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MANAGEMENT

January 2023

Vol. 39 No. 1

The Official Publication of the Sports Field Management Association

Tree Removal **14** | Nutrient Management **22**
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TAKING THE LEAD

Introducing SFMA CEO
Laura Simmons, CAE



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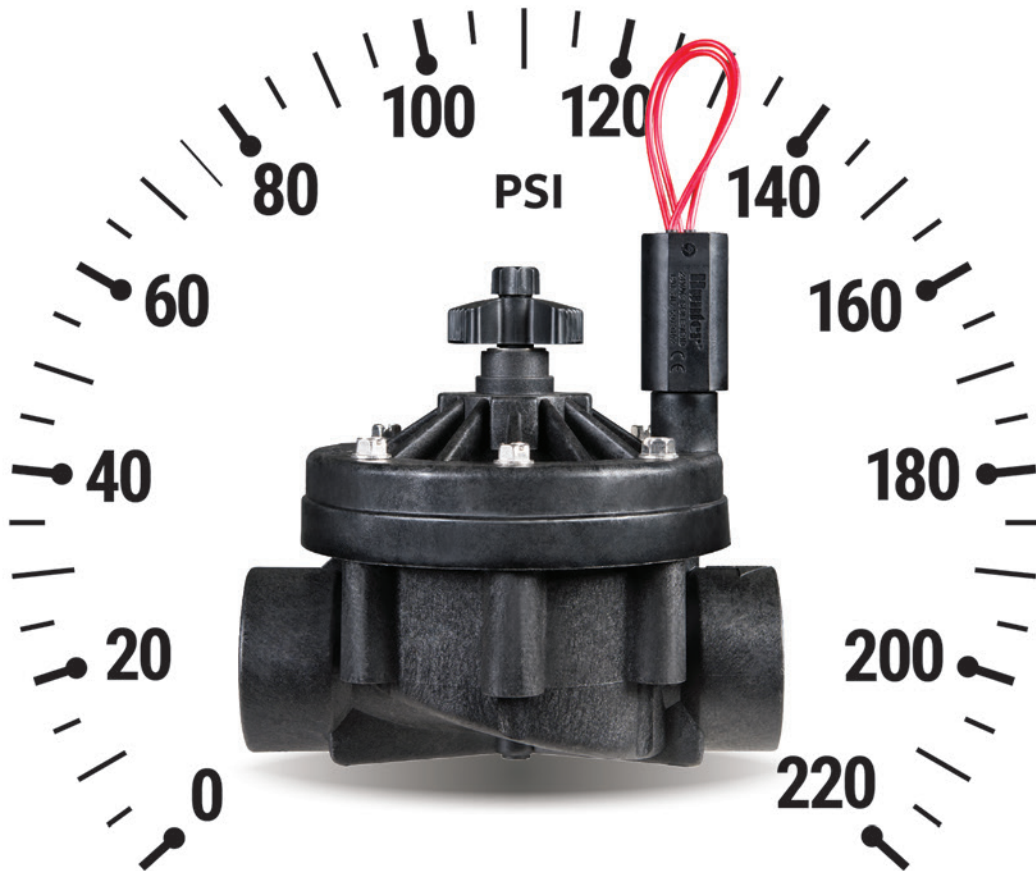


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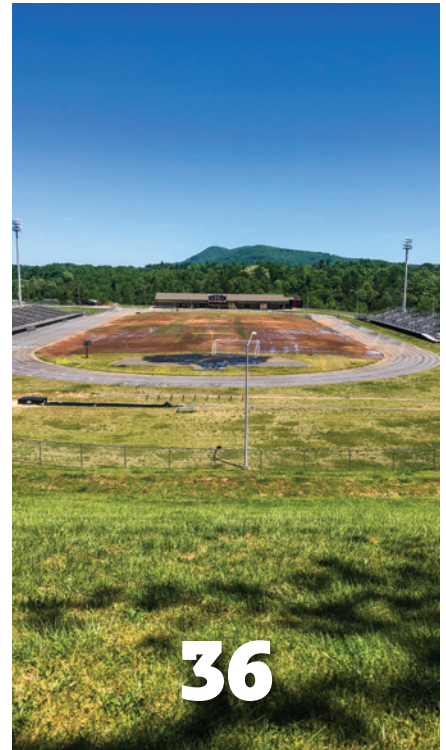
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Editor's Note



John Kmitta

Associate Publisher /
Editorial Brand Director
jkmitta@epgmediallc.com
763-383-4405

Happy New Year. Welcome to 2023.

This month brings the sports field management industry's biggest event – the SFMA Conference and Exhibition, in Salt Lake City, Utah., January 16-19.

I'm looking forward to the Seminar on Wheels tours, the SAFE Night of Bowling, the conference education sessions, trade show, and the keynote address by NFLPA Executive Director DeMaurice Smith. Most of all, I'm looking forward to all the great networking opportunities and the ability to connect with my industry contacts, meet new people and interact with you, the reader.

For conference information, be sure to visit sportsfieldmanagement.org/conference, or check out our show preview and Salt Lake City overview at sportsfieldmanagementonline.com.

NEW BEGINNINGS

The New Year brings new leadership to SFMA. In this issue, we are pleased to introduce new SFMA CEO Laura Simmons, CAE. I had the pleasure of speaking with Laura for the profile featured in this issue, and I came away from that conversation excited for the future of the association. 2022 was a challenging year for the SFMA Board as the board members and search committee worked through the process

of identifying the right leader to take the reins as CEO. But I am confident that their due diligence paid off, as their new CEO brings strong association management credentials, great people skills, and a vision for the future of SFMA. I look forward to meeting Laura this month in Salt Lake and working with her to share SFMA's message with our readers.

FOND FAREWELL

I also want to take a moment to express my gratitude to my friend and colleague, Peggy Tupper, who retired from our company at the end of 2022. As National Sales Manager on *SportsField Management* magazine, Peggy has been integral to our brand, and our team, for the past decade. Peggy's impact extends far beyond the advertisers and SFMA Commercial Members with whom she has come into contact. Her personality resonates with anyone who has had the pleasure to meet her, and her ideas and support have helped our team deliver new content and products to our audience.

Now, as Peggy moves into retirement to spend more time with her children and grandchildren, I wish her all the joy and relaxation that this new chapter will bring. **SFM**

SportsField MANAGEMENT

EPG Brand Acceleration
10405 6th Ave. N., Ste 210
Plymouth, MN 55441

Official Publication of the Sports Field Management Association

SALES REPRESENTATIVES

Leslie Palmer | National Sales Manager
Phone: (763) 383-4460 | lpalmer@epgmediallc.com

Edwin Rosario | Marketing and Engagement Sales Executive
Phone: (763) 383-4495 | erosario@epgacceleration.com

EDITORIAL

Sr VP Sales/Group Publisher | David Voll
Associate Publisher/Editorial Brand Director | John Kmitta
Assistant Editor | Robert Augsdorfer
Technical Editor | Adam Thoms, Ph.D.
Interactive Content Designer | Reba Zatz

AD MATERIALS AND QUESTIONS

ads@epgacceleration.com

SUBSCRIPTION SERVICES

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President's Message



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Jamie Mehringer

Parks and Rec (Appointed):

Brad Thedens, CSFM

SFMA OFFICE

P.O. Box 1673

Lawrence, KS 66044

Phone: 800-323-3875

Email: STMAinfo@STMA.org

www.sportsfieldmanagement.org

SFMA EDITORIAL COMMITTEE

Chair: Brad Thedens, CSFM

Technical Editor: Adam Thoms, Ph.D.

Rebecca Auchter, CSFM; TJ Brewer, CSFM;
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James Bergdoll, CSFM, CPRP
SFMA President

jbergdoll@chattanooga.gov

Happy New Year fellow sports field managers! I sincerely hope that everyone had a merry and restful holiday season and was able to spend quality time with family and loved ones.

It is hard to believe that nearly a year has gone by since announcing the rebranding of the association and being introduced as the incoming president at our annual conference in Savannah, Ga. This past year was certainly challenging, as we dealt with a few unexpected turns of events. However, we had many successes throughout the year and learned a great deal.

We are now in a new year, and are just a few weeks away from another exciting annual conference in Salt Lake City! I am very pleased to have the opportunity to hand off my role as president to Sun Roesslein, CSFM, who is an excellent leader and advocate for our industry. I take comfort in knowing she will be at the helm this year, and I cannot wait for all of our readers to get to know her better in next month's issue.

We will miss the board members who are rolling off this year, especially Past President Nick McKenna, CSFM, but we are excited to welcome our newly elected board members coming in this year. Another great success coming out of last year is hiring our new CEO, Laura Simmons, CAE. Laura brings a lot of professional association leadership experience and is very energetic about the opportunity to serve our membership and industry. It has been fantastic working with, and getting to know,

Laura over the last few months, and I look forward to seeing the great things she will do as CEO.

Another reflective moment I would like to make regarding 2022; during the transition period from when Kim Heck left the association until Laura was hired as CEO, board leadership got to work directly with SFMA staff – an opportunity they had not previously had. Although we had a plan in place and everyone had to pick up additional responsibilities, we certainly had to manage the unexpected and, at times, unknown. However, the SFMA staff members were amazing, took it all in stride, and rose to the occasion to be leaders when we needed them. Most of them are long-tenured employees and bring so much value to the association. I do not think we acknowledge their work enough. They are the glue that holds this thing together. I personally want to thank Leah Craig, Nora Dunnaway, Kristen Althouse, and Whitney Webber. It has been a pleasure working with you all. Thank you for everything you do.

Lastly, thank you SFMA for the opportunity this year, and thank you readers who read this column each month. Have a great 2023 and see you all in Salt Lake City! **SFM**

James Bergdoll, CSFM, CPRP

Conference track to focus on Diversity, Equity and Inclusion

The 2023 SFMA Conference in Salt Lake City will feature seven education tracks – one of which will focus on Diversity, Equity and Inclusion.

On Tuesday, January 17, from 2 – 3:15 p.m., the DEI track will feature a panel that will include Amy Fouty, CSFM, field consultant, The Motz Group; Lynda Wightman, retired vendor/supplier industry relations manager, Hunter Industries; Abby McNeal, CSFM, CPRP, parks superintendent, city of Louisville, Colo.; Leah Withrow, head groundskeeper, Reno Aces; Victoria Wallace, extension educator, University of Connecticut; Kaylin Dillon, CFP, financial advisor; and Eddie Jones, lead organizational development specialist. They will discuss “Taking it to the Next Level - Advice from Industry Veterans on Growth and Development.”

“Successful careers do not just happen, they are intentionally developed through goal setting, planning, execution, continuous review and improvements,” said Fouty. “The panel is comprised of individuals who have real-world experience to map out a variety of aspects of what it means to have a successful career. From your first job to your retirement, the session will provide some information to assist attendees at any point along their process.”

On Thursday, January 19, from 8-10 a.m., Fouty; Sarah Martin, CSFM; Maritza Martinez; and Sun Roesslein, CSFM, will present “Volunteering for Sports Field Events.”

SFMA Mowing Patterns Contest Winner announced

Nick Miller, field and grounds coordinator for the City of Aurora Parks and Recreation Department (Aurora, Ohio) was announced as the winner of the 2022 SFMA Mowing Patterns Contest. The winning field is located at Hartman Park in Aurora, Ohio. This 28-acre sports complex was constructed in 2018 and consists of four baseball/softball fields and 15 acres of multi-use playing surface for soccer/lacrosse etc.

Miller’s design will be featured at the 2023 SFMA Conference and Exhibition and showcased in an upcoming issue of *SportsField Management* magazine.

Pre-conference education

Don’t miss the pre-conference education session taking place on Monday, January 16 from 1:15 – 5 p.m. at the SFMA Conference and Exhibition in Salt Lake City. In this session – titled “How Can We Help?” – meet and interact with academics for a refresher in the basics

of turfgrass management and problem diagnosis.

Speakers and topics include the following:

- Let Us Help You – Leah Brilman, Ph.D. – DLF Pickseed
- Turfgrass Basics – Gregg Munshaw, Ph.D. – Pinnacle Agricultural Research Center
- Fertilizer 101 – Cale Bigelow, Ph.D. – Purdue Turf Science
- Weed ID – Erick Begitschke, M.S. – University of Georgia
- Insect ID – Geoffrey Rinehart – University of Maryland
- Disease ID – David McCall, Ph.D. – Virginia Tech
- Turfgrass Math – Adam Thoms, Ph.D. – Iowa State University
- Basic Field Safety – John Sorochnan, Ph.D. – University of Tennessee

Enjoy a fun, relaxed, reception-style atmosphere complete with food and beverages. The session is free to attend, and pre-registration is not required. It is sponsored by DLF and Mountain View Seeds.

The SFMA Institute of Sports Field Management

SFMA has a large collection of articles, webinars, research, and technical bulletins to meet your field and facility needs. SFMA provides information on sports field safety, benefits of natural grass, synthetic turf resources, and cultural practices. Professional development and management resources are also available to assist with facility operations and career advancement. The SFMA Institute of Sports Field Management is available at <https://www.sportsfieldmanagement.org/knowledge-center/> (Note: Pages marked with a lock symbol are for members only).

2023 Seminar on Wheels

For the Seminars on Wheels at the 2023 SFMA Conference, Monday attendees will visit the athletic facilities at Brigham Young University including LaVell Edwards Stadium, Miller Park, the Football Practice Facility, South Field, and the Indoor Practice Facility. In the afternoon, attendees will visit Rio Tinto Stadium, home of MLS club Real Salt Lake followed by Smith’s Ballpark, home of the Salt Lake Bees.

Thursday will feature a half-day seminar on wheels, and attendees will visit Zions Bank Real Academy & Training Center – training facility for MLS club Real Salt Lake followed by University of Utah. Sign up for one or both when you register for the 2023 Conference. If you have already registered but did not sign up, you can log back into your registration and add the seminar on wheels

The 2023 Seminars on Wheels are sponsored by Bush Sports Turf. **SFM**



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Introducing SFMA CEO Laura Simmons, CAE



On December 1, 2022, the Sports Field Management Association (SFMA) welcomed its new CEO Laura Simmons, CAE.

In a letter to members, SFMA President James Bergdoll, CSFM, CPRP, stated “We received hundreds of applicants and conducted numerous interviews with some very impressive individuals. After all was said and done, one candidate stood out among the crowd.”

Bergdoll added, “Laura has a proven track record of association leadership, including developing innovative programs, growing membership, managing finances/budgets and implementing strategic plans.”

Most recently, Simmons served as deputy director for the Federation of State Massage Therapy Boards, and has more than two decades of experience serving associations and working in the world of property management. Simmons received her MBA from Webster University and a BA from the University of Kansas, and has been recognized as a Certified Association Executive (CAE) from the American Society of Association Executives.

“In addition to Laura’s impressive background, in her first interview she brought boundless positive energy and showed great interest in tackling SFMA’s challenges and championing our members,” Bergdoll stated. “In short, she blew the selection committee away. Laura brings poise and professionalism to the role, and is absolutely an outside-the-box thinker who will provide a fresh perspective to the association.”

“Laura will be responsible for enhancing SFMA’s role and profile as a member advocate and positioning the association as the leader in the field for the years ahead,” he added. “The board of directors has every confidence she will succeed.”

SportsField Management magazine recently asked Simmons about taking on the role of SFMA CEO, and her vision for the association.

SPORTSFIELD MANAGEMENT (SFM): Please tell us a bit about yourself and your background.

LAURA SIMMONS, CAE: I got into the association management business by accident. When I graduated from college, we were in a bit of an economic downturn; so, getting a job was not easy. I was working in retail, and through a friend of a friend, I found out about an office manager position. I took that, and it was with an association – and I fell in love with it. It was a small staff – similar to SFMA – and we all wore multiple hats. It was a great opportunity for me to get exposed to all areas of association management – not just one niche area. I loved working with members and helping them to better their profession and their industry. Over the years I have worked with a variety of

different associations and membership organizations, learned all the best practices, and was able to hone my leadership skills. I have become more of a collaborative person – I like to brainstorm and bounce ideas off people. I am a firm believer that if I have a good idea and you have something to add to it, then it becomes a great idea – and much better than anything I could come up with on my own. I really appreciate diversity of thought and ideas and being able to formulate those things into action plans and goals for the future. My philosophy comes from working with – and for – the members, making sure I am doing what I can to help them achieve their goals.

SFM: In the official announcement to SFMA members, it was mentioned that in your previous roles you have developed innovative programs, grown membership, managed finances and budgets, and implemented strategic plans. Looking at all of that, what would you say are the biggest strengths you bring to SFMA?

SIMMONS: It would be that diverse experience. I only have a 30,000-foot view of the organization so far, and I have a lot of learning to do. But the fact that I have that varied experience from working with other associations, and the ability to wear many hats, gives me that ability to take in the full context of everything that is going on within the organization. Before making any decisions or making any moves, I am good at looking at every aspect – from financial to strategic to public relations. I am able to look at the entire realm of the organization and the impacts that decisions could have. So, my biggest strength is making fully informed decisions.

SFM: Would you say the most important attribute for any association executive is that type of flexibility and diversity?

SIMMONS: Yes, flexibility, diversity of thought, and collaboration – being able to listen to the members. I know every member is probably going to have a different answer if I asked, “What is your number-one need?” Being able listen; recognizing individual traits of people; and honoring those differences among individuals, their industries and their roles really is key to being successful in association management – regardless of your role.

SFM: What attracted you to the SFMA CEO position?

SIMMONS: Honestly, the dedication to the members. When I first found out about the position, I took a deep dive into the website and the magazine. It was the commitment to the values and the profession itself. Being able to build on the education and knowledge

and invest back into the industry really spoke to me. And the focus on safety was a key factor. The organization clearly has a strong foundation, and I felt there are a lot of possibilities and opportunities for me to build upon that. It's a strong organization, and I am excited to be a part of it.

SFM: What was the interview process like for you, and what did you learn about SFMA and its members throughout that process?

SIMMONS: Really, it was the exclamation point for me on wanting the position. The job description caught my attention, and I did my research before I even applied. But it was meeting the people on the search committee – current leaders, past leaders, and some who have not yet become SFMA leaders – and hearing their passion and excitement. Even when they had concerns, it was never negative; it was “What can we do better?” and “How can we grow?” It was great to be able to just have a conversation and connect. I was able to do that by Zoom, but once we met in person, I was like, “Yes, these are my people. I am ready to go.” It was really the final “yes” for me.

SFM: You spoke about the diversity of tasks you have to manage in this role. What are the keys to prioritizing all the things that need to be done as CEO?

SIMMONS: The key for me is that I still have a lot to learn, so I have to get in and get started immediately. But I am already working on some transitional tasks and setting priorities. I will start getting up to speed on where the staff is with projects and what I can do to support them. With conference coming up, I know they are super busy. So, I need to support them at this point, and then once we are past conference I need to do a deeper dive into who is doing what, and do our own internal SWOT analysis to determine what is working in our operation and what is not. How can we better support our members? How can we better support the foundation? There is a wealth of knowledge on this team, and I want to make sure they have the opportunity to voice their thoughts and opinions about the future of the organization.

SFM: What are you most excited about in the new role?

SIMMONS: Meeting the members. That is one of my top priorities. The timing is perfect with the conference coming up, as I will get to meet a lot of them. But the other thing I really want to do is reach out and do tours of some fields and facilities to get myself more ingrained. I am planning to take the Sports Field Management 101 course we offer, but doing that

“The organization clearly has a strong foundation, and I felt there are a lot of possibilities and opportunities for me to build upon that. It’s a strong organization, and I am excited to be a part of it.”

– LAURA SIMMONS, CAE

versus seeing a team in action is much different. I want to get out and see members and make sure I have a comfortable understanding of the industry. I need to have a full understanding to help me do the best I can when developing new programs and building respect for the profession.

SFM: What are your initial goals or vision for SFMA?

SIMMONS: To step back into the strategic plan. I know it was developed in 2021, and with the former CEO's departure, some of it got put on hold. So, to step back into that with James [Bergdoll], Sun [Roesslein] and the rest of the board to get that process going again, reevaluate it, and determine next steps and make sure we are in a good place to attain those goals. That is my top priority.

SFM: Can you tell us a bit about yourself outside of work?

SIMMONS: I have been married for 30 years, we have two adult children and two dogs. We live in a small town south of Kansas City. It is a great little community, and it is a nice break away from the city. We love the outdoors, and we have a little bit of land. We enjoy gardening and canning; I make a great salsa. I am an avid reader, and love to immerse myself in a good book.

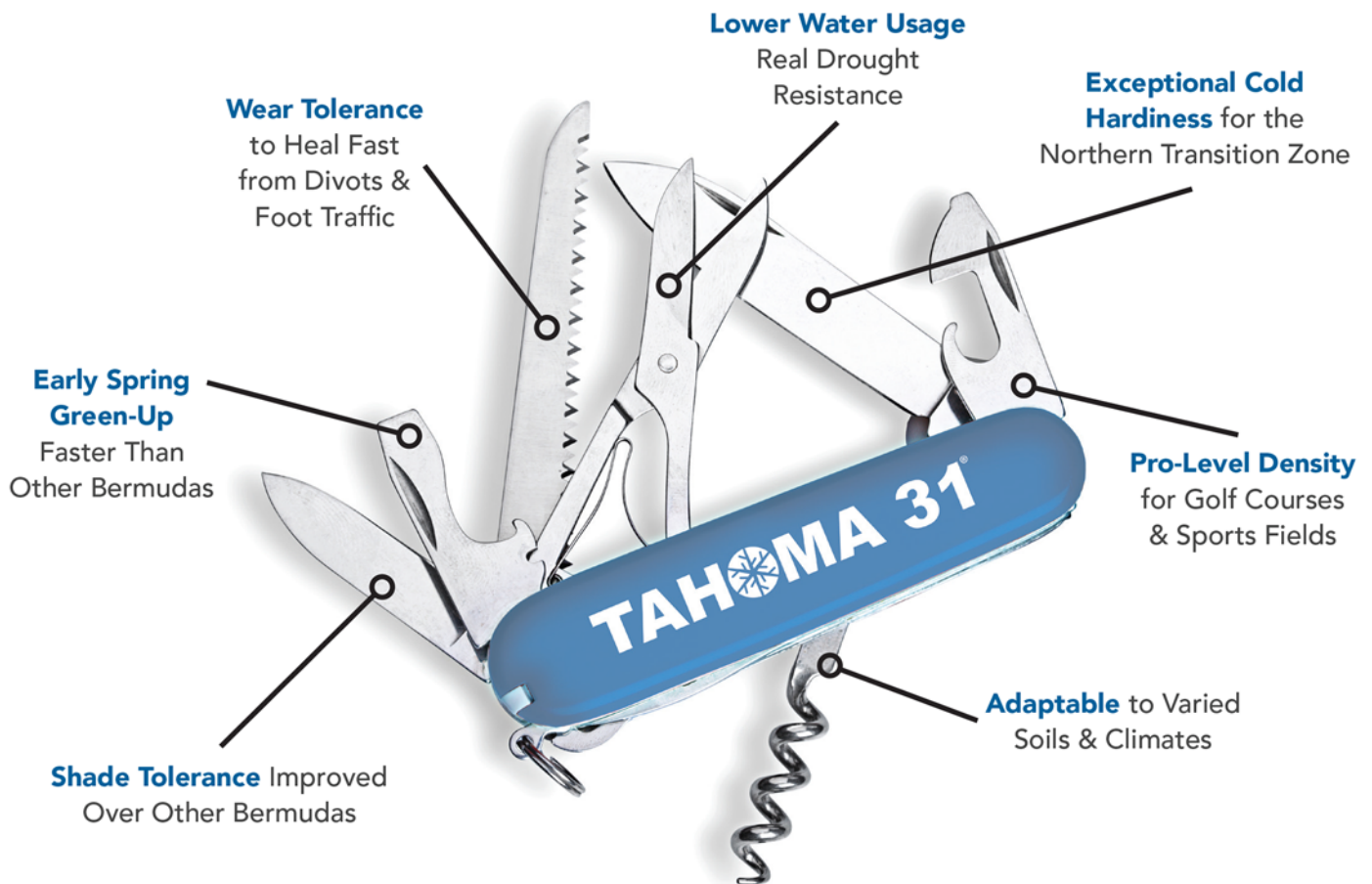
SFM: Is there anything you would like to add?

SIMMONS: I am really excited to get to know the members, and to dive in and work with this great team that we have. I look forward to doing the best we can to implement the strategic plan and really build upon the great foundation that is already in place. I am very excited to get started. **SFM**

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Surface rooting can cause damage to structures and create a tripping hazard. All photos by John C. Fech

Navigating Tree Removal

By John C. Fech

When trees near a sports field, in a park or on a campus grounds become problematic, removal is a good option. However, knowing when a tree is really problematic or just looks problematic is a really tough endeavor indeed. An extra caveat is that tree removal is a political football, with emotional complications and challenges. With all of this in mind, sports field managers need to get it right; to remove the bad ones and keep the good ones. The step-by-step process of assessing the condition, seeking guidance from a certified arborist, identifying and prioritizing specimens, communicating effectively

with stakeholders, and implementing the plan will bring success to a sometimes daunting endeavor.

START WHERE YOU CAN

When faced with a big concern like tree removal, it can be difficult to know how and where to start. Most often, this is because the task seems overwhelming. Instead of feeling the need to tackle and accomplish the entire objective/ outcome, it's often helpful to lower the expectation a bit – especially if you're not totally equipped or you've never done this before. A guiding phrase from tennis great Arthur Ashe provides some excellent advice in this regard: "Start where you are, use what you have, do what you can."



Stem girdling roots limit the capacity for trees to adequately conduct water and nutrient movement.

Considering the obstacles that he was able to overcome and the achievements that he made, it's especially pertinent.

With tree removal:

- Start where you are – Every sports field manager has had to define and implement various projects; this is just one more. Use the skills that are general in nature and transfer them to this project.

- Use what you have – Whether it's advice from a neighbor who has recently had a tree removed or watching a YouTube video featuring an ISA Certified Arborist, reliable information is readily available.

- Do what you can – Even if it's only making a list of trees that appear to be problematic, a simple step can be very impactful.

PROBLEM IDENTIFICATION

When deciding which trees to work on first, start with the ones that appear to have something wrong with them. The obvious defects of cracks, previous topping procedures, soft/spongy wood, missing bark and sapwood at the base, and lots of stems that occupy the same general space are easy to spot.

Defect “look alikes” can be a little tricky, but are similar to actual defects in that they are conditions to note on a list of concerns. The ones that fall into this category are burls, exfoliating bark and root knees. These naturally occurring features of trees are not actual problems, they just look like it.

TREE LOCATION

Just like with residential housing or commercial real estate, location is very influential in navigating tree removals. For example, trees often cause problems with

casting excessive shade, creating surface roots and droppage of debris. If located close to the playing surface of a sports field or walking path on school grounds, it's not so much the tree itself that is the issue, it's the conflict with the purpose of the site (a.k.a., the location).

In some cases, the opposite is the problem – the site itself is the issue, as in situations where more water or fertilizer is applied to maintain turf than is beneficial for the tree. This is certainly the case with herbicides that control broadleaf weeds. Turf maintenance equipment such as mowers and string trimmers pose threats to tree health, often causing damage to the bark and sapwood, which disrupts the movement of water and nutrients and often leads to decay of the heartwood.

Another consideration of location is the suitability of the site for the tree's health. The common phrase of “right plant, right place” rings true here. A good technique for this factor is to ask, “Is this a good spot for a (fill in the blank) tree, or, actually, any tree at all?” After all, some trees are planted “just because,” and not for any real purpose. For overall tree vigor, consider size, shape, sun/shade preferences, fall color, spring bloom, disease resistance and other redeeming characteristics.

Finally, in terms of location, does the tree have to be removed or can it just be “fixed” or mitigated through pruning, cabling/bracing, radial trenching, relocation or root excavation? In some situations, trees don't have to be cut down; rather they can be stabilized or modified to remain as an asset in the sports field or grounds landscape. This can be beneficial if a key stakeholder has a special interest in a given tree, or if it has historical or memorial significance.



Location and size are important considerations when choosing and planting woody plants near sports fields.



Failure to remove co-dominant leaders at the proper time leads to included bark, a serious defect.

If any suspected tree problem or location issues are in doubt, it's best to consult with a qualified professional. Highly competent tree professionals establish and maintain their skill sets through the International Society of Arboriculture (ISA). Various categories of certification exist; the ones that pertain to this arena are the ISA Certified Arborist, the ISA Tree Risk Assessment Qualification and the ISA Board Certified Master Arborist.

PRIORITIZING THE REMOVALS AND REMEDIATIONS

Some trees are more problematic than others. Consider safety to players, spectators and landscape users as the highest priority, move on to threats to turf health, and then to general lack of aesthetic appeal.

Create a priority list with columns for tree species and location, identified issue/concern, proposed solution and follow-up evaluation – timeframe to be determined, usually six months later. The priority can be framed by field, by historic complaints, or by inputs from staff and stakeholders. As with problem identification, assistance from an ISA Certified Arborist can be very helpful during prioritization.

COMMUNICATING WITH DECISION MAKERS

It's probable that at least some removals will need approval from a field owner, department manager, athletic director or other stakeholder. It's rare that a sports field manager has total control over these sorts of decisions. With that in mind, persuading or at least communicating intent becomes a key component of navigating tree removals. A few considerations of the other person(s) in the equation can smooth out the process.

First, consider the background and specific personality of the “pitcher,” – the person being persuaded or informed. Most people favor credibility, act emotionally and think logically; usually it's a combination thereof, skewing in one of these categories, much like being an introvert or extrovert. Even the most reserved and quiet person has some degree of outward expression. It's helpful to know beforehand which is their preference or at least a tendency. “Hot buttons” are similar, such as a desire to see color on the campus grounds or have water features near the field.

Like knowing the innate or chosen preferences of another person, being privy to their awareness of the need to remove trees can be very helpful as well. Convincing someone that removal is necessary is easier if they already know that there is some sort of need to do something to a particular tree that they've observed. The



On high-pH soils, iron chlorosis is a common occurrence, and may be a consideration in the remove/retain decision.

JOHN MASCARO'S PHOTO QUIZ



CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:

Green spot on in goalmouth of unirrigated field

TURFGRASS AREA:

Multipurpose field

LOCATION:

Brewer, Maine

TURFGRASS VARIETY:

Bluegrass / ryegrass / fescue blend

Answer on page 33

John Mascaro is president of Turf-Tec International

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Most turf species cannot tolerate excessive shading, which could be one consideration for tree removal.

movie character Jordan Belfort in “The Wolf of Wall Street” utilized this principle to his maximal advantage – after all you can’t write your name if you don’t have a pen.

COMMUNICATION HELPERS AND HINDERERS

As with most things in life, communication can either be smooth or rough. Being successful hinges on knowing what works and what doesn’t.

In addition to knowing the background of a pitch, being specific and clear about the proposed action makes a big difference. As David Horsager, author of “The Trust Edge” explained, “People trust the clear and mistrust the ambiguous or overly complex.” In this context, site-specific tree defects, costs and risks should be described clearly and concisely.

Being aware of potential “interrupters” and “blockers” is also helpful. Common ones include time and attention, initial perceptions, competition with other projects, available funds, expected return on investment and too much work/too little focus.

Being aware of “noises” and distractions; noises can be actual sounds or related elements such as accents, body

language, facial expressions, preconceived notions, ringing in the ears, and background noises. Even industry jargon – such as IPM, Poa and PGRs – can be problematic. Finally, “non-answers” can get in the way of effective communication. When a question is asked and it is not directly answered, the listener must figure out why their question didn’t merit the response they were looking for, resulting in a disruption in the information exchange.

Listening actively. Here’s a challenge – in conversation, do you listen, or do you wait to talk? Pausing to focus on the message that your conversation partner is delivering is not only polite, but it also helps prevent missing key information in their response, allows them adequate time to finish what they are saying, and provides a bit of time for you to formulate your response. A good way to fully consider what your pitch is saying is to take a cue from Steve Covey, author of “The 7 Habits of Highly Effective People,” to seek first to understand before being understood. If someone feels like they are being understood, they feel affirmed – like their opinion is valued – and are more likely to agree with the need for tree removal.

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Ryan Newman, *Director of Athletic Grounds*
University of Colorado Boulder



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Essential pitching point techniques also include KISS (Keep It Short Sweetheart), making it visual, being unassailable, emphasizing burden relief and problem solving (a.k.a., WIIFM – What’s In It For Me?), sweetening the case with one more benefit, timing and preplanning any decision-maker objections.

Finally, in addition to evaluation after tree removal, replanting guidelines are the final step in navigating tree removal. Perhaps the most effective mindset is to consider where existing trees are problematic due to location and pests. Toss in purpose of the tree, selecting from a large plant palette to create a diverse landscape and maintenance considerations of the species chosen and replanting becomes well planned and poised to be highly successful. **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.



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Nutrient Management: Part 1

Editor's Note: The following nutrient management best management practices are excerpted from SFMA's National BMP guide, *Best Management Practices for the Sports Field Manager: A Professional Guide for Sports Field Management*. The full guide, as well as a customizable BMP template, is available at https://www.sportsfieldmanagement.org/knowledge_center/bmps/

Proper nutrient management in sports field management plays a key role in plant health and stress resistance, as well as overall aesthetics and playability (plant density, recovery, and wear tolerance). However, improperly applied nutrients can result in wasteful use of natural resources and nutrients. Thus, nutrient use should be undertaken with care and consider the impact of nutrient applications with respect to the environment, economy and society.

Therefore, the goal of the nutrient program should be to achieve an acceptable, safe playing surface that maximizes plant nutrient uptake while applying a minimum of nutrients to achieve these results.

ESSENTIAL MINERAL NUTRIENTS

Essential mineral elements are required for turfgrass growth. Phosphorus, potassium, sulfur, and, especially, nitrogen are most commonly deficient (see table on page 26).

By law in most countries, anything sold as fertilizer must list the percentage in the following order: N, P, K. The phosphorus is expressed as P_2O_5 and potassium as K_2O . For example, a 20-2-5 fertilizer has 20% N, 2% P_2O_5 , and 5% K_2O . The fertilizer label often also includes the percentages of other nutrients and/or the materials from which the nutrients are derived.

PRIMARY MACRONUTRIENTS

NITROGEN

Nitrogen is the nutrient that has the greatest impact on plants. Turfgrass has variable nitrogen requirements based on the species and usage, fertilizer source and timing, seasonal evapotranspiration rates, precipitation, and soil properties. Turfgrass requires nitrogen in greater quantities than all but the non-mineral nutrients that come from air and water (carbon, hydrogen, and

oxygen). Nitrogen plays a role in nearly all plant functions and is an essential component of amino acids, proteins, nucleic acids, etc. It is vital to understand the nitrogen cycle in order to maximize uptake by plants and minimize losses to the environment.

Understanding which nitrogen sources should be used is an essential component in an efficient nutrient management program. In many cases, nitrogen sources are applied without regard to their release characteristics. This increases the risk of negative environmental impacts, as well as management costs. Each nitrogen source is unique, and therefore should be managed accordingly.

The first selection criterion in choosing a nitrogen fertilizer source is the rate at which it becomes plant available. Some sources are immediately plant available (quick-release/water-soluble nitrogen) and others become so over time (slow- or controlled-release/ water-insoluble nitrogen). The most common dry fertilizer sources that are readily plant available and dissolve into the soil solution are urea (46-0-0) and ammonium sulfate (21-0-0). The most common liquids that are readily plant available are urea (various concentrations) and urea ammonium nitrate (28-0-0; 32-0-0). These readily available sources provide quick uptake and rapid greening, which can be especially important during cool times of the growing season and just before/after sporting events. However, high rates applied at any one time result in excessive shoot growth and increased mowing requirements at the expense of decreased root growth and increased probability of infection of some pathogens. The risk from fertilizer burn is relatively high with these quick-release sources, especially when applied at high rates and/or when weather is hot and/or dry.

Additionally, these rapid-release sources are more likely to be lost to the environment. Within this group of "quick-release" fertilizers, urea molecules rapidly convert to ammonia gas and then ammonium. Left on the surface, the ammonia can be volatilized — potentially losing much of the applied nitrogen. Additionally, the ammonium converted from urea or applied as a fertilizer can revert back to ammonia and be volatilized, especially in alkaline soils common in arid regions. Volatilization potential can be reduced by avoiding urea

application under hot, humid, and/or windy conditions. After application, watering with 0.25" irrigation water reduces volatilization potential.

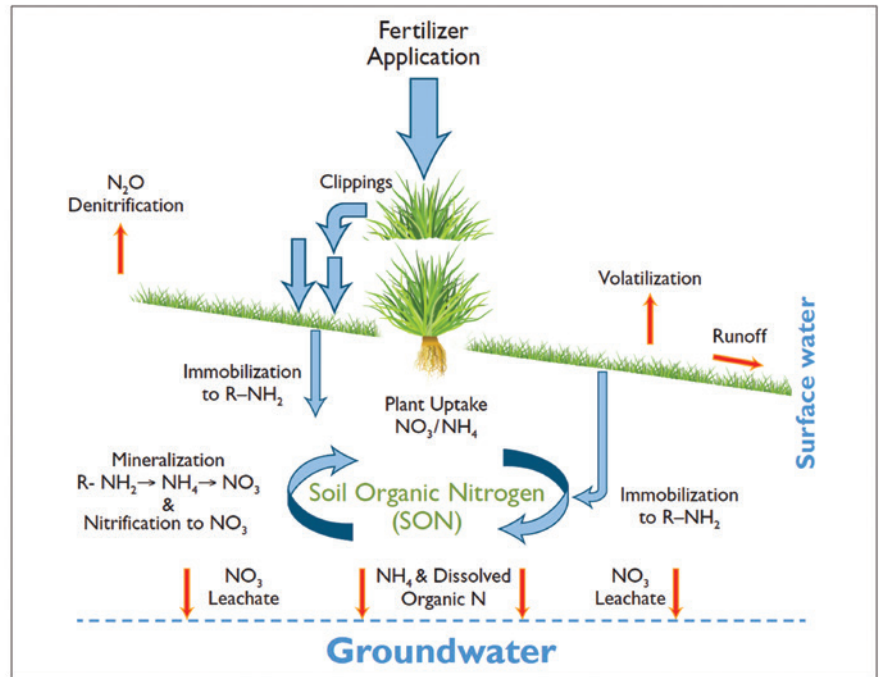
Ammonium converted from urea or applied as a fertilizer converts to nitrate within a few hours/days. The nitrate is prone to leaching below the rootzone with high precipitation and irrigation rates, particularly in sand-based soils. Nitrate is further lost to the environment due to emissions of nitrification/denitrification gases (e.g., nitrous oxide), especially with prolonged soil saturation. Thus, proper irrigation and drainage can help minimize losses of nitrate.

Use of fertilizers that are not "quick release" and become available over time can result in increasing nitrogen uptake and reducing losses. These fertilizers can effectively "spoon feed" plants by releasing or converting nitrogen in a steady manner rather than a flood of it entering the soil solution. These nitrogen sources can reduce losses to the environment, decrease foliar burn potential, and reduce labor with fewer required applications. Although complex, understanding these sources of nitrogen fertilizers can be simplified by separating into two types:

- **Slow/controlled release** – Nitrogen is released slowly or, in some cases, engineered to release in a controlled rate. For example, long-chain molecules containing nitrogen (e.g., methylene urea and urea formaldehyde) are broken down through microbial degradation — eventually resulting in ammonium and nitrate as breakdown products. Another example are the coated fertilizers, such as polymer-coated urea. Composted animal and plant biosolids and similar sources are included in this category as well.

- **Stabilized** – Inhibitors are added to water-soluble nitrogen products and slow down the nitrogen cycle to decrease the chance of loss and increase the window of when the plant available forms of nitrogen (ammonium and nitrate) are available for uptake. Inhibitors include:

- o **Urease inhibitors** – The conversion of urea to ammonium is slowed as the enzyme that catalyzes this reaction is temporarily inhibited.



The nitrogen cycle. Credit: New York Golf Course Foundation.

- o **Nitrification inhibitors** – The conversion of ammonium to nitrate is slowed as microbes responsible for this conversion are temporarily inhibited in their activity.

While these enhanced-efficiency fertilizers are generally more expensive on a cost per pound of nitrogen basis as compared with quick-release materials, their benefits include increased efficiency (lower rates can be applied), reduced costs (fewer applications; reduced mowing needs; reduced clippings), reduced risk for nitrogen-related diseases, and reduced environmental impacts. Often, a blend including 30-50% of these sources along with quick-release nitrogen is affordable and effective.

Proper nutrition is imperative as plants are preparing for dormancy late in the season. Therefore, nitrogen fertilization is often necessary. As always, any local regulations should be followed when applying fertilizers late in the year. It is also noteworthy that some irrigation waters, especially waste waters, can be high in nitrogen and should be tested and accounted for to avoid excessive nitrogen applications.

PHOSPHORUS

As with nitrogen, phosphorus deficiencies or excesses are detrimental to plants, and excesses are harmful to the environment. Phosphorus plays important roles

in cell structures and in energy transformations. It is especially important for root development with newly established sod and seedlings. However, excessively high phosphorus can result in poor plant health and encourage weed infestation, particularly annual bluegrass.

However, in contrast to nitrogen, phosphorus is rarely deficient in well-maintained and established turfgrass and is readily managed through soil testing. Plant response is well correlated to the proven soil tests, with no benefit to applying phosphorus when soil test values are sufficient. It is noteworthy that sports turfgrass tends to need relatively higher concentrations of phosphorus due to frequent overseeding and clipping removal. Despite this, there is no proven benefit, even in sports turfgrass, to continue to add phosphorus fertilizer when the soil test levels are very high. Doing so is a concern for water quality as it contributes to eutrophication. For this reason, fertilizer applications are regulated by some states/counties. In cases where phosphorus is not needed due to high soil test values and/or when prohibited, “phosphorus-free” fertilizer sources should be used. In most cases, uncoated/coated ureas, ammonium sulfate, and potassium chloride/sulfate suffice to provide the needed nutrients for turfgrass without application of any phosphorus.

More so than nitrogen, phosphorus fertilizer accumulates in the soil. Phosphorus is poorly soluble, especially at extreme alkaline and acid soil pH levels. Shortly after fertilizer is applied, the majority of the phosphorus precipitates into a solid form. Nutrients need to be dissolved into the soil solution for plant uptake and this solid phase phosphorus is temporarily not available for plants until it slowly solubilizes over time. This is not a concern if enough of these precipitates exist in the soil in proximity to the roots of each plant.

The forming of these solid phosphorus precipitates greatly minimizes phosphorus leaching, especially as compared with nitrate. However, phosphorus can be leached when soil test concentrations are high. Of greater concern is phosphorus loss due to surface water runoff when soil test values are excessive, especially in close proximity to surface water bodies. Fertilizer that lands on impervious surfaces (e.g., sidewalks) that lead to stormwater drains should be minimized and removed.

The most common forms of phosphorus fertilizer are the ammonium phosphates. However, there are a wide variety of phosphorus fertilizers that can generally be categorized as follows:

- Traditional inorganic phosphates – These are in granular (such as monoammonium or diammonium phosphate) or liquid (ammonium polyphosphate) form that quickly react in the soil to form precipitates.
- Coated phosphates – These are similar to the coatings for nitrogen that are released slowly over time.
- Organic complexed phosphates – These products have been reacted with organic acids or are bound in various plant and animal biosolids (e.g., animal or plant manures or treated sewage sludge). These release nutrients into the soil as they are decomposed by microbes or chemicals. (Note: The phosphorus described here is potentially different than the phosphorus found in “organically certified” fertilizers, which can include these materials or most other sources listed here.)
- Specialty products – These include a wide range of products, which are primarily used for pathogen control and improvement of stress tolerance.

Recommended rates of phosphorus, when needed, are 1-4 lbs./1,000 ft², with the rate proportional to soil test values. Timing of phosphorus applications is not as critical as nitrogen. Typically, a single annual application is adequate, although more may be needed if the soil test is very low and/or with new sod/seed. It is recommended to apply phosphorus and incorporate into the soil ahead of establishing turfgrass if soil test values warrant its use.

POTASSIUM

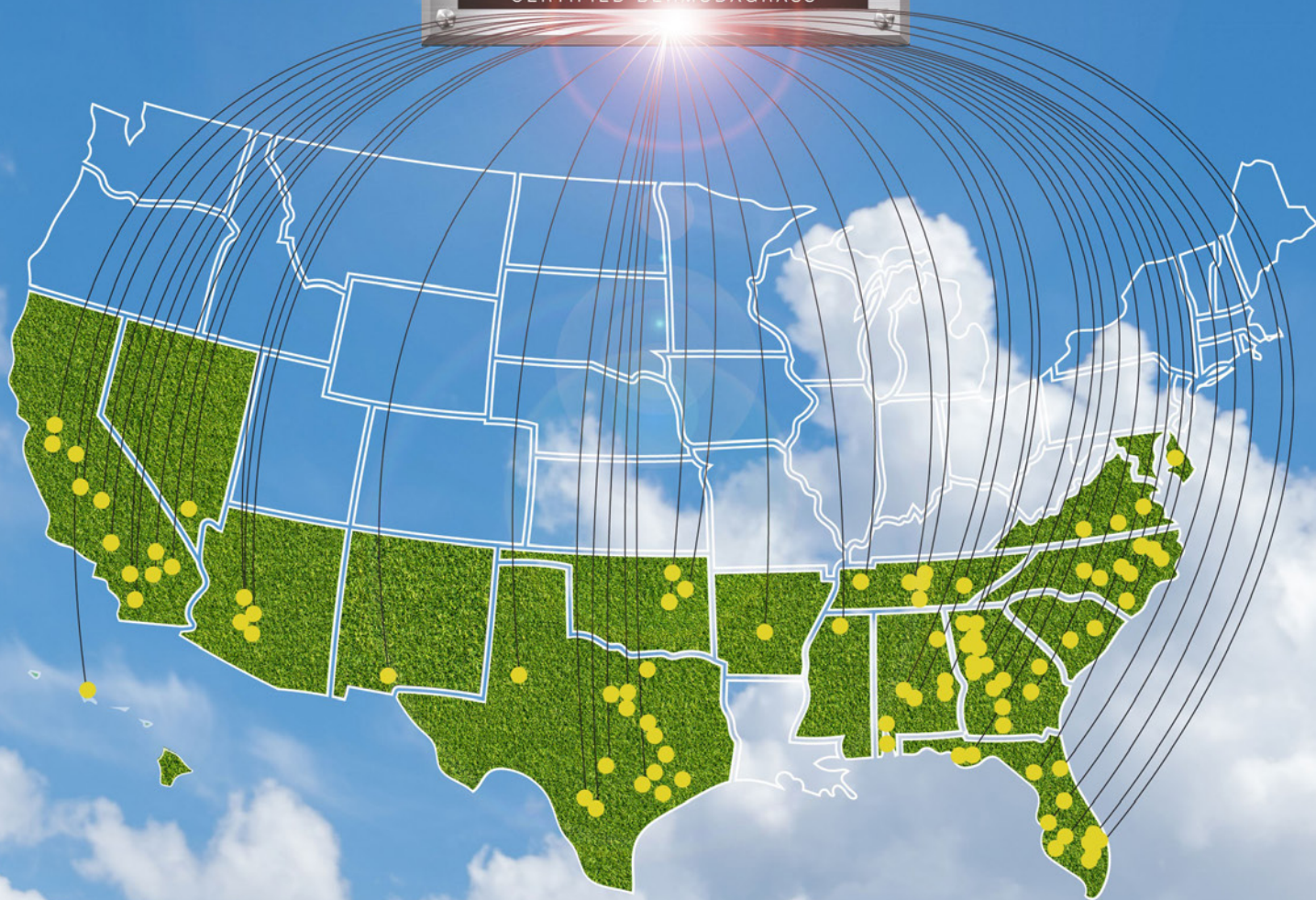
Potassium is essential for proper water relations in plants, as well as other functions, as it supports stress resistance. The overapplication of potassium is wasteful of maintenance costs and natural resources. As with phosphorus, there are good correlations with plant response and soil test values. Potassium is intermediary compared with nitrogen and phosphorus with regard to soil holding capacity. It is held loosely in the soil by clay and organic matter, which means that it is not easily leached in soils with higher levels of these soil components, but is readily leached in sandy, low-organic-matter soils. In these, it tends to need careful management similar to nitrogen to provide for season-long availability. Otherwise, a single annual application is generally adequate.

Rates of potassium, when needed, should be based on soil test results. The most common forms of potassium fertilizer sources are potassium chloride and potassium sulfate, although other sources are available and potentially useful (e.g., potassium nitrate, potassium thiosulfate, etc.). Coated sources are available and can be helpful, especially in sandy, low-organic-matter soils.

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Nutrient	Visual Deficiency Symptoms (all of these can result in poor shoot growth)	Typical Shoot Tissue Concentration ¹	Critical Soil Test Level ²
<i>Non Mineral Nutrients (obtained from air and/or water)</i>			
carbon (C)	never deficient	43-48%	n/a
hydrogen (H)	never deficient	2-4%	n/a
oxygen (O)	shoots never deficient, but roots can be deficient in saturated (especially compacted) soils	43-48%	avoid soil moisture saturation for extended periods
<i>Primary Macronutrients</i>			
nitrogen (N)	chlorosis, significantly poor growth/recovery (excessive nitrogen results in dark green color with excessive shoot growth/poor root growth)	3-4%	n/a (typical values are 5-10 parts per million [ppm] unless higher due to recent fertilization)
phosphorus (P)	poor root growth, in rare circumstances shoots will be red/purple	0.25-0.45%	18-30 ppm
potassium (K)	chlorosis, lack of turgidity (shoots lay over)	2-3%	150-200 ppm
<i>Secondary Macronutrients</i>			
sulfur (S)	chlorosis	0.23-0.30%	n/a (less likely to respond to sulfur fertilizer as organic matter levels increase above 3%)
calcium (Ca)	lack of turgidity (shoots lay over)	0.5-1.0	400-500 ppm
magnesium (Mg)	chlorosis	0.25-0.50	80-100 ppm
<i>Micronutrients</i>			
iron (Fe)	general chlorosis, although interveinal chlorosis is common in most species, this type of chlorosis is difficult to see or not present in shortly mowed turfgrass; it is rare to see deficiencies in newer varieties	65-500	n/a (very poor correlation to plant response)
zinc (Zn)	chlorosis	22-50 ppm	>1-2 ppm
manganese (Mn)	chlorosis	35-60 ppm	6-10 ppm
copper (Cu)	chlorosis	5-8 ppm	0.4-0.6 ppm
boron (B)	chlorosis	8-15 ppm	>1-2 ppm
chloride (Cl)	chlorosis	unknown	>20-25 ppm
nickel (Ni)	not observed	unknown	unknown

¹Values shown are not intended to represent optimal ranges, but rather are what is commonly measured. Optimal levels vary by species, variety, use, and environment.

²The soil test values shown for the primary macronutrients have good confidence due to significant research, but the other nutrients have relatively less scientific backing and, instead, are based largely on observations and extrapolations with other species. The excessive soil test level shown is not meant to be a "sufficiency level", but rather the point at which there is virtually no chance that a fertilizer response would be likely.

SECONDARY MACRONUTRIENTS

As with primary macronutrients, secondary macronutrients are found in plants at percent levels (>0.1%). However, they were classified as "secondary" because they are historically less commonly deficient in crop plants.

SULFUR

Sulfur deficiencies have become relatively more common, especially in turfgrasses, due to reductions in acid rain pollutants and increasingly pure fertilizer materials. Predicting sulfur deficiencies is difficult, as the soil test is not well correlated to plant response. Rather, organic matter is a somewhat better predictor, with the likelihood of response diminishing as organic matter levels increase above ~2%. As with nitrogen, sulfur is prone to leaching losses. As such, sulfur is more likely to be needed on high-sand, low-organic-matter soils, especially on those that receive high precipitation/irrigation rates. Irrigation water should be tested because many sources, especially greywater, can be high in sulfur.

When sulfur is likely to result in improved plant health, it is commonly added in conjunction with nitrogen as ammonium sulfate and/or with potassium as potassium sulfate. Micronutrients (zinc, iron, manganese, and copper) are also often applied as sulfate salts, although the rates may not supply enough sulfur to meet all needs. Gypsum (calcium sulfate) and Epsom salt (magnesium sulfate) also contain sulfur, although these are usually applied for reasons other than sulfur nutrition. Sulfur-coated urea or elemental sulfur are good sources for steady release of sulfur over

the growing season, which is especially helpful to soils prone to leaching. Excesses are not typically environmental or plant health concerns, although these are wasteful of resources and, as with all soluble fertilizers, can be a contributor to excessive salts/fertilizer burn.

CALCIUM AND MAGNESIUM

Although calcium and magnesium are essential to plant function, they are ubiquitous in the environment and, thus, rarely have documented deficiencies. Soil and irrigation water tends to be very high in these nutrients. Although much of the calcium and magnesium is found in solid form in soils, equilibrium chemistry assures that there is ample found dissolved in soil solution. When deficiencies do occur, they are typically on acidic sandy soils with no or minimal irrigation or with very pure irrigation water. Testing for and maintaining an appropriate pH with dolomitic limestone, which contains both of these nutrients, is generally enough to provide for healthy plant growth as both pH and nutrition is managed. Excess amounts of these nutrients are common and not typically concerning, although unwarranted applications are wasteful and potentially detrimental due to excessive salts.

MICRONUTRIENTS

Micronutrients are typically found in relatively low concentrations in plant tissues, although they are just as essential for proper turfgrass health as macronutrients. They play a variety of roles in turfgrass biology, including photosynthesis, enzyme catalysis, protein synthesis, and a wide variety of other physiological activities and structural components. However, they are often found in ample concentrations in soils and turfgrass rarely shows response to their application. For example, nickel and molybdenum are needed in extremely minute quantities and there are no documented deficiencies in fieldgrown turfgrass. Although rare, deficiencies of the other micronutrients have been documented. These are far more likely to occur in sand-based fields with low organic matter.

Generally, there is ample chloride in irrigation water and soils. It is also included with the most common source of potassium fertilizer which is “potash” (potassium chloride). Chloride deficiencies are more likely to occur

in non-irrigated, high-rainfall areas when potassium chloride fertilizer is not utilized.

Boron, zinc, manganese, copper, and iron are more likely to be deficient in alkaline soils due to poor solubility. In the past, iron chlorosis (yellowing) was somewhat common. However, modern varieties have been bred to mostly avoid chlorosis, especially with Kentucky bluegrass. Regardless, it is common to do a foliar iron spray a few days before high-visibility sporting events. This doesn't necessarily improve plant health, but the practice typically results in visual response of greening.

Rates of micronutrient fertilizers are relatively low and should follow label recommendations. It is relatively easy to cross over from deficient to toxic given the fact that these are needed in such low quantities. This is especially true for copper and boron. In most cases when one or more micronutrients are needed, a single application annually will suffice. However, in severely deficient situations more frequent, generally foliar, applications are warranted. This is especially true for newly established sand-based fields. **SFM**

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College and University Turfgrass Programs

EDITOR'S NOTE: The following is the first in a series delving into colleges and universities that offer programs devoted to turfgrass management, turfgrass science, and related disciplines. We will profile various colleges and universities through conversations with key players at major institutions, as we discuss their programs and provide insight into the industry education that is available to the next generation of sports field managers.

In this issue of *SportsField Management*, we examine the turfgrass programs at Texas A&M University and Iowa State University.

TEXAS A&M UNIVERSITY

The Department of Soil and Crop Sciences at Texas A&M University is one of the largest departments of its kind in the nation and is preeminent throughout the world. Students have the option to choose between two hands-on, science-based majors: B.S. in Turfgrass Science or B. S. in Plant & Environmental Soil Science (Crops Emphasis or Soil and Water Emphasis).

Additionally, the Department of Soil and Crop Sciences at Texas A&M University offers minors in Agronomy, Environmental Soil Science, and Plant Breeding.



Through a network of research, extension, and teaching programs, Texas A&M has provided solutions based on sound research, extensive outreach educational programs and assistance through statewide and county extension activities.

Research efforts strive to integrate urban landscape systems to enhance quality of life, develop improved technologies for the management of weeds, diseases, insects, and other important pests, develop turf systems to reduce impact of environmental pollutants, and develop landscape management systems that conserve natural resources.

According to Chase Straw, Ph.D., assistant professor, turfgrass management and physiology at Texas A&M University, the university's Department of Soil and Crop Sciences currently has more than 20 students majoring in Turfgrass Science, and he anticipates those numbers increasing in coming years.

"We had nine freshman applicants in 2021 that applied to be a Turfgrass Science major, and only two got accepted. So, it is a pretty low acceptance rate," he said. "However, we have a lot of transfers from junior colleges, and that is how we get a lot of our students. Our recruiting efforts are geared more toward junior colleges. We try to persuade students that once they get their two-year associate's degree at a junior college to transfer into the Texas A&M Turfgrass Science program, because it is a lot easier to transfer in than it is to get accepted initially."



Texas A&M offers a four-year Turfgrass Science degree, but does not offer a two-year degree program.

“I think having the four-year degree professionally gives you the ability to critically think,” said Straw. “College is not necessarily about what you learn in the classroom, but how you develop life skills and learn how to think for yourself and manage your time appropriately. That is going to serve you well when you go out into the world. Everything you learn in the classroom is going to set a foundation for when you start your actual job. You are obviously going to get your hands-on experience when you get into the job, but college will hopefully teach you that work/life balance – especially when you make it to a higher-end job in this industry and have a lot of pressure on you.”

According to Straw, internships are the most valuable experiences for students because they provide hands-on training. “I push students to take quality internships; and in my classes we try to do a lot of site visits so they can get in front of turfgrass managers, and can experience things for themselves and see it at somebody’s facility,” he said.

Straw teaches two of Texas A&M’s turfgrass classes, both of which are for juniors and seniors. His classes feature a lecture one day of the week and then a guest speaker or site visit on another day.

“I have gotten good feedback from students,” said Straw. “It’s encouraging to hear that they see it first in my class and then they go out and do it in their internships. They already have an idea of why to do it, then they learn how to do it when they are on their internships.”

According to Straw, Texas A&M Turfgrass Science students have interned recently at MLS stadiums, the Boston Red Sox, Philadelphia Eagles and one will soon be interning at Carolina Green. Also, two students were recently part of the all-female grounds crew for the Little League Softball World Series.

In terms of the types of careers Texas A&M Turfgrass Science students are pursuing after graduation, Straw said it is a 40/40/20 split of 40 percent sports field



management, 40 percent golf course management and 20 percent landscape management.

According to Straw, Texas A&M is one of only a handful of universities that still offers a Turfgrass Science degree. “We had talked about merging everything into Plant and Soil Sciences, but my department head felt that having the Turfgrass Science degree gave us an advantage,” he said.

In terms of research, Texas A&M has a 10-acre research facility. “We usually have three or four Turfgrass Science majors working at our turfgrass research facility,” said Straw. “They are involved in data collection, data entry, and simple analyses. Texas A&M also offers directed studies where we can develop a research study with them or have them assist with research we have going on, and they get credit for it. I try to let the students develop their own research.

For more information about Texas A&M’s TurfgrassScience major, visit <https://soilcrop.tamu.edu/program/turfgrass/>.





IOWA STATE UNIVERSITY

The Iowa State University Department of Horticulture Turfgrass Management option has an excellent national reputation and students are sought after by employers throughout the country. Iowa State University Turfgrass Management students learn all the skills necessary to maintain turf that could earn them a position as a sports field manager, golf course superintendent, lawn care specialist, or municipal grounds professional.

"The coursework focuses on the importance of soils, plant function, and the management of insects and disease," said Barb Clawson, student services specialist, associate teaching professor and academic advisor. "Hands-on experience, amazing internship opportunities, and professional development."

According to Clawson, Iowa State Turfgrass Management students graduate the program into jobs as assistant golf course superintendents, AIT, golf course superintendents, sports field managers, irrigation technicians, small equipment or fertilizer/chemical sales, spray technicians, lawn care professionals – some combining turf with landscape design, installation and management skills.

Clawson said that, at the beginning of the fall 2022 semester, of 154 students total in the Horticulture program, 32 were in Turfgrass Management.

According to Adam Thoms, Ph.D., assistant professor of commercial turfgrass in the Department of Horticulture at Iowa State University, students have the chance to be a part of research through various undergraduate research assistant positions.



“Our students have helped with studying the testing and development of potentially new fertilizers, helped evaluate new cultivars, and investigated new devices for cultural practices to list a few projects,” he said. “They get to work in the field, greenhouse and lab.”

To get prospective students interested in Iowa State’s Turfgrass Management program, Clawson said the Iowa Golf Course Superintendents Association/Iowa Turf Institute has sponsored a barbecue during the Iowa FFA Convention and invited students and agricultural educators for a tour of Jack Trice Stadium, as well as a local golf course.

“I try to get students who are interested in sports already, that maybe don’t have what it takes to play the game but want to make the game better by managing a pristine field. When a student finds us, I try to get them to speak with Adam Thoms or Nick Christians on the first visit, offer them a tour of the stadium and/or a golf course,

talk at length about where our students intern and find careers, and make sure they understand our curriculum.”

Added Clawson, “Our program combines the needed technical information with hands-on activities and internships to prepare our students for a rewarding career.”

For more information about Iowa State University’s Department of Horticulture and its Turfgrass Management focus, visit <https://www.hort.iastate.edu/undergraduate-experience/academic-offerings/turfgrass-management/>. **SFM**

SportsField Management magazine will detail other college and university turfgrass programs in coming issues. If you would like your school profiled, please contact John Kmitta at jkmitta@epgacceleration.com or 763-383-4405.

Blowers, Sweepers and Vacuums

BILLY GOAT'S HURRICANE STAND-ON BLOWER

The compact P2000 zero-turn stand-on blower with 3,500 cfm and 150-plus-mph air velocity has a patented Dual Deflector Air Flow System, allowing the operator to change the angle of air flow for deeper, more efficient cleaning. And a patent-pending Directional

Air Discharge Foot Pedal permits the operator to quickly transition air output from the left to the right side when turning. Add zero-turn maneuverability and 36-inch gate clearance, and this machine makes for fast and easy cleanup on or off the field



ECHO EFORCE 56V BATTERY SYSTEM

Echo Incorporated's eFORCE 56V battery system includes 10 products, two batteries and two chargers. This line of Echo outdoor products is available at major retail locations and more than 6,000 independent Echo lawn care dealers across the United States. This new generation of battery-powered Echo eFORCE lawn equipment offers long usage times, power for dense/tough jobs, quiet operation, easy starts and maneuverability, cost efficiency and simple maintenance. The new Echo eFORCE battery-powered cordless lineup includes:



- Handheld blower (550 cfm)
- Chain saws (12" top-handle and 18" rear-handle)
- String trimmers (16" and 17")
- Self-propelled 3-in-1 lawn mower (21")
- Hedge trimmers (22")
- Brushcutter (17")
- Pro Attachment Series trimmers (16" with 14 attachments and 17" with 15 attachments)
- Batteries (2.5Ah and 5.0Ah)
- Chargers (standard and rapid)

HONDA POWER EQUIPMENT VERSATTACH MULTI-PURPOSE SYSTEM

Featuring two powerhead options and six different attachments, the Honda VersAttach Multi-Purpose System combines the power and reliability of Honda 4-stroke engines with a robust lineup of tools to fit a wide range of needs. The Honda VersAttach System offers two powerhead models: the UMC425, powered by a Honda GX25 mini 4-stroke engine, and the UMC435, powered by a GX35 mini 4-stroke engine. The design of the Honda mini 4-stroke engine provides for full, 360-degree operation, allowing the VersAttach to be used — and stored — upright, sideways or even upside down, and eliminates the need to mix fuel and oil, saving the operator valuable time, money, and frustration of trying to get the right fuel/oil mixture. Each model can be paired with an optional interchangeable edger, line trimmer, blower, hedge trimmer, pruner and cultivator that fit quickly and securely into the attachment shaft by way of Honda's SureLoc joint locking system, saving time and effort for the user.



HUSQVARNA 580 BACKPACK BLOWER

Providing 15-percent more blowing force than its predecessor, the Husqvarna 580 backpack blower boasts best-in-class support with cushioned straps, ventilated back pad and hip belt that reduce fatigue and provide all-day comfort. With a fuel tank capacity of 89.7 fluid ounces, the 580 allows more running time. More running time in between refueling and



JOHN MASCARO'S PHOTO QUIZ

ANSWER

From page 17

The green spot on this unirrigated field is fairly easy to diagnose. When a worn area in the goalmouth of this high school field was thin, the coach told the sports field manager that he had been given some sod and wanted to do a repair. Since it was the middle of the summer and the field has no irrigation or access to water, the sports field manager told him he was better off putting some loam and seed down later in the year toward the fall in place of trying to resod the area. He also suggested that he just use the sod somewhere else. A couple of weeks later, the sports field manager observed the sod on the field. The area was never properly leveled out before the sod was installed and a low area at the center of the repair was the only area that received an adequate amount of water due to a dry summer. In addition, this low area in the sod also was being mowed at a higher height due to the depression, also contributing to the greener area. The sports field manager reported that the coach had, "Good intentions, but a bad outcome to what might have been good sod." This photo also illustrates how higher mowing heights during periods of stress – including times of drought – can increase turfgrass health and survivability.

Photo submitted by Matt Tobin with Pioneer Products and David Hart, sports field manager at the City of Brewer (Maine).

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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all-day comfort means fewer stops, and more efficient work time. The high-compression X-TORQ engine, coupled with large-diameter high-flow elbow and carbon plastic fan design, instantly delivers 1,000 cfm of air flow and 220-mph air speed.

M18 FUEL DUAL BATTERY BLOWER

Milwaukee Tool's M18 Fuel dual battery blower reaches full throttle in less than one second while providing the best clearing control. Leveraging Milwaukee's Powerstate brushless motor, the blower delivers an output of 600 cfm and 145 mph, maintaining that power level throughout the full discharge of the battery. The simultaneous use of two M18 Redlithium batteries meets performance expectations in high-demand applications while maintaining system compatibility. With the ability to reach full throttle in less than one second, it delivers a maximum output of 17.7 newtons, helping users tackle demanding applications with maximum control and productivity. Designed with an ambidextrous variable-speed lock-on lever, the blower allows users to easily lock into any power level while an optimized tool balance reduces fatigue and provides control. With a noise rating of 64 dB(A), the M18 Fuel dual battery blower eliminates emissions without sacrificing power.



REDEXIM TURF TIDY

The Redexim Turf Tidy is a versatile machine, allowing users to dethatch or verti-cut, and then sweep, all in one pass. The Turf Tidy's fully floating head follows the ground contours, ensuring accurate cutting and excellent pickup. Another great use for the Turf Tidy is to pick up leaves, paper, pine needles, grass clippings, and even cores. The high-lift hopper can easily be emptied into a trailer or dumpster. The Turf Tidy comes in two sizes, which



means there is one that will match your productivity goals. The Turf Tidy is also much more affordable than some might think, making this an ideal machine to help save time and labor.

SCAG WINDSTORM

The Scag Windstorm stand-on blower features the exclusive Nozzle Direction System (NDS), providing control of the air discharge tilt and rotation. Quick and easy adjustment via fingertip controls: 1) A mechanical lever provides 16-degrees of vertical tilt adjustment. 2) Two electric switches allow for automatic left/right horizontal rotation or manual rotation adjustment. Air output of up to 6,000 effective cfm pair with ground drive speeds up to 10.5 mph to deliver optimum productivity. Windstorm's spacious operator platform with coil-spring suspension ensures a smooth ride, whether you're preparing asphalt for sealcoating or cleaning up leaves in the fall. A 37-hp. Briggs & Stratton Vanguard Big Block EFI engine delivers power and efficiency. The Scag Windstorm features a 2-year commercial warranty.



STIHL BGA 300

The first Stihl battery-powered backpack blower is also the most powerful battery blower in the Stihl lineup. With its high-performance brushless motor, the Stihl BGA 300 delivers 25 newtons of blowing force and max air speed of 194 mph (571 cfm) for heavy-duty clearing of dry and wet debris. Certified by the American Green Zone Alliance (AGZA), this blower is an environmentally conscious and zero-exhaust emission option. When paired with the Stihl AR 3000 L battery and used on level 1, the BGA 300 delivers up to 140 minutes of performance. Three power levels plus a boost mode improve battery efficiency for consistent, long-lasting power throughout the battery charge. Modeled after its gas counterparts, the BGA 300 gives users a robust and durable build while also providing a comfortable and compact, ergonomic design in a virtually maintenance free package.

TURFCO TORRENT 2 PTO DEBRIS BLOWER

Keep your sports turf and facility grounds looking their clean-swept best with Turfco's high-powered, versatile, productivity-maximizing Torrent 2 PTO



debris blower. The supplied handheld controller allows for rapid, side-to-side, on-the-fly changes in nozzle direction, eliminating work-slowing waits for the nozzle to reset itself.



The blower angle can be preset to operate at the correct angle to handle the specific task at hand such as clearing away leaves, grass clippings or aeration cores, using the optional Turfco-patented MagnaPoint system – it can save up to two hours operating time per day. Weighing in at just 340 pounds, the Torrent 2 PTO debris blower delivers big-game operating performance that also reduces fuel costs and lowers maintenance expenses. The blower moves fast, operating at full capacity at a 5-mph optimal speed. A minimum 20-hp. engine is required to operate the blower.

TURF PRIDE SWEEP-RITE

The Turf Pride Sweep-Rite is a durable, robust sweeper for lawns, tees and sports fields, and is available in a single unit or triple gang. Perfect for maintaining and cleaning synthetic turf, options include magnets and grooming brush. It easily picks up grass, leaves, twigs and debris; and is designed for use on medium to large residential lawns, sports turf and artificial turf fields. The Sweep-Rite is equipped with a 10-cubic-foot-capacity mesh bottom basket and optional hopper extensions for bulky debris. Pick up head is polypropylene steel-backed brushes:

- Eight brushes staggered in four rows
- Variable height adjustment independent of the frame
- Sealed ball bearings on brush axle for extended life
- 10-1/2" x 2-1/2" drive wheels
- Heavy-duty rear casters



The Sweep-Rite is easily towed by any equipment with a rear hitch hole – tow with a front engine tractor, zero-turn mower, ATV or golf cart. Parts are interchangeable with the Parker Suburbanite Sweeper (Note: OEM name

used for descriptive purpose only, Turf Pride claims no association with them).

TURF TEQ POWER BROOM

Brush pressure, brush speed and pivot angle (left/right) can all be adjusted easily from the operator position on the Turf Teq Power Broom. The Power Broom features a hydrostatic transmission, differential lock and a Honda commercial-grade GXV390 engine. The multi-use capability of the Power Broom allows the operator sweep debris, snow or dethatch lawns. The Power Broom attachment can also be removed allowing the operator to mount a Power Edger, Power Rake, Brush Cutter or Plow attachment.



WIEDENMANN LINE OF TURF SWEEPERS

Wiedenmann offers a full line of natural and artificial turf sweepers. The largest sweeper/verticutter/flail/fraise mower collection system is the Super



600 with a multi-purpose head and a high-dump 5.9 cubic yard hopper. Other available sweepers for natural turf include the Super 500, Super 490, and Super 1300. For artificial turf, the Terra Clean 100 and the Terra Clean 160CM use a rotary brush to bring debris and crumb rubber to a vibrating screen which separates and distributes the crumb rubber back onto the field while collecting the debris. Blowers include the Whisper Twister and the Mega Twister which are quiet while producing exceptional blowing capacities (cfm). Both units can swivel 270 degrees on the ground, thus directing airflow. In addition to these products, Wiedenmann makes a full line of verticutters, fraise/flail mowers, groomers, brushes, rakes, spikers, and deep-tine aerifiers for turf maintenance. **SFM**

Sports Facilities Management

By Steve Peeler, CSFM

All photos provided by Steve Peeler, CSFM

Sports facilities come in all different levels of play, size, and types of events that occur. Regardless of level of play, type of sport played, or other events, there is one thing that they all have in common, and that is player safety. Safety is the number one priority when it comes to playing surfaces – both natural grass and synthetic. Each sport has areas that are more sensitive in protecting players and participants. Maintaining these areas requires different maintenance practices, moisture management, firmness, and playability.

First, the playing surface must be consistently level and true so the best playing conditions can be maintained while making the games more enjoyable for all involved. At the professional level, playing surface management is more important than ever before. Even at the recreational level of play, playing surfaces have become the focus of liability lawsuits.

Surface runoff and internal drainage is the first ingredient required to pass the safety test of a playing surface. Traveling sports teams pay a lot of money and often travel great distances to compete. Therefore, fields must be ready to play immediately after – or sometimes during – inclement conditions. It is also in the best interest of promoters that sponsor the events to make sure drainage is the number one priority, as they don't want to have to reschedule events and refund money back to teams because they can't play.

Should a playing field lack the proper drainage, a rain event that occurred prior to a sporting event may take hours or days to return to safe playing conditions. As an industry standard, most college and professional fields throughout the United States must have an elaborate drainage system and, in some instances, mechanical assistance in making sure fields return to safe play in a very short timeframe.

PLAYING SURFACE

Once an adequate drainage system can be confirmed, the next most important area of concern is the playing surface itself. Surfaces must have proper slope so runoff can be accomplished to 100% certainty. Furthermore, all playing surfaces should be without large undulations, ponding water, depressions, or irregularity for the safety of the athletes. Large stadium venues must take the proper steps to conserve the integrity of the turf and grade of the playing field. Even when protection has been exercised and precautions in place, the surface can still be damaged with irregular growth patterns, stunted growth, and diseases. Once the playing surface has been transformed back into its natural state, unsafe conditions still may be present.



Protective covers and foot traffic in localized areas can result in compaction while reducing air and water within the root zone. Surfaces become slippery and hazardous for all athletes and participants once compaction or overuse of the playing surface occurs. Typically, there is very little time between non-sporting events (concerts, conventions, etc.) and actual sporting events to conduct cultural practices to assist in the improvement and cure of these conditions.



Sure footing on the playing surface is a must when it comes to all levels of play. Excessive moisture within the thatch layer can cause injury, which could be long term and affect the athletes. Moisture content can be controlled with proper drainage, maintaining thatch laying at ½-inch or less, aeration, vertical mowing, and proper irrigation practices. Nevertheless, proper soil and infiltration rate is required as a part of maintaining optimum moisture levels.

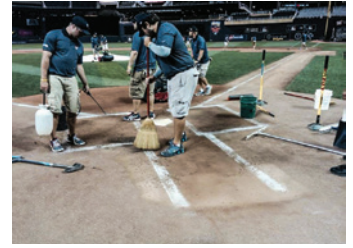


Cultural practices such as topdressing with specified sand, aeration, and vertical mowing will increase the playability of the surface and are required at all levels in coordination with rootzone mixes. Improper sieve sizes within the rootzone will

increase moisture-holding capabilities to a point that surfaces are soft, unstable, and, in some cases, damaging to the surface with regular maintenance equipment. When this occurs, renovation should be a consideration.

Firmness of either a natural grass, synthetic turf, or infield skin surface becomes an issue if Gmax is rated at 200 or higher. Surfaces that become too hard can also lead to injury, as well as affect ball roll, ball spin, and ball bounce. Infield skin areas specifically are sensitive to firmness and ball reaction. Directional rotation can cause a ball to react differently on ball bounce and stay down, come up, or move rapidly to one side of the other. Moisture management is very important so consistency can be expected on every play as much as possible. Once the athletes become comfortable with ball bounce and reaction, it is easier to execute plays and perform.

Lips, elevation changes, and depressions can also cause ball roll to be affected in a negative way. Injuries have occurred because of the sudden directional change, as the players are on a fixed path to catch or stop a ball in play. Player reaction times are sometimes slower than the ball's directional change once a play has begun. Firmness and optimum moisture management are key components in producing a standard playing surface.



MAINTENANCE REQUIREMENTS

Maintaining a sports facility requires equipment and personnel to be successful. As our industry evolves, new technology has reduced the amount of labor required. Mechatronics, robotics, and improved cultural practices have allowed many facilities to save labor cost while increasing productivity. Having equipment that meets and exceeds the level of maintenance required is highly recommend. Maintaining that equipment will determine future success at your facility. Although most facilities don't have Major League budgets, practices can sometimes be performed with use of creativity and imagination. Having a big-league surface on a Little League budget can be accomplished with additional time spent on details. Mowing, grooming, aeration, topdressing, and fertilization must be performed with the proper equipment for success and health of the turfgrass.



Inspection and auditing of the irrigation system should take place often to ensure full coverage is being accomplished and able to meet the needs of the playing field. All systems require slight adjustments throughout the season, so it is recommended to perform inspection and auditing once per month to certify that the system is operating correctly. Equal distribution over the entire area being irrigated can be confirmed by conducting a simple catch can test. **SFM**

Steve Peeler, CSFM, is senior field manager for the Atlanta Braves.



Handling Stress in the Workplace

By Evelyn Long

Stress in the workplace is common across industries. Landscape and grounds management professionals need to be on top of workplace stress concerns given the nature of the work — manual labor, hot summers and demanding projects can all impact a worker's physical and mental wellbeing. Managing stress requires a combination of physical wellbeing, good project management and mental health discussion. The following tips will help handle stress in the landscape and grounds management industries.

1. HEAT-MANAGEMENT POLICY

One of the most significant inhibiting factors against landscape and grounds management professionals is high

temperatures. Whether planting trees, mowing grass, or spreading fertilizer, the bulk of the work occurs outdoors.

Heat stress is critical in any conversation about mental health and physical wellbeing. Hot days can be linked to a variety of physical and mental ailments — from dehydration and heat exhaustion to less visible issues such as a higher risk of mood disorders and occupational injuries, according to a Boston University researcher.

Therefore, crews should have a heat-management policy to protect employees. Managers can start their heat management from the beginning. New employees can learn about heat-related illnesses during their onboarding, so they know what to watch out for during the long days.

On the job, managers should be armed with heat safety education and keep track of breaks and PPE so they can help workers stay cool and refreshed during the day.



2. CONSISTENT WATER BREAKS

Another crucial part of a good heat management policy is to have regular water breaks. Workers who labor in the sun should make it a habit to drink plenty of water before their shifts for the best results. But on the job, managers can help set expectations for water breaks.

Throughout the day, employees should hydrate themselves with water. As a best practice, workers should drink 1 cup every 15 to 20 minutes or about 1 quart every hour they're outside. However, workers should be careful about drinking too much water because the amount of salt in the bloodstream can get too low.

Working in direct sunlight can cause dehydration rapidly if workers don't hydrate enough. Dehydration and stress go hand in hand because dehydration can cause an increase in cortisone levels, which ties into the body's stress levels.

3. RETHINKING EMPLOYEE SCHEDULING

Stress isn't only about the environment, of course. In any demanding job, stress can be caused by a variety of factors including management styles, challenging tasks and tight timelines that put pressure on workers. While managers can't eradicate all of these sources, they can rethink their team workflows and delegation to give workers a fair balance of work and sense of meaning in their careers.

One way to alleviate this problem is to rethink employee duties and ensure they aren't overloaded. Employees who feel overworked can quickly become stressed out, leading to a decline in the quality of their work and productivity.

Where possible, schedule with both worker and project needs in mind. Can longer shifts be offset with more flexible, relaxed days? Can new technology simplify administrative tasks to take work off a manager's plate?

While the labor shortage may make flexible scheduling difficult, workers can appreciate when their leaders are cognizant of their workload and stress.

Finally, good leaders can help workers find a sense of progression and meaning in their work. Does your workplace offer the opportunity to learn new skills, earn certificates and/or progress upward in the business? Workers who feel a sense of purpose in their work are less likely to feel overwhelmed when challenges arise.

4. TALKING ABOUT MENTAL HEALTH

Studies suggest stress in the workplace is at an all-time high, with about 57% of American and Canadian workers saying in a recent poll that they felt it daily. While this finding is alarming, leaders can make a difference by confronting these issues head-on and with empathy.

Conversations and policies are adjusting to the modern era because of an increased emphasis on mental health as part of an employee's ability to engage with work. Stress at work can lead to a decline in mental health, affecting employees in their personal and professional lives. Managers should emphasize mental health and encourage open discussions in the workplace.

Supporting mental health can effectively build teams, but employees may need help talking about it. Managers should emphasize from the beginning their open line of communication, and should help their employees feel that they can discuss problems about work or their home life.

There are also specific tools that can help with awareness of mental health at work. In one survey of construction industry professionals, more than 60% of respondents identified supervisor and employee training as the most helpful resources for their workers. Other ways to show commitment to health include "Toolbox Talks," or group discussions on a particular safety issue.

Leaders can't force workers to come forward with stress and mental health concerns, but company culture can show them that they are safe and supported should they choose to do so. Stay transparent and consistent with your emphasis on mental health resources, and leaders can open up critical lines of communication to support their teams. **SFM**

Evelyn Long is a writer and editor focused on home building and construction. She is the co-founder of Renovated, a web magazine for the home industry.

This article originally appeared on Landscape-Business.com, sister production to SportsField Management magazine.

Platinum TE Paspalum expands production to Spain and Saudi Arabia



Platinum TE Paspalum recently issued production and distribution licenses to two international turf farms. Novogreen in Spain and Atlas Turf Arabia in Saudi Arabia are the first turf farms outside of the United States to grow the patented turfgrass showcased at the 2022 FIFA World Cup Qatar.

Platinum TE is a premium-quality seashore paspalum turfgrass developed by Dr. Ron R. Duncan. Introduced in 2007, Platinum TE is the turfgrass of choice at more than 300 locations in over 30 countries. Platinum TE is a dense turf with unmatched salt tolerance, fine leaf texture, dark green color, low light tolerance, disease resistance, and rapid recovery from injury. Following extensive trials with varieties of paspalum, bermuda, and zoysia turfgrasses, Platinum TE was selected as the exclusive turfgrass of the 2022 FIFA World Cup in Qatar.

Novogreen, headquartered in Seville, Spain, recently added Platinum TE to its Toledo farm with plans to expand to its other farm location in Tarragona. Novogreen has nearly 20 years of experience in sod production and sports installation supplying quality turfgrass to golf courses, sports fields, parks, and other landscaping projects. They are members of the European Turfgrass Producers and Turf Producers International.

Also included in Platinum TE's expansion is Atlas Turf Arabia, the first and only turf farm in Saudi Arabia to offer licensed and certified turfgrass. The farm is a joint venture

between Atlas Turf International and Golf Saudi created to meet the needs of extensive golf development planned in the country as well as sports field and landscaping projects.

"The advantages of having a farm within Saudi Arabia producing Platinum TE are numerous," said John Holmes, co-founder of Atlas Turf Arabia. "Locally grown Platinum TE provides developers and contractors with a proven, quality turfgrass available quickly to meet the expedited timelines on many ambitious projects throughout the country."

Platinum TE Paspalum production at Novogreen and Atlas Turf Arabia is certified by the International Turfgrass Genetic Assurance Program (ITGAP).

Hilltip SweepAway push broom attachments

The new SweepAway push broom attachments from Hilltip are a versatile clean-up solution for use on forklifts, tractors, loaders, excavators and other vehicles.

This simple, yet effective tools provide professional results when sweeping a variety of materials, such as leaves, sand, rocks, debris, snow and slush.

Offered in multiple sizes from 59 to 118 inches wide, the SweepAway push brooms are available in a light series with eight brush rows or a medium series with 12 brush rows. Featuring polypropylene bristles, the replaceable brush rows are easy to change and clean. Additionally, the brooms contain no moving parts, resulting in practically no maintenance requirements.

Optional accessories for the SweepAway push brooms include side brushes (leaf-stopper brushes), fastening straps and edge markers. Replacement brush rows are also readily available from Hilltip.



ASBA 2022 Game Changer Award winners

The American Sports Builders Association (ASBA) announced the winners of its Game Changer awards. The honorees represent excellence and innovation in supply and manufacturing for sports facilities.

Winners were announced at the conclusion of the 2022 ASBA Technical Meeting in Palm Desert, Calif.

The Game Changer Awards program allowed attendees in the ASBA's Exhibit Hall to learn about new technologies and products on the market. Attendees

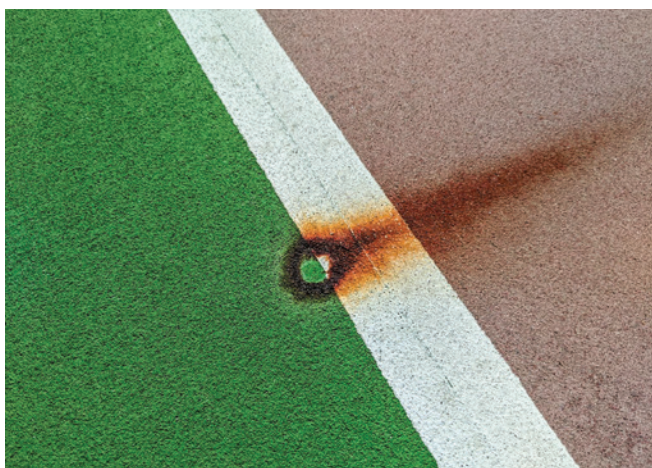
were able to vote for those products they thought best exemplified excellence and innovation in the industry.

Winners were as follows:

COURTS DIVISION

Wipe-Out Stain Blocker (California Sports Surfaces)

Wipe-Out Stain Blocker is a concentrated acrylic latex stain blocking primer that provides exceptional adhesion and stain blocking properties as a preparation for the installation of athletic surfaces, as well as existing acrylic surfaces. This product can help prevent the formation of unsightly rust spots that can detract from the appearance of a new court. The product is available in conveniently sized 30- and 55-gallon drums. It is easy to apply with a 50- to 70-durometer rubber squeegee and takes just two hours per coat to dry for most applications, depending upon local weather conditions.



FIELDS DIVISION

Synthetic Turf Infill Containment System (Sportsfield Specialties)

Sportsfield's Pedestrian and Equipment Synthetic Turf Infill Containment Systems are designed to be installed in the access areas of a synthetic turf field to capture the infill and other potential contaminants as people and equipment exit the playing surface. The pedestrian version incorporates brush assemblies designed to remove infill from cleats as athletes walk across them, and the equipment version uses heavy-duty galvanized steel grates that allow maintenance equipment and emergency vehicles to be parked on them while the infill is removed using air or water. The infill is contained within the bottom of the trays and can easily be removed using a vacuum. The trays are modular and can be installed in a variety of configurations to meet the needs of a specific project.

IA 2022 New Product Contest winners

The Irrigation Association (IA) announced the winners of its 2022 New Product Contest. This year's contest combined both virtual and live elements. All products and technologies entered in the contest were featured in the online product showcase at irrigationshow.org and displayed in person at the 2022 Irrigation Show and Education Week held Dec. 5-9 in Las Vegas.

Thirty new products and technologies were entered in three categories: landscape irrigation, landscape lighting and agriculture irrigation. Products were evaluated based on innovation, design quality, increased water/resource-use efficiency, ease of use and product life expectancy. Official judging was conducted via Zoom Oct. 11-12, and the winners were announced live on Dec. 8 during the general session at the Irrigation Show.

New in 2022, the IA recognized three products in each category: gold, silver and bronze winners.

The gold winner of the landscape irrigation category is the Ultrasonic Flow Sensor by Rain Bird Corporation (pictured). The Ultrasonic Flow Sensor reads flow rates for landscape irrigation controllers using ultrasonic waves instead of the traditional impeller-type sensor. Specially designed with wide set ultrasonic reflectors inside the body, it can be installed immediately after a pipe bend or in the same box as a master valve, able to sense both high and low flow rates without special calibration.

The silver winner of the landscape irrigation category is Irrigation Management as a Service by Calsense, and the bronze winner is the LXME2 & LXME2 PRO controllers by Rain Bird Corporation.

The gold winner of the landscape lighting category is the Brilliance Sector Selector by Brilliance. The Sector Selector creates specific zones that can be controlled independently from a single transformer. The silver winner of the landscape lighting category is RUPS – Renewable Universal Power Supply by Lite the Nite, and the bronze winner is INSPIRA by Unique Lighting Systems.

The gold winner of the agriculture irrigation category is the S5 Pressure Compensating Heavywall Dripline by Rain Bird Corporation. The silver winner of the agriculture category is the Nelson R2000FX Rotator by Nelson Irrigation Corporation, and the bronze winner is AlphaDisc by Netafim.

Visit irrigationshow.org for more details about the contest and to see all the products entered. **SFM**



The following are some industry Tweets from the past month.



@TampChamp

Good morning from T-Mobile Park! I love this place!

DECEMBER 13



@AELTCGoundsman

Not seen many snow days like this for a long time here
#LetItSnow

DECEMBER 12



@kota_garber28

The @TurfgrassTiger program has shown me the endless amount of opportunities there are in Sports Turf Management. I had the time of my life prepping the ACC Championship field in Charlotte. Thank you @TifDan14 and @leahlou2 for inspiring me.

@womeninturfteam @FieldExperts

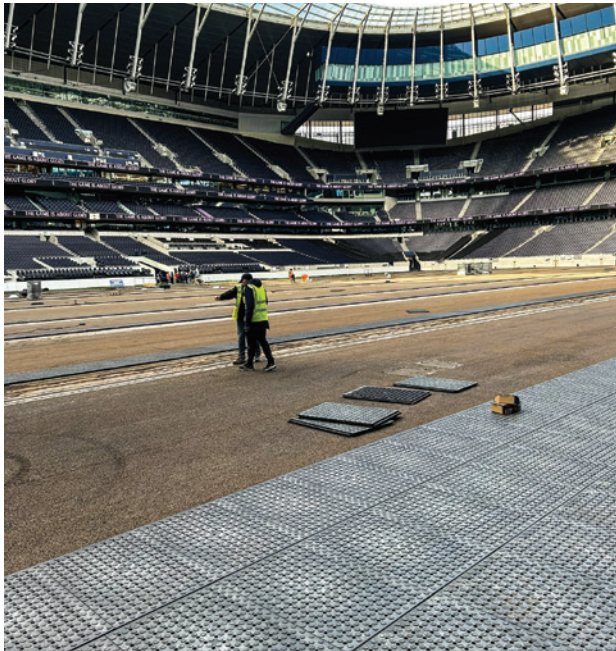
DECEMBER 9



@VTTurfTeaching

Another semester of #Turfgrass Management comes to a close as @VTSPES students are proud parents of their turf babies, which they planted and nurtured throughout this course. This has been an amazing group of excellent, high-quality students and I am very proud of them. #Hokies

DECEMBER 9



@Benjaytaylor

Every time I go to this place, I can't believe it's actually real! It really is something else! Never seen it naked before though!!

@DarrenBaldwin40 @WayneBilling #somethingelse

DECEMBER 8



@levineturf

Mound renovation over the last few days. Converted over to @duraedge blackstick & added a new @bulldogfe rubber.

@ewingsportsfl #swoop

DECEMBER 6



@CUBuffsTurf

2023 starts today at the practice fields. #GoBuffs #Team1stClass
#DominateDetails #AttitudeAndEffort #5Ps

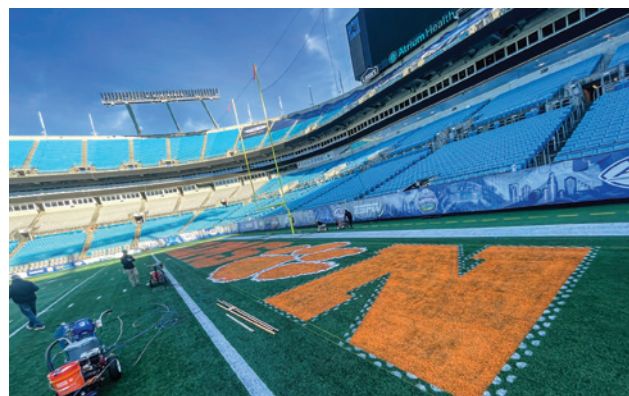
DECEMBER 6



@jemsekgolf

Update on @Tahoma31Bermuda in Chicago's Soldier Field. Looks to be holding better than the fescue/bluegrass ever did.

DECEMBER 4



@zcarrothers

Big thanks to @TifDan14 for allowing us to come out and help get the end zones ready for Saturday's #ACCchampionship game

DECEMBER 1



@genuineturbo

All set for the game today! Soft ahead of a busy month!

NOVEMBER 26



@Twillhog75

Ready for the 3rd game in 4 weeks. Didn't get all the healing we wanted, but it was much colder than normal between these 2 games. We learned a lot the last couple weeks between using the grow tarps, grow lights, and the Turf Pods. Excited to see what we can do the next 3 weeks!

NOVEMBER 26



@CgcChad

And we got home for Thanksgiving, barely. @CarolinaGreenCo

NOVEMBER 25



@NPappas23

I would say the 2022 #NFLMexicoGame was a success! Grateful for this crew and all the work they put in this week.

Thanks @PHIL_BOGLE @andylevy5 @bermuda419s @_TJBrewer & everyone else involved!

NOVEMBER 22



@bigcuzelswick

Blankets are off. Finally got some sunshine this week.

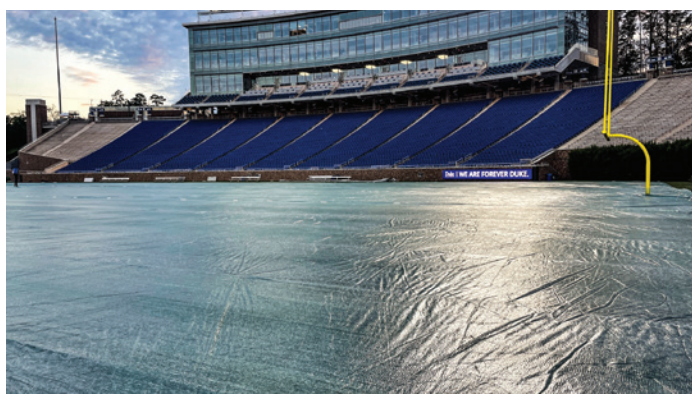
NOVEMBER 18



@BPBfieldcrew

Late night fungicide apps while we wait for the stadium game to finish up.

NOVEMBER 17



@DukeGroundsCrew

A nice win, mow, fertilize and cover. Not ready for 32 degrees ahead.

NOVEMBER 12

ASBA announces new officers and directors

The American Sports Builders Association (ASBA) announced its officers and directors for the coming membership year. The new slate took its place at the conclusion of the ASBA's Technical Meeting, held in Palm Desert, Calif.

Randy Resley of Sport Court of the Rockies, LLC (Highlands Ranch, Colo.), was named chairman-elect of the association. Resley, who previously served as president of the Courts division of the association, moved into the position at the conclusion of the 2023 technical meeting. Resley has been extensively involved with ASBA, serving on the board of directors and as a part of the editorial committee for the new publication, *Courts and Recreational Facilities: Construction and Maintenance Manual*.

Allen Verdin, CFB, of The Motz Group in Cincinnati, is ASBA's new secretary/treasurer elect. Like Resley, Verdin took his newly elected office at the conclusion of the 2023 technical meeting.

Todd Dettor (Fast-Dry Courts, Inc. & 10-S Tennis Supply, Pompano Beach, Fla.) was elected to the office of president of the association's Courts division. Dettor previously served as a member of the board of directors, representing the association's Builder division.

Jordan Fisher, CTB, of Fisher Tracks, Inc. was elected to the office of Track Division president. Prior to this, he served as a member of the board of directors, representing the association's Builder division.

Additionally, Craig Honkomp, PE, PS, LEED, AP of Sportworks Design, was re-elected to the position of Professional division president.

Newly elected to the board of directors to represent the Builder division are Ryan Auer of Leslie Coatings, Indianapolis; John Nelson, CFB of Peacock Services; and Jonathan Wright, CTCB of Court One, Youngsville, N.C.

Elected to serve as a member of the board of directors representing the Professional division is Sean Hufnagel, PLA, ASLA of HNP, LLC in Birmingham, Ala.

David Clapp, CTB, CTCB, of Baseline Sports Construction in Knoxville, Tenn., remains on the board for the 2022-2023 membership year as the association's present chairman.

Also continuing their terms on the board of directors are Kirk Grego, CFB of Mid-America Sports Construction in Lee's Summit, Mo. (Fields division president); Megan Buczynski, PE, LEED AP, of Activitas, Inc., Dedham, Mass. (secretary/treasurer); Anthony Graham of MAPEI in Deerfield Beach, Fla. (Supplier division-tracks); Fred Kolkman, CTCB of Fred Kolkman Tennis & Sport Surfaces, LLC, Grafton, Wis. (Builder division-courts); Jameson Sheley, CFB-S, CTB, Byrne

& Jones Sports Construction, Bridgeton, Mo. (Builder division-fields); David Painter, Stockmeier Urethanes USA, Inc., Clarksburg, W. Va. (Supplier division-tracks); Tim Gerrits, ASLA, of GMB Architecture + Engineering, Holland, Mich. (Design Professional division); and David Burke, NGI Sports, Chattanooga, Tenn. (Supplier division president-courts).

Trash Pandas' Charlie Weaver named MiLB Groundskeeper of the Year



Rocket City Trash Pandas' Head Groundskeeper Charlie Weaver was named the 2022 Minor League Baseball (MiLB) Groundskeeper of the Year.

The award gives Weaver and the Trash Pandas the honor for the best field in the eight-team Southern League and throughout all 120 teams in Minor League Baseball for the 2022 season.

"Winning something like this is very meaningful to me. Just to have our hard work recognized throughout the entire season," said Weaver. "To be acknowledged as the best in the league and all of baseball truly means a lot."

"All of us are so excited for Charlie and his staff," Trash Pandas Manager Andy Schatzley said. "It's an incredible accomplishment and doesn't surprise any of us who are lucky enough to be around him every day."

A Madison native, Bob Jones High School alumnus, and former pitcher for the University of Alabama in Huntsville baseball team, Weaver returned to his hometown and joined the Trash Pandas in July 2019 after previously working for the Wisconsin Timber Rattlers and the Hoover Metropolitan Stadium.

Maintaining one of the newest ballparks in Minor League Baseball has been no easy task. But Weaver, with Assistant Groundskeeper Colby Hunter and a dedicated team of game day employees by his side, have perfected the job since Toyota Field opened. This past season, the Trash Pandas grounds crew stayed busy as the team played a full 69-game home schedule, as well as the first

two playoff games in Toyota Field history while keeping a cool head throughout the most stressful situations during the season.

“To win something like this takes a great group of people around you. I would not be able to do anything like this if it wasn’t for Colby, our game day staff, the support of our front office, and especially my wife,” Weaver said. “This should be a grounds crew of the year award, because without everyone else, none of this would be possible.”

Around the Trash Pandas’ home schedule, Toyota Field hosted many other events in 2022 including high school and college baseball, concerts, youth baseball camps, and even a Division I College Football game in October. Throughout all of that, the grounds crew kept the field in top shape, making sure players and fans had the best experience possible at the ballpark. Weaver earned the award by constantly being ranked among the best in baseball by his peers. In surveys conducted throughout the Southern League, the playing surface at Toyota Field is called the best in the circuit. Weaver’s field received the highest praise in each category including infield and outfield turf areas, player safety, professionalism of crew, and handling of weather conditions, which can be especially tough throughout rainy Alabama summers.

2022 Minor League Baseball Groundskeepers of the Year:

- Charlie Weaver, League and Overall Groundskeeper of the Year, (Rocket City Trash Pandas, Southern League)
- Kyle Calhoon (Hartford Yard Goats, Eastern League)
- John Packer (Carolina Mudcats, Carolina League)
- Pat Skunda (Dunedin Blue Jays, Florida State League)
- Ben Hartman (Wichita Wind Surge, Texas League)
- Mitch Hooten (West Michigan Whitecaps, Midwest League)
- Greg Burgess (Greenville Drive, South Atlantic League)
- Matt Parrott (Charlotte Knights, International League)
- Isaiah Lineau (Las Vegas Aviators, Pacific Coast League)
- David Jacinto (Fresno Grizzlies, California League)
- Sam King (Hillsboro Hops, Northwest League)

Louisville City FC’s Aaron Fink voted USL Groundskeeper of the Year

The United Soccer League (USL) announced that Louisville City FC’s Aaron Fink was named the 2022 USL Groundskeeper of the Year presented by Brandt. Fink and his grounds staff at Lynn Family Stadium are the inaugural winners of the award.

As part of the award, Fink and one of his staff will receive a trip to the 2023 Sports Field Management Association Conference, courtesy of Brandt, January 16-19 in Salt Lake City, Utah.



“On behalf of Brandt, we’re excited to present this award to Aaron Fink and his crew at Louisville City,” said Karl Barnhart, chief marketing officer at Brandt. “Great sports field maintenance goes beyond providing luscious looking fields on game day; it’s about ensuring the turfgrass is healthy and safe all year long to help reduce risks to the players and increase the level of play.”

“A lot of times we don’t get recognized for what we do unless we’re the ones screwing up, so I think it’s an awesome opportunity for our team to get acknowledged for hard work,” said Fink. “When I told the guys about this, I thought back to two times this year they really earned it. The first game of the year, we were shoveling snow off the field. Then in mid-July, we had the USL Summer Showcase here when it was 100 degrees out. Those spots epitomized this year when the team was willing to do hard work in some harsh conditions. This is a group award, in my opinion. There’s not one person who won that award.”

Fink is joined in the Lynn Family Stadium groundskeeping staff by three full-time staff – Darrell Clark, assistant groundskeeper; Matt Skidmore, head groundskeeper at the Lynn Family Sports Vision & Training Center; and J.R. Williams, assistant groundskeeper at the Lynn Family Sports Vision & Training Center; along with two interns – Nolan Dumstorf and Michael Netherton.

Both Lynn Family Stadium and the Lynn Family Sports Vision & Training Center utilize the same Tahoma 31 bermudagrass, and Fink’s staff use Brandt’s Parco-Root and MegAleX to help maintain the natural playing surfaces.

“Parco-Root helps the rooting around the field, and MegAleX helps us get through stressful periods,” said Fink. “Both are used spring through fall at the stadium and training facility fields.”

Voting for the 2022 USL Groundskeeper of the Year award presented by Brandt was conducted among players, technical staffs, and coaching staffs in both the USL Championship and USL League One. **SFM**



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Florida #1 Chapter (South):
305-235-5101 (Bruce Bates) or
Tom Curran, CTomSell@aol.com

Florida #2 Chapter (North):
850-580-4026,
John Mascaro, john@turf-tec.com

Florida #3 Chapter (Central):
407-518-2347, Dale Croft,
dale.croft@ocps.net

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Indiana: Contact Clayton Dame,
Claytondame@hotmail.com or
Brian Bornino, bornino@purdue.edu
or Contact Joey Stevenson,
jstevenson@indyindians.com

Iowa Sports Turf Managers Association:
www.iowaturfgrass.org

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Michigan Sports Turf Managers Association (MiSTMA): www.mistma.org

Minnesota Park and Sports Turf Managers Association: www.mpstma.org

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www.nestma.org

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405-744-5729; Contact:
Dr. Justin Moss okstma@gmail.com

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Preparation

Q: We have had a hard time finding experienced workers, so we have been forced to hire more employees that have little to no prior turfgrass management experience. What are your thoughts on preparing non-trained workers for our industry?

A: This question came up at a recent SFMA regional meeting. It seems like everybody in 2022 has struggled to find workers, trained or non-trained. In some cases, one may be lucky enough to hire a person who has worked in a related field. For example, a landscape maintenance crewmember with a couple of seasons of experience may develop into a great sports field employee with some targeted training. They will have good equipment experience and often have experience with the same turf care products. So, they may just require some refinements of their skills along with a few new techniques specific to sports field management. The greatest challenges are usually when hiring individuals with zero turfgrass experience. As one person recently told me, “We are hiring ‘good attitudes’ and training them for our jobs.”

Once you have an employee on site and orientated, my suggestion is to have them work with people who will take adequate time to demonstrate and explain each of their required tasks. It is important that supervisors welcome questions from the employee. I also suggest that supervisors provide regular opportunities for the employees to discuss their work with them. It is a little like asking your kids when they get home from school, “tell me what you learned today?” Although it may seem a little silly, asking an employee to talk through their work processes is a great way for an employee to gain a deeper understanding of the tasks and how they should be accomplished. It also helps a supervisor understand where additional training may be needed. In some cases, an insightful or experienced employee may even provide recommendations on how tasks can be completed more efficiently. Your work environment should encourage open discussions.

If you have multiple work teams on your job site, move new employees around to work with other

teams whenever practical so they can get additional training. Being exposed to a variety of tasks will keep them from getting bored, which is a common reason new employees quit. This cross training also makes it easier for employees to cover tasks when others are absent or when positions are open. In the process, you and the employee may also discover talents that neither expected. You might find that an employee has a talent for painting logos or can drive a mower straighter than anyone else on your crew. It can also be a great confidence booster for employees when they are entrusted to complete a new task, and they do it well.

In addition to internal training, look for educational opportunities outside your work environment. For example, help the employee get their pesticide license. Extension services often offers free classes to help workers prepare for the pesticide license exam. Vendors often offer equipment demonstrations and irrigation repair classes. Knowledge gained from these classes can contribute toward improving your facilities. Also, sending employees to special events or training is usually seen as a reward for the employee and sends them the message that you value them as an employee.

Lastly, encourage or support all your employees to join the local SFMA chapter or the national SFMA. The SFMA provides great education opportunities in the Knowledge Center and technical resources in the “Members Only” section of the SFMA website. That non-trained worker can quickly become trained and end up as a vital team member for your staff. **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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