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# SportsField

## MANAGEMENT

June 2022

Vol. 38 No. 6

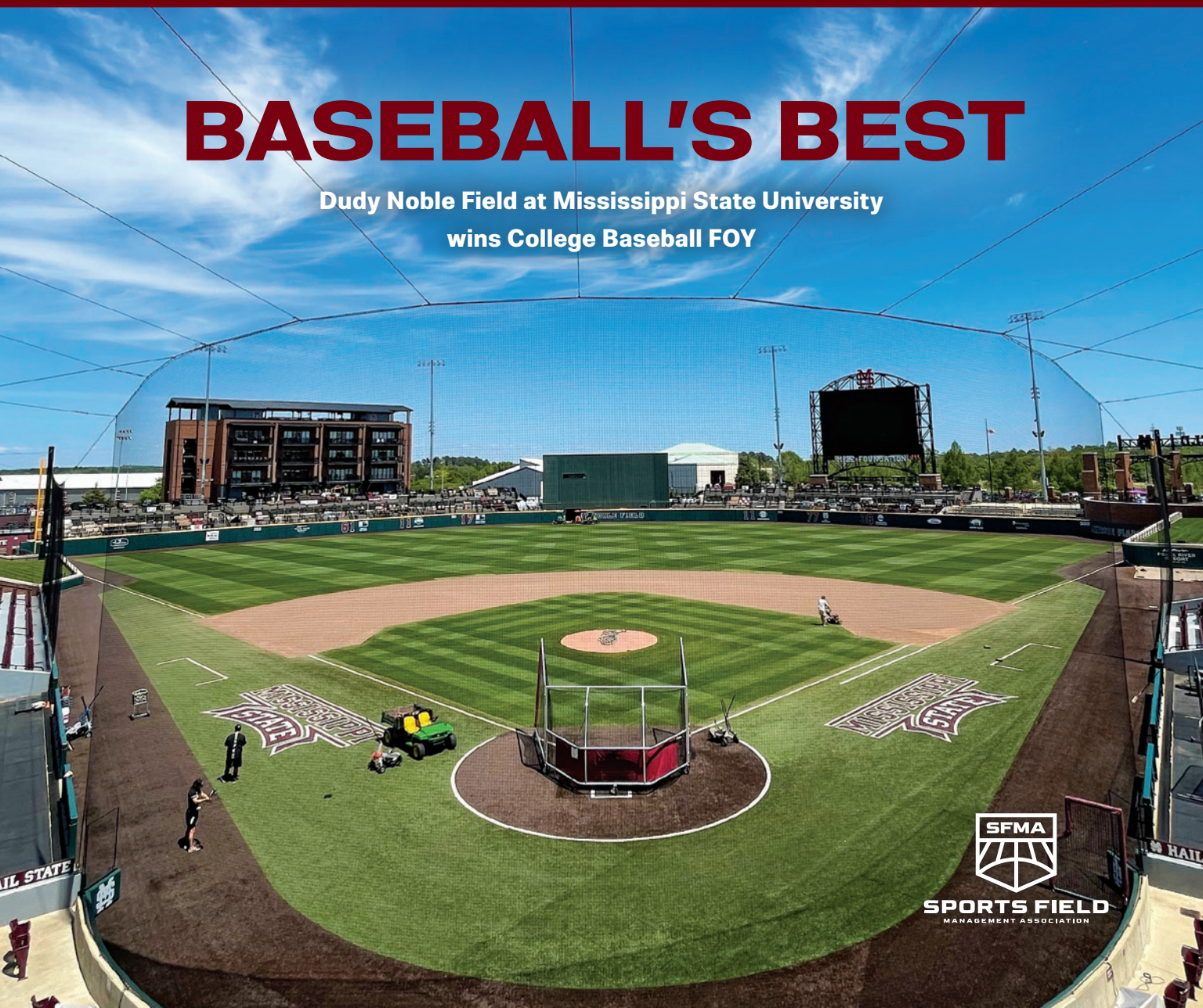
The Official Publication of the Sports Field Management Association

SFMA CEO Kim Heck Bids Farewell **18** | Severe Weather and Lightning Safety **22**

Emil Bossard: Industry Pioneer **26** | Utility Vehicles **36**

## BASEBALL'S BEST

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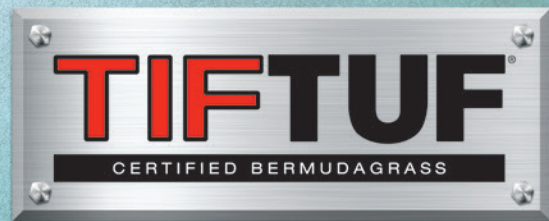
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# Editor's Note



**John Kmitta**

Associate Publisher /  
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In September 2004, after being selected as the first full-time executive director of STMA (now SFMA), Kim Heck wrote the following, "If you ask my peers what I am all about, you will consistently hear about my passion for making things better and my belief in collaboration. By working with others, advocates and adversaries alike, an organization becomes stronger. It is this strength of leadership that I strive to bring to the STMA to advance the influence and recognition for the profession."

18 years later, Heck has delivered on her promise to make things better through collaboration, has made the organization stronger, and has helped the association to advance the influence and recognition for the profession.

In this issue of *SportsField Management*, we honor Heck, who stepped down from her role as CEO of SFMA this month. In addition to our interview with Heck, we also share the words of those who have worked closely with her during the past 18 years.

As you will see, the terms used to describe Heck include, among others, "professional," "skillful," "sincere," "visionary," "poised," "hard working," "friend," and, of course, "leader."

It has been through her leadership that SFMA has grown to be what it is today – a professional organization

with a strategic plan and a bright future under its new brand. Current, former and future SFMA members all have Heck to thank for the state of the association and the road that has been mapped for it.

I want to thank Kim for her impact on *SportsField Management* magazine, and for being a great partner to our publication. I took on the role as editorial brand director of the magazine while we were already well into a rebrand and redesign of the publication (from *SportsTurf* to *SportsField Management*), and Kim could not have been more gracious. She made my job so much easier.

Kim has always supported our editorial efforts by sharing content, ideas, feedback, and her keen eye for detail – all with the goal of continually improving the publication. Kim was also vital in helping me to feel like a part of the sports field community by including me in SFMA efforts – such as the Founders Awards announcements – and by valuing my opinion. It is that strength of leadership that makes others want to do their best job possible; and it is why her impact on the association and the industry will be missed.

From everyone at *SportsField Management* magazine, we offer Kim our sincerest thanks and heartfelt best wishes for the future. **SFM**

## SportsField MANAGEMENT

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

Official Publication of the Sports Field Management Association

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**Publisher's Notice:** We Assume No Responsibility For The Validity Of Claims In Connection With Items Appearing In *SportsField Management*.

*SportsField Management* (ISSN PENDING) (USPS 000-292) (Reg. U.S. Pat. & T.M. Off.) is published monthly by EPG Brand Acceleration at PO Box 96, Port Jervis, NY 12771.

**Postmaster:** Send address changes to *SportsField Management*, PO Box 96, Port Jervis, NY 12771-0096. For subscription information and requests, call Subscription Services at (763) 383-4492. Subscription rates: 1 year, \$40 US & Poss.; All subscriptions are payable in advance in US funds.

Send payments to *SportsField Management*, PO Box 96, Port Jervis, NY 12771-0096. Phone: (763) 383-4492. Fax: (763) 383-4499. Single copies or back issues, \$8 each US; Canada; \$12; Foreign \$15. Periodicals postage paid at Port Jervis, NY and additional mailing offices. COPYRIGHT 2022, *SportsField Management*. Material may not be reproduced or photocopied in any form without the written permission of the publisher.



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# President's Message



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**James Bergdoll, CSFM, CPRP**

SFMA President

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I will always remember the feedback I received from an employee after the first season of operation at a large youth sports tournament facility where I was formerly employed. She said, "The only thing consistent is change."

Change can be good; we have to change or adapt to certain situations and actions. In the case of a new venture, you might have to change and adapt regularly to find out what works. In my current position, I was recently asked about my thoughts on changing the departmental organizational structure. My response was that, in my six years with the city, I have led and driven change every day in order to be a better operation. I tend to embrace change, which is one reason I was really excited about our recent rebrand. To others, change can be scary, because it is accompanied by a bit of the unknown. Our association has certainly changed in its 41-year history. But for the last 18 years, we have had a constant in Kim Heck.

Kim came to the association when we were outgrowing a mostly volunteer-led group. The timing was right to continue to grow the association, but needed someone to take the reins and lead the way. Kim did just that. I joined the SFMA (STMA) around the same time that Kim took the helm, and I do not know the association without her as the leader – so this is very much a new adventure for all of us.

I can recall the early days of my involvement and how we were in some financial difficulties back then. We

now have a sound investment portfolio and generally are profitable from year to year, allowing us to invest in ways to continue our mission. Our membership has grown, and our conference gets better every year! I am very proud of the work we have accomplished together as a board with Kim and her team during the last four to five years. The creation of the Sports Field Management Institute, the Sports Field Management 101 Certificate Program, the Best Management Practices document, the Route to Recovery (post-pandemic opening), our 10-year Strategic Plan, and the rebrand of the association have all been impactful and will help drive our future.

From a personal perspective, I have nothing but respect and admiration for Kim. Ever the professional, we rarely see the "real" Kim, but we do know she's a devoted mother and grandmother and a Jayhawks/Chiefs/Royals superfan. Kim also has a great sense of humor and an infectious laugh that will certainly be missed. I raise my glass to you, Kim, and wish you all the best in your future endeavors. On behalf of our membership, I cannot thank you enough for what you have done for the industry and the Sports Field Management Association.

Cheers! **SFM**

*James Bergdoll, CSFM, CPRP*



# SFMA Programs

## Focus on Youth

The Sports Field Management Association (SFMA) initiated four distinct programs that focus on bringing young people to a career in sports field management: SFM 101, Cue Career, iCEV, and the Chapter Ambassador program. A strategic goal for SFMA is to grow the organization by focusing on integrating the next generation into positions that will ultimately lead to the sports field manager by using technology to bridge the gap between those upcoming generations and current sports field managers. These four programs address this goal.

### SFMA 101

The SFMA 101 free self-paced training course provides continuing education opportunities for anyone who has not been formally educated in turfgrass science and is interested in entering the industry.

The course is online and, when completed, participants will receive a Certificate of Completion that can be printed out to show a potential employer.

The course builds a solid foundation in the science and practices of turfgrass management so students can successfully care for a turfgrass sports surface. Those who complete the course will be ready to be hired for seasonal and crew assistance at sports facilities.

This course is not restricted to students, and may also be used as a training tool for current sports field crew members. Although the course is free, those pursuing it must be an SFMA member or join as an SFMA student member (\$30) to participate.

If you are interested, visit [sportsfieldmanagement.org](https://sportsfieldmanagement.org).

### iCEV

SFMA has partnered with iCEV Multimedia, LLC to develop a national online turfgrass curriculum. iCEV is an organization that provides online curriculum, instructional materials and certification testing for career technical education. Similar to FFA, it provides its educational products to agricultural ed teachers. It also offers other technical career education outside of agriculture-based (i.e., business, marketing, health sciences and more), as well as develops training cur-

riculum for companies. More than 14,000 teachers in classrooms have used the lessons, and students have viewed 12 million minutes of videos.

iCEV provides educators pre-built, fully customizable courses complete with multimedia lessons and supporting coursework. The SFMA turfgrass curriculum is being redeveloped into presentations accompanied by detailed lesson plans, projects and activities, handouts, assessments and more. Content is aligned to the latest state and national standards.

The goal of iCEV is to provide students with the focus and preparation needed for a successful transition from K-12 to post-secondary studies to career success, along with providing necessary training for the lifelong learner.

When students complete the iCEV curriculum and pass the test they will receive SFMA Turfgrass Science Certification. SFMA is the issuer of the certification, and iCEV is the supplier of the preparation content and the testing platform. SFMA is the only entity to offer this certification through iCEV. iCEV will also include a short module on the importance of joining the SFMA as a student member.

For more information, visit [icevonline.com](https://icevonline.com).

### Cue Career

Cue Career is an online platform where students learn about careers by directly interacting with professional associations. Cue Career provides students with an easy and effective way to access information about careers and professional development opportunities. SFMA has partnered with Cue Career to present the career of sports field management. Students will explore the career of sports field management by watching video interviews with SFMA members who are early in their career. They will also have access to development opportunities such as internships, apprenticeships, seasonal crew opportunities, etc. Cue Career is free to students.

To see all that this resource offers, visit [Cuecareer.com](https://Cuecareer.com)

### Chapter Ambassador Program

SFMA has 32 chapters, and they are an ideal channel to help share the career of sports field management with students in their local communities.

The SFMA Chapter Relations Committee is developing a model to provide to chapters on how to contact and engage middle school and high school students.



The model will include how to contact schools, who to contact, how to volunteer for career days or other opportunities. There will be a PowerPoint presentation and script developed for presenting to students plus suggestions on how to further engage students at chapter events. There are many messages that apply to a variety of students' interests, such as those who:

- Enjoy the outdoors
- Are involved in sports and want to stay involved
- Consider themselves a sports fan
- Want to use emerging technology such as drones, GPS, robotic equipment, and high-tech turf apps
- Care about protecting the environment
- Are interested in the art and science of creating and maintaining beautiful and safe fields for athletes
- Are in a high school ag education program

The committee's goal is to complete the module by year's end and present it to its chapter leadership at the Chapter Officers Training Session during the annual conference.

## Now is the time to prep for Field of the Year

The application to submit to SFMA's premiere program, Field of the Year, will be available July 1. Visit *SportsFieldManagement.org* and you'll find the link on the home page, or you can access it from the *Programs* tab.

Awards are given in three levels: Schools and Parks and Rec, Colleges and Universities, and Facilities used by Professional Athletes. In addition, five sports are eligible: baseball, football, softball, soccer and sporting grounds (which is a broad category for non-mainstream sports, such as lacrosse and rugby).

Applications are judged by the SFMA Awards Committee using a scoring matrix rather than a consensus approach. The deadline to apply is Oct. 15. Winners will be notified in November. Each winner receives three nights of hotel at the upcoming conference, in Salt Lake City, Utah, Jan. 16-19; signature clothing; and an award that is presented during the annual awards banquet on Jan. 19. **SFM**



## Arrowhead Stadium

Kansas City, MO

Arrowhead Stadium made the switch to NorthBridge® Bermudagrass in 2013. NorthBridge has excellent cold tolerance, aggressive rooting, rapid recovery and early green-up which makes it a great choice for the Kansas City Chiefs. Each year Arrowhead Stadium hosts eight or more NFL games along with other sporting events. NorthBridge stands up to the test and continues to perform well while maintaining a safe playing surface for professionals.



"The biggest reason I continue using NorthBridge with all the other options that are out there is our track history. I mean we've had extreme success here with NorthBridge with the dormant traffic and the cold tolerance and everything that we get out of it."

– Travis Hogan, Head Groundskeeper

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## DUDY NOBLE FIELD

MISSISSIPPI STATE UNIVERSITY, STARKVILLE, MISS.

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The Field of the Year Awards program is made possible by the support of sponsors  
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Dudy Noble Field at Polk-DeMent Stadium (DNF-PDS) has always been an iconic venue in the world of college baseball. We hold 18 of the top 19 on-campus crowds in the history of college baseball. Overall, DNF-PDS has held 22 crowds of more than 12,000 and 58 crowds more than 10,000. So, our work is not only seen on TV (SEC Network) for every game, but it is also viewed by 10,000 to 15,000 on-campus fans per game as well. The struggles we face are no different from most others. Our largest struggle is keeping student workers on staff. This has been even

harder since COVID. With the smallest staff in the conference, and the most acreage maintained, students play a huge role in our operation. Having to utilize student labor brings its own set of challenges. Balancing each student's time is very important; after all, they are here to get an education, not work full time. The lack of students wanting to work puts extra strain on our full-time staff. Baseball is 365 days a year now, so Todd Hughes is there seven days a week most weeks throughout the entire year.  
– Brandon Hardin, sports turf superintendent



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

**Hardin:** Since we built the “New Dude” several years ago with an all-new hybrid surface, to say I was surprised that we won would be an understatement; but that just made it even more special for us. It was only fitting that the 2021 Baseball National Champions played on the 2021 College Baseball Field of the Year.

**SFM:** You have won the SFMA Field of the Year Award in the past in the College Football category for Scott Field. How does this win compare?

**Hardin:** It is an honor to even be asked this question. These awards are a testament of the dedication, talents, and expertise of my crew! This award – the first for Dudy Noble Field – is as special to me as our first FOY at Scott Field.

**SFM:** What are/were the biggest challenges you have faced with Dudy Noble Field, and how have you approached those challenges?

**Hardin:** Mother Nature. We average 30-plus tarp

Continued on page 16



**Level and category of submission:** College Baseball

**Field manager:** Brandon Hardin

**Title:** Sports turf superintendent

**Education:** : B.S. Agronomy

**Experience:** Mississippi State University (2003-2006), sports turf student worker; Roger Dean Stadium, Jupiter, Fla. (2005), intern; Louisiana State University (2007-2008), horticulturalist; Mississippi State University (2008-2014), assistant superintendent, sports turf; Mississippi State University (2014-present) superintendent, sports turf.

**Full-time staff:** Todd Hughes, Feliciano Grimaldo and Payton Smith

**Original construction:** 2017

**Turfgrass:** Field: Latitude36 bermudagrass and perennial ryegrass. Berms: Tifway 419 and perennial ryegrass.

**Overseed:** 15 lbs. per 1,000 sq. ft. max.

**Rootzone:** Sand

**Drainage:** : Herringbone



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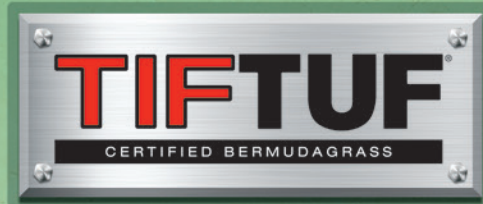
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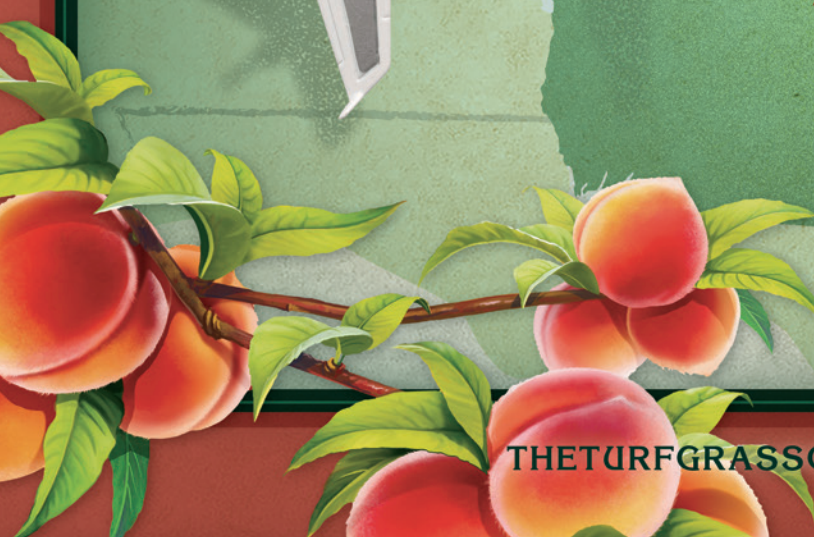
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### Judge's Comments

The staff at Dudy Noble Field was able to produce a safe, playable field throughout the past year. With limited staff, an increased number of camps, and pressure to produce a top-notch surface, the crew was able to use creative thinking and techniques to make it happen.

– Jaxon Bailey, Symmetry Sports Construction

**Editor's Note:** A panel of judges independently scored Field of the Year entries based on playability, appearance of surfaces, utilization of innovative solutions, effective use of budget and implementation of a comprehensive agronomic program.









**Continued from page 12**

pulls a season. With that comes more added pressure of keeping the surface at the highest level, but alive as well. The weather in Mississippi is atrocious at times, where we see 40- to 50-degree temperature changes – especially from February through April. Mother Nature always wins. We just roll with her punches.

**SFM:** I know we have covered your background in the past, but for those readers who are unaware, please tell us a bit about yourself and your career path in sports field management.

**Hardin:** Came to MSU as a student in 2001, graduated in 2006, was an assistant at LSU for a year in 2007, came back to MSU in 2008 and have been here ever since. This is home!

**SFM:** You have obviously found success with award-winning fields in more than one sport. What is the key to your success, and what advice to you have for other sports field managers?

**Hardin:** My crew/my guys. My entire staff started as students and moved their way up to where they are now as full-time assistants or sports turf specialists. The camaradery of my crew is special, and every award we win is because of them. I like to think that they are implementing what I have taught them, but most the time their ideas work better than mine.

Always keep an open mind. Just because we were taught a certain way or a certain thing doesn't mean that new, improved tweaks or ideas to an already successful process won't work. Do whatever it takes to get the job done. **SFM**



## JOHN MASCARO'S PHOTO QUIZ



### CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

**PROBLEM:**

Two brown circular areas

**TURFGRASS AREA:**

High school football stadium field

**LOCATION:**

Oxford, Alabama

**TURFGRASS VARIETY:**

TifTuf bermudagrass

*Answer on page 33*

*John Mascaro is president of Turf-Tec International*

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Kim Heck's three children stopped by the 2022 SFMA Awards Banquet in Savannah, Ga. before heading to Tybee Island for a family vacation. (Left to right) Jessica Reitman, Kim Heck, Andrew Heck and Madeline Heck.

# THE ROAD TO SUCCESS

## KIM HECK LOOKS BACK AT NEARLY TWO DECADES OF CHARTING THE COURSE FOR SFMA

Sports Field Management Association (SFMA) CEO Kim Heck, CAE, is stepping down as CEO of the association this month after 18 years in that role. Heck reflected upon her tenure with the association during a recent interview with *SportsField Management* magazine.

### **SportsField Management (SFM): What led to your decision to step down as CEO of SFMA?**

**Heck:** I think the impetus for stepping down is that it is good timing! We just finished the rebranding and relaunching of the association. In addition, I was part of the leadership who participated in the development of a 10-year strategic plan, which also launched in January. It seemed like logical timing to have someone else lead the association into the new era. Together with the staff and the support of committees, I had successfully accomplished six strategic plans for the association, and the comprehensive initiatives those plans contained.

### **SFM: What's next for you in terms of future endeavors?**

**Heck:** I know I will not be able to stay away from non-profit work, and I'll look locally for my next venture. I currently volunteer for our neighborhood association as its secretary. There are many organizations that have needs.

### **SFM: In 2004, in your initial message to our audience, you wrote that your pledge was to "design a road map that will lead to greater success for the individual member and for the association." What do you feel are the biggest successes of the course you mapped for the association during the last 18 years?**

**Heck:** Financial stability is probably number one. When I was hired, SFMA was

## PARTING WORDS

*In her letter to SFMA members, outgoing SFMA CEO Kim Heck, CAE, stated, "I am incredibly proud of what I've accomplished during my tenure and the legacy I leave behind. Above all, I'm honored to have worked with so many talented and passionate people in this incredible industry."*

*We asked some of those talented and passionate people with whom Heck has worked to share their thoughts about Heck and her legacy.*

Kim always put the association and its members first and had their best interests at heart. She was the 2019 winner of the George Toma "Golden Rake" Founders Award, which goes to someone who emphasizes the importance of everyone involved in sports field management. Kim was always willing to go the extra mile in elevating the professionalism of the members and this industry.

**– Kristen Althouse, education manager, SFMA**

There is no way 18 years have passed since Kim Heck accepted the challenge of managing STMA. The leaps our association has taken from her first day to now are even more mind blowing. Not sure what we did to deserve her. Kim's first task – I now see in hindsight – was to teach our board to be visionary, strategic and transparent. All who served on the board or on a committee during Kim's tenure know they received a doctoral level education in how an association should be nurtured and managed. The strides SFMA made during her leadership have been beyond any dreams I had when she was hired. She inspired elected leaders to dream big, to be inclusive, and to be strategic. Her commitment to facilitat-





Kim Heck (left) receiving the George Toma Golden Rake Founders Award in 2020 from George Toma and the previous year's Golden Rake awardee, Abby McNeal, CSFM.

struggling financially. We now have more than \$2 million in reserves. Although the switch to engaging a financial planning firm to implement an investment strategy was a big step, the board of directors at that time set a vision to help secure a strong future for the association.

Changes to our governance structure have also paved the way for a stronger association. The board's terms of service were redefined and shortened, which made board service more attractive to volunteers. Previously, board members would serve 14 years; now the maximum is seven, and we have a healthy number of members volunteer to run for office each year.

Educationally, the association has never been stronger. Hundreds of educational resources have been developed and provided in different models to be relevant to a variety of learning styles. The conference and exhibition has grown each year, not only in attendance and exhibitor participation, but in the breadth of topics, outside events and in professional appearance. Our certification programs are top notch. The core purpose of our association is to provide continuing education to members to help them succeed, and that has been a focus during my tenure.

**SFM: What have been the biggest challenges you have faced, and what have you learned from any moments of adversity along the way?**

**Heck:** There are three significant challenges that stand out for me:

One is the lack of interest in the profession. Students pursuing two-year and four-year degrees in turfgrass management are declining. For a strong future for SFMA, the industry must have young people seeking sports

ing strategic planning provides SFMA with continuity, helping ensure our positive momentum continues regardless of who the elected leaders are or what obstacles stand in our way. Kim did not use tricks or magic, she simply worked extremely hard and efficiently to get us to the position we are in today. It is impossible to quantify what she has meant to SFMA. With a lump in our throat, we all rejoice in and are grateful for her SFMA legacy. Congratulations Kim!

**Mike Andresen, CSFM, director of grounds maintenance, Kirkwood Community College**

Two words immediately come to mind to me regarding Kim – consummate professional. She knew how to properly advise the board, and remind us of what our responsibilities were as individuals and as a group; and she could do that in a friendly, non-combative manner. Every board member that served during Kim's tenure would also refer to her beyond the SFMA relationship as a friend because she took the time to get to know about you and your lives/families/jobs as well. Her passion for KU basketball rivals mine for UK, and has provided us plenty of things to "discuss" over the years – including an annual wager where the loser of the KU/UK basketball game must don the opponent's jersey for a day. I join many in thanking Kim for so skillfully applying her expertise and talents toward the growth, recognition and value of SFMA as a professional organization, and I wish her continued good health and nothing but the best.

**– Mike Goatley, Ph.D., professor and extension turfgrass specialist at Virginia Tech**

Kim Heck was brought on to the STMA as it was just turning the corner in growth and professionalism. Kim took the association and expanded the reach of its message, expressing the value of a sports field manager and field safety globally. Under her guidance, STMA created several strategic plans that led to the creation of the certification program (CSFM), SAFE Foundation, and several marketing campaigns promoting the sports field manager and the industry. Raising our professionalism and value at all levels of the industry, Kim worked with the board to grow the association to where it is today, supporting safe, well-maintained surfaces for all users. Kim's impact is the foundation upon which the next chapter of SFMA will be built. Personally, Kim made a huge difference in my career by providing support for women in the industry and professional representation. Thank you, Kim, for all that you have done.

**– Abby McNeal, CSFM, CPRP, CABI, field superintendent, City Wide Operations for Denver Parks and Recreation**





Kim Heck and the SFMA Headquarters staff at the 2022 SFMA Conference in Savannah, Ga. From left, Whitney Webber, Heck, Leah Craig, Nora Dunnaway and Kristen Althouse.

field management as a career. Although a formal education is the better path, the board realizes it is not the only path. We are working on a variety of ways to attract and train students for an immediate impact on the profession.

The second is garnering more respect for the work of our members. We have had a strong PR initiative during the past 10 years to present members and the work that they do to the public. It is a long process, and although we have made progress, we have so much more to do.

The last is the extreme dissatisfaction of my boards with the synthetic turf industry. That angst has ebbed and flowed as board members changed over the years. Although our members definitely prefer to only manage natural grass surfaces, the original perception that synthetic fields are going to eliminate sports field management jobs has generally evolved to a grudging acceptance that there is a place in our industry for them – offering another

management tool in the toolbox.

What I have learned is that there are no fast nor one-and-done solutions!

**SFM: What have you enjoyed most about being part of the sports field management industry for almost two decades?**

**Heck:** Members and those in the industry are great! They are kind and forgiving. If there is an issue they want addressed, they bring it forward with professionalism and diplomacy. I admire the prevailing attitude of members. They always push forward to be the best at what they do. They take professional development seriously, and are open to new ideas and technology. I love sports, and although I have zero training in sports field management, I have been able to be involved in sports vicariously through the excellent work of our members.

**SFM: In past interviews, you have pointed out the camaraderie in the sports field management industry and how friendly and supportive everyone is toward each other. Is there anything you would like to say**

I feel very fortunate to have been on the board of directors when we went through the process of hiring Kim to be the executive director of the STMA. In the early days of her tenure, the association was on rocky ground, and Kim, her team, and the board understood that a new strategic plan was needed. We would not be where we are today without Kim's efforts. Her professionalism, knowledge of the association industry, and focus on elevating our industry took a small association and turned it into a big-time association in the industry. While we had some tremendous board leadership throughout her tenure, I am sure every one of the board members and past presidents would echo how blessed we were to have Kim.

**– Boyd Montgomery, CSE, CSFM, regional business manager sports fields & grounds, North America, Commercial Products Division, Toro**

Kim has been the central figure for SFMA for the last 18 years, and she has always been there to meet the ever-changing needs of the membership and green industry. Her willingness to share her experiences prior to SFMA (mainly GCSAA) has brought professionalism, structure, governance and financial stability to our association. We have relied heavily on Kim and her staff to bring SFMA up to standards shared by many other green industry associations. Kim has worked with the SFMA board of directors to diversify funds and make the association more financially secure. This was done well before COVID-19, and SFMA has been able to keep up its great services to all members throughout. These additional funds have also been used to expand many member benefits, research and new publications. Kim has also been a big supporter of the SFMA on a worldwide stage as well. She helped to create our International Committee,



**about the people you have met and worked with these past 18 years, the friendships you have made, as well as your staff at headquarters?**

**Heck:** From day one I have felt a connection between our members that is unusual in most membership organizations. No matter what level of sports a member represents, or the stature of an academic, everyone is very approachable and willing to share. I feel I can pick up the phone or turn on Zoom and access 2,500 people I call friends – even if I haven't met them previously. Our conference environment showcases this fellowship so clearly. It sounds corny, but every year it is like a family reunion. Staff has those same relationships with members and with each other. Almost all our staff have been employed for as long as I have: Leah came on board a few weeks after I did; Nora has been with SFMA 16 years; and Kristen, 14 years. Although Whitney is the newbie at two years, it feels like she has been with us a long time, too. The culture of the association makes SFMA work fulfilling for our headquarters staff.

**SFM: Major efforts you just helped see to fruition are the association rebrand and SFMA's new 10-year strategic plan. What are the keys to both of those initiatives being successful moving forward, and/or what advice do you have for whomever leads SFMA into the next decade and beyond?**

**Heck:** Strategic planning has always been the hallmark of each SFMA Board. Once the plan is developed, they use it to guide their work. The 10-year plan is exciting, and the new CEO will have some major initiatives to steer. I would imagine each future board will continue their meticulous attention to advancing the strategic plan. The plan can be summarized by one word – growth. Member numbers, recognition of the profession, and greater diversity are the three platforms for growth. These are long-term initiatives, and will require a strong focus to accomplish. Our headquarters staff and our board always have more ideas than available resources! **SFM**

and has been gaining traction ever since. These are just a few of the many inputs Kim has implemented into the SFMA. We will miss her dearly.

**– Troy Smith, CSFM, sports turf manager, SiteOne Landscape Supply**

Kim was always the professional, and handled herself with such grace and poise. Kim is sincere, thoughtful, and loved the work she did. The loyalty shown by her staff shows that she was a true leader – one worthy of being followed. Kim never put herself before the SFMA; the association was always a higher priority when in public, in board meetings, at conference, and any other situation. Kim made being the president of the SFMA a true joy. She was ahead of most issues, communicated quickly, and was always a great sounding board for new ideas. In short, Kim was always a bright spot within our industry. It was truly my privilege to serve my time on the board while she was our leader. I respect her as a professional, love her as a friend, and cherish all the time we spent together.

**– Tim VanLoo, CSFM, sales consultant for D&K Turf Products**

I was on the STMA board when Kim was hired. She was such a breath of fresh air! She brought a new level of excitement and professionalism to the association. Under her leadership, the association has grown in membership, strategic vision, and professionalism. I am one of the original members of the Environment Committee and have served as chair/co-chair for a number of years. Kim has been the committee's staff contact, and has helped to develop the Environmental Certification Program every step of the way. Along with committee members, Kim helped craft the vision and purpose of the certification program. She has been intimately involved in the development of all three versions of the certification document. I am also on the SAFE Board, and Kim oversees the operations of that foundation. Suffice it to say, I have enjoyed working with her over the years, and value her friendship.

**– Vickie Wallace, extension educator, University of Connecticut**

In 2004 the board of directors felt the time had come for the association to have its own executive director. After months of searching, Kim Heck was selected, and on September 1, 2004, she became the very first full-time dedicated executive director (later CEO) in SFMA's 23-year history. I was fortunate enough to be on that selection committee when we all agreed that Kim had the vision and tools to take STMA (SFMA) to the next level of our profession. Her experience, vision and leadership brought SFMA to the forefront of sports field management industry. Kim has been an integral part of SFMA's initiatives that include field safety, environmental stewardship, professional development, member recognition, certification, scholarships, chapters, and the SAFE Foundation, to name a few. Kim has put together a stellar staff that shares her vision and dedication in strengthening membership, advancing member recognition and promoting education. Kim, thank you so much for all you have done for SFMA over the last 18 years. I will miss you dearly.

**– Steve Wightman**



# Severe Weather and Lightning Safety: It's Shocking What We May Not Know!

By Brad Jakubowski

Weather is a critical component of a sports field manager's daily responsibilities. When the weather is behaving well, it makes life easier, when it isn't, life can become very troublesome – even dangerous.

Every year, many people are killed or seriously injured by thunderstorms despite advanced warning. The following information is intended to help sports field managers become more aware of the potential hazards associated with severe weather, and to provide guidelines for making storm-related safety decisions.

Thunderstorms are relatively small in size – averaging 15 miles in diameter – and last an average of 30 minutes. Despite their small size, all thunderstorms are dangerous. On average, the United States experiences about 100,000 thunderstorms each year, and 10% are classified as severe (1-inch hail, winds of 58 mph or greater or a tornado). Thunderstorms produce many hazards, including floods/flash floods, tornadoes and lightning.

## FLOODS/FLASH FLOODS

Know your facility's potential for flooding and the challenges associated with vehicles coming into and leaving the facility. Bottlenecks from insufficient ingress and egress routes often occur when parents are merely dropping off and/or picking up athletes for regular events. Consider the increased traffic congestion in this example with everyone moving in a panicked frame of mind (see Figure 1 and Figure 2). How would traffic proceed if everyone tried to leave at once?

- The number one cause of deaths associated with thunderstorms.
- Most fatalities occur at night, and most victims are people who become trapped in automobiles.

- Six inches of fast-moving water can knock you off your feet; a depth of two feet will cause most vehicles to float.

## TORNADOES

The best thing to do is to put as many walls as possible between you and the outside. A reinforced building can provide good shelter, but a basement provides a more substantial “wall” for your protection.

Be sure to consider what it will take to move a large number of people into reinforced buildings in a relatively short period of time. Fortunately, lead-time warnings for tornadoes have improved, and locating tornadoes is a little more predictable than our next hazard, lightning. Knowing ingress and egress routes for each facility is important as with flooding.

- Third most deadly hazard. Can occur at any time of the year and in any state.
- In southern states, peak tornado occurrence is March through May, while peak season in northern states is May through August.
- Tornadoes are most likely to occur between 3 and 9 p.m., but can occur at any time.

## LIGHTNING

Lightning is the second most deadly hazard, and is the least predictable. This makes it the most dangerous severe weather hazard for sports field managers. Lightning is the discharge of electrical energy built up between positively and negatively charged areas. These discharges can move from cloud to cloud, ground to cloud and cloud to ground. Twenty to 25 million cloud-to-ground strikes are recorded each year. Important facts to keep in mind:

- Most lightning fatalities and injuries occur in the summer months during the afternoon and evening.
- Lightning can strike 10 miles in advance or behind a traveling thunderstorm.
- Each spark of lightning can generate 100 million volts and 50,000-degree Fahrenheit temperatures.
- Lightning occurs in all thunderstorms.

Lightning is a random, chaotic and dangerous fact of nature. Almost all lightning deaths are of people caught outside. One out of five people were engaged in a sporting activity, while another one-fifth were killed seeking shelter during the thunderstorm. The National Weather Service recommends “When Thunder Roars, Go Indoors.”

It is also important to obey the 30/30 Rule. Go indoors





Figure 1: Ingress. Photo by Brad Jakubowski

if, after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors for 30 minutes after hearing the last clap of thunder.

This is an important rule to remember, because gauging the distance of lightning can be misleading. At night, lightning is easy to see and can be spotted 60 to 100 miles away. During the day it is harder to spot, and may be less than five miles away. Fortunately, many of today's weather apps provide lightning detection functions that can help lessen the severity of lightning-caused deaths or injuries. The key, however, is having a lightning safety plan and following it without exception (surprisingly, many organizations or facilities DO NOT have a lightning safe plan). The plan should give clear and specific safety guidelines to eliminate errors in judgment. These guidelines should address the following questions.

- When should activities be stopped?
- Where should people go for safety?
- When should activities be resumed?
- Who should monitor the weather, and make the decision to stop activities?
- What should be done if someone is struck by lightning?

Of the questions above, the one most often misunderstood is where to go? What is a safe location for members

of your crew to take shelter during a lightning delay? If they are working in the field, it is important to take shelter in a glass-enclosed shelter or vehicle or get as low as possible compared to the terrain around you. Gazebos and dugouts are NOT SAFE. Open dugouts built with chain link fences could be considered human-sized toaster ovens, and should be avoided at all costs. (See sidebar on page 25 for examples of safe and unsafe shelters from lightning.)

### BEING PREPARED FOR SEVERE WEATHER

Being prepared means having a severe weather safety plan. The following outline was developed by the National Lightning Safety Institute (NLSI), and provides a framework for dealing with athletic event safety.

#### **Lightning Safety for Organized Outdoor Athletic Events**

Education is the single most important means to achieving lightning safety. A lightning safety program should be implemented at every facility. The following steps are suggested:

1. A responsible person should be designated to monitor weather conditions. A reliable and accurate weather app, NOAA Weather Radio, local weather forecasts, or local TV stations should be used prior to and during athletic events. An inexpensive portable weather radio is recommended for obtaining timely storm data as





Figure 2: Egress. Photo by Brad Jakubowski

well as an inexpensive AM radio (the static you hear) for detecting unpredictable and nearby lighting strikes.

**2.** Suspension and resumption of athletic activities should be planned in advance. Understanding of SAFE shelters is essential. SAFE evacuation sites include:

- a. Fully enclosed metal vehicles with windows up.
- b. Substantial buildings with pipe-in plumbing.
- c. The low ground. Seek cover in clumps of bushes.

**3.** Unsafe shelter areas include all outdoor metal objects such as flag poles, fences and gates, high mast light poles, metal bleachers, golf cars, machinery, etc. AVOID trees. AVOID water. AVOID open fields. AVOID the high ground. AVOID dugouts (they are connected to metal objects).

**4.** Lightning's distance from you is easy to calculate: if you hear thunder, it and the associated lightning are within auditory range – about 6 to 8 miles or less away. Ask yourself why you should NOT go to shelter immediately. Of course, different distances to shelter will determine different times to suspend activities.

A good lightning safety motto is, "If you can see it (lightning) flee it; if you can hear it (thunder), clear it."

**5.** If you feel your hair standing on end, and/or hear "crackling noises," you are in lightning's electric field. If caught outside during close-in lightning, immediately remove metal objects, place your feet together, duck your head, and crouch down low in baseball catcher's stance with hands on knees.

**6.** Wait a minimum of 30 minutes from the last observed lightning or thunder before resuming activities.

**7.** People who have been struck by lightning do not carry an electrical charge and are safe to handle. Apply

first aid immediately (CPR) if you are qualified to do so. Get emergency help promptly.

Once a plan is in place, it is crucial that drills be conducted to ensure its success. Double check that there is ample space for all people considered, and that distances to the safety facilities match warning and evacuation lead times. Proper training and clearly defined procedures will help ensure success whenever severe weather threatens. A bare-bones procedure is still much better than none at all. Try to decide prior to any game or activity what that procedure will be.

If you have questions about safety guidelines and procedures, some available resources are as follows:

- National Lightning Safety Institute (NSLI): [www.lightningsafety.com](http://www.lightningsafety.com), which includes "Decision Tree for Personal Lightning Safety" and "Lightning Safety for Organized Athletic Events"
- NCAA Sports Medicine Handbook Lightning Safety Guideline
- NOAA/National Weather Service: [www.spc.noaa.gov](http://www.spc.noaa.gov)

Also, don't hesitate to check with other sport field managers. They either have the same questions and concerns as you, or have gone through the process of developing a plan. Good luck and stay safe! **SFM**

*Brad Jakubowski is a turfgrass and irrigation instructor with Penn State University. He is a certified irrigation technician with the Irrigation Association and is an author and presenter covering multiple management areas within the turfgrass industry. He focuses his time on teaching best irrigation practices and troubleshooting, weather-based management decisions, soils and plant nutrition.*

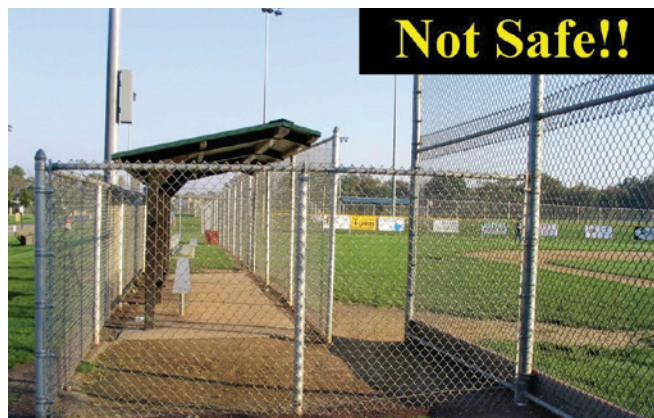


# Safe/Not Safe

Locations and their relative safety from lightning



This gazebo is not safe because lightning can travel along the structure and by following a path of least resistance, spread into the open area.



Would you feel safe in this dugout during a lightning storm?



This restroom is enclosed and has plumbing. It provides a grounded and safe electrical path. (Be sure not to hold on to any of the fixtures or be using the facilities!)



This tractor offers safety from lightning with the enclosed cabin. Photos provided by Brad Jakubowski



Because of their open cabins, both the open tractor and golf cart are not safe from lightning.





# Lasting Legacy

**Emil Bossard was an industry pioneer and patriarch of a sports field management dynasty**

By John Kmitta

Emil Bossard, former head groundskeeper for the Cleveland Indians, passed away in 1980. Unfortunately, his life and his work occurred prior to the founding of the Sports Turf Managers Association (now SFMA). As a result, despite being inducted into the Major League Baseball Groundskeepers Hall of Fame, Bossard did not garner the widespread recognition he truly deserved for his impact on the sports field management industry. However, the legacy of Emil Bossard lives on to this day.

"Emil was the greatest groundskeeper of all time," said Hall of Fame Groundskeeper, George Toma. "He could do anything. He invented a nail drag, an edging shovel, rakes, and practices such as soaking clay in a bathtub; hand seeding that rivals any mechanical seeder seen today; and painted using a 4-inch paintbrush, which created sharp lines. He used bailing wire instead of string to lay out the arc. Emil would take a bucket, put seed in it, and scatter the seed with his hands. He taught us to push and pull to rake the seed into the soil."

Born in Switzerland in 1891, Emil Bossard's family immigrated to the United States



**Emil Bossard.**  
Photos provided  
by the Bossard  
family.



Emil Bossard (right) with  
George Toma in 1950.

when Emil was only one year old – ultimately settling in St. Paul, Minn. Bossard's father eventually went on to run a hardware store and plumbing business. Emil Bossard – who became a naturalized citizen of the United States in 1908 – had been working as a laborer when he landed a job as in 1911 as groundskeeper for the St. Paul Saints minor league baseball team.

He was quoted as saying, "I stepped in and got the job. I moved right in, but I didn't know a damned thing about the work."

But he learned, and he worked at it, and he innovated, and ultimately went on to become head groundskeeper for the Cleveland Indians beginning around 1936. While working for the Indians, Bossard gained the nicknames "Doctor of the Diamond" and the "Evil Genius of Groundskeepers" for what was referred to at the time as "maximizing the home field advantage." Depending on his team's preferences and abilities, it is said that Bossard would tilt the base lines in or out, so balls were more likely to roll fair or foul; water the base paths to slow down opposing runners; adjust the height of cut on the infield to impact the speed of ground balls; and either soak or harden the ground in front of the plate depending on whether a sinkerball pitcher was on the mound for the Indians or their opponent.

Joe DiMaggio is quoted as having said, "The Yankees hated to come [to Cleveland], because our every defensive flaw was exploited by the Bossards the way they prepared the playing field."

Bossard's contributions were so critical that Indians manager Lou Boudreau called him "the tenth man in our lineup." In 1955, Boudreau told *Baseball Digest* that he wouldn't be surprised if Bossard helped the Indians win as many as 10 games per year.

"This is a game of inches," Bossard said in an interview. "An inch is often the difference between a base hit and an out. We try to have the inches go our way."



During Bossard's tenure, the team won the World Series in 1948 and a pennant in 1954. According to Toma, when the Indians won the World Series in 1948, the players bought Bossard a Buick. Bossard would later use that Buick to tire roll the infield dirt, said Toma.

Bossard also built many fields during the 1940s and '50s on military bases that were decommissioned following World War II.

"His baseball and football fields were excellent. They looked like they were laser graded," said Toma. "I worked with Emil in 1948 in Virginia on a naval air station, and then again in 1949 in Georgia on an Air Force base. In 1950, we built six fields at the old Daytona Beach Naval Air Station."

Toma pointed out that he and Bossard did all that work without the benefit of modern equipment or engineered soil mixes. They would have to go in search of infield dirt and then work the soil, which is why Bossard invented the nail drag, Toma added.

"Emil could close his eyes and create a better field than anyone else," said Toma.

Bossard went on to manage the field for the Indians' Spring Training site – Hi Corbett Field in Tucson, Ariz. By 1959, according to a report in the Tucson Daily Citizen, Emil Bossard had been named, "The No. 1 groundskeeper in all baseball."

In 1961, Bossard retired as head groundskeeper of the Cleveland Indians – a position taken over by his son,

Harold. He moved to Tucson, where he continued to work at Hi Corbett Field until 1970. Emil Bossard died on May 6, 1980, but left behind a lasting legacy.

"The cheapest insurance, to this day, is a great, safe playing field. Emil knew that," said Toma. "The techniques and equipment we have today – we have Emil to thank for that. There is nobody else in this industry that could shine Emil Bossard's shoes – they can only hope to follow in his footsteps."

## A MIGHTY OAK

Many of Emil's own family members did indeed follow in his footsteps – a tradition that carries on to this day.

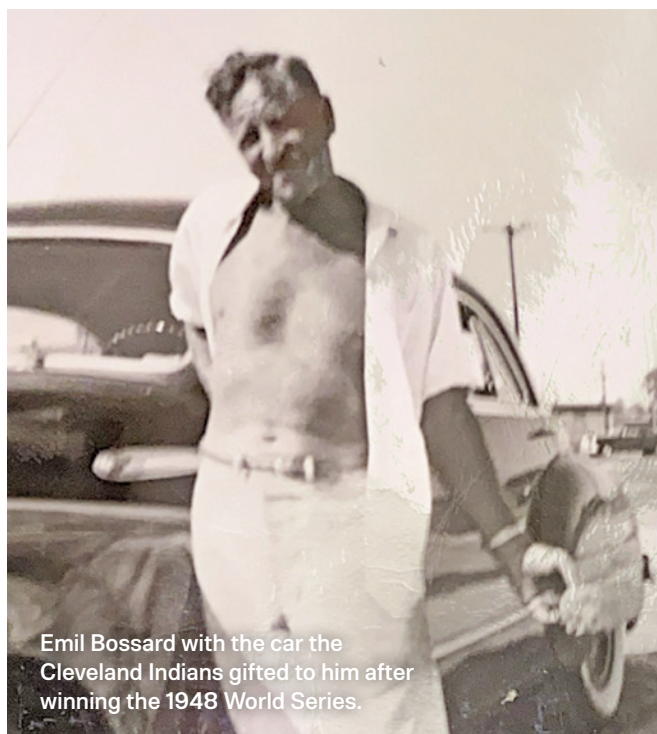
Emil and his wife Elizabeth (Lizzie) had three sons – Harold, Marshall and Eugene (Gene). Harold and Marshall were groundskeepers for the Cleveland Indians and Cleveland Browns, and Gene was a groundskeeper for the Cleveland Indians and Chicago White Sox. Emil's grandsons Roger (White Sox), Bruce (Indians and Browns) and Brian (Indians, Browns, Yankees and Chargers) carried on the family tradition. Great-grandson James Bossard worked for the Indians and Browns, and is currently a groundskeeper at Case Western Reserve University. And Emil's great-great-grandson, Andrew Bossard, is assistant groundskeeper with the Cleveland Browns – making it five generations of Bossards managing professional sports fields.

Said Toma, "What has made the Bossards successful is the same thing that made me successful. It's that 'and then some' attitude. You do the job...and then some. That is what distinguishes the mediocre from the great."

"I started working for the Browns and Indians at old Cleveland Municipal Stadium at 15 years old, in 1975," said James Bossard (Emil's great-grandson). "At that time, Emil would come in for weeks at a time during summer baseball season from his home in Tucson. We mostly talked about the playing surface. He once complimented me on my straight lines as I was fertilizing with a walk-behind spreader. He was thrilled to be walking the strikingly nice turfgrass in the warm sunshine – maybe it was more of a shuffle by that time."

James added that Emil was like a giant oak tree that dropped the acorns that grew into the great groundskeepers and the higher standards that are now the norm in the industry.

"He loved a great surface, and I am 100 percent positive that he would love the high standards and the current state of the industry – better turfgrass cultivars, better equipment, sophisticated drainage and irrigation, better pesti-



Emil Bossard with the car the Cleveland Indians gifted to him after winning the 1948 World Series.



cides, and well-thought-out soil profiles,” said James. “Emil was the first guy to look at where baseball is played and not look at it as a field – he saw it as a playing surface. He loved the work and surpassing the challenges presented; and was dedicated to the highest degree – probably a perfectionist.”

In 2011, James accepted an award on Emil's behalf.

“I think so many generations of family have done this job for a few reasons,” said Andrew Bossard (Emil's great-great-grandson). “One is that it was always a job that was available to them. At the old stadium, it was always a Bossard in charge. Two is that I think a lot of us just took to it – and maybe felt that it was chosen for us. I know for me it's all I ever really knew.”

Andrew added that he remembers conversations among his father, grandfather and even great-grandfather. “It was always just talking about fields, dirt, players and grass,” he said. “I always felt like this is what I should do. I ended up starting with the Browns when I was 17 years



old. I'm now 32, and have basically spent half my life in one place doing the same job. And it makes me proud knowing that I'm doing the 'family business.' Even though it's a new stadium, I'm still standing in the same spot that four generations before me worked.”

Andrew added that he will likely be the last Bossard to do this work, but that he still

looks forward to taking his young son to work with him and teaching him about the family business.

“Emil's legacy lives on when my father, Roger and I show up to work every day using those family secrets passed down from dinner table to dinner table over the last 90 years. I can't speak for Roger or my dad, but that makes me proud. And I hope that all those who came before me are looking down and are proud.”

Emil Bossard was inducted into the Major League Baseball Groundskeepers Hall of Fame in 2012. **SFM**

*John Kmitta is associate publisher and editorial brand director of SportsField Management magazine.*

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**AAS Ornamental Seed Winner  
Gold Medal Winner**



Erase that seafaring conqueror image and replace it with this Gold-Medal-winning, garden-faring beauty that

performs exceptionally well and has high-impact color. This trailing begonia “explores” the garden by spreading and spilling its branches over the edges of hanging baskets and containers. Prolific rose-colored flowers stand out against the glossy green foliage, and do so all season long. It has a strong tolerance to heat and many diseases, as well as

both wet and dry conditions. “Stellar performance for containers” stated one AAS Judge. “Good plant with season-long integrity,” said another.

### CELOSIA FLAMMA ORANGE

**AAS Ornamental from Seed Winner  
National Winner**



Get ready to bring some fiery orange color with Flamma (“The Flame”) celosia. This compact variety has numerous

branches, each with a strong flower plume, as well as secondary blooms, which give a long show of color. AAS Judges were impressed with the superior performance and how well it stood up to hot, humid and rainy conditions during the trial season. Not only does Flamma have exceptional heat tolerance, but also stuns with its early flowers that won't fade. Whether you decide to grow this in beds or in containers (it was trialed in both) you will have a great show of orange color all season long.

### SUNFLOWER CONCERT BELL F1

**AAS Ornamental from Seed Winner  
National Winner**

Concert Bell puts on quite a performance with a unique flower presentation of multiple clusters of 10 to 12 flowers on an erect columnar stem. Beautiful golden-yellow blooms appear earlier than the comparisons. Each



plant grows to a very uniform height of 5 to 6 feet and if used as a cut flower, makes an instant, ready-made bouquet from just one

cut. Excellent seed germination makes this beauty very easy to grow, and is perfect for continuous sowing to keep blooms going through the end of summer. Concert Bell was trialed in a year of adverse weather conditions, and multiple judges commented on its durability and sturdiness even through strong storms and winds.

### VERBENA BEATS PURPLE+WHITE

**AAS Non-Seed Ornamental Winner  
National Winner**



Verbena Beats is an incredible new series of verbena that is an incredible plant that performs all summer long. The AAS

judges raved about how early to flower Purple+White was, making it a pollinator magnet all season long. The unique purple-and-white bicolor blooms maintain a nice, attention-getting pattern and thrives even during severe heat stress. A bonus is how Verbena Beats Purple+White is resistant to powdery mildew making it easier to grow and maintain.



**VERBENA BONARIENSIS VANITY**  
AAS Ornamental from Seed Winner  
National Winner



It's not every day we see a new variety of a classic cottage garden plant, but Vanity is one to wow. Not only does this type of verbena create a pollinator paradise, but also the compact habit makes it sturdier and easier to maintain. Deep blue/purple flowers are 1-1.5" across

and continue to attract butterflies day in and day out. Vanity prides itself on performing well in hot dry conditions while remaining a showy garden plant. Once you try Vanity, you will feel the same as the AAS judge who stated, "This entry was my favorite in all of this season's entries!"

**ZINNIA QUEENY LEMON PEACH**  
AAS Ornamental from Seed Winner  
Regional Winner – Northeast, West/Northwest



Zinnia Queeny Lemon Peach is an easy-to-grow annual with vigorous, healthy plants covered with stunning 2-4" blooms. The lemon-yellow bloom color with dark peach center is consistent across multiple plants; plus, it's a perfect height to use as a cut flower if you want to bring the

beauty indoors. As the blooms age, they have a reverse fading habit that presents beautiful color shades that start as a bright lemon yellow, moving to a buff or light coral color. Another bonus is that the plants continue to bloom all summer without deadheading, and stand up well in summer heat.

**TERRA NOVA NURSERIES**  
[www.terravanurseries.com](http://www.terravanurseries.com)

**BRUNNERA 'ALEXANDRIA'**



Brunnera 'Alexandria' features brilliant mirror-silver leaves of great size and vigor with tiny clouds of sky-blue flowers floating above the foliage as it emerges in the spring. This variety works as a wonderful shade

# SportsField

## MANAGEMENT



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accent plant and is idea for containers, mass plantings and borders.

### HEUCHERELLA 'PEACH TEA'



Heucherella 'Peach Tea' showcases large, peachy-red leaves, contrasting beautifully with its cream-white flowers.

It is vigorous and compact with a mounding growth habit, yet gives off a delicate glow in the landscape. This Evergreen perennial has also been ideally bred for borders, containers and mass plantings.

### KNIPHOFIA POCO 'CITRON'



Kniphofia POCO 'Citron' is a lovely, citrusy addition to the immensely popular POCO Series of Kniphofia. This

variety's short, dense spikes emerge a creamy lime green color followed by a shift to fresh lemon. Buds then transition to canary yellow and end up a light butter crème. Poco 'Citron' pumps out huge numbers of blooms from summer to fall, and performs exceptionally as a container plant or in beds and borders.

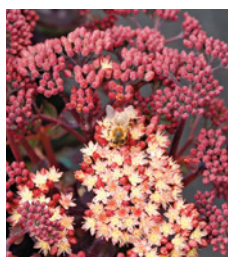
### LEUCANTHEMUM 'MT HOOD'



Leucanthemum 'Mt Hood' – featuring large, double flowers composed of ice-crystal-like petals – has an

ideal mounding habit and produces an enormous number of flowers throughout the season. The plant reblooms with tremendous vigor; each layer of flowers covers the previous bloom cycle, and multiple layers of blooms extend the season. It also presents amazing landscape value for borders, mass plantings and containers.

### SEDUM 'CONGA LINE'



Sedum 'Conga Line' showcases strong, upright stems covered in multicolored foliage — shifting from green

and purple to warm burgundy tones during flowering — topped with lovely peach, coral and cream flowers in late summer. This perennial is a champion pollinator attractor and has a short and compact habit that keeps it neat and tidy in the landscape.

### MONROVIA

Monrovia collaborates with plant breeders around the world to introduce improved plant varieties to North America. Visit [Monrovia.com](http://Monrovia.com) to learn more.

### GINGERSNAP POTENTILLA

*Potentilla fruticosa* 'Hachapp' PPAF



Loads of beautiful yellow blooms with dramatic salmon-hued edges cover the shrub from top to bottom.

Deer- and rabbit-resistant, this Monrovia exclusive blooms continuously throughout the summer. Full sun, 3 feet tall and wide. Zones 3 -8.

### SKYE DAYLILY SERIES



Skye Daylilies provide dependable summer beauty. Each of the five varieties in this series repeatedly blooms

throughout summer. They also offer a tidy, compact habit, as well as disease resistance and drought tolerance. Grows to 18 inches tall and wide; Zones 4-11.

- Blazing Skye is a clear yellow with a dramatic burgundy eye and matching burgundy ruffled edges.
- Radiant Skye boasts big blooms in varying hues of pink with a strong yellow eye.
- Saffron Skye is a bold, solid yellow with frilly edges.
- Stormy Skye features soft pink blooms with a bold burgundy eye and ruffled burgundy edges.
- Titan Skye has brilliant orange frilly petals with a bright yellow eye.

### LITTLE JOKER PHYSOCARPUS

*Physocarpus opulifolius*  
'Hoogi021' PP #27,986



Little Joker Ninebark offers dramatic, deep burgundy-purple leaves that add beauty to the landscape from early

spring through fall. In late spring and early summer, Little Joker produces pollinator-friendly, pale-pink button that contrast its dark leaves. This compact shrub is exceptionally disease resistant and drought tolerant, requiring little maintenance. Grows to 4 feet tall and wide, Zones 4-8.



# JOHN MASCARO'S PHOTO QUIZ



## ANSWER

*From page 17*

The two brown circular areas on this high school football stadium field are not an act of vandalism as you may have guessed. It is a manmade problem caused by a disease I call "School Spirit Spot." It was caused by a couple team moms, armed with carbon dioxide fire extinguishers pointed down at the turfgrass, before a big game to produce the exciting smoke effect as the home team ran onto the stadium field. In this situation, prior to the game, the sports field manager was standing in the north endzone when he "saw the smoke" that had been unannounced to him. After the event, he spoke with his supervisor, the director of operations, and the athletic director, and had them all agree that if any fire extinguishers were ever used again, they either had to be aimed into the air or plywood would have to be placed on the ground for them to spray on. Thankfully, this damage occurred in late September when the area's temperatures were still warm enough for good turfgrass recovery. The sports field manager also spoon-fed the areas with some fertilizer and tried to keep them blended in with some green sand until the damage grew out.

**Photo submitted by Jacob Turner, sports field manager for Oxford Public Schools, Oxford, Ala.**

*John Mascaro is president of Turf-Tec International*

If you would like to submit a photograph for John Mascaro's Photo Quiz, please email to [john@turf-tec.com](mailto:john@turf-tec.com). If your photograph is selected, you will receive full credit. All photos submitted will become property of SportsField Management and the Sports Field Management Association.

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### LITTLE DARLING LILAC

*Syringa* 'SMSDTL' PP #31,830



Recent breeding work has improved lilacs, offering varieties that flower more than once and stay more compact. Little Darling Lilac, a

Monrovia exclusive, offers even more to love with double the blooming power. Lovely purple blossoms cover the plant in the spring, with a bonus flush of flowers in the fall, offering twice as much color and scent to enjoy, for a lot longer. True to its name, Little Darling really stays compact, which makes it a great choice for today's smaller landscapes. Bee and butterfly friendly, this variety is a great addition to any landscape. Zones 4-8, growing 2 to 4 feet tall and wide.

### DARKSTAR NINEBARK

*Physocarpus opulifolius* 'Minbla3' PPAF

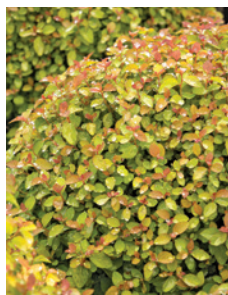


The search for the perfect dark foliage ninebark might just be over. After trialing dozens of varieties, Monrovia's

craftsman introduced Darkstar Ninebark. Available exclusively from Monrovia, Darkstar adds beautiful drama with gorgeous burgundy new growth that ages to the deepest, dark purple. Darkstar's leaves are larger than typical Ninebark foliage giving the plant a fuller more open look in the landscape. This compact variety grows to about 5 feet tall and 4 to 5 feet wide. Perfect for the back of the border or as dramatic statement plant. Full to partial sun, Zones 4-8.

### BUTTERSCOTCH BABY SPIREA

*Spiraea japonica* 'MINSPIZ02' PPAF



Butterscotch Baby Spirea goes through color transformations that make it truly captivating. New growth emerges a

warm, caramel-butterscotch that transitions to a bright chartreuse green in summer. Bright-pink flowers sit atop the green backdrop. In the fall the caramel-red color returns. Butterscotch Baby keeps a very compact, mushroom-cap like habit growing only 1.5 feet high and 2 feet wide. Full sun, Zones 4-9.

### NITTY GRITTY GROUND COVER ROSES



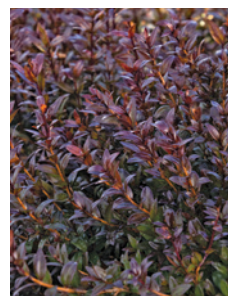
Low-growing roses can be a wonderful way to add sparkle to the landscape. Nitty Gritty features bright, color-saturated

blossoms that flower throughout the season. The entire Nitty Gritty collection makes it easy to grow roses, with fuss-free, own-root, low-maintenance plants. They require little to no pruning and are self-cleaning. Zones: 4-9.

### SWEETMAROON MYRTLE

*Myrtus communis* 'Monfazed' PPAF

Sweetmaroon Myrtle offers a multi-sensory experience in the garden. Stunning glossy, deep-maroon foliage sits as a backdrop for fragrant white spring flowers. The leaves of this Monrovia exclusive also provide a beautiful scent when



crushed or sheared. In the fall, the foliage transitions to a brilliant, bright red. This evergreen shrub stays compact, reaching only

4 feet tall and wide, making it a wonderful option for drought-tolerant hedges or back border plantings. Zone 8-10.

### COCO CHILL WEIGELA

*Weigela florida* 'VBL1' PPAF



Colorful and compact, Coco Chill Weigela offers dark, dramatic foliage with contrasting bright-pink flowers.

This Weigela blooms from spring through summer for season-long interest and tops off at 3 feet tall and wide. Zones 4-8.

### LILLA SMOKE BUSH

*Cotinus coggygria* 'Lilla'



Lilla Smoke Bush wraps a wonder of seasonal transitions into one shrub. Moody, purple-red leaves highlight pink

plumes of flowers in the summer. As fall sets in, the foliage creates a show of orange, coral, and red hues. Lilla is a dwarf form of 'Royal Purple' Smoke Bush, growing only to 4 feet tall and wide. This Monrovia exclusive is recommended for Zones 4-8. **SFM**





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All photos provided by Polaris Commercial

## Accessories that Enhance UTV Productivity

*The following content was provided by Polaris Commercial, and was written by Nick Snidarich, product and marketing manager.*

Utility vehicles (UTVs) are made to navigate various terrain and go where pickup trucks can't. But UTVs have different features designed with a specific environment and user in mind due to the kind of work (or fun) being done. For sports field managers and ground maintenance professionals, utility and safety are paramount, with bonus points awarded to UTVs that have accessories available to further enhance the vehicle. With a seemingly endless list of optional accessories on the market, upfitting your UTV can seem daunting, so we're breaking down what to consider.

### First things first

The selected UTV brand, make and model can determine the accessories available and needed – and whether they are appropriate for the jobsite. There are UTVs designed strictly for recreational use, and UTVs designed for daily work environments.

Other considerations may include cost, and whether you will customize your UTV at the time of purchase or have accessories installed after purchase. If adding after the initial UTV purchase, look for accessories that are vehicle validated – meaning they have been tested and quality approved by the original equipment manufacturer. Without this, you could negatively impact the accessory fit and function; or worse, limit the performance or lifespan of the UTV itself. Also, consider a UTV and accessory offering that allows for easy plug and play of powered accessories. This will reduce install time by eliminating the need for slicing and wiring directly to the battery terminal. Armed with this information, you can then dive into the top accessories to upfit your UTVs for your application.

### Accessories to increase operator confidence and vehicle awareness

Before you buy accessories, take inventory of what your UTV already has. For example, if a UTV doesn't have three-point seatbelts, a horn and back-up alarms as standard features, start there. If these accessories are standard, consider going a step further to increase driver confidence and visibility.

- Lighting is a highly effective addition for increasing visibility. Strobe lights call attention to the vehicle, while LED floodlights, spotlights and lightbars provide increased field lighting and navigation visibility for the operator.

- Rear and side mirrors further aid in operator visibility of their surroundings. Look for mirrors that can be securely mounted to the ROPS or side doors and are adjustable to accommodate all operators.

- Speed limiters enable top speeds to be lowered to meet campus or facility speed limits, and help increase overall durability. Slower speeds prevent excess damage to the driveline



Mud guards help reduce exposure to mud, dirt and caustic chemicals in a UTV's driveline and engine bay.



Lighting is an effective addition for increasing operator visibility and calling attention to the vehicle.





**Cargo bed toppers keep gear safe, secure and protected from the elements. Added cargo toppers should be weather-resistant, lockable and made with durable but lightweight material.**

while still maintaining productivity. Depending on the make and model, these can be available as an aftermarket accessory installed by the dealer or pre-programmed into the machine.

### Performance and utility accessories

UTVs are designed to traverse off-road, limited-access areas with ease. This capability protects over-the-road trucks from unnecessary use and costly abuse. Depending on work use, added components can give the UTV an edge over work trucks when it comes to performance and utility.

- Headache racks increase load-carrying capabilities for the UTV. Attached to the rear cab, these racks serve as further tie-down points to secure large loads.
- Electric cargo box lifts can help you work smarter and tackle bigger jobs by eliminating manual lifting of the rear cargo bed, a critical capability for those who often have heavy payloads of sand and gravel that can be unloaded by tilting the bed.
- Cargo bed toppers keep equipment and materials secure and protected from the elements. Ensure your cargo bed topper is weather resistant, lockable and made with durable-but-lightweight material – such as aluminum.
- A plow system can be used for snow removal and material handling. Find one that is durable enough to last through harsh conditions, securely fits to your vehicle, and can easily be added or removed from the UTV when needed. A winch is required to operate the plow system, so plan to add that too.
- Mud guards help reduce exposure in the UTV's driveline and engine bay from mud, dirt, debris and caustic chemicals, decreasing maintenance time and keeping the UTV in pique driving condition.

While the best UTV accessories will depend heavily on



**A durable plow system is ideal for snow removal and material handling.**

the specifics of the location and needs of the crew, it is imperative to stick to trusted brands. Quality and reliability go a long way in enhancing your UTV – even if it means spending a bit more up front. It is also worth considering where accessories are coming from – and it is important to always check your owner's manual regarding installation of accessories. For example, while a third-party supplier may have a wider range of niche accessories available, fitment may not be 100-percent accurate. This means that rework or adjustments may be needed, which can come at extra cost and upfit time. You can trust that accessories coming from an OEM are specifically designed for that model year vehicle, fitment will be accurate, and they will work seamlessly with other accessories within the OEM catalog.

Understanding the ins and outs of the desired accessories, how they will be incorporated within your UTV, and leveraging the reputation of the company from which you are purchasing will ensure that you are not only up-fitting your UTV with features that enhance performance but also confirming your investment lasts. To get started, head to manufacturers' websites to see what accessories are available and recommended. From there, you may also be directed to a reputable dealer or find build-and-quote modules to design, price and get an accurate feel for your desired UTV and available accessories. **SFM**



# Utility Vehicles



## CLUB CAR CARRYALL 500

The Club Car Carryall 500 has the power to replace pickup trucks at a fraction of the cost. With a rustproof, aircraft-grade aluminum frame, chassis and cargo box, along with best-in-class ergonomics, the Carryall 500 is rugged and versatile, making it the perfect solution for industrial and commercial jobs. Designed with tools in mind, the easy-to-use Versattach system of holders and dividers makes hauling cargo safely and securely a problem of the past. To further boost performance, Club Car Carryall utility vehicles include a powerful 14.0-hp. Kohler gas engine for better efficiency and consistent performance. Zero-emission, electric models are also available for applications where quiet, environmentally friendly operation is a must. These electric Carryall models are now available with a high-performance, AC electric powertrain for those applications that require additional power to take on the toughest jobs.



## CUB CADET CHALLENGER SERIES

The Cub Cadet Challenger Series has reimagined utility through a complete lineup of UTVs with premium features, providing users the versatility needed for a full day's work.

The M Series offers the essentials in a crossover that's ready to ride, including front and rear mounting systems with attachment points to tackle a variety of jobs. In addition, a wide variety of accessories and attachments – such as a spare tire mount, LED light bar kit, accessory rack tubes, upper doors, rear windows and more – are compatible across the lineup for customization.



## JOHN DEERE TX 4X2 WORK SERIES GATOR

John Deere TX 4x2 Work Series Gator utility vehicles are designed to power through any job. Equipped with four-wheel suspension, the models offer a smooth ride no matter what the operator is hauling. A 15.5-hp. engine delivers exceptional torque, low-end lugging power, and fast acceleration. The durable deluxe cargo box offers 16.4 cubic feet of capacity and converts into a flatbed configuration to allow for larger cargo. The easily adjusted Quick Clamp attachments, like divider walls, offer the ability to configure and reconfigure your cargo box in a few minutes without tools. Regardless of the job at hand, the TX Work Series Gator utility vehicles provide turf professionals with the power needed to complete tough daily tasks.



## KIOTI K9 2400 CAB

For professionals in search of a fully featured, tough and reliable companion that's ready to work all year round, the Kiotti K9 2400 Cab utility vehicle is just the machine. The K9 2400 Cab joins two other models in the popular K9



Series of utility vehicles – the K9 2400 and K9 2440. With a 24-hp., three-cylinder diesel engine reaching speeds up to 31 mph, operators won't lag behind. This model also comes with an ergonomically designed dashboard standard across the K9 Series, so access to critical controls and functions has never been easier. And with a factory-installed full-size cab featuring air conditioning and heat, plus a tilt-opening windshield, operators can work in comfort year round. The K9 2400 Cab also features advancements to reduce vibration and noise, along with a fully functioning audio system with speakers. A redesigned CVT transmission with engine braking capabilities delivers power smoothly and efficiently.



#### **KUBOTA RTV520**

Boasting a new appearance, the Kubota RTV520 is tougher and more aggressive than the previous generation from the inside out. A more powerful 2-cylinder Kubota liquid-cooled EFI engine provides more than 17 horsepower, while electronic fuel injection (EFI) makes starting the engine in cold weather easier and gives instant power with greater throttle control. Equipped with a variable hydrostatic transmission (VHT) that provides exceptional performance on any terrain with smooth and powerful acceleration, low-speed driving is enhanced through smooth throttle control, great traction and increased maneuverability. Ease of operation is made possible through the VHT's one-pedal operation, smooth acceleration and engine braking. A large cargo bed opening provides easy access to components for quick and simple maintenance. And a heavy-duty cargo bed with 441 lbs. of cargo capacity and a towing capacity of 1,168 lbs. means the RTV520 is ready to tackle the toughest jobs.

#### **POLARIS PRO XD MID-SIZE**

Designed for modest payloads, tighter spaces and remarkable comfort, the Pro XD Mid-Size UTV comes in two- and four-seat versions with a capable 500-pound-capacity cargo bed. Uses for the mid-size model include all-terrain



and all-weather utility or people movement for applications like construction, events set-up, landscaping and facilities and grounds maintenance. Built to withstand tough duty cycles and daily worksite use, the Pro XD lineup boasts durability, serviceability and safety features that differentiate it from other work UTVs. The mid-sized model takes the same purpose-built features that work customers value in the full-size Pro XD, and delivers them in a more compact profile, with capable payload and towing capacities at a lower price point. Additionally, the small footprint allows for easier access to narrow spaces, offering greater maneuverability, flexibility and efficiency – while maintaining a 200-hour service interval for longer uptime.



#### **TORO WORKMAN UTX**

Designed for work, not play, Toro's all-new line of Workman UTX utility vehicles are durable, versatile and rugged. The commercial-grade, 4-wheel drive vehicle is built on a rock-solid, high-strength steel frame and uses a proprietary ground speed governing system. That means ground speed and rpm are not directly connected on the Workman UTX, allowing the operator to limit the speed of the machine without gutting the power. Like a full-sized vehicle, the Workman UTX is road-ready with standard turn signals, brake lights, hazards, LED headlights, and a horn. It also can take on any weather, with an integrated Boss plow mount, all-weather cab with heat and air conditioning, and push-button 4-wheel drive. Available in two- and four-passenger models, the Workman UTX is ideal for large turfgrass maintenance areas and is designed to tackle tough workdays in any environment. **SFM**



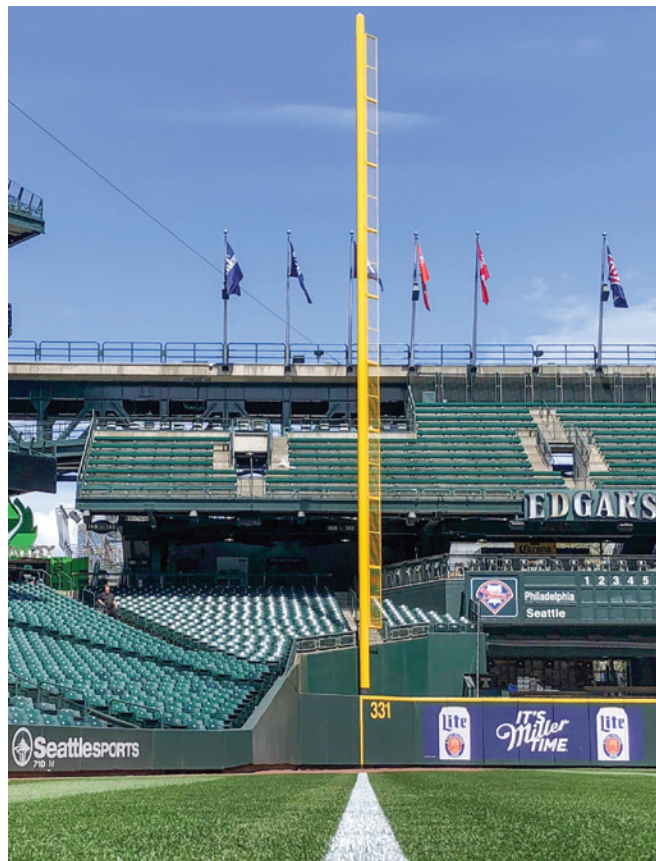
The following are some industry Tweets from the past month.



**@bermuda419s**

My last day on the job. Sun Devil for life, but time for new adventures!

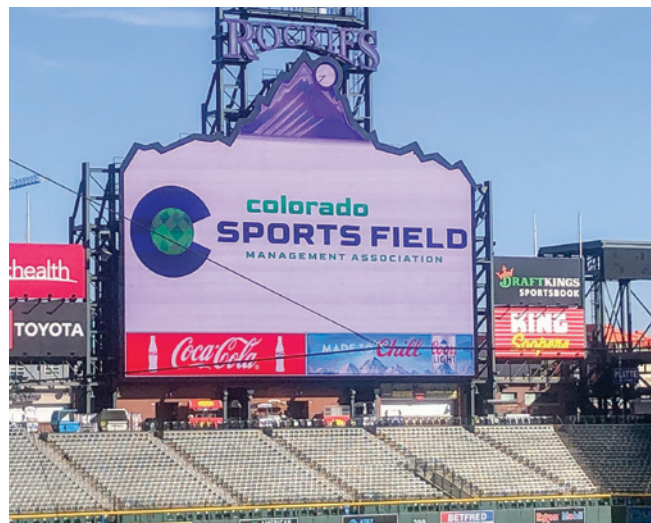
**MAY 12**



**@TampChamp**

Who's line is it anyway?

**MAY 9**



**@CSTMA\_TURF**

Unveiling the new logo! We are now Colorado SFMA  
@FieldExperts

**MAY 10**



**@levineturf**

Getting ready for @ASUNSoftball conference tournament.  
Should be a fun week. @OspreySB #swoop

**MAY 9**





@ASUGroundsCrew

Sun Devil Stadium is ready for commencement! Congratulations to all those graduating this spring! #ASUgrad

**MAY 9**



@Mike\_Kerns\_

Not long before this is in the stadium. Counting down the days.

**MAY 5**



@FieldExperts

Pictured here, grounds crew preparing the field for the 1924 World Series.

**MAY 5**



@\_Tim\_Wilson\_

Love using the TDR to monitor deep moisture on the infield going into the home stand!

**MAY 3**

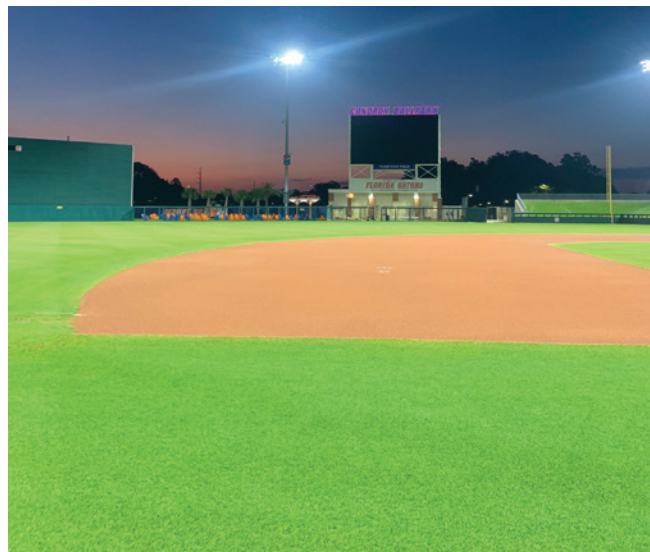




@ThomsTurf

A big change from this morning @iastate\_cals @IowaSportsTurf  
@CycloneTurf

**MAY 3**



@campbet004

Could be a nice day for two practices

**APRIL 28**



@RickEstradaturf

Nothing quite calming than watching sprinklers run. I enjoy the adjusting part. Considering how much we rely on them to work accordingly. #turfnerd #agronomy #sportsturf #turfgrass

**MAY 3**



@J\_CooleyWSurge

Everyone needs a little fresh air

**APRIL 27**



## RedMax EBZ8560 backpack blower

RedMax introduced its most powerful blower yet, the EBZ8560. Passing a 4,000-hour durability test, this high-performance backpack blower was built to keep professionals working comfortably all day. The new RedMax EBZ8560 generates 15% more blowing force than its predecessor (the EBZ8550).

“Pro users who run the RedMax EBZ8550 swear by it,” said Jack Easterly, product manager at RedMax. “Now we’ve leveled up again to deliver even more power and we’re confident this will blow away the competition in true RedMax fashion.”

The superior power and perfor-



mance are made possible by the higher engine compression from the RedMax Strato-Charged 2-stroke engine. Paired with the high-flow volute, the EBZ8560 produces 1,000 cfm of air volume at speeds of 220 mph at the nozzle.

In order to help provide all-day comfort, this backpack blower features cushioned straps and a ventilated back pad to reduce fatigue. Whether it's lawn clippings, leaves or other heavy debris, the EBZ8560 helps operators clear large areas



faster and more effectively.

The RedMax EBZ8560 backpack blower is available at local dealerships.

## ASV smooth CTL turf tracks

ASV Holdings Inc. offers smooth turf tracks for minimized damage to soft, delicate surfaces. With a combination of greater ground surface area and the benefits of ASV's Posi-Track undercarriage, the turf tracks can achieve equal or better traction than treaded tracks on dry surfaces. As one of the only completely smooth tracks on the market, ASV turf tracks can be trusted to

minimize damage to topsoil and root systems.

“People are often surprised by how well our turf tracks perform,” said Buck Storlie, product manager for the ASV brand. “In a field test, we completed 30 counter rotations with an ASV machine with turf tracks and a similar model from another manufacturer with treaded tracks. The turf tracks left no damage while the other model dug a rut two to three inches deep into the topsoil.”

ASV's distinctive green turf tracks have a completely smooth design and are manufactured from a specialized blend that resists cracking, provides traction, and maximizes overall life. The rubber tracks eliminate rusting and corrosion because they contain no steel cords. Additionally, durability is maximized through seven layers of embedded puncture-, cut- and stretch-resistant material. These turf tracks are available for the RT-25, RT-40, RT-50, RT-65 and VT-70 High-Output models.

ASV turf tracks amplify the effects of ASV's patented Posi-Track





undercarriage. Posi-Track features include flexible tracks, a large number of ground contact points and an open-rail undercarriage that contribute to longer component wear life, even ground distribution, more track on the ground and a virtually eliminated risk of derailment. Turf tracks take that to the next level with the elimination of treads, providing maximum ground contact.

ASV turf tracks are backed by a 2-year/2,000-hour warranty. The warranty covers tracks for the entire period and includes the industry's first and only no-derailment guarantee on new machines.

## New Scag EVZ

Scag Power Equipment introduced its EVZ electric-powered zero-turn riding mower. The EVZ is the first electric-powered unit in Scag's mower lineup. Operators will no longer have to deal with a noisy engine, smelly exhaust or messy gas cans.

The EVZ is powered by a Vanguard 48V 5kWh lithium-ion commercial battery pack. A Smartec by Hydro-Gear ZT-2800e electric drive system delivers smooth drive power and incredible maneuverability. Smartec D2e cutter deck motors provide strong cutting power, yet deliver maximum efficiency for extended runtime.

The machine features Scag's proven Hero cutter deck. Heavy-duty construction ensures years of dependable service and worry-free productivity. Low-maintenance mower design maximizes operator convenience: fewer grease points, no engine oil to change, no belts to replace.

A variety of features further enhance the customer experience, including standard LED lights for low-light conditions. A full-fea-



tured display screen shows battery charge level, total hours of machine runtime and provides system diagnostics. Onboard Bluetooth capabilities offer remote troubleshooting through the Smartec Connect and Smartec MyMow apps.

## Mean Green launches Nemesis professional-grade electric mower

Mean Green announced the availability of the new Mean Green Nemesis electric mower, which can cut up to five acres at a time when fully charged.

"The Nemesis brings commercial power and reliability, as well as

state-of-the-art, high-performing features such as an interactive touch screen display that allows control of the blade speed, drive speed, and visibility to battery capacity in real-time," said Brandon DeCoff, vice president chore marketing at Generac Power Systems.

The Nemesis offers a 2.25-hour runtime on its 7.2 kWh battery. It is capable of achieving a top speed of up to 8 mph, handling 15-degree slopes, and offers the power equivalent to a 28-hp. gas mower.

At the professional level, switching from gas to battery-powered mowers turns into big savings on routine maintenance costs. With fewer moving parts to break and the overall expense of replacement componentry such as air filters and spark plugs, the savings between service intervals is noticeable. While the 7.2 kWh battery in the Nemesis is substantial, it will charge overnight and be ready for duty the next day.

The Nemesis also features dual-support, multi-position, anti-scalp wheel mounts to prevent the deck from contacting the ground when passing over high spots. An adjustable rollover protection structure, comfortable high-back suspension seat, dual USB charging ports and cup holders add to the creature comforts – with LED floodlights standard for those mowing later into the evening.







## Husqvarna releases new 525LST trimmer and 580 backpack blower

The Husqvarna 525LST string trimmer is an ideal choice for commercial sites, and combines a high-torque gearbox with a larger fuel tank. The 22-ounce fuel tank feeds a 25.4cc displacement engine pushing 1.34 horsepower. Concealed cables prevent snagging and damage, while the solid-steel driveshaft and rugged skid plate offer increased durability to this lightweight, powerful trimmer. Weighing only 11 pounds, the 525LST string trimmer also incorporates LowVib anti-vibration technology, rubberized grips and flexible trigger, reducing stress and strain on hands and arms, and offering extended comfort throughout the workday.



Providing 15-percent more blowing force than its predecessor, the 580 backpack blower also boasts best-in-class support with cushioned straps, ventilated back pad and hip belt that reduce fatigue and provide all-day comfort. With an industry-leading fuel tank capacity of 89.7 fluid ounces, the 580 allows more running time. More running time in between refueling and all-day comfort means fewer stops, and more efficient work time. The high-com-

pression 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.

## RC Mowers breaks ground on new \$4.8 million facility

RC Mowers, a manufacturer of remote-operated robotic mowers, has begun construction of a new \$4.8 million office and production facility in Green Bay, Wis., with plans to begin operations there in February 2023.



“RC Mowers has doubled our revenue every year since our inception four years ago, and this new facility will alleviate the growing pains we’re experiencing as a result of our success,” said RC Mowers CEO Michael Brandt. “Investing in this new building will allow us to grow our manufacturing capabilities as our product line continues to expand, and the additional office space will accommodate our expected employee growth over the next several years.”

Founded in 2018, RC Mowers manufactures remote-operated robotic mowers for commercial use. The mowers are built to safely mow steep slopes, difficult terrain and other hazardous landscapes, resulting in decreased labor costs and greater profitability. The mowers comply with, or exceed, ISO and ANSI standards.

The 36,300-square-foot building is located on a 7-acre site adjacent to the company’s current location. It will feature 9,300 square feet for office operations and another 27,000 square feet of production space. The facility will provide the growing robotics mower manufacturer with three times the space it currently has.

## Oklahoma State University announces two new turfgrass varieties

Oklahoma State University scientists unveiled two new turfgrass varieties, which will be available for commercial use in the next two to four years.

OKC1876 and OKC3920 are crosses between common bermudagrass and African bermudagrass. According to Dr. Yanqi Wu, OSU plant and soil sciences professor and plant breeder, the two new varieties have unique genetic identities due to being crossbred from two different types of bermudagrass families.

OKC1876 and OKC3920 will become OSU’s ninth and 10th turf bermudagrass varieties to be released for commercial use since 1991. These new varieties were purpose built — like Tahoma 31, which is used in over 156 locations across the U.S.

OSU scientists found that OKC1876 exhibits high turfgrass quality, improves drought resistance, retains excellent fall color, reduces seedheads and wide adaptation in southern states. It also demonstrates excellent establishment characteristics, fine texture, high turf density, dark green color, good traffic tolerance and sufficient sod tensile strength for reliable commercial production.

*Courtesy of OSU Agricultural Communications Services* **SFM**





## Tennessee Valley STMA announces Excellence in Sports Turf award winner

The Tennessee Valley Sports Turf Managers Association (TVSTMA) established an “Excellence in Sports Turf” award to recognize the efforts of sports turf managers in the region who maintain high-quality athletic field surfaces. The first recipient of this award is Dustin Wilson, athletic director and head football coach of Springfield High School in Springfield, Tenn. TVSTMA interviewed Wilson following the award announcement:

### **TVSTMA: Tell us about yourself and the turfgrass you manage.**

**Wilson:** I am currently the AD and head football coach at Springfield High School. This is my seventeenth year in education as a business teacher, coach and athletic director. I was raised in Robertson County, and grew up in the hay and tobacco fields on a family farm. I am now proudly working at the school from which I graduated in 1998. In 2017, our on-campus stadium was built. The surface was installed by Ryan Moriarty with SportsTurf and provided by Tri-Turf Sod in Paris, Tenn. We have a practice field as well. I continue to use it as a “farm” for repair, but it receives much more traffic being a practice field.

### **TVSTMA: What led you to turfgrass management?**

**Wilson:** Athletics/coaching – I have been involved with sports my whole life. I can remember every uniform I have ever worn. I can remember every field I played on. I want people to remember Springfield football when



they visit. Whether in person, clips in the paper, on social media or on a TV broadcast, everyone is looking at the field. I want it to be the best. With those desires and the lack of resources we have in public education and education-based sports specifically, I had to learn a lot. I had to lean on a lot of experts. I raised tobacco, corn, hay, tomatoes, so now I had to learn about grass.

### **TVSTMA: What is most rewarding about the position?**

**Wilson:** Hearing and/or seeing our players treat it like the staff does. The comments, the identity, the pride they have in the field. It spreads in the community. Not to the degree of spreading that I strive for, but the boys take pride in it and is enjoyable.



**TVSTMA: What is most challenging about the position?**

**Wilson:** Time management – it is another job that we are not reimbursed appropriately for. I am a teacher, a coach and an athletic director. When you add field maintenance, it is tough to balance and manage your time. Our players help us paint, but nobody else gets on the mower but me!

**TVSTMA: What is your favorite “tool” in your turf maintenance toolbox?**

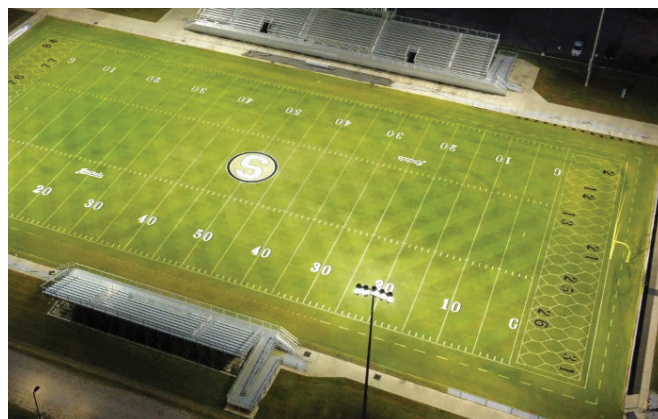
**Wilson:** The phone. I pick it up and call Billy Clark, Stephen Callis or Matthew Powell. I continue to learn about it, but I can't take credit for it all because of the people that give me advice when called upon. Don't reinvent the wheel, just trust the people you call and ask.

**TVSTMA: What tool would you most like to add to your turf maintenance toolbox?**

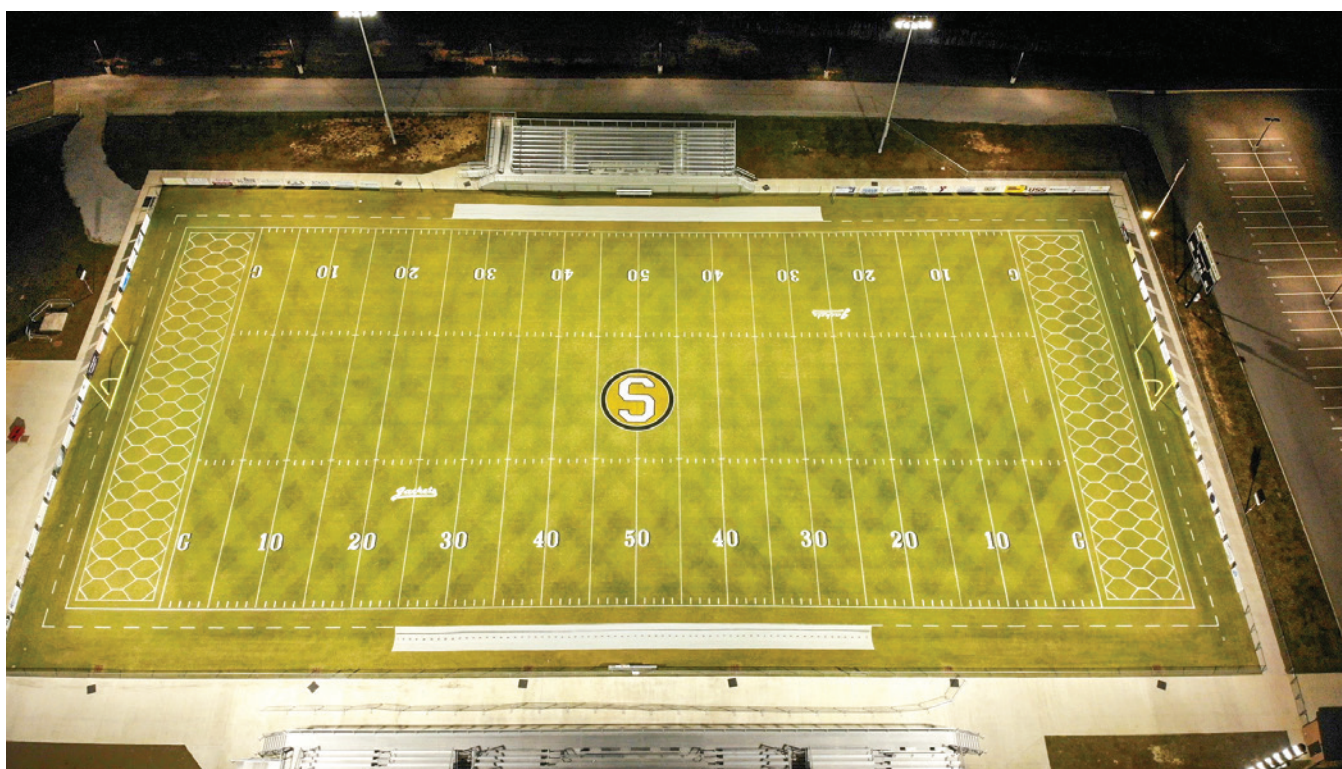
**Wilson:** I would love a small-horsepower tractor unit with a bucket that has turf tires. Something to do maintenance. We have a two-wheel-drive Gator that was donated by Stevie Howell at Industrial Staffing of Tennessee that provides most of the maintenance now.

**TVSTMA: Why do you do it?**

**Wilson:** To represent our community the best it can be.



To make Springfield a destination – not just a stopping place. The football program (and in some cases the athletic programs) is something I am in control of. I choose to put time and other resources in the athletic fields because we have visitors that leave here remembering Springfield just as I did when growing up traveling to fields across the country. The football field here is an example of something that is beginning to be mentioned when talking about Springfield football. I have a vision that includes facilities that are better than average, better than “good.” Also, I strongly believe the better the field looks, the better the boys feel about it and the better they play on it! **SFM**









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MANAGEMENT

## STMA Affiliated Chapters Contact Information

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**Colorado Sports Turf Managers Association:** [www.cstma.org](http://www.cstma.org)

**Florida #1 Chapter (South):**  
305-235-5101 (Bruce Bates) or  
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**Florida #2 Chapter (North):**  
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**Florida #3 Chapter (Central):**  
407-518-2347, Dale Croft,  
[dale.croft@ocps.net](mailto:dale.croft@ocps.net)

**Gateway Chapter Sports Turf Managers Association:**  
[www.gatewaystma.org](http://www.gatewaystma.org)

**Georgia Sports Turf Managers Association:** [www.gstma.org](http://www.gstma.org)

**Greater L.A. Basin Chapter of the Sports Turf Managers Association:**  
[www.stmalabasin.com](http://www.stmalabasin.com)

**Illinois Chapter STMA:** [www.ILSTMA.org](http://www.ILSTMA.org)

**Intermountain Chapter of the Sports Turf Managers Association:**  
<http://imstma.blogspot.com>

**Indiana:** Contact Clayton Dame,  
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Brian Bornino, [bornino@purdue.edu](mailto:bornino@purdue.edu)  
or Contact Joey Stevenson,  
[jstevenson@indyindians.com](mailto:jstevenson@indyindians.com)

**Iowa Sports Turf Managers Association:**  
[www.iowaturfgrass.org](http://www.iowaturfgrass.org)

**Keystone Athletic Field Managers Org. (KAFMO/STMA):** [www.kafmo.org](http://www.kafmo.org)

**Mid-Atlantic STMA:** [www.mastma.org](http://www.mastma.org)

**Michigan Sports Turf Managers Association (MiSTMA):** [www.mistma.org](http://www.mistma.org)

**Minnesota Park and Sports Turf Managers Association:** [www.mpstma.org](http://www.mpstma.org)

**MO-KAN Sports Turf Managers Association:** [www.mokanstma.com](http://www.mokanstma.com)

**New England STMA (NESTMA):**  
[www.nestma.org](http://www.nestma.org)

**Sports Field Managers Association of New Jersey:** [www.sfmanj.org](http://www.sfmanj.org)

**North Carolina Chapter of STMA:**  
[www.ncsportsturf.org](http://www.ncsportsturf.org)

**Northern California STMA:**  
[www.norcalstma.org](http://www.norcalstma.org)

**Ohio Sports Turf Managers Association (OSTMA):** [www.ostma.org](http://www.ostma.org)

**Oklahoma Chapter STMA:**  
405-744-5729; Contact:  
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**Oregon STMA Chapter:**  
[www.oregonsportsturfmanagers.org](http://www.oregonsportsturfmanagers.org)  
[oregonstma@gmail.com](mailto:oregonstma@gmail.com)

**Ozarks STMA:** [www.ozarksstma.org](http://www.ozarksstma.org)

**Pacific Northwest Sports Turf Managers Association:** [www.pnwstma.org](http://www.pnwstma.org)

**Southern California Chapter:**  
[www.socalstma.com](http://www.socalstma.com)

**South Carolina Chapter of STMA:**  
[www.scstma.org](http://www.scstma.org)

**Tennessee Valley Sports Turf Managers Association (TVSTMA):** [www.tvstma.org](http://www.tvstma.org)

**Texas Sports Turf Managers Association:**  
[www.txstma.org](http://www.txstma.org)

**Virginia Sports Turf Managers Association:** [www.vstma.org](http://www.vstma.org)

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# Feeling the Heat

By Pamela Sherratt

With the summer upon us, it's important for sports field managers to protect themselves from sunburn and heat exhaustion, and to keep hydrated. I thought it might be interesting to take a look at how our cool-season turfgrass fare during the summer months, too.

Cool-season turfgrasses perform best when daytime temperatures are in the 60-75°F range and soil temperatures are in the 50-65°F range, along with adequate soil moisture. Solar radiation is the source of heat buildup in the turfgrass plant. Transpiration of water up through the plants and out of the stomatal pores dissipates the heat. The rate of transpirational flow is dependent on temperature, wind, solar radiation and humidity. It is regulated by the stomatal openings and by the static layer of air that covers the leaf blade (called the "boundary layer," and held at 100% humidity). Once the boundary layer is removed by windy conditions, the movement of water via transpiration is increased. Thus, the rate of transpirational cooling is much greater on a sunny, windy day than a cloudy, calm day.

Dr. Karl Danneberger describes it as such:

- Clear sunny day, no breeze, and adequate soil moisture – The canopy temperature will be 15°F higher than the air temperature.
- Clear sunny day, slight breeze, adequate soil moisture – The canopy temperature will be within 1°F of the air temperature.
- Cloudy, no breeze, adequate soil moisture – The canopy temperature will be the same as the air temperature.
- If soil moisture is limiting, under sunny days the canopy temperature can rise 20°F above the air temperature.
- Heavy sand topdressing left on the turf surface can increase canopy temperatures 23°F.

The most common heat stress symptoms are a reduction in shoot growth and a stoppage or loss of a functional root system. In most cases, heat stress alone does not cause turf death. The impact of heat is often associated with detrimental changes to the plant that increase the likelihood of traffic or wear injury. Soil temperatures above the optimum are more detrimental than air temperature. When average daily soil temperatures exceed

70°F, 50% or more of the root system of a cool-season turfgrass can be lost.

Cool-season grasses are also susceptible to drought stress, and will go dormant in the summer if they do not get water. Turf can avoid drought stress by having deep roots, or an abundance of root hairs, a dense sward, rolled or hairy leaf blades, thick cuticles and/or small leaf areas.

The amount of water a turfgrass system needs is based upon its "water use rate" (WUR), which is calculated by the evapotranspiration (ET) rate. Compared to warm-season grasses, cool-season grasses have high water use rates during the summer, typically between 0.25 – 0.35 inches per day. ET rate is commonly used as a guide for the amount of supplemental irrigation needed each week if there is no rainfall. A ballpark figure would be that turfgrasses require 1-inch of water per week. Lower amounts than the weekly ET rate could also be applied if there was a severe drought, and the irrigation water was scarce or too expensive. It is not uncommon to see irrigation strategies of replenishing only 50-80% of the calculated ET rate in order to conserve moisture. If turf is allowed to go dormant in order to conserve moisture, it is important to regularly check the crown of the grass plant to make sure that it stays hydrated, or the turf may die. Turfgrasses with rhizomes or stolons are more able to withstand periods of drought than shallow-rooted, bunch type grasses.

It is essential during the spring months to promote as many roots as possible by alleviating soil compaction and by being judicious with both water and fertilizer. Spring is the best root growth growing period for cool-season grasses. Cultural practices to encourage root growth at that time of year will provide great dividends during summer stress. **SFM**



**Pamela Sherratt**

Sports Turf Extension Specialist  
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## Questions?

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Or send your question to Dr. Grady Miller, North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or [grady\\_miller@ncsu.edu](mailto:grady_miller@ncsu.edu)





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