Addressing these issues now will save you time and money later.

MAINTENANCE CHECKS

Conducting common maintenance checks is essential before storage. For equipment with cutting elements — including mowers, string trimmers, chainsaws and brush cutters — inspect blades and trimmer strings for dullness and replace them as needed to ensure optimal cutting efficiency.

One advantage of battery-powered tools is the reduced maintenance burden compared to fuelpowered equipment. Users of fuel-powered tools must deal with tasks such as draining fuel, replacing spark plugs and managing fuel stabilizers to prevent engine damage during storage. With battery-powered equipment, simply charge the battery and your equipment will be ready to go when spring arrives.

BATTERY STORAGE

An important aspect of winterization is the proper maintenance and storage of battery packs. Avoid exposing battery packs to water or rain, as this could damage the tool and battery pack. Do not use oil or solvents to clean or lubricate your battery pack, as these can make the plastic casing brittle and prone to cracking, which poses a risk of injury. Store battery packs at room temperature, away from moisture. Avoid damp locations where corrosion of terminals can occur. After about a year of storage, remember to charge the pack as normal to keep it in good condition. **SFM**

Katy Springfield is senior manager of product marketing at Milwaukee Tool

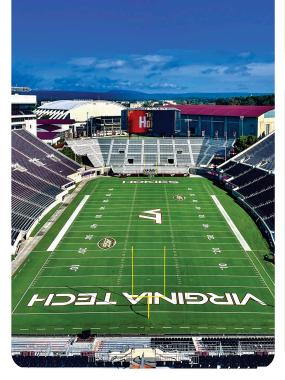
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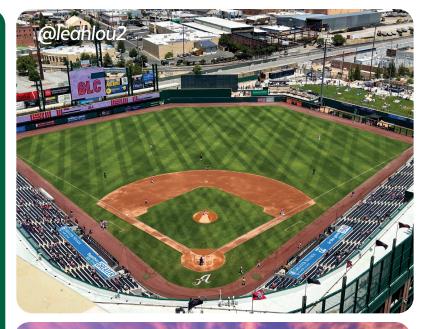
The following are photos and posts pulled from industry social media feeds during the past month.

Scan the QR code for links to all of our feeds and connect with us.



@VT_groundscrew





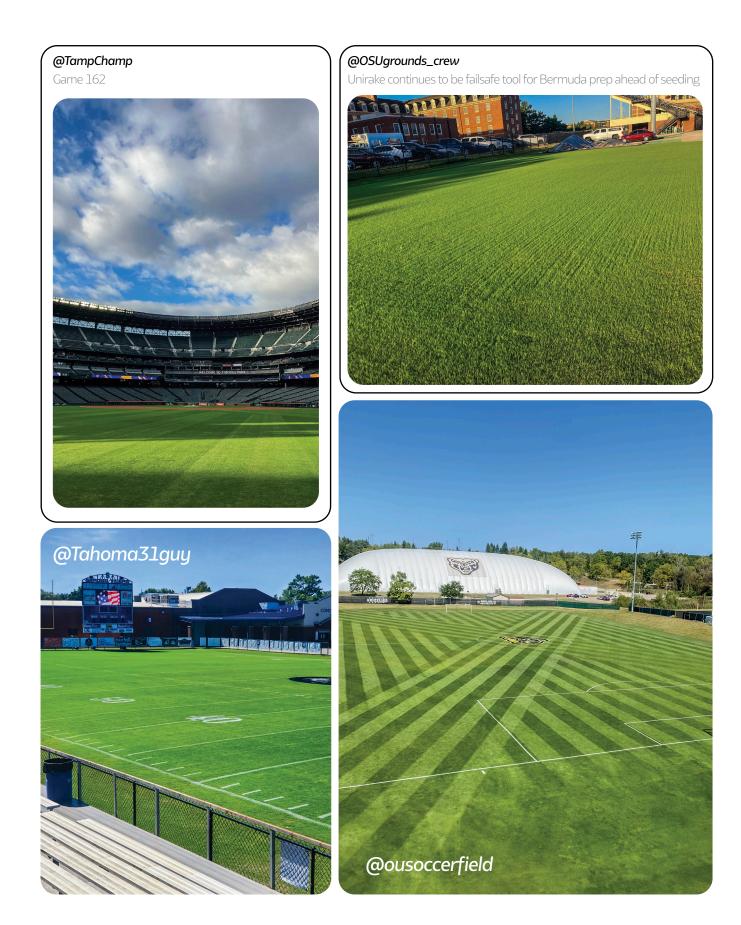


@VTTurfTeaching

Going old-school with the first mow on the overseeded seedling turf.

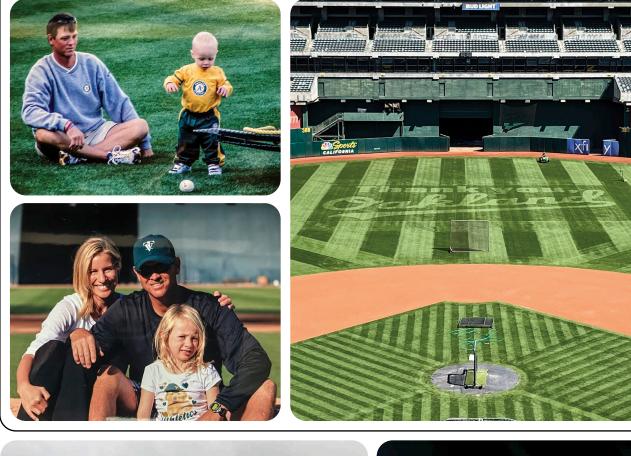


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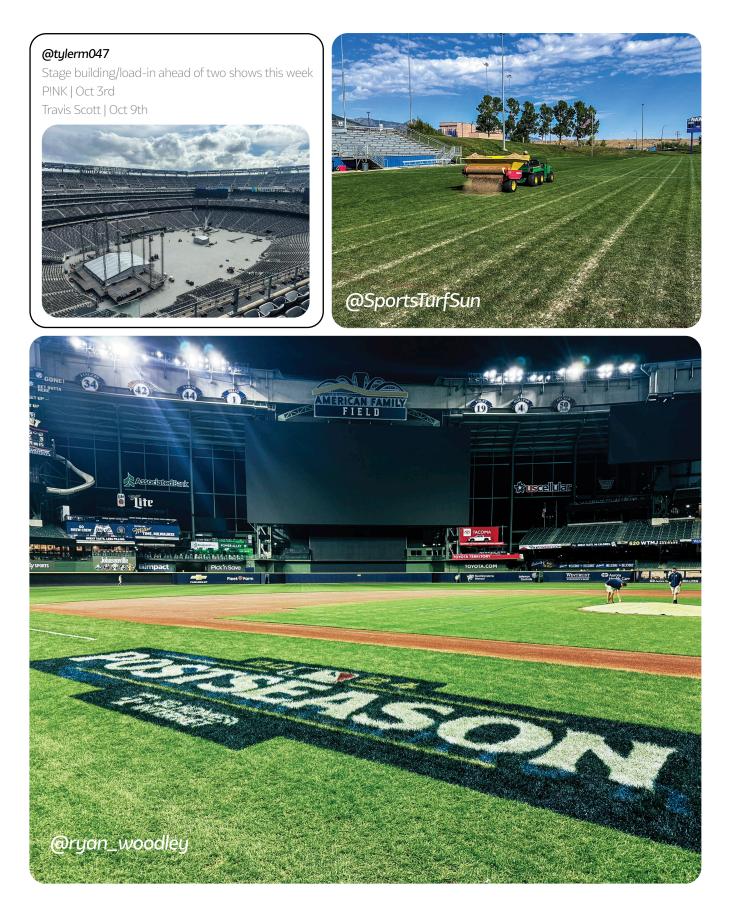
@oaklandturf

From the bottom of my heart, Thank You Oakland! For the support of coworkers, coaches, players and fans. Privileged: my whole adult life I've been working for @Athletics at the Coliseum, met my amazing wife here, my kids literally grew up here: Grateful #bestgroundscrewever





FROM THE FEEDS



Redexim Scarivator

Redexim's Scarivator is a new tool for the maintenance of hybrid sports pitches. Recognizing the increasing popularity of hybrid systems, the Scarivator has been specifically developed to remove unwanted rootzone material, loosen soil and ensure a smooth, level surface without damaging the synthetic fibers.

Hybrid surfaces naturally become compacted over time, which necessitates effective renovation to maintain performance and longevity. This process now begins with the Scarivator, designed to loosen the uppermost layer of the surface.

The Scarivator features two horizontal beams equipped with angled spring tines to work into the surface at adjustable depths of up to 35mm (1.38"). The beams reciprocate each other to agitate and loosen the organic material and soil without the risk of synthetic fibers wrapping around the rotor. The result is a renovation solution that ensures costly replacement and repairs can be avoided, and the lifespan of the system is extended.

The Scarivator comes with a 2.13m (83.9") working width, infinitely adjustable working depth and adjustable tine angle for varying degrees of aggressiveness.





SiteOne offers new formula and new colors for LESCO Tournament Turf Paint

SiteOne Landscape Supply reformulated its LESCO Tournament Turf & Athletic Marking Paints to reduce drying time, and to help non-clogging, low-VOC cans to empty completely to prevent waste. SiteOne has added two new colors to the palette — fluorescent orange and fluorescent pink — to give seven different colors for utility marking, sports field line marking, traffic lines, or marking on natural or synthetic turf. LESCO Tournament Turf & Athletic Marking Paints will not kill, hurt or brown natural grass.



Yanmar expands attachment lineup

Yanmar expanded its attachment line to include a full range of buckets, augers, trenchers, stump grinders, soil conditioners, breakers, sweepers, pallet forks, brush mowers, grapple rakes, grapple buckets and snow and grading blades.





"We're excited to offer yet another reliable and versatile set of tools to help fleet customers and contractors be productive right out of the gate and conquer the evolving demands of any construction jobsite head-on," said Frank Gangi, product manager — attachments, Yanmar Compact Equipment North America.

The attachments, available through Yanmar's dealer network, allow for seamless compatibility for use with all Yanmar-branded compact track loaders. This allows operators to simply attach the tool and get to work with the confidence to get the job done.

Ignite Attachments angle broom attachment

Ignite Attachments released a new angle broom attachment for skid-steers and compact track loaders. The attachment's 22.5-inch operating height offers better sightlines for safer, more efficient operation. Features such as a fully reversible drum with individually replaceable polycarbonate bristle wafers, zinc-coated pins and drum carrier components and a motor-protecting guard make for dependability and fast ROI. The angle broom is available in working widths of 72 or 84 inches with a manual or hydraulic angling option and universal harness.

A low operating height is at the heart of Ignite's angle broom design. This feature allows for better sightlines in front and to the sides of the attachment, making it easier to operate in tight spaces or near structures.

Ignite's low-profile angle broom uses 24-inch diameter polycarbonate bristle wafers, which hold up on sidewalks and other abrasive surfaces. Additionally, the entire drum can be removed with just a few bolts, allowing operators to rotate it 180 degrees for even wear across the whole



individually replaced. The Ignite angle broom allows for easy integration with any carrier brand and overall attachment durability. Both widths allow for a 25-degree max angle from the center. With the hydraulic option, the angle broom comes with a universal harness that works with any compact track loader or skid-steer brand.

LebanonTurf launches no phosphorus Mesotrione fertilizer product

LebanonTurf launched ProScape 20-0-4 100% PCSCU SOP

8% Ca with .08% Mesotrione, the industry's first and only Mesotrione combination product that does not contain phosphorus and is designed for routine turf maintenance.

ProScape 20-0-4 100% PCSCU SOP 8% Ca, is a new, SGN 150, blended product that controls more than 46 grassy and broadleaf weeds, including crabgrass, dandelion and yellow nutsedge. It is labeled for use on golf courses, athletic fields, and residential and commercial turf.



"Up until now, the only

fertilizer combination product with Mesotrione herbicide was the popular 21-22-4 Starter that's designed for seed establishment," said Christopher S. Gray, senior manager of professional marketing. "The development of this new product resulted from our professional customers asking for a product that contained no phosphorus so that it could be used for routine maintenance purposes."

Mesotrione provides control of more than 46 broadleaf and grassy weeds with its technology based on a naturally occurring compound produced by the bottlebrush plant (Callistemon citrinus). It is absorbed through the roots, shoots and leaves and inhibits photosynthesis in susceptible plants, which results in bleaching of the leaves followed by necrosis and death of the plant. Mesotrione has been granted "Reduced Risk" status by the EPA for turf use due to its favorable ecotoxicity and human health profiles compared to many registered herbicides.

"We've been working on bringing this product to market for several years and are extremely excited about being able to help our loyal customers utilize Mesotrione for all of their turf management needs from turf establishment to general maintenance," said Gray. SFM

CALENDAR OF EVENTS

2024

NOVEMBER 3-6

ELEVATE (NALP)

Charlotte https://www.landscapeprofessionals.org/ELEVATE

NOVEMBER 4-8 IRRIGATION SHOW AND EDUCATION WEEK

Long Beach, California https://irrigation.org/IA

NOVEMBER 7-9

TCI EXPO Baltimore https://treecareindustryassociation.org/

DECEMBER 2-6

AMERICAN SPORTS BUILDERS ASSOCIATION

TECHNICAL MEETING

Orlando https://sportsbuilders.org/page/UpcomingEvents



JANUARY 13-16 SPORTS FIELD MANAGEMENT ASSOCIATION CONFERENCE & EXHIBITION

Palm Springs, California https://www.sportsfieldmanagement.org/conference

FEBRUARY 9-13 TURFGRASS PRODUCERS INTERNATIONAL EDUCATION CONFERENCE AND FIELD DAY

San Antonio https://turfgrasssod.org/

<u>JULY 1-3</u>

NATIONAL SPORTS SAFETY AND SECURITY CONFERENCE & EXHIBITION

San Antonio https://ncs4.usm.edu/events/annual-conference/

OCTOBER 13-15

SYNTHETIC TURF COUNCIL ANNUAL CONFERENCE

Palm Beach Gardens, Florida https://www.syntheticturfcouncil.org/

OCTOBER 22-24

EQUIP EXPO Louisville, Kentucky https://www.equipexposition.com/

OCTOBER 22-24

PGMS SCHOOL OF GROUNDS MANAGEMENT

Louisville, Kentucky https://pgms.org/page/AnnualConference

NOVEMBER 2-5

ELEVATE (NALP)

Phoenix https://www.landscapeprofessionals.org/ELEVATE

DECEMBER 1-5

AMERICAN SPORTS BUILDERS ASSOCIATION TECHNICAL MEETING

San Antonio https://sportsbuilders.org/page/UpcomingEvents

DECEMBER 8-11 IRRIGATION SHOW AND EDUCATION WEEK New Orleans https://irrigation.org/IA SFM



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Recovering From Disaster

Q Can you provide recommendations for those who are helping with the recovery of athletic fields following hurricanerelated flooding and damage?

- NC County Extension

As national news outlets have reported, there was significant personal and property devastation caused by recent hurricanes. Our thoughts go out to everyone impacted. This article is not intended to provide disaster recovery information for those most severely affected, but will offer advice for people who are managing less damaged fields.

The degree of turfgrass injury from flooding depends on turfgrass species, water temperature, duration of

submergence and depth of submergence. Turfgrass can usually withstand submersion for up to 60 days when water temperatures are below 50 degrees, but may only survive a day or two when water temperatures are in the upper 80s or higher. If the turfgrass

The degree of turfgrass injury from flooding depends on turfgrass species, water temperature, duration of submergence and depth of submergence.

is submerged for more than a few days under water that is cloudy with silt, clay and debris, it is more damaging than if the water is clear. In addition, flood waters may contain toxic contaminants such as petroleum. These may cause longer-term problems because the contaminant may linger in the soil, impeding regrowth. And although it may seem minor, the lack of oxygen to the roots brought on by saturated soils may cause turf loss.

If the floodwaters deposited silts and clays on the surface, these should be removed with shoveling, scraping, power washing, etc., as soon as possible. In some cases, debris and soil material can be blown off the surface with a blower. The airflow from the blower can also hasten the soil-drying process. If the grass does not begin to green up by the time the soil begins to dry out, it may be a sign that the turf is dead or so severely set back that regrowth is going to be very slow. Given enough time, bermudagrass will grow back from almost any flooding damage. But if the damage is more than just thin turf, and time is an issue, it may be better to start over completely. Since these conditions are occurring near the end of the bermudagrass growing season, it may be too late to get adequate new bermudagrass growth to cover severely damaged stands following renovation. If there are large bare areas, I would suggest that the fields be overseeded with ryegrass to stabilize the soil from further erosion and/or to provide a usable turfgrass surface in the spring. Overseeding with ryegrass will help absorb some of the extra moisture and the actively growing roots will help keep the soil pores open. If it was previously a tall fescue field, interseed with tall fescue seed rather than using ryegrass.

If the damage is not too severe, begin aerification once the ground can support an aerifier. This will help break up soil layers and get more oxygen into the rootzone. Do not expect much residual activity from previously applied fertilizer or preemergence herbicides. Fertilizer

> applications may benefit the turfgrass, but rates should be moderated due to the time of year. Floodwaters may have replenished your weed seed bank, which may translate to a need for greater postemergence weed control in the future.

If topsoil was eroded and

replaced before renovation, there may be short- or longterm variation in turf growth and color due to differences in soil. Also, silt and clay deposits that were not removed may result in long-lasting visual and performance differences. Regular aerification and topdressing should address these problems over time. Turfgrass managers will need to honestly assess fields in late spring because field renovation may still be necessary. **SFM**



Grady Miller, Ph.D.

Professor and Extension Turf Specialist North Carolina State University

Questions?

Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or e-mail grady_miller@ncsu.edu

Or, send your question to Pamela Sherratt at 202 Kottman Hall, 2001 Coffey Road, Columbus, OH 43210 or sherratt.1@osu.edu







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