

GKB Combinator



The GKB Combinator is the ultimate tool for the removal of unwanted turf. This machine is capable of stripping, fraze mowing, sprig digging and even removing infill from synthetic turf with an optional brush attachment.

GKB Aerator Synthetic



Lifts and loosens infill
Full-depth decompaction

GKB Quick-Clean Synthetic



Lifts and removes all types of debris
Adjustable screens
HEPA filtration

QUALITY

INNOVATION

DELIVERED

STECEQUIP

STECEQUIPMENT.COM

(888) 325 - 2532



SportsField

MANAGEMENT

June 2021

Vol. 37 No. 6

The Official Publication of the Sports Turf Managers Association

Fraise Mowing Effects and Recovery **8** | Hiring Tips **20**
Landscape Plants **24** | Safety and Security **34**

The *SFM* Interview:

Up close with Michigan State University's
Dr. John "Trey" Rogers III



SportsTurf
MANAGERS ASSOCIATION

Don't let its good looks fool you!

365ssTM
ULTRA DURABLE KENTUCKY BLUEGRASS BLEND



365ssTM Kentucky bluegrass blend is the most durable sports turf product available. It's fast germination, aggressive growth and unrivaled wear tolerance make it an ideal choice for any sports field. It's exceptional turf quality, dark green color and fine leaf texture made it the *only* choice for the Rose Bowl. 365ssTM was developed for the rigors of sports turf use without sacrificing the high turf quality high-end facilities demand.

- ★ Excellent Turf Quality
- ★ Very High Density
- ★ Extreme Wear Tolerance
- ★ Dark Green Color
- ★ Rapid Germination
- ★ Aggressive Recovery
- ★ Superior Sod Strength

ALL SEASON SPORTS TURF
USE FOR HIGH QUALITY INTERSEEDING

BLUEMUDA 365ss
BLUEGRASS INTERSEEDING FOR ALL SEASON PLAYABILITY

365ss is a key component to the most advanced bermudagrass interseeding program ever developed. Its excellent turf quality and exceptional wear tolerance help it provide sports fields year-round playability while reducing overseeding costs.

MVS MOUNTAIN VIEW SEEDS

www.mtviewseeds.com • 503-588-7333 • info@mtviewseeds.com



**7X FASTER THAN
TRADITIONAL LINE MARKING**



PAINT PERFECT LINES



**SAVE UP TO
50% PAINT**

THE FUTURE OF LINE MARKING

"The Turf Tank One saved us time on and off the field.. and given the flexibility of the annual subscription options, we were able to quickly approve it in our budget."



**NOW WITH *FREE*
CUSTOM WRAPPING!**



TURF TANK®



BOOK A DEMO ON YOUR FIELDS!

WWW.TURFTANK.COM

(877)-396-4094

SALES@TURFTANK.COM



 **SCAN ME**

Contents

JUNE 2021
VOL. 37, NO. 6



24

24

Landscape and Grounds Management

Landscape Plants

34

Safety and Security Track and Field Maintenance *Preventive steps for proven results*

37

Plant Growth Regulators PGR Update

38

Equipment and Technology Focus UTVs for Sports Field and Grounds Management Applications



43

8

Industry Research

Fraise Mowing Effects and Recovery

12

Profile

The SportsField Management
Interview: John "Trey" Rogers III, Ph.D.

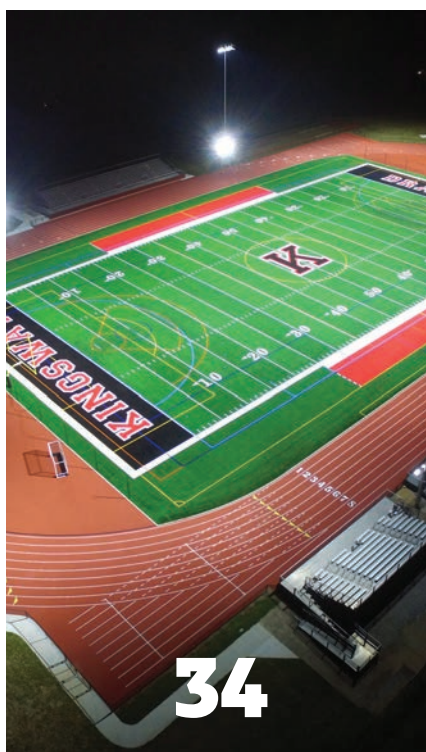
18

MSU turf students expand skills
through spring internships

20

Staffing

Maximizing Your Hiring Process to
Secure Top Talent



34

DEPARTMENTS

6

Editor's Note

7

STMA President's Message

17

John Mascaro's Photo Quiz

41

Innovations

43

From the Twitterverse

46

STMA In Action

48

Marketplace

49

STMA Chapter Contacts

50

Q&A

Saving America's Water

In just 4 years, over 500 million square feet of TifTuf has been installed on residential and commercial landscapes, golf courses, and collegiate and professional sports fields across our country. As a result, over 9.5 billion gallons of our precious water resources have already been saved. TifTuf is absolutely changing the face of the American landscape!



www.THETURFGRASSGROUP.com



Editor's Note



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

I had the pleasure this past month of having my first Zoom call with this year's STMA Editorial Committee. It was great to meet this year's committee members and discuss ways to continue improving *SportsField Management* magazine.

For those who aren't aware, the STMA Editorial Committee is tasked with ensuring that the magazine contains information relevant to the sports field manager, and to provide ideas and contacts for articles for publication.

We will continue to hold virtual committee meetings throughout this year, but the initial conversation generated plenty of great ideas. And while the committee members will be involved with bringing many of these efforts to fruition, you, the reader, also play an important role.

As sports field management professionals, you are the eyes and ears of this industry. If there are projects that should be profiled, interesting stories that should be covered, people who should be interviewed, or news and events to be highlighted, we want to hear about it. This is your

industry, and we want to provide the most in-depth coverage possible. As such, please e-mail me at jkmitta@epgmediallc.com or call me at 763-383-4405 with information, ideas, etc.

Also, it is our goal to build up a database of photography for use in the magazine. I know many of you post great photos to Twitter, but we would love to receive your photography as well — especially photos of you and your crews at work. Most cell phones are capable of taking high-resolution photos, which makes it even easier to capture and share the industry at work.

We will be creating some different avenues through which you can submit photos; but, in the meantime, please feel free to send me any pics you think might be of interest (JPG format preferred). If you have multiple high-resolution photos, I recommend sending via a file-sharing system such as Dropbox, Google Drive or WeTransfer. Please reach out to me with any questions regarding photography.

More details will come soon regarding other efforts we have in store for *SportsField Management*.

I look forward to hearing from you. **SFM**

SportsField MANAGEMENT

EPG Media & Specialty Information

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

The Official Publication Of The Sports Turf Managers Association

SALES REPRESENTATIVES

Peggy Tupper | Senior Account Manager
Phone: (763) 383-4429 | ptupper@epgmediallc.com
Leslie Palmer | Senior Account Manager
Phone: (763) 383-4460 | lpalmer@epgmediallc.com

EDITORIAL

Group Publisher | David Voll
Associate Publisher/Editorial Brand Director | John Kmitta
Technical Editor | Adam Thoms, PhD
Art Director | Phil Tippin
Sales and Traffic Coordinator | Kurt Eisinger

SUBSCRIPTION SERVICES

Phone: (763) 383-4492 | customerservice@epgmediallc.com

REPRINTS

Marcia Brewer | Wright's Media
mbrewer@wrightsmedia.com | (877) 652-5295

DIRECT MAIL LIST SALES

Kris Grauer | NPS Media Group
kgrauer@npsmediagroup.com | (203) 822-7933

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 Media & Specialty Information at PO Box 96, Port Jervis, NY 12771.

Postmaster: Send address changes to *SportsField Management*, PO Box 2123, Skokie, IL 60076-7823. For subscription information and requests, call Subscription Services at (763) 383-4492. Subscription rates: 1 year, \$40 US & Poss.; 2 years, \$65 US & Poss.; 1 year, \$65 Canada/Foreign Surface, 1 year, \$130 Airmail. All subscriptions are payable in advance in US funds.

Send payments to *SportsField Management*, PO Box 2123, Skokie, IL 60076-7823. Phone: (847) 763-9565. Fax: (847) 763-9569. Single copies or back issues, \$8 each US/Canada; \$12 Foreign. Periodicals postage paid at Port Jervis, NY and additional mailing offices. COPYRIGHT 2020, *SportsField Management*. Material may not be reproduced or photocopied in any form without the written permission of the publisher.

EPG MEDIA &
SPECIALTY INFORMATION

President's Message

SportsTurf MANAGERS ASSOCIATION

President:

Nick McKenna, CSFM

Immediate Past President:

Jimmy Simpson, CSFM

President-Elect:

James Bergdoll, CSFM

Secretary-Treasurer:

Sun Roesslein, CSFM

Vice-President Commercial:

Jeremy Bohonko

Professional Facilities:

Nicole Sherry

Academic:

Adam Thoms, Ph.D.

Higher Education:

Clark Cox, CSFM

Parks & Recreation:

Brad Thedens, CSFM

Schools K-12: Jeremy Driscoll**Commercial:** Paula Sliefert**At-Large Elected:**

Scott Thompson, CSFM

At-Large Appointed:

Alpha Jones, CSFM

STMA OFFICE

P.O. Box 1673

Lawrence, KS 66044

Phone: 800-323-3875

Email: STMAinfo@STMA.org

www.STMA.org

STMA EDITORIAL COMMITTEE

Chair: Brad Thedens, CSFM

Technical Editor: Adam Thoms, Ph.D.

Rebecca Auchter, CSFM; TJ Brewer, CSFM;
Joe Churchill; Arthur Eddy; Charles Goode;
Eric Harshman; John Kmitta; Cody McKee;
Kelly Rensel, CSFM; Eric Roberts, CSFM;
David Schwandt; Chase Straw, Ph.D.

Howdy STMA members!

It's hard to believe that spring is almost over and summer is standing on our doorstep. Part of my role at Texas A&M is overseeing our baseball surface, and, as such, I've watched a lot of games over the last few months. Perhaps it's how the season has gone for our team, or perhaps it's just how things go in general, but it's hard for me to watch baseball and not think of one word: FAILURE! The old saying is that baseball is a game of failure, which is absolutely true. A Hall of Fame hitter will only get a hit 3 to 4 times out of every 10 at bats, so, technically, they are failing 60 to 70 percent of the time. It is their ability to get those hits despite previously failing that makes them successful.

Failure has always been a major motivator in my life. When I think back on my time as an athlete (and life in general), it's the losses and failures that stick in my mind. It's the losses and failures that drove me to keep working and improving. And it's the losses and failures that taught me the most valuable lessons. As an athlete, I hated to lose as much as, or more than, I enjoyed winning; and although that served me at times, there were also moments where my fear of failing limited my ability



Nick McKenna, CSFM

STMA President

nmckenna@athletics.tamu.edu

to perform and succeed. The desire not to fail still motivates me on a daily basis and drives me to succeed at everything I do. However, I no longer fear failure or even look at it as something that is always negative. It has taken a lot of reflection and a conscious effort to get to this point, but I truly believe that failure is what ALLOWS us to be great! Don't get me wrong, I'm not advocating for a catastrophic failure that might cost you your job; but the little failures that force us to analyze and reevaluate what we do and how we do it are a good thing. That's how we learn, that's how we improve, and that's how (and why) we become the best at what we do.

John F. Kennedy probably summed it up best when he said, "Those that dare to fail miserably can achieve greatly."

As we move into the summer my challenge to you is this — dare to fail! Dare to apply for Field of the Year, dare to take the CSFM exam, dare to learn or try something new, and dare to be great. **SFM**

Nick McKenna, CSFM

FRAISE MOWING EFFECTS AND RECOVERY

BY RAY MCCAULEY, PH.D.



Top photo provided by Redexim. Bottom photo provided by Ray McCauley, Ph.D.

Bermudagrass is the turfgrass of choice for sports fields in the southern United States because of its excellent quality, stress tolerances, and rapid growth rate. However, bermudagrass can produce excessive thatch — a layer of living and dead plant material that forms between the green turfgrass shoots and the soil surface.

At moderate depths (< 0.5-inch), thatch protects turfgrass crowns from traffic, moderates soil temperatures, and provides cushioning for falling athletes. However, turfgrass health and aesthetics, as well as soil physical properties (how fields behave) are compromised when thatch exceeds 0.5-inch depth. Excessive thatch reduces drought tolerance, increases localized dry spot potential, and slows water, air, fertilizer and pesticide movement into the soil. Excess thatch also increases the likelihood of winter-kill and spring dead spot.

Sports field managers often employ various cultural practices to manage thatch. Topdressing — the broadcasting of a thin layer of sand or soil across the field — is the best cultural practice for controlling thatch accumulation (Beard, 1973; Miller, 2008). To be effective, though, topdressing must be performed multiple times annually. If thatch levels become excessive, topdressing alone becomes ineffective. Instead, mechanical practices must be used. These practices are often laborious, expensive and disruptive of turfgrass quality. Hollow-tine aerification and vertical mowing have been the standard mechanical practices used to manage thatch. Although their aggressiveness may be adjusted, neither aerification nor vertical mowing impacts the entire surface, and multiple years of both are often necessary to effectively manage thatch.

FRAISE MOWING

Fraise mowing is a highly disruptive mechanical practice that is not for the faint of heart. It enables sports field managers to (potentially) remove all thatch without the added time and expenses of gradual thatch reduction. Like other cultural prac-

tices, fraise mowing has collateral effects on bermudagrass quality and soil physical properties, which can last for weeks to months. However, these effects and duration can be manipulated. Beginning in May 2016, several studies were conducted to evaluate the influences of fraise mowing. Several of these

studies were conducted on athletic fields in the piedmont region of North Carolina.

Fraise mowing produces an unsightly (often bare ground) surface for ≥ 3 weeks until bermudagrass recovers. This downtime decreases facility revenues, and should be as short as possible. Fraise mowing timing is imperative to limit this downtime. Bermudagrass does not begin aggressively growing until daytime and nighttime air temperatures exceed 85°F and 65°F, respectively, for more than one week. If



Aggressive fraise mowing. Be aware that there is very little to no green grass on the field following fraise mowing. Photo provided by Ray McCauley, Ph.D.

fraise mowing is performed too early in the growing season, the cooler temperatures will slow bermudagrass recovery. This was evident in North Carolina when slower recovery occurred following fraise mowing at 0.5-inch depth in mid May (6 weeks recovery) compared to mid June (4 weeks recovery). Caution should be exercised when fraise mowing in the late summer, as well. Bermudagrass goes off-color/dormant after the first killing frost, but its growth typically slows well before (≥ 1 month) this date. If bermudagrass is fraise mowed too late (and too aggressively) in the late summer, bermudagrass decline or death, as well as increased winter weed pressure may result (Stewart et al., 2016). Therefore, give your bermudagrass fields ample time to recover by timing fraise mowing in the late spring to mid-summer.

The old adage “garbage in, garbage-out” holds true with fraise mowing. If a field has poor coverage before fraise mowing, bermudagrass will not spontaneously appear after fraise mowing. Instead, bare areas will persist. If bare areas (without any stolons or rhizomes) > 1 foot in diameter are present after fraise mowing, they should be sprigged, plugged or sodded to speed up recovery.

Fraise mowing depth has a profound effect on bermudagrass recovery. Bermudagrass recovers from growing

points where new shoots emerge (nodes) on unmown rhizomes and stolons. As fraise mowing cutting depths increase, more nodes are removed. Thus, longer recovery times can be anticipated with increased cutting depths. Shallow cutting depths (0.25 inches) can recover in as few as three weeks after fraise mowing. However, 1-inch depths may require ≥ 6 weeks to recover.

Bermudagrass must be fertilized with quick- or slow-release nitrogen to speed up its recovery from fraise mowing. In North Carolina, hybrid bermudagrass recovered the fastest from 0.25-inch cutting depth when it received nitrogen (ammonium sulfate; 21-0-0) at ≥ 0.5 lb. per 1,000 square feet for three consecutive weeks. For the more patient, weekly applications of ammonium sulfate at 0.25 lb. N per 1,000 square feet or a single application of polymer-coated urea at 2.0 lbs. N 1,000 square feet (applied one week after fraise mowing) recovered in four weeks after fraise mowing. Normal fertility programs should be resumed after recovery. Otherwise, excessive bermudagrass shoot growth and scalping may occur.

Sand topdressing is often applied during field establishment to speed up bermudagrass grow-in and to level surfaces. Sand topdressing at ≤ 0.25 -inch depth (≤ 0.8 cubic yards per 1,000 square feet) applied within two weeks after fraise mowing did not have an effect on bermudagrass recovery. However, topdressing did help to further level the surface — especially any depressions from overlapping fraise mower passes. Topdressing depths ≥ 0.5 inches (1.5 cubic yards per 1,000 square feet) applied one or two weeks after fraise mowing delayed bermudagrass recovery and are not recommended.

Nothing happens in a vacuum, and fraise mowing is no exception — it affects soil physical properties (how fields behave) as it removes thatch. Fraise mowing hybrid bermudagrass at three depths (0.25, 0.5, or 1.0 inch) affected thatch height, field hardness, traction and drainage in two soils — a sand and a native sandy loam. Immediately after



Fraise mowing depths (0.25, 0.5, or 1.0 inch) followed by core aerification. Photos provided by Ray McCauley, Ph.D.

fraise mowing, the 0.25- and 0.5-inch depths reduced thatch by $\geq 14\%$ and 46% , respectively. These benefits were still present when the study concluded two months later. Field hardness increased as fraise mowing depths removed more cushioning thatch in both soils. The 1.0-inch fraise mowing depth increased field hardness by $\leq 90\%$ (49 gravities) in the sandy loam and $\leq 21\%$ (≤ 14 gravities) in the sand. The 0.25 and 0.5-inch depths increased field hardness by $\leq 24\%$ and $\leq 58\%$ (respectively) in the native soil, but had little effect in

the sand. Traction (shear strength) in the non-cohesive sand decreased by 9% and 22% in the 0.5 and 1.0-inch depths, respectively, because these depths removed more stabilizing roots, rhizomes and stolons. The opposite occurred in the more cohesive native soil, and traction increased by 6% in the 1.0-inch fraise mowing depth. Surprisingly, drainage (saturated hydraulic conductivity) in the sand decreased with the 0.5 and 1.0 inch cutting depths by 34% and 48%, respectively. Drainage slowed even though these cutting depths removed $\geq 46\%$ of thatch. Despite all of these changes, all soil physical properties were within defined acceptable ranges — field hardness (< 100 gravities), traction (20 to 120 N·m), and drainage (≥ 16 inches per hour) — after the bermudagrass fully recovered from fraise mowing (Baker and Richards, 1993; Chivers and Aldous, 2003; Serensits and McNitt, 2014).

Because fields will be closed until they recover from fraise mowing, what better time is there to beat them up even more? For a follow-up study, the effects on bermudagrass recovery and soil physical properties were observed following fraise mowing and core aerification. Fraise mowing was followed immediately by core aerification (3.0 inch depth; 3.0×3.0 inch spacing; cores reincorporated) in two soils. Aerification did not delay recovery at any fraise mowing depth and recovery occurred in three weeks in the 0.25 and 0.5-inch cutting depths and 6 weeks in the 1.0-inch cutting depth. Thatch content decreased as fraise mowing

depth increased but was unaffected by aerification. Drainage decreased with increasing fraise mowing depth. However, aerification offset this reduction and increased drainage from 37% to 79%. With fields already closed for play, no difference in recovery rate, and improved drainage, it makes sense to core aerify immediately after fraise mowing.

Fraise mowing enables sports field managers to (potentially) remove all thatch from their fields. What would have taken years to do with vertical mowing, hollow-tine aerification, and topdressing can now be done in an afternoon with a fraise mower. Be aware that there is very little to no green grass on the field following fraise mowing, and it will be weeks to months before the field looks like a field. But after the recovery period, it will look and perform better than the field before fraise mowing. **SFM**

Ray McCauley, Ph.D., is an extension assistant under Dr. Grady Miller at NC State University. He received his B.S. and M.S. at Clemson University in Turfgrass Science and his Ph.D. at NC State University in Crop Science. His Ph.D.

research concentrated on fraise mowing bermudagrass with an emphasis on its effects on soil physical properties.

REFERENCES

Baker, S.W. and C.W. Richards. 1993. Soil physical properties of soccer pitches: Relationships between laboratory and field measurements. *Int. Turfgrass Soc. Res. J.* 7:489-496.

Beard, J.B. 1973. *Turfgrass science and culture*. Prentice Hall, Englewood Cliffs, NJ.

Chivers, I. and D. Aldous. 2003. Performance monitoring of grassed playing surfaces for Australian Rules football. *J. Turfgrass Sports Surface Sci.* 70:73-80.

Miller, G.L. 2008. An evaluation of crumb rubber and calcined clay for topdressing sports fields. *Acta Horticulturae*. 783:381-390.

Serensits, T., and A. McNitt. 2014. Update on field safety testing. *SportsTurf*. 30(7):8, 10-11.

Stewart, B.R., H.W. Phillely, C.M. Baldwin, and J.D. McCurdy. 2016. When will it be ready for play? Fraise mowing recovery time in bermudagrass. In: Abstracts ASA, CSSA, and SSA International Annual Meeting, Phoenix, AZ. https://scisoc.confex.com/crops/2016am/webprogram/Paper_101905.html

MOST VALUABLE PLAYER
For games that matter.



Ready-to-use Paint Tote System
saves time, money, space,
and reduces waste.

We make the games look better.
WorldClassPaints.com | 1.800.748.9649

Perfect Infields
Ball Field Finisher



Quick Attach to Various Vehicles

	John Deere... TS, TX, TG, XUV, HPX
	Kubota..... RTV X900 / X1100
	Polaris..... Ranger
	Club Car..... Carry All II, 272
	Honda..... Pioneer 500 / 700
	Can Am..... Defender

800.228.1003 x134
sales@broyhill.com • www.broyhill.com

 **Broyhill**
when only perfection will do

The SportsField Management Interview: John "Trey" Rogers III, Ph.D.

In this edition of the *SportsField Management* Interview, we meet John "Trey" Rogers III, Ph.D., professor of Turfgrass Management in the Department of Plant, Soil, and Microbial Sciences at Michigan State University (MSU). He has been a faculty member at MSU since 1988. During that time, he has advised and graduated more than 1,100 students. His current turfgrass research interests at MSU include performance turf renovations, turfgrass establishment and soil modification. He served as the lead scientist for the indoor turf project at the Pontiac Silverdome for the 1994 World Cup Soccer matches, and as the project leader of the Spartan Stadium turfgrass conversion in 2001-02. He was a turf consultant and project leader for the 2004 and 2008 Summer Olympic Games and the 2008 UEFA Cup. His consultations on golf course, athletic field, and turfgrass matters are extensive throughout United States and internationally. His national and international lectures and presentations total more than 270, with more than 230 publications and one book. He is the senior author of two U.S. patents.

SportsField Management (SFM): Please tell us about your background and your career path. What attracted you not only to the turfgrass industry, but also to your role as an educator?

Rogers: I'm a native of Fort Smith, Arkansas. What got me involved in this was golf. I began to enjoy golf as a teenager, and I started off working on a driving range. I was eventually asked to work on the course, and I really enjoyed it. I initially went to college to be an engineer, and kept working on the golf course in the summer. I eventually changed my major [to Agronomy]. I graduated and became an assistant superintendent. There was a professor, now retired, from the University of Arkansas, named



John King. Dr. King was instrumental in convincing me to come back to graduate school. He tells the story that, in his class, he would ask the question, "Can you spot the error or the issue with this paper?" He said nobody ever saw the error, but I saw it inside of 30 seconds. So he thought I might be the type of person who would enjoy the challenge of graduate school.

So I went back to the University of Arkansas, not knowing anything about graduate school. I had a great experience teaching a soils laboratory with Dr. Duane Wolf, and really dove into my projects with Dr. King. That really got me thinking that I would like academia. I like the autonomy. I like the challenge. After I graduated

from the University of Arkansas in 1985, I then went to Penn State, and that is where I got my Ph.D. I often tell people that I learned to do research (the scientific method) and to love teaching at the University of Arkansas; I learned turfgrass at Penn State. Both of those things prepared me to take a position that I had no idea that I was going to take – and that was to run the two-year turfgrass program and do research at Michigan State. I started here in 1988. I remember telling my father that I would be at Michigan State for one or two years. I just finished year number 33.

SFM: Please tell us about your typical day or typical year – both the courses you teach and the research with which you are involved – and what your overall role entails.

Rogers: I have what is called a research teaching appointment. So a big part of my role is teaching and advising students – both in the two-year and four-year programs. At Michigan State we have an undergraduate program, we have a two-year golf program, and we have a two-year sports turf program. I don't know a lot of universities that



have a specific two-year sports turf program, but we started one in 1988. I was not the coordinator of the sports turf program until 2014. First, Eric Miltner and then David Gilstrap ran that program. When they stepped away, I took both programs, which I'm still doing today. I teach two classes in the fall, and two classes in the spring – an introductory turfgrass class, a seminar class, a sand-based construction class, and then what I call a capstone class, which attempts to synthesize all turfgrass issues and classes the students have taken while at MSU.

I remind the students in the capstone class, “We have taught you everything we know, now forget it all, because everything is gray. It's not black and white – it's gray when you get out there.” So we try our best to prepare our students through this class. We teach our students – both two- and four-year – in the same room, which makes us very unique in my mind. We've never felt the need to separate them – there are other classes that will do that.

The thing about teaching turfgrass is that you rarely teach somebody who isn't “all in,” totally enthralled with working in the turfgrass industry. These people, because

they have prior experience in the industry, know why they are coming to school, and man are they enthused. So, as I have said many times, this is one of the great teaching jobs in the world.

I have had a lot of great graduate students, several of whom are running turfgrass programs – John Sorochan, who eventually taught Adam Thoms; Alec Kowalewski at Oregon State; Jason Henderson at the University of Connecticut; John Stier, who is also at the University of Tennessee...I don't want to leave anyone out. Tim VanLoo, Matt Anderson, Thomas Green, Ryan Bearss, Jeff Dunne, Jacob Bravo, Mark Krick and Tim Vanini were all graduate students of mine. They all contributed to this program.

Research-wise, for the first 20 years of my career, we did a lot of work with regard to anything that was sports turf related – looking at new grasses, how to manage turf under reduced light or shaded conditions, establishment of turfgrasses, wear tolerances of turfgrasses, etc.

We've had a lot of projects that have been high-profile. And, while high profile projects have lots of pressure, they



also have big budgets, providing learning opportunities. We've done a good job providing information from these projects. I always tell graduate students that the information from high-profile jobs eventually trickles down to everyone. There are a lot of things people use every day today that came from the fact that we were doing the Olympics in Beijing or the Olympics in Greece. We would learn techniques that we would then pass on to everyday field managers.

A typical day for me is never typical. What has kept me the most enthralled about doing my job is that any given day it is going to be different. The only thing I can always count on is that class starts at 9:10. After that, I don't know what is going to happen.

SFM: What has the last year been like for you and for your students with regard to COVID-related challenges?

Rogers: I saw one of my students, just by chance, in March. This was a student who had enrolled in the turf-grass program in August of 2020. His first comment to me was, "It's nice to finally meet you face to face." There are 15 students I've never met face to face. So they have had a very difficult job.

For me it has been pretty easy. I have enjoyed the 31-second commute to teach from my kitchen table. I've had some extra time to redo every lecture I have ever given – brand new pictures, brand new thoughts – a lot of things I might not have been able to do had I been going to the office. But the students are the ones this has been most difficult for these past months.

Last October, I'm sitting there on Zoom, staring at those kids. I had sent every student 16 grasses that we were going to study, the seeds we were going to study, and the soil we were going to use to do an establishment project. But they are in their basements; they are in their mom and dad's houses; and they are miserable. This is not what they expected.

I knew we were going to do the same thing [remote learning] in January, despite what we were hearing. So I called my department chair, and said, "Do you trust me? Because I've got an idea, and I need to get these kids out of their basements."

I called nine golf courses throughout the United States, and I asked them if they would be willing to take these students and let them work on their golf courses from January through March. I told them (the superintendents), "Before you say yes, I have some rules. First, I need the students to take 12 credits online. It's going to be synchronistic. They are going to meet Tuesday and Thursday mornings; so they need Tuesday and Thursday mornings off – maybe even the whole day. But the rest of the time they will work, and I'm going to expect your technicians to help us teach the labs of the classes of the particular semester sequence that we are in." And they all said yes.

So the students went to those golf courses January through March (see article on page 18). We had a few bumps in the road, but by all accounts they enjoyed it, and they loved the hands-on experience that they got. We would talk about the theory in the morning, and they would go out that afternoon or the next day and apply it.

It's not easy to go to class 12 credits and work 40 hours a week. So that was a big move for us. That was a

way to make it more palatable for our students – particularly our first-year students. We encouraged our seniors to stay at their internships and do the same thing. Many of them did stay at their internships in the fall, but by winter I could tell many were back in their basements. It was just awful for them. It wasn't what they expected. It wasn't what they paid for in so many ways. It wasn't what their maturity level was even ready for either.

It's not their fault. None of this was their fault. I tried to keep that in mind. And we got through it. But I sure hope we are going back to face to face this fall.

SFM: What is the key to getting young people interested in the turfgrass industry?

Rogers: We don't have very many students at MSU who don't love this work. By the time they have gotten to school, they already know they like it.

People in the sports turf industry are telling me that they can't find good help, and I agree. But maybe the interns are not treated the same as other interns in the organization. If you have a marketing intern, you might find them housing through the marketing department. But I never hear that with grounds. In golf, they learned a long time ago that the more they can make an internship turnkey, the more kids will jump into that fire. A lot of times it is their first time getting out of the house, and their first time going away. That's the thing I did with the "great experiment" during COVID – I made sure it was turnkey. When they walked onto that golf course, they had a place to stay, they had a place to study, and they had a place to go to work. The more that that can be done in this world, the easier it is to get people attracted to your particular facility.

Sports turf has always lagged behind golf in terms of education and resources, but it is catching up rapidly. Now people need to remind their bosses that they have to be able to provide opportunities. If you can, there are a lot of students who enjoy the idea behind sports turf. There are a lot of things that are attractive about it, but the opportunities have got to be there, and it needs to be turnkey.

SFM: What are the challenges that you deal with on a regular basis and how do you approach those challenges?

Rogers: Most of my challenges are personal. I want to do a good job and stay current. I want to be sure the students get what they need.

The other day someone asked me if I could give a 45-minute lecture. I said, "Anytime. Any subject. It doesn't matter." That has become automatic.

I feel very strongly about remaining current so I can relate to students. One of the questions I get all the time is whether I think students have changed in the last 32 years.

Do I think the 18 year old has changed? Not necessarily. Do I think they've been out of their home by the time they get to MSU? No. Do I think they are afraid of getting out of their comfort zone? Yes, I do. Do they have different technology than someone had 30 years ago? Sure.

30 years ago, I could ask the class how many spots are on a giraffe. The way they would have answered would be to pick the youngest guy or girl and send them to the library, and tell them to come back with the answer. Now, everybody can answer this question inside of five seconds.

So, who needs to make the adjustments – the students or me? Obviously, me. I'm the guy who has constantly needed to adjust to the idea of teaching and the idea of getting something across. It's not the students that need to adjust. Recognizing that I'm the person who needs to make the adjustment has been key. I'm very cognizant of that.

I also enjoy consulting, and the challenges of projects, chasing perfection. I take on certain things, and that becomes my focus. I'm not afraid to change my focus. Those are my biggest challenges.

SFM: Can you give us an idea of the types of projects you for which you serve as a consultant?

Rogers: For the past 11 years I have been working with the Mortenson company whenever they build a stadium with natural turf. They have been fun to work with, and I have learned so much. Right now I have two projects with them – one in St. Louis and one in Nashville. My job is to make sure nothing goes wrong turf-wise for these billion-dollar stadiums. I make sure the raw materials are up to specs. I make sure the specs themselves are written correctly. A lot of times the superintendent or sports field manager hasn't even been identified yet in these projects, so I will contribute in that role until they arrive.

In the last year or so, I have taken on the challenge of turfgrass racetracks for Thoroughbred racing. I find that fascinating. I've been working in Kentucky with Keeneland. Also, in a separate endeavor, the turf track at Churchill Downs will be rebuilt this July, and I'm happy to be involved with that.

Those are things I really enjoy. I'm very big on challenges, rather than just doing the same thing over and over.

We hope to be involved with the FIFA World Cup coming to North America in 2026. John Sorochoan and I are working toward that right now. We would like to be involved with the research that is necessary for any of the stadiums that will be environmentally challenged. I don't believe we will be building any new stadiums in North America for the World Cup, so the idea will be to retrofit and/or make sure that any stadiums that will be reduced light or indoor can meet the standards that FIFA requires.

It's a huge undertaking. It's 48 teams for the first time, as opposed to 32. FIFA has a requirement that each city

(16 total, I think) has to have four training sites, and each of those training sites has to have two fields. So that is a lot of FIFA-standard fields that have to be in and ready to go in 2026. It's going to be in three countries across three time zones. Nothing like this has ever been done before, certainly in the United States.

SFM: On the flip side of challenges, what are your biggest accomplishments, or what are you most proud to have achieved?

Rogers: There are different ways to look at that. All of my graduate students, and all their success, has made me extremely proud. My undergraduates and two-year students are off at great careers at top-100 golf courses and MLS stadiums and NFL stadiums. When they call you back to say "thank you," or to ask a question, or just to give you an update, you can't help but have a real sense of pride.

From a project standpoint – the World Cup in 1994 at the Pontiac Silverdome in Detroit was something I don't know we will ever match. We had a ton of pressure for that project. We knew we had pressure, but we were too young to know how much it was, and that was probably good. If we had failed, who knows how much we would have set back the idea of sports turf in reduced-light conditions. But I know that we helped propel that part of the industry with what we could do and how technology can help us with sports turf. We're very proud of the role we played in that.

The one thing that has allowed us to do very well at Michigan State is the fact that we have had a team approach for a lot of years. I am watching some of my teammates retire, which has got me a little concerned as to how things will go in the future. One in particular is Dr. Jim Crum, soil scientist. None of these projects were ever possible without him. You can have the greatest plants in the world, but if you don't have the right soil, you've got a problem. It has been a team effort, and that has been important to me.

SFM: Please tell us about your family, as well as any passions or hobbies outside of work.

Rogers: I've been married to my wife, Michelle, for 31 years. None of this is even remotely possible if she doesn't carry the big load. She is a passionate, fun-loving woman, who I am forever indebted to her in this lifetime. We have three grown children – Rebecca, Evan and Miranda (Evan and Miranda are twins) – as well as one grandson (Miranda), named Miles. We are so very proud of these children and what they have grown to become. Each of them graduated from Michigan State



John "Trey" Rogers III, Ph.D., with his wife, Michelle, and grandson, Miles.

University, and have many memories of these students we have talked about in this interview. I purposely made them a big part of my classroom, and so past graduates always ask me about their whereabouts. My son, Evan, was even in the Turf Program for a while (graduated with a Turf minor), so I got to teach him in class. Talk about pressure; he had already heard most of my stories! I still remember hearing him whisper to a classmate, "Let's see how he does with this one."

My hobby list is quite short, and maybe some of that is because turf is a big hobby of mine. I play a lot of golf and this job afforded that in many ways. And I like playing gin rummy with my gang during the long Michigan winters.

But here's the thing...everyone asks me when I'm going to retire. I say, "I don't think I can, because I love what I do." I think I will always be involved to some level. Academia allows that to happen.

One of my big goals is to travel with my wife going forward. She has lots of places on her list. I am glad there is turf at most of them.

I feel very fortunate, and I have always felt very fortunate. **SFM**

JOHN MASCARO'S PHOTO QUIZ

CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:

Multiple half-moon-shaped divots

TURFGRASS AREA:

Multipurpose field

LOCATION:

Northeastern United States

TURFGRASS VARIETY:

Bluegrass / rye / fescue blend

Answer on page 33

John Mascaro is president of Turf-Tec International



SUBSCRIBE TODAY!

Online | Print | Mobile | E-Newsletter | Facebook | Twitter
sportsfieldmanagementonline.com/subscribe



SportsField

MANAGEMENT

MSU turf students expand skills through spring internships

By Beth Bonsall

Presented with the unique challenges caused by COVID-19, Michigan State University (MSU) turf faculty in the Department of Plant, Soil and Microbial Sciences (PSM) and the Institute of Agricultural Technology (IAT) collaborated on a solution that could potentially benefit students, alumni and the golf industry.

Called “The Experiment” from the start, Professor John “Trey” Rogers III, Ph.D., approached Brian Horgan, Ph.D., professor and chair of PSM, with the idea of finding turfgrass internships outside of Michigan starting in January 2021. With MSU classes continuing in remote formats, this would be a way for students to learn on premise at actual golf facilities while also taking online courses.

Discussions began in October 2020 and moved quickly. Rogers knew the facilities that had the resources to accommodate students, as well as the willingness to experiment with MSU. Many of Rogers’ industry connections are also MSU turf alumni who understand the value of in-person learning experiences.

“We needed nine golf facilities, and I made nine phone calls,” Rogers said. “I wasn’t giving them much time to react to this. All these superintendents said they’d take as many students as we wanted to send their way.”

During the spring 2021 semester, 16 turf students were matched and arrived at golf courses in Arizona, California, Florida and Texas. Turf students were part of the crop and soil sciences undergraduate program and the IAT golf course turf management certificate program.

“That’s really a testament to the alumni who have come out of this program,” Horgan said. “They realize that this is an experiment, but they trust Michigan State and they trust the faculty here. We’re trying something new and novel, and it might have some legs.”

STEADY BUSINESS

Typically, MSU coordinates compressed internships for students starting April 1, but having the students start in January, or in some cases even earlier, helped golf facilities this year as business in many states has been booming. Golfing has been viewed as a safe outdoor activity people could participate in while social distancing, so demand has remained steady throughout the pandemic.



File photo of a turf class led by Professor John “Trey” Rogers III, Ph.D., (second from the left) at the Hancock Turfgrass Research Center on the campus of Michigan State University.

“The labor market right now in the golf industry is really tight,” Horgan said. “Trey’s idea became really well timed. These golf courses are looking for high-quality students, and Michigan State has that reputation.”

John Nachreiner, director of agronomy, Shady Canyon Golf Club, Irvine, Calif., had two student interns at his course this spring. Nachreiner graduated from the MSU turf program in 2000, and appreciates how important internships are for both students and golf facilities.

“We are happy to interact with young students who are ready to put their knowledge to work,” he said. “Additionally, when an intern comes, then everyone on the team ups their game because they remember when they were interns. It brings up the collective game of everybody no matter what their position is.”

LEARNING, THEN DOING

For the spring 2021 internships, MSU faculty worked with participating golf course superintendents on what to expect and how they could help coordinate on-site work and labs with students’ in-class learning.

Students took four classes in addition to full-time internships at their respective golf courses. Three classes were on Tuesday and Thursday mornings and one class was asynchronous. This enabled students to learn first and then apply that knowledge in areas including turf equipment maintenance, grass planting, turf grooming, irrigation system calibration and pesticide and fertilizer application.

IAT student Trevor Stahl caught the turf bug after studying finance and interning with a financial planning company during his junior year. He realized finance wasn’t the right career direction for him. Stahl took a year off from school before discovering the two-year IAT certificate program.

"I'm 23 now and found out last July about the IAT turf golf management certificate program," Stahl said. "Growing up, I had always golfed with my dad, but I got into turf much later, putting together my love of golf and the outdoors."

Stahl had some experience in landscaping and a basic understanding of grass, but he said the turf classes and his internship at Shady Canyon Golf Club has taught him a lot in a short period.

"The superintendents are looking at our class schedules and helping connect the dots between what we're learning and what we're putting into practice," Stahl said. "Overall, my knowledge has grown exponentially. This internship has been really good."

He's also found a community among the small, close-knit group of turf students and faculty who have built a unique camaraderie through their experiences.

"I was definitely a little nervous coming out here. I was most nervous moving across the country, especially given everything that was going on," Stahl said. "Dr. Rogers wanted to make sure everyone was comfortable. He helped me realize I am a good fit for this program, and this is what I really love to do."

COVID-19 has caused little disruption in daily operations at Pelican's Nest Golf Club, Bonita Springs, Fla., and work has remained steady. MSU students rarely go to Florida during normal compressed April internships due to the seasonality, so the opportunity to host two student interns starting this January was unique.

Jason Zimmerman, director of greens and grounds at Pelican's Nest, graduated from MSU in 1998. Helping MSU and its turf students appealed to him.

"It has been a great benefit to have students here working that are committed to learning more about not only what they are doing, but why they are doing it," he said. "They proved to be very dedicated to working and were a great asset to the club."

Zimmerman said there is nothing better than applied learning in the turf industry.

"One of the best things about this career is that it is constantly changing and we continue to learn every day," he said. "To read something in a textbook or see it on a video does not take the place of getting dirty."

Jackson Severns has been working at Pelican's Nest since the fall 2020. Severns found his niche with the turf concentration in the crop and soil sciences major, but he also found remote classwork challenging when classes moved online in March 2020 due to COVID-19.

"I did not do well with the online school and took some time off," he said. "Dr. Rogers helped connect me with Pelican's Nest, and I started working there as

an employee in September 2020. For the spring 2021 semester, I became an intern at Pelican's Nest and took online turf classes that were directly applicable to my internship."

This internship has provided unique opportunities for Severns to interact with industry leaders, as well as learn applicable skills on the golf course.

"It's nice to go to class, and then you go to work to learn more about pesticides, fertilizers, procedures, protocols, fungicides. Then you're working right with the spray technicians at the golf course," he said.

WRAPPING UP "THE EXPERIMENT"

Rogers and Horgan reviewed the challenges of remote classes in the highly applied skills field of turfgrass, and developed new opportunities for students to learn in partnership with golf facilities and MSU alumni. Additional faculty and instructors involved included Thom Nikolai, Ph.D., and Phil Hill.

This new internship program ran from January through March 2021. Afterwards, students had the option of staying at their locations or moving on to a different golf facility for their April-May internships. Of the 16 students who participated in the new internship program, 12 went to different golf facilities to gain additional experience.

Moving forward, the turf program plans to offer two internship opportunities to students: January-March and the normal April-May opportunity.

"We bit off a lot here, but the alternative was these students were sitting behind a computer all semester and not using their turf skills in the field," said Rogers.

Said Horgan, "This is what we do best. We do research and we teach at a land-grant university. We have relationships with our industry from an extension outreach perspective. This was truly an experiment. Not being afraid to take a risk, that's what experimenting is all about."

The resulting knowledge gained through "The Experiment" will help build stronger and more resilient academic programs, facilities and careers.

"It's really clear to me that when Dr. Rogers was putting this together, he thought of us as students," said Stahl. "And how best to help us learn." **SFM**

Beth Bonsall writes about the experiences of students and faculty in the College of Agriculture and Natural Resources and the Institute of Agricultural Technology at Michigan State University. She also supports student recruitment and diversity, equity and inclusion communications.

Maximizing Your Hiring Process to Secure Top Talent

By Erin Wolfram and Melissa Johnson



Leaders within an organization often experience immediate panic when they have a sudden need to hire a new employee. This often comes unexpectedly at the worst time, and can lead to an ineffective search and hasty hiring decisions. Preparation is key in reducing stress; so the more you can do before needing to fill a position, the

better. The following tips provide ideas on how to take a more active and focused approach to the recruitment and hiring process.

BUILD YOUR NETWORK

Building your network is an important first step in finding and securing top talent. This will help you develop relationships with industry profes-

sionals who may someday be a good fit for your organization or may know someone who is.

1 Join professional associations Joining and being an active participant in industry-specific professional organizations, especially those at the local and regional levels, are great ways to not only grow your net-

work, but also to build solid relationships with people so you can get to know them on a personal level. When you attend meetings, participate in committees, or serve on a board of directors with someone, you gain valuable insight into their knowledge, skills and abilities, which may become very valuable if they ever apply for a position within your organization. Additionally, if someone has had quality experiences with you in a professional capacity, they may be more interested in applying for a position within your organization because they already know and respect you.

2 Utilize LinkedIn

Having a solid LinkedIn profile, securing connections, actively engaging with others' content, and sharing or posting your own content also helps build your network, increase your visibility, and establish expertise. This not only can help you attract top talent, but it can also expand your reach when you have an opening. You can share the position description with all of your connections, as well as send customized messages to specific individuals who either might be interested in applying for the position or know a great candidate they can recommend.

3 Develop interns

If you don't already regularly hire interns, you should consider starting an internship program. This is one of the best ways to develop a strong pool of potential candidates for future positions. By hosting interns, you get to experience firsthand what each person is like as an employee. In addition, interns are able to gain a solid understanding of the organization, its culture, and people; if they have a good experience (make sure they do!), they will want to come back as a full-time employee. Any time you have a job opening, you can e-mail your list of past interns to see if they are interested in applying or know someone who might be.

CONDUCT AN EFFECTIVE SEARCH

Your network will be an invaluable resource as you begin your search. The first step in the hiring process is to develop a well-written job description that provides a clear and accurate picture of the position and its requirements. Promote your job opening with not only your external network, but also with any current employees who may be interested in advancing within your organization.

1 Write a quality position description

When developing a position description, make sure the content attracts the type of candidates you are seeking. It is important to write a clear and concise job description with realistic requirements that accurately define the role, essential tasks, and specific goals for the position. In terms of required and preferred qualifications, prioritize the knowledge, skills and abilities that are most important to you and your team, and keep in mind that quality, hands-on experience can often be just as valuable as education. In addition, try to think beyond the required and preferred qualifications and include information about the work environment and culture. This will help you and potential candidates better evaluate organizational fit, which is extremely important in selecting the top candidate.

Provide clear instructions on how candidates should apply; it is beneficial to request a résumé, as well as a cover letter addressing their interest in the position. Also, include a contact person's name, e-mail address and phone number; and encourage individuals to reach out to that person if they have any questions. This also provides a contact to which candidates can address their cover letter.

One final recommendation on writing position descriptions is to

always include a salary range. Certain factors do influence salary needs, and while money should not be the most important element when applying for a job, you do not want to waste your time or a candidate's time if your salary requirements do not align.

2 Advertise your position

Start promoting your position, both internally and externally. Begin by sharing your opening with your team and encouraging them to apply, if applicable. Then ask them to share the job posting with anyone in their network who might be a good fit. Next, advertise your opening on job boards related to your industry, such as the STMA Career Center and affiliate chapters' websites. Additionally, post the job announcement on LinkedIn and share it in your LinkedIn news feed, as well as on any other social media platforms. Do not forget to e-mail the job posting to people in your network, and encourage them to share it with others. This is the time to really utilize your contacts. Referrals often result in the best candidates.

DEVELOP AN EFFICIENT EVALUATION PROCESS

When hiring for an open position, it is important to develop a consistent and unbiased evaluation process to adequately assess candidates and their fit with the position and organization.

1 Develop a rubric

Once you have written the job description, start thinking about how you will evaluate whether candidates meet the qualifications throughout the process. It is often helpful to develop a corresponding rubric that can be used to assess candidates' application materials and evaluate them during an interview. Not only will this help your search committee maintain consistency and focus as they evaluate candidates, but it will also help make the process more organized and efficient.

Sample application / interview rubric:

Qualification	Rating (1-5)	Notes
Renovation Management	4	Complete field renovation in 2018, maintenance building construction 2020
Cool-season Grass Maintenance	5	10 years of experience at two different facilities known for quality conditions
Supervisory Skills	3	3 years overseeing a crew of 5
Problem Solving	4	Resolved flooding issues from major storm, effectively used resources to overcome labor shortage in 2020 due to COVID-19

2 Evaluate candidates' application materials

Once you receive applications, it is time to start using the evaluation rubric to review candidates and select those you want to interview. Look to see if the candidates outline how they meet your required and preferred qualifications, but also make sure they address why they are interested in the specific position at your organization. Those candidates who take the time to tailor their materials and demonstrate why they want the specific job should rise to the top of your "keep" pile. Yes, you want someone who has the skills to successfully do the job, but you also want someone who wants to work for your organization and who will fit in well.

3 Develop interview questions

The key to a successful interview process is to select questions that effectively evaluate a candidate's ability to perform the essential tasks of the job, as well as assess their overall fit within the organization. Ask these same interview questions consistently across all candidates to avoid any unintentional biases.

If you have a large pool of seemingly strong candidates, it may be helpful to conduct brief screening interviews over the phone or video chat to narrow the candidates to three to five to invite to an on-site interview. Screening interviews often involve approximately five questions that help you assess key qualifications and find out why each person is interested in the position.

Here are a few questions to consider:

- Tell me about yourself.
- Why are you interested in this position at this organization?
- What are your greatest strengths related to this position?
- What do you think your biggest challenge will be in transitioning to this position?
- Tell me about a time you have successfully overcome a challenge or obstacle at work.
- What questions do you have for me?

You may repeat these questions during an in-person interview, especially if additional people are present. When developing other questions for on-site interviews, ask questions that will help you evaluate whether or not

the candidates have the skills and strengths you believe are necessary to fill this role, and give them the opportunity to share specific examples that prove their qualifications. One of the best ways to do this is to ask behavioral interview questions, which allow candidates to share specific experiences from their past that likely will predict their future performance within your organization.

Sample behavioral interview questions / talking points:

- Tell me about a time you went out of your way to assist a visitor, player, client, customer, etc.
- Tell me about a time when you disagreed with a colleague or supervisor.
- Give me an example that demonstrates your problem-solving ability.
- Give me an example of an innovative solution you implemented.
- Tell me about the most difficult situation you have faced as a supervisor.

4 Seek questions from candidates

The last question you should always ask candidates is "What questions do you have for me?" As

mentioned earlier, candidates are evaluating you as much as you are evaluating them, so give them the opportunity to ask questions to learn more about you, the position, and the organization. Pay close attention to the types of questions they ask (or don't ask). If the candidate has a lot of thoughtful questions, this likely means they are very interested in the position and are invested in learning as much as possible to make a well-informed decision if an offer is made. This is a good sign!

5 Assess candidates' answers to interview questions

Again, using a rubric will help you and the members of your search committee efficiently and objectively evaluate a candidate's interview performance. As you interview candidates, listen for specific examples that demonstrate they have the skills, strengths, and knowledge you are seeking. If they provide vague answers, you may want to prompt them to answer more fully, which hopefully will encourage them to provide more details in future responses. In addition to assessing a candidate's ability to do the job, it is also important to analyze their compatibility with the culture of the organization and department. If possible, try to engage in conversation with candidates. This not only will help them produce more authentic answers but should also help you gauge their personality and whether they will fit in and be a valuable member of your team. A more conversational approach also lets them get to know you better, which is equally important.

6 Conduct on-site visits

You do not want there to be any surprises for either party, so as you continue to narrow your candidate pool, invite your final two or three candidates to conduct a more in-depth site visit. Provide them with a

tour, introduce them to potential colleagues, and allow them to ask more questions. This will likely be more informal than the actual interview and will help you both get to know each other better.

7 Check references

Typically, one of the final stages of the evaluation process is conducting reference checks. Request three to five references from each candidate you interview. Talking to people who know or who have worked with a candidate is a valuable way to obtain more information about an applicant, their past job performance, and personal qualities. Similar to the interview process, it is important to develop a list of structured questions to ask each reference.

Sample reference check questions:

- What is your relationship with the candidate?
- Please describe (candidate's name) position with your organization and their main roles and responsibilities.
- What were (candidate's name) greatest strengths and challenges in this role and as an employee, in general?
- What was (candidate's name) biggest accomplishment while working with your organization?
- Would you rehire (candidate's name) if given the opportunity?
- Is there anything else you think is important for us to know about (candidate's name) that we have not discussed?

MAKE AN OFFER

Finally, once you have selected a candidate and extended a job offer, invite them back for another site visit before they make their final decision. Use this time to thoroughly review the salary and benefits package, introduce them to more potential colleagues, walk them through organizational policies, and answer any final questions to ensure they have

the information they need to make a well-informed decision.

Selecting the right person to fill a role within your organization is a big decision and can be very costly if you do not make a quality hire. This can result in a quick turnover and starting this process all over again much earlier than you would like. Therefore, the more time you spend building your network, executing an effective search, and developing an efficient evaluation process before extending a job offer, the more likely you will be able to make a confident decision that is best for the organization, as well as for the person you ultimately decide to hire. **SFM**

Erin Wolfram has more than 15 years of experience in career services, and owns and operates Career Advantage Golf (<http://careeradvantagegolf.com>), specializing in career services for those in the turf management field. She has a podcast called A Year of Career: 52 Practical Answers to Your Questions, where she provides quick career and job search advice. Wolfram has a Bachelor of Science in Secondary English Education, Master of Science in Counseling Psychology, Master of Science in Educational Technology, and is a certified professional etiquette consultant. She can be reached at erin@careeradvantageresumes.com.

Melissa Johnson has more than 20 years of experience working with individuals from a variety of careers and industries. She specializes in one-on-one career coaching, resume and cover letter development, and job search assistance. Johnson has a passion for providing individualized support and guidance for each of her clients to ensure they are able to achieve their career goals. She has a Bachelor of Arts in Psychology and a Master of Education in Counseling Psychology.

LANDSCAPE PLANTS

Finding the ideal plant for a particular location can be a challenge. The following overview provides detailed information and photography of landscape plants that merit consideration.



Leucanthemum Sweet Daisy Birdy, All-America Selections

ALL-AMERICA SELECTIONS

All-America Selections (AAS) is North America's oldest non-profit plant trialing organization. All AAS winners are trialed throughout North America by professional, independent, volunteer judges. www.all-americaselections.org



Begonia Viking XL Red on Chocolate

A new begonia with large, uniquely colored dark leaves has arrived! The deep-bronze/brown color remains sharp and intense throughout the season, no matter where they are located; north, south, east or west. The color tones shine through to give a stunning appearance. Covered with vibrant red flowers, the compact plant retains its shape well and does not become rangy. These extra-large mounded plants are perfect in both landscapes and containers.



Celosia Kelos Candela Pink

Across the board, AAS judges loved the bright pink blooms that rose

above the foliage, almost like a tall, tapered candle. Showy plumes of pink flowers keep their color all season long and the judges agree that this is a perfect filler plant to add height and interest to a combination container planting. But it is also useful in mass plantings, borders and general garden use.



Delphinium Dewy Blue

AAS Judges in cooler northern climates loved this new compact delphinium that's covered with gorgeous blue flowers. This seed propagated variety has great vigor, excellent germination and is very easy to grow. Dewy's uniformity makes it a great bedding, container and landscape plant.



Leucanthemum Sweet Daisy Birdy

Sweet Daisy Birdy leucanthemum is a beautiful perennial with robust, long-lasting blooms and carefree longevity in gardens down to Zone 3. In the AAS Trials, it demonstrated

excellent cold and heat tolerance, and maintained a tidy, sturdy habit over the three-year trial. The cheery flowers are large and pure white in color, appearing earlier in the season than the comparison varieties. The 5-inch reflexed daisy blooms feature small feathery petals around golden-yellow button centers.



Zinnia Profusion Red Yellow Bicolor

This is a gold-medal winning beautiful new bicolor addition to the popular Profusion series of zinnias. This gorgeous zinnia starts the season with a bold vibrant red center ring surrounded by golden yellow outer petals. As the season progresses, the aging flowers morph into soft, beautiful shades of apricot, salmon, and dusty rose, bringing a plethora of color to the garden, all from one variety.



Marigold Big Duck Gold

Big Duck Gold sports very large golden-yellow flowers that continue blooming throughout the season,

much longer than the comparisons. These marigolds begin the season putting energy into establishing a solid, healthy plant with clean, deep-green foliage. Then, when it starts blooming, full, plump blooms top the 15-inch plants and continue blooming through the end of the season. Use in beds and containers, in landscapes as mini hedges, back of the border plants, or even as a filler in new perennial beds.



Marigold Big Duck Orange

Big Duck Orange joins sibling Big Duck Gold in a new marigold series that continues blooming throughout the season, even longer than the comparisons. These marigolds grow vigorously, creating well-branched plants with clean, deep-green foliage. Fully double and beautifully colored 4-inch orange blooms pop on the 15-inch plants and continue blooming through the end of the season. The judges raved about this variety's vigor, flower size and superior disease, rain, heat and drought resistance long past when the comparisons succumbed.

Marigold Big Duck Yellow

Big Duck Yellow is another marigold color in the series that has great heat and disease tolerance. The 4-inch flowers are well supported on sturdy,



compact, uniformly even plants that consistently produced more flowers for a longer period than the comparisons. The fully double, bright-yellow blooms are a beautiful contrast to the deep green foliage and raise their heads well above the foliage for a standout display.



Marigold Garuda Deep Gold

Sometimes it's an AAS judge who writes the best description: "Favorite performer of the trial. This marigold not only has a strong color, but while the comparison is brown and rotting [in late summer], this entry is going strong through the end of September. It is much more resistant to disease than the comparison. Also the vigorous habit is exactly what you would want from a cut flower for season long flowers."

Nasturtium Baby Rose

Baby Rose is a petite-flowered, mounding variety with healthy, dark foliage ideal for containers and



small space gardens. AAS' expert judges praised the uniformly compact plants that sported flowers with consistent coloration. Their compact habit means less "flower flopping," with their blooms remaining upright throughout the season. The rose color is uncommon in nasturtiums, and contrasts beautifully with the dark-green foliage.



Nasturtium Tip Top Rose

Tip Top Rose is a strong-yet-compact nasturtium with unique and showy rose-colored flowers showcased above medium-green foliage. These 14-inch-by-18-inch mounded plants were more floriferous than the comparisons varieties in the AAS trials, producing a bigger and better garden show. The uniquely colored flowers are a great addition to the nasturtium family especially since they don't fade as they age. It makes a great winter annual in warmer climates and a spring annual in other areas, whether used in containers or in the landscape.



Delphinium Dewey Blue, All America Selections



Petunia Wave Carmine Velour

AAS judges enthusiastically came up with an array of ways to describe the carmine rose color: “fabulous,” “stunning,” “intense,” “vibrant,” “lively,” “great color,” “bright,” “non-fading,” and so on. Large 2-2.5 inch flowers cover the easy-care spreading plants that rarely need deadheading because new blooms continuously pop-up and cover the spent blooms.

Vinca Mega Bloom Polka Dot

The hearty Mega Bloom vinca series has been bred to withstand heat and



humidity without succumbing to disease. Polka Dot excels in that area plus sports huge showy flowers on full, vigorous plants that stay tidy and compact. The leaves of Mega Bloom Polka Dot stayed a healthy green all season resulting in large healthy plants all summer until frost. Each large bloom (3 to 4 inches) has attractive overlapping petals in snowy white with a bright pink eye.

Zinnia Holi Scarlet

This beautiful winner is named after the famous Holi Festival



of Colors because of its vibrant color. AAS Judges deemed this an “excellent flower” because of the bright solid color, size and number of blooms as well as the disease resistance, which was superior to the comparisons. Holi Scarlet will keep producing fresh, colorful blooms all season long, even through heat, humidity and drought. Uniform and compact mounding plants will make a stunning mass planting of vibrantly colored deep-red flowers drawing in both people and pollinators.



Zinnia Holi Pink

AAS Judges in the southeast really liked this variety because of the vibrant pink color that doesn't fade. The size and number of blooms, as well as the disease resistance, were superior to the comparisons. The Holi series is bred to keep producing fresh, colorful blooms all season long, even through heat, humidity, and drought. Holi is perfect for landscapes since it produces during a long window of time and only needs minimal maintenance, such as occasional dead-heading.



Coleus Main Street Beale Street

The first-ever coleus to be named an AAS Winner, Main Street Beale Street coleus is an outstanding variety, exhibiting deep-red foliage that holds its color extremely well in the garden. The rich color doesn't fade, bleach or get spotty as the season moves into late summer. The lush, bushy plant grows uniformly and, as a huge bonus, does not flower until very

late in the season – up to 6 weeks later than the comparisons. A unique feature of this coleus is that it can be successfully grown from full sun to full shade.



Echinacea Sombrero Baja Burgundy

Sombrero Baja Burgundy adds a bold accent with its vibrant, deep violet-red blossoms. After being trialed over three tough winters, the AAS Judges noted this standout's hardiness, sturdy branching, and floriferous blooming habit. Birds and pollinators certainly flock to this deer-resistant beauty.



Rudbeckia x American Gold Rush

American Gold Rush features bright, golden-yellow flowers with black centers and arched petals. This compact, upright domed-shaped beauty has narrow 2-inch wide hairy foliage bred for its resistance to Septoria leaf spot. This hybrid shows no signs of the fungus even in wet, humid conditions. Blooming from July to

September, with some color up until frost, this cultivar has smaller foliage and shorter height compared to other rudbeckia varieties. Incredibly easy to grow and pollinators love it.



Rudbeckia x Amarillo Gold

A beautiful Rudbeckia hirta, Amarillo Gold boasts of a compact form and uniform habit perfect for landscapes, bedding and containers. The light-green center disc surrounded by bold sunshiny colors makes this black-eyed Susan a versatile plant for combinations with a multitude of other colors. AAS Judges noted how this rudbeckia was earlier to flower than the comparisons and lasted throughout the summer providing weeks of stunning color in the garden. Large 4- to 6-inch blooms cover compact 12- to 18-inch plants.

ANTHONY TESSELAAR PLANTS

Supported by outsourced specialists, Anthony Tesselaar Plants works internationally to identify, trial and release outstanding and distinctive landscape plants. <https://tesselaar.com>

Canna Tropicanna Series

With their exotic striped foliage, Tropicanna cannas are ideal for adding color and impact to any landscape. They're perfect for use in



narrow spaces where vertical cover is needed, and are also excellent in containers, serving as the “thriller” in large commercial pots. They tolerate most soils, including poorly drained/boggy areas. In warmer climates, they’ll grow to about 4 feet the first year and up to 6 feet in subsequent years. Available in three colors: original Tropicanna with striped red, yellow and orange foliage and tangerine flowers; Tropicanna Black with scarlet-orange flowers and purple-black leaves; and Tropicanna Gold with green-and-gold-striped leaves topped with soft orange flowers edged in yellow. Hardy in USDA Zones 7-11 as perennials; in Zones 4-6, plants can grow as annuals, or rhizomes can be dug and overwintered.



Coprosma Pacific Series

These low-maintenance, colorful, glossy shrubs are quick growing with a full, bushy form. They’re ideal as an edging plant along a walkway,

grown in mass as a hedge or planted in large pots. They can be planted at any time of the year in well-drained soil and tolerate high wind and salt spray. They can be pruned to shape or left to grow without shaping. Mature plants grow to 3 feet high and wide. With their glossy wave-shaped foliage, they are available in two colors: Pacific Sunrise foliage is chocolate brown with hot pink highlights; Pacific Sunset foliage has vivid red centers with burgundy/brown margins. Hardy in USDA Zones 9-11, but don’t perform well in high humidity.



Cordyline Festival Series

Unlike most cordylines, rather than forming a single stem, Festival cordylines branch from the base like a grassy clump, growing to a height and width of about 3.5 feet. With glossy strappy, cascading foliage they make a bold statement in both landscape settings and in raised planters. When planting in mass, space them at 24-inch intervals. Once established, Festival has low-to-moderate water needs, but should be watered thoroughly during hot, dry weather. They tolerate a range of soil types, but thrive in well-drained soil. Available in two colors: burgundy and raspberry. Hardy in USDA Zones 8-11 as

a perennial; also perform in cooler climates as annuals, and can be brought indoors as a houseplant.



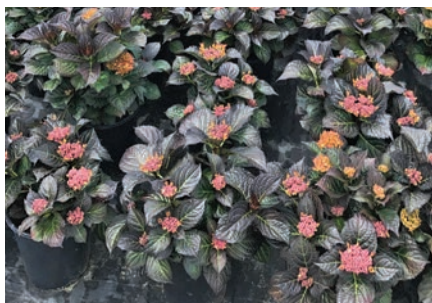
Flower Carpet Roses

First introduced to the USA 25 years ago, Flower Carpet roses were the original “eco rose,” requiring no spraying or chemicals to keep them thriving and in bloom. Winner of more than 25 international awards for exceptional disease resistance and strength, Flower Carpet roses are low maintenance, drought tolerant once established, and can be grown in a range of both soil types and weather conditions — from hot dry California to sub-zero temperatures in the upper Midwest and New England where they’re also tolerant of road salt spray. Their tiered root system means they’re drought and low-water tolerant; surface roots take up available surface water while deeper roots access lower level water in drought conditions. Flower Carpet roses have glossy green foliage that looks great even when the plants aren’t in bloom. They are self-cleaning, with masses of flower clusters covering each bush from late spring to late autumn. An annual cutback with manual or electric hedge shears and early spring and late summer feedings are the only maintenance requirements. Their



Flower Carpet Rose Yellow, Anthony Tesselaar Plants

sizes and shapes vary depending on variety and location, with most growing to 3 feet wide and high once established. For massed plantings, plant two to three roses per yard; for borders, space 32 inches apart. Current U.S. variety availability includes 10 colors from white and pale pinks to soft yellow and deep reds. Hardy in USDA Zones 4-11.



Hydrangea Tuxedo Series

This new series of hydrangeas features not only lush bold pink or red flowers, but, more importantly,

striking deep purple/black-flushed foliage. They keep their dense, compact growth habit, with mature plants growing to just under 3 feet high and wide. They perform best in partial sun or shade. Flowers appear in early spring; but even after they've stopped blooming, the stunning foliage on Tuxedo hydrangeas continues to add impact and color to any landscape setting. Hardy in USDA Zones 6 and above.

TERRA NOVA NURSERIES

Based in Canby, Ore., Terra Nova Nurseries, is a tissue culture propagator and a grower of both annuals and perennials.

www.terrannovanurseries.com

Artemisia Makana Silver

Artemisia Makana Silver makes a mounding, small shrub. Its soft, silvery foliage works great when plant-



ed in a landscape. It can be trained as a small specimen tree, and it is fast growing and needs good drainage. Artemisia Makana Silver was selected as the "Best Novelty" plant at the 2018 Annual Trial Gardens at Colorado State University. Its USDA Hardiness zones are 9-11, and it has a foliage height of 24 inches and a foliage spread of 36 inches.

Brunnera 'Alexander's Great'

Brunnera 'Alexander's Great' is a gigantic plant with heavily silvered leaves that make a dramatic state-



ment in the landscape. Bred by renowned plant breeder Alexander Zukevich, 'Alexander's Great' has gigantic leaves that form a bushel-basket of silver-flecked foliage. Terra Nova Nurseries recommends growing it under 35% shade during the summer months for optimal performance. Its USDA Hardiness Zones are 4-9, and it has a foliage height of 14 inches, a foliage spread of 30 inches and a flower height of 17 inches.



Echinacea 'Sweet Sandia'

Echinacea 'Sweet Sandia' produces single, broad petals that look like slices of watermelon. Its compact habit and many flowering stems have contributed to Echinacea 'Sweet Sandia' being one of Terra Nova's most sought after plants in years. This variety flowers in the spring and summer, and it attracts hummingbirds and pollinators. Echinacea 'Sweet Sandia' is also deer resistant, fragrant and a low

water-usage plant. Its USDA Hardiness Zones are 4-9, and it has a foliage height of 19 inches, a foliage spread of 16 inches and a flower height of 24 inches.



Heuchera 'Black Forest Cake'

No matter how you slice it, Heuchera 'Black Forest Cake' is good. This perennial has smooth, dark-chocolate foliage topped with bright cherry-red flowers. This heuchera has an excellent habit, and its showy flowers are a great addition to any perennial foliage lineup. Heuchera 'Black Forest Cake' is a medium-sized plant that works well in landscapes and garden beds. Its USDA Hardiness Zones are 4-9, and it has a foliage height of 6 inches, foliage spread of 12 inches and a flower height of 12 inches.



Heuchera Northern Exposure Purple

Heuchera Northern Exposure Purple has round leaves, a good crown and a quick growth rate, making it

an excellent landscape plant. This variety was bred from Heuchera richardsonii, resulting in greater cold tolerance and rust resistance. The round, silver-to-purple leaves are striking, and blooms last from spring through summer. This tough-yet-beautiful plant provides an aesthetic landscape when used alongside other plants in the series or alone in containers, beds, borders, or mixed beds. Its USDA Hardiness Zones are 3-10, and it has a foliage height of 12 inches, a foliage spread of 20 inches and a flower height of 25 inches.



Plectranthus Velvet 'Starlet'

Plectranthus Velvet 'Starlet' has the strongest pink flowers available in this genus. Its naturally compact habit and stunning floral display make this new cultivar "eye candy" for certain. Beyond its exemplary, natural semi-dwarf habit, Plectranthus Velvet 'Starlet' produces a unique color that can light up a summer and fall garden like few other varieties. This variety has tubular trusses of bright-rose, pure-pink and violet flowers that are held perfectly above the foliage. USDA Hardiness Zones for this variety are 9-11, and it has a foliage height of 14 inches, foliage spread of 16 inches and flower height of 18 inches.

PENNSYLVANIA HORTICULTURAL SOCIETY

Founded in 1827, PHS uses horticulture to advance health and well-being. www.PHSonline.org



Rhus aromatica 'Gro-low'

Rhus aromatica 'Gro-low' is a great native shrub for tough conditions. Like other members of the Sumac genus, it has proved to be relatively deer resistant. It has fantastic orange-red fall color and clusters of fruits in the fall that are attractive to wildlife. By nature, it is a low spreading shrub that can also be effectively used as a ground cover to help stabilize the soil on slopes and hillsides. Planting information: full sun, part shade, medium water, deer resistant.



Itea virginica 'Henry's Garnet'

Itea virginica 'Henry's Garnet' is a versatile native shrub for both dry and very wet conditions. This is one of the very best of all the flowering shrubs. In the spring, there are gooseneck, white,

bottlebrush-like flowers with a sweet fragrance. In the fall, the narrow leaves turn a vibrant red to purple, and in the winter the stems have purple tints. Planting information: Full sun to part shade and tolerant of both dry conditions and very wet conditions.



Platanus x acerfolia 'Exclamation!'

For over a century, the London plane tree has been a classic tree in the urban landscape, prized for its grand proportions, pollution tolerance, and beautiful exfoliating bark. Exclamation! is an improved cultivar; lightly fruiting, upright pyramidal habit, and most importantly, resistance to anthracnose, which causes premature foliage drop. Grows 60 feet. Planting information: full sun, part sun, shade, high water, medium water, low water.

Pycnanthemum muticum

Pycnanthemum muticum is a tough pollinator plant that will take almost all conditions in the landscape. This



Photo: SB_Johnny, Wikimedia Commons

species of mountain mint spreads by underground stems, making it a great perennial choice for areas where large masses are of value. The fragrant stems, leaves and flowering bracts have a greyish cast. It is one of the few truly deer-resistant perennials, and it is in the "best of the best" class with regard to attracting a myriad of pollinators. Planting information: Full sun, tolerates dry and drought-like conditions, deer resistant.



Hydrangea paniculata 'Bobo'

A diminutive variety, this heavily flowering shrub features large conical clusters of white flowers beginning in midsummer, which fade to pink and persist into the fall. Blooms on new wood, so tolerant of hard freezes and over pruning. A great choice for the front of the border or in a container. Grows 30-36 inches. Planting information: full sun, part shade, medium water, deer resistant. **SFM**

JOHN MASCARO'S PHOTO QUIZ

ANSWER

From page 17

These multiple half-moon-shaped divots were manmade, but what caused them might surprise you. My two friends, who are alert readers of the Photo Quiz saw this event happening and could not believe their eyes. The man pictured in the inset photo, equipped with a metal detector and a shovel, decided to look for lost valuables and possibly the elusive gold nugget on this multipurpose athletic field. He was just going along, like he was at the beach, sweeping his metal detector to and fro, scanning and then digging for treasure. As you can see, there was no care at replacing the soil or turf in his gold-fevered frenzy to find riches.

Photo submitted by Peter Thibeault, CSFM, sports turf manager, and Matt Tobin of Pioneer Athletics, from an undisclosed location.

John Mascaro is president of Turf-Tec International



If you would like to submit a photograph for John Mascaro's Photo Quiz, please send it to John Mascaro, 1471 Capital Circle NW, Ste #13, Tallahassee, FL 32303 call (850) 580-4026 or e-mail to 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 Turf Managers Association.

Online • Print • Mobile • E-Newsletter • Facebook • Twitter

sportsfieldmanagementonline.com/subscribe



SUBSCRIBE TODAY!

SportsField

MANAGEMENT

Track and Field Maintenance

Preventive steps for proven results

By Mary Helen Sprecher

Track and field facilities are three-season facilities. In some areas, they might be busy all year long, which is part of the problem when it comes to maintenance. How do you make time for necessary work without disrupting games and practices?

Sports construction professionals recommend first developing a calendar of how many sports are using the field — and when.

According to Paul Arcella of Heavy & Athletic in Deerfield Beach, Fla., the scope of use a facility bears can be surprising.

“The number of competitive sports, the location of the track, and the schedule all need to be taken into consideration. Where we are, in Florida, if you’re thinking about what goes on at the high school level, football usually is king. Most schools have varsity and JV teams, and some of the more competitive schools also have freshman teams. The end of football season overlaps soccer. For most schools, there are varsity and JV teams for boys and girls soccer. That season rolls into lacrosse, which also has boys’ and girls’ teams at the varsity and JV levels. That season then rolls into track and field, which, again, has boys’ and girls’ teams and lasts until late April or early May. That gives way to spring football to close out the year.”

Roll in band practices, summer camps, tournaments that are held in the offseason, as well as normal PE classes that might use the track and field throughout the year, and, according to Arcella, “the track and field really never get a break.”

It’s easy for athletic directors and coaches to lose sight of maintenance. And if a facility is fairly new,



Photo courtesy of Sportworks Design, West Chester, Ohio.

or in good shape, the inclination might be to ignore it.

“It’s important to develop a maintenance program that fits how they use their field and track,” added Arcella.

While tracks and fields are, of course, different facilities, thinking of them as two parts of one integrated facility that needs regular maintenance is key to keeping them in top form.

Basic maintenance for both parts of the facility includes a hefty dose of preventive medicine. In both cases, it is essential to keep the surface clean.

For track surfaces, this means addressing any unwanted debris, including sand, dirt, grit, leaves, etc. By using a leaf blower to keep the track free of material like this, you avoid these things being ground into the

track and, over time, damaging the surface. If more intensive cleaning is needed, consult your track builder, who has access to specialized equipment that can deep-clean the surface without damaging it.

Keep an eye on curbs, drains and other areas as well.

“A sports facility manager should also focus on clearing drain inlets regularly,” said Todd Wiggins of Sports Turf Company in Whitesburg, Ga. “Drain inlets should be free of grass clippings, trash or any foreign objects that could obstruct runoff. This helps prevent drainage backups and prevents any water-related damage to both your track and field.”

Test the field irrigation system, and make sure sprinkler heads are distributing water evenly, and on the



Photo courtesy of Fisher Tracks, Boone, Iowa.



Photo courtesy of American Athletic Courts, Inc., Vincentown, N.J.

field only. Look for wet spots on the track or on nearby structures that would indicate misdirected water. Also check for any areas where the field seems to hold water longer than

others; this may be indicative of a drainage problem. And, of course, if you notice water puddling on the track, it could be indicative of a low spot that a contractor should address.

Even if they don't have to be mowed and fertilized, synthetic fields need regular care, as well.

"Synthetic turf and running tracks are 'low maintenance,' not 'no maintenance,'" said Arcella.

Arcella recommends weekly sweeping and cleaning of trash, leaves and other debris; if weekly isn't enough to stay on top of the problem, increase it to two to three times a week.

A lack of grooming leads to matting down of the fibers in areas of heavy use on the field. If caught early, the problem can be corrected. Without regular maintenance, however, it can lead to bigger problems with the surface that can, over time, shorten the field's useful life.

Synthetic fields are a significant investment for the schools and parks that own them, benefit from an owner who keeps open the lines of communication with the builder who installed them. By doing regular walk-throughs of the facility and sending photos regarding any areas of concern, it is possible to head a lot of problems off at the outset.

"Backpack blowers can be utilized for leaves and the like, but the operator needs to be careful not to displace the infill by directly blowing downward into the turf," said Arcella. "We also use a drag mat 'friction' sweeper pulled by a small golf cart or utility vehicle."

There are several vehicles on the market that can be used strictly in maintenance work on synthetic fields, including those that vacuum fields, remove any metal and re-level the infill. A specialty contractor with expertise in sports fields can provide advice on such equipment. Note that such vehicles should have special turf tires that keep them from damaging the field.

When using vehicles in any maintenance work, it is essential to protect the track from the damage that can result. It is easy to think that if a vehicle is only driven across the track occasionally (or quickly, or slowly), that it will not cause harm to the athletic surface. Unfortunately, this is not the case.

Track contractors recommend putting sturdy boards over the track and covering them with a tarp or rubber matting in order to allow vehicles to cross safely.

Arcella added that field owners should always be aware of the need to protect the track.

“Create crossovers for athletes who will be using the main inner field and who will most likely be wearing cleats. These crossovers could be a heavy tarp, rigid mats or weighted tarps,” he said. “There are several sports vendors that supply these types of track protection and they’ll help keep the surface free of nicks, indentations and the like.”

Keep tabs on the track surface by walking around it regularly. If patching is needed or if damage is present, report it to your track builder, who will know what to do. Unfortunately, it is not uncommon for problems to be noticed at the end of one season (for example, spring), but because the track is not going to be needed by the school over summer vacation, the problem might not be reported until the following fall, and, in the intervening time, it has gone from a minor issue to a major repair.

“Facility managers should ensure a proper maintenance routine is in place even during periods of limited use of the facility,” said Wiggin. “Regular maintenance should include collecting debris from the track and field, checking drain inlets and regular field maintenance. It is important to properly secure the facility if personnel are not there on a regular basis to prevent any unscheduled activity.”

Lighting should also be checked regularly to ensure all fixtures are working properly and that there are no problems. Check fencing and gates and make sure no rails are loose and no fabric is bulging. Look at bleachers and railings, as well as steps.

In many cases, track and field facilities are open for community use during the summer, as well as during



Photo courtesy of GMB Architecture + Engineering, Holland, Mich.

the school year when students are not using it. Because, at such times, the facility is largely unsupervised, it is important to try to safeguard against misuse that can result in damages.

“It is important to have rules posted about the use of your track and field facility so that summer visitors can easily see them,” said Wiggin. “The rules for your facility should clearly list the types of things that are allowed and are prohibited to avoid any damage to the facility. It is important to discourage the use of spiked shoes, chairs, skates, narrow wheeled strollers, tricycles and bicycles on your running track to prevent premature wearing. If there is an event with lots of traffic across the running track specifically, we recommend crossing mats to protect the track surface and prevent excess wear in a concentrated area.”

The listed rules should include a phone number that visitors can call with any concerns, including problem users or damage to the facility they may have observed.

Put locking covers onto sand pits, since parents who bring their toddlers tend to use them as sandboxes, leading to sand getting tossed

out and various debris being left behind, which could harm athletes when the sand pits go into use again.

Make sure to do periodic check-ins to see whether the track and field are in good shape; if it looks as though they are suffering from the effects of too much unsupervised use, you may need to revisit the decision about it. **SFM**

Mary Helen Sprecher wrote this article on behalf of the American Sports Builders Association (ASBA).

In-depth information on the maintenance of running tracks and sports fields can be obtained from the American Sports Builders Association, the non-profit association helping designers, builders, owners, operators and users understand quality sports facility construction. ASBA's publications, including *Running Tracks: A Construction and Maintenance Manual*, and *Sports Fields: A Construction and Maintenance Manual*, are available for purchase from the Association.

The ASBA may be reached via its website, www.sportsbuilders.org, or via e-mail at info@sportsbuilders.org.

PGR Update

By John Kmitta

In 2020, the industry dealt with shutdowns, labor shortages and other challenges, many sports field managers turned to plant growth regulators (PGRs) to help bridge the gap during periods of reduced mowing and maintenance. But as sports are in full swing throughout the country, and many fields are exposed to increased traffic, how do PGRs fit into a sports field management program?

"I believe there are three main fits for PGRs in a sports field management program," said Rick Fletcher, technical services manager, Turf and Ornamentals, at Nufarm. "Mowing management, playing surface consistency, and overall appearance [turf color]. Additional considerations, depending upon the site and grass species, could be *poa annua* management and in-field markings or painting applications."

Said Aaron Hathaway, Ph.D., technical services manager, Turf and Ornamentals, at Nufarm, "Especially in cool-season turfgrasses, we can see a rebound in turf growth when growth regulation is lifted or wears off in the plants. We actually see more growth in the plant than if we had never applied a PGR unless another application is applied. This means we can manipulate more growth in the turf plants when we stop applying PGRs altogether."

As a result, sports field managers have begun to apply PGRs during the growing season to maximize turf health by limiting vertical growth and the spending of energy on this mowed vertical growth. Then, before heavy practices begin, they will cease use of PGRs and gain the benefits or the rebound effect where more growth occurs and divots and wear

can be more quickly recuperated, Hathaway added.

OVERALL BENEFITS

According to Fletcher, the use of late-stage gibberellic acid (GA)-inhibiting products on cool-season turf species provides several benefits, such as increased tiller density, increased rooting potential and color enhancement along with reduced shoot growth leading to mowing management reductions.

"These changes in plant growth have been shown to directly improve playing surface stability [divots and slips] and consistency [ball roll/bounce]," said Fletcher.

According to Dean Mosdell, Ph.D., technical services manager for Syngenta, there are several benefits to plant growth regulators:

- Reduced clippings: PGRs can help reduce the amount of grass clippings, resulting in less green waste, reduced mowing time and labor savings.
- Maintenance of painted lines and logos.
- Better turf quality: PGRs can increase turf density and root growth for better wear tolerance and recovery.
- Pre-stress conditioning: PGR applications made prior to heavy-use periods or special events can help enhance recovery.
- Water use efficacy: Multiple applications can reduce water use, resulting in tolerance of low light levels, heat stress and other abnormal weather patterns.

PROPER APPLICATION AND OTHER CONSIDERATIONS

"Remember that the 'G' in PGR stands for 'growth,' so avoid situations where the turf is stressed [heat, water], dam-

aged [disease, insects, excessive play], and when planned cultural practices are to take place [aeration, verticutting]," said Fletcher. "Turfgrasses under regulation will be much slower to recover from any or all of these events."

Mosdell added that plant growth regulators should be applied when the turf is actively growing. Repeat applications based on growth rate (amount of clippings produced) or a growing degree day model. Apply in at least 44 gallons water per acre for adequate coverage with a foliar-absorbed product and leave on the foliage for at least one hour.

According to Fletcher, it is also important to understand how your chosen PGR product absorbs into the target plant, foliar or root; how fast typical absorption takes place; and the effects of water quality and application calibration on deposition and absorption.

"For example, late-stage GA-inhibiting products are predominantly foliar absorbed within the first one to four hours after application/deposition," he said. "If this type of PGR product was used in a tank mix that was immediately watered in, the products would be moved away from the leaves and the desired effects greatly diminished."

Hathaway added that a foliar-absorbed PGR makes sense in athletic field situations where there is often constant overseeding with perennial ryegrass to make sure seed is available to germinate and fill in thinned, stressed and/or divot areas. These foliarly absorbed PGRs, if applied before seed germination, won't be absorbed by young germinated seeds. **SFM**

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

UTVs for Sports Field and Grounds Management Applications

By John Kmitta

There has been increased interest in UTVs from sports field managers and professional grounds managers in recent years. According to David Anderson, product manager at John Deere, some reasons for this growth include the ability to diversify tasks; enhanced maneuverability; and the ability to efficiently transport crew members, equipment and materials. As a result, jobs are completed quicker and more efficiently.

“Facilities and grounds managers are increasingly viewing UTVs as a powerful, versatile and effective workhorse,” said Joel Hicks, product development manager, Kioti Tractor. “As a result, demand for UTVs has continued to climb among professionals, and manufacturers have responded with additional feature and accessory options.”

According to Noah Wahl, marketing manager at Toro, there has also been increased demand for electrification innovation in the utility vehicle market.

“As these versatile vehicles take on a larger role for our customers, long-term savings and the ability to meet new green initiatives through battery-powered technology advancements are key,” said Wahl. “Additionally, customers expect the



Photo courtesy of John Deere



Photo courtesy of Toro

same performance and productivity from battery-powered vehicles that they're used to getting from gas.”

According to Wahl, as more colleges and municipalities adopt green initiatives, electric vehicles offer the versatility and power of a traditional utility vehicle, but with reduced emissions.

“Utility vehicles are utilitarian by name, and the number of applications appropriate for utility vehicles has grown significantly with the expansion

of options and technology upgrades in the last 10 to 15 years,” said Nick Snidarich, product manager, Polaris Commercial.

As a result of this increased capability, more work customers are using them to replace their full-size trucks and vans as UTVs are purpose-designed for off road terrain, Snidarich added.

“The key trends in UTVs focus on durability, capability and comfort,” said Anderson. “To ensure maximum durability, manufacturers have focused on developing UTVs that are designed to withstand the toughest of conditions, minimizing downtime.”

According to Anderson, versatility is also important with UTVs, because every customer has different needs. As a result, manufacturers have expanded offerings to provide full lines of vehicles with a variety of terrain, cargo and passenger capabilities.

Said Hicks, “With the ability to choose one or two rows of seats and whether to have a cab — coupled with available accessories such as mirror, lamp and winch kits — grounds managers can design the UTV that is perfectly suited to their needs.”

Anderson added that comfort continues to be a top priority with UTVs. To meet this demand, manufacturers have

introduced a variety of new features — including heated and air-conditioned cabs — to keep operators comfortable, even in challenging environments.

“Durability is essential, as UTVs often are put to work in harsh and rugged conditions,” said Anderson.



Photo courtesy of Kioti



Photo courtesy of Kubota



Photo courtesy of Polaris

“With this in mind, manufacturers are upgrading older models with newer components and ensuring that these new models are designed to withstand all types of jobs for sports field maintenance.”

To cater to the growing needs of different customers, providing equip-

ment with a variety of capabilities — terrain capability, cargo capability, and passenger capability — is also increasingly important, Anderson added.

“Throughout our commercial portfolio, comfort, ergonomics, and in-cab comforts for work UTVs are being requested more because the UTVs are used more often and for longer periods of time,” said Snidarich.

According to Snidarich, safety, productivity, and overall total cost of ownership are always top of mind with facilities, grounds and sports field managers, and they need UTVs that contribute in those ways. Reducing accidents and injuries, avoiding mishaps, and enhancing situational awareness are key to improving safety.

He added that it is important to ask the right questions up front to identify the right utility vehicle for your needs (see sidebar for sample questions).

Said Anderson, “It is important for managers to determine their needs and how they will use a UTV. Think about key factors such as the power source, how much you plan to haul, type of terrain, machine speed, number of passengers, and the jobs you intend to complete. By determining these needs, you’ll be able to narrow down your options to find the machine for you. Additionally, this will help identify any attachments you need to tackle a variety of different jobs head-on.”

Hicks added that your dealer is the best resource for finding the right UTV to fit your needs.

“You can research various utility vehicles online; but, at the end of the day, nothing can replace the one-on-one, personal advice you will receive from a trusted dealer,” he said. When speaking with your dealer, come prepared with

QUESTIONS TO ASK IF YOU’RE BUYING A UTV

- Will my UTV be operated indoors, outdoors, on road or off?
- Do I need to haul more than two people?
- If I expand to a crew UTV for more passenger seating, am I losing cargo bed space?
- What is the towing, payload and bed capacity (can it fit a pallet)?
- What fuel will I have on site?
- Do I have access to electricity for charging?
- Are the key components engineered to withstand the tough duty cycle of daily use (heavy-duty, longer-lasting tires; puncture-resistant seats; durable brakes and driveline)?
- Is there a speed limiter and/or speed calibration?
- Is there a back-up alarm, horn and parking brake?
- Is the cab fully sealed to protect from weather and dust?
- Is there an engine braking system that eliminates acceleration when going downhill?
- Are there operator alarms to alert me before I overuse my UTV, possibly causing damage?
- How quickly can I perform the common maintenance checks — do I have to empty my cargo to check the oil?
- Are the tires all the same size so I can stock one spare vs. multiple?

— Sidebar provided by Polaris

details about how you plan on using the vehicle, including the types of terrain you'll be driving on, how much cargo and passenger load capacity you'll need, what you need to accomplish with your UTV and whether you plan to use the vehicle for trailering."

Also consider whether the tasks you'll be performing will be helped or hindered by a cab, Hicks added.

"While cabs provide added comfort and safety, they do increase the vehicle's price tag and aren't always ideal for work in tight spaces," said Hicks.

According to Wahl, there's no one-size-fits-all UTV.

"With so many types on the market, sports field and grounds managers can tailor their fleet by assessing their application requirements and using those factors to identify the best vehicle for their needs," he said.

Wahl added that although application will determine the exact type of vehicle needed, always keep in mind operating cost, operator comfort and ease of maintenance.

"Also remember to consider the width of the vehicle as you make your selection," said Wahl. "Will you be navigating college campuses or park areas that use bollards or other vehicle barriers? If so, ensure you select a vehicle that can physically operate within those barrier parameters."

Added Hicks, "With manufacturers challenging one another on feature and accessory options to meet marketplace demands, it'll be exciting to be part of this industry in the years ahead." **SFM**

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

UTV PRODUCT ROUND-UP

JOHN DEERE PROGATOR 2020A AND 2030A

The John Deere ProGator 2020A and 2030A utility vehicles boast 34 hp. and 22.1 hp., respectively, and have a max speed of 19.1 mph and bed capacity of 5,400 pounds. The 2020A is equipped with a four-cylinder liquid-cooled gas engine, while the 2030A features a three-cylinder liquid-cooled diesel engine. The 2020A and 2030A models can be equipped with a variety of attachments and implements. Both models can be used with the John Deere SelectSpray series sprayers, offering spraying flexibility and control.

KIOTI MECHRON

The Kioti Mechron UTV Series offers a diverse range of models and features. With standard four-wheel-drive and a 22-hp, three-cylinder Daedong engine, all Mechron utility vehicles combine power and agility. More than 55 inches of cargo bed space allow for more than 1,100 pounds of bed capacity. The 12 inches of ground clearance offer precise maneuverability in most environments. With field cab add-ons available for the Mechron 2200 and two-row bench seating on the Mechron 2240, operators can choose the level of comfort and convenience that best suits their needs.

KUBOTA RTV520

Kubota Tractor Corporation launched the gas-powered RTV520 with a new look and updated features. The new RTV520 features a more powerful 2-cylinder Kubota liquid-cooled EFI engine that provides more than 17 horsepower, and gives instant power with greater throttle control. Equipped

with a Variable Hydrostatic Transmission, the RTV520 offers a smooth driving experience at low speeds. Dynamic braking allows for one-pedal operation, making jobs that require frequent stops easier. Offered in general purpose and deluxe configurations, the RTV520 is available at Kubota dealerships now.

POLARIS UTILITY VEHICLES

Polaris offers a broad portfolio of utility vehicles. Highlights include:

- Four Pro XD models with available gas or diesel powertrain and two- and four-seat configurations. Designed with daily work in mind, it has safety features, heavy-duty tires, puncture-resistant seat, and increased payload capacity.

- The Polaris Taylor-Dunn line-up has nine different models of all-electric utility vehicles. The Bigfoot is the most common for sports field managers because of its wide operator's compartment, low deck height, load capacity of up to 3,000 pounds, and towing of up to 10,000 lbs.

- The Polaris GEM e1 XD is all-electric, street legal, and has a 1,400-lb. payload capacity.

TORO WORKMAN GTX LITHIUM-ION MODEL

Toro recently introduced its new Workman GTX Lithium-Ion model. A key benefit of the lithium-ion power packs is that they're maintenance free, so the machine is always ready to get to work, and has a long lifespan. The high-efficiency lithium-ion battery packs offer consistent runtime, and, because the packs are nearly 26% lighter than lead-acid batteries, it makes a big impression on productivity without leaving a big impression on fine turf. **SFM**



Exmark expands Radius zero-turn mower line

Exmark expanded its zero-turn riding mower offering with a new Radius E-Series machine featuring a twin-blade 48-inch UltraCut Series 3 cutting deck.

According to Mike Mayfield, Exmark product manager, the new mid-size Radius E-Series model offers several benefits, including increased cut quality, improved mulching and more uniform clipping discharge.

“The new 48-inch UltraCut Series 3 twin-blade cutting deck uses longer blades than an equivalent three-blade cutting deck, for increased cutting system performance, particularly when mulching or bagging,” said Mayfield.

The design of the twin-blade cutting system increases cutting chamber volume by 50 percent. The larger cutting chamber reduces deck packing, with more efficient transfer of clippings from the left to right chamber in side-discharge use.

The new UltraCut Series 3 twin-blade cutting deck is fabricated and welded from 7- and 10-gauge high-strength alloy steel. Heavy-duty

Series 4 cutting spindle assemblies feature sealed bearings for maximum durability with reduced maintenance requirements.

The new Radius E-Series machine is powered by a Kawasaki FR691V air-cooled twin-cylinder engine, featuring pressurized lubrication and cast-iron cylinder liners. Exmark's hydro drive system uses dual Hydro Gear hydros to deliver zero-turn precision and infinitely variable ground speeds of up to 8.0 mph forward and 5.0 mph reverse.



Kubota introduces the next generation of SZ Series commercial stand-on mowers

Kubota Tractor Corporation introduced the next generation of the SZ Series commercial stand-on mowers with the availability of four new models: the SZ19NC-36-2 with a 36-inch cutting deck, SZ22NC-48-2 with a 48-inch cutting deck, SZ26NC-52-2 with a 52-in cutting deck, and the SZ26NC-61-2 with a 61-inch cutting

deck. Improvements to the SZ Series deliver adjustable cutting deck baffles, enhanced serviceability, and increased tire performance. The new SZ-2 models will replace the original line of Kubota SZ mowers, and are currently available at Kubota dealerships nationwide.

The new “-2” models replace the first-generation models in Kubota's SZ Series line of stand-on mowers. The new models feature improvements throughout while maintaining the same horsepower and deck size configurations as previous models. One of the most notable upgrades to the SZ Series is the inclusion of adjustable cutting deck baffles to the SZ22NC-48-2, SZ26NC-52-2, and the SZ26NC-61-2 models. The new adjustable baffles allow operators to adjust the air intake of the cutting deck, which affects the quality of the cut and how well the clippings are directed into the bag, out the discharge chute, or onto the ground as mulch. Cutting conditions can vary greatly by region and climate, and more adjustability ensures operators can configure their SZ mower to provide the highest quality cut possible across a range of terrain conditions.

Also new for the next generation of SZ mowers are 23-inch Zero T tires. These tires feature a tread pattern that provides a great balance between handling, grip, and reduced turf impact. Serviceability of the SZ series was improved by making key areas of the cutting deck easier to access during service. Kubota also repositioned the hydraulic fluid reservoir inside the body of the mower. This helps protect the system and reduces potential leak points, further improving serviceability and reducing equipment downtime.

All the Kubota SZ Series mowers are equipped with Kawasaki FX and FT Electronic Fuel Injection (EFI) commercial engines and hydro-gear transmissions.



Turfco's new TurnAer XT10 stand-on aerator

Turfco introduced the new XT10, which replaces the TurnAer XT8. The XT10 is engineered to continue driving the productivity of riding aerators with upgrades that increase reliability and durability.

With its zero-turn agility, optional 60-pound seeder attachment and patent-pending Auto Depth Control tine-setting capacity, the XT10 packs a lot of punch. A 23-hp. engine gives it plenty of power, with a top aerating speed of 7 mph and 30-inch aerating width — capable of covering two acres of turf per hour. The optional drop seeder attachment allows operators to increase productivity by up to 50 percent and seed and aerate at the same time. The XT10 enhancements include the following:

- Brawnier axles are bigger, 34 percent stronger, and rigorously tested against extreme conditions.

- New semi-pneumatic front caster wheels make flat tires a thing of the past.

- Enhanced tine wheels.

- Upgraded electronic foot-controlled tine switch.

- Optimized weight distribution for better handling and better aeration.

The XT10 features drive chains located outside the aeration area so that soil and debris will not clog up the system. The Auto Depth Control function adapts automatically to changing ground conditions so that operators can pre-set the depth once and achieve uniform consistency across every job.



Kawasaki adds two ethanol-free KTECH products

Kawasaki Motors Corp., U.S.A. Engines Division is launching two rigorously tested, ethanol-free fuel products specifically optimized for outdoor power equipment applications. The introduction of these two additions to Kawasaki's Signature Series family of products includes KTECH Blend Pre-

Mixed 2-Cycle Fuel + Oil and KTECH Ethanol-Free 4-Cycle Fuel.

The KTECH Pre-Mixed 2-Cycle Fuel + Oil product is engineered to avoid the inherent issues attached to pump fuel that is formulated for the transportation industry. It is available in quart, one-gallon and five-gallon cans, as well as 54-gallon drums.

This new entry in the KTECH product line provides easy starts, lower maintenance, and takes all the guesswork out of the oil and fuel mix for two-cycle equipment.

Kawasaki's KTECH development and engineering teams have focused on delivering a stable mixture that will last two years in a tank and five years in a sealed container. This fuel-oil pre-mix offers the solution for easy start and run applications at sea level or higher altitude, in cold, dry, humid, or hot weather, and after sitting for up to a several years.

The new unleaded KTECH Ethanol-Free 4-Cycle Fuel is formulated for long life durability of 4-cycle small engines, and 2-cycle when mixed with oil to engine manufacturer specifications. This new fuel can aid in reducing costly repairs, equipment downtime, and user aggravation.

This new KTECH 4-Cycle Fuel passes warranty requirements for all manufacturers of 4-cycle and 2-cycle (when mixed with 2-cycle oil to manufacturer specifications) engines.

An added benefit to these new offerings from Kawasaki's KTECH is the relative actual size of their one-gallon containers — Kawasaki's measures a full 128-ounce capacity, while many others now market one-gallon containers that have only 110 ounces of liquid. **SFM**

The following are some industry Tweets from the past month:



@WoodpeckersNC

It's all in the details.

MAY 11



@_TJBrewer

Paint day #1

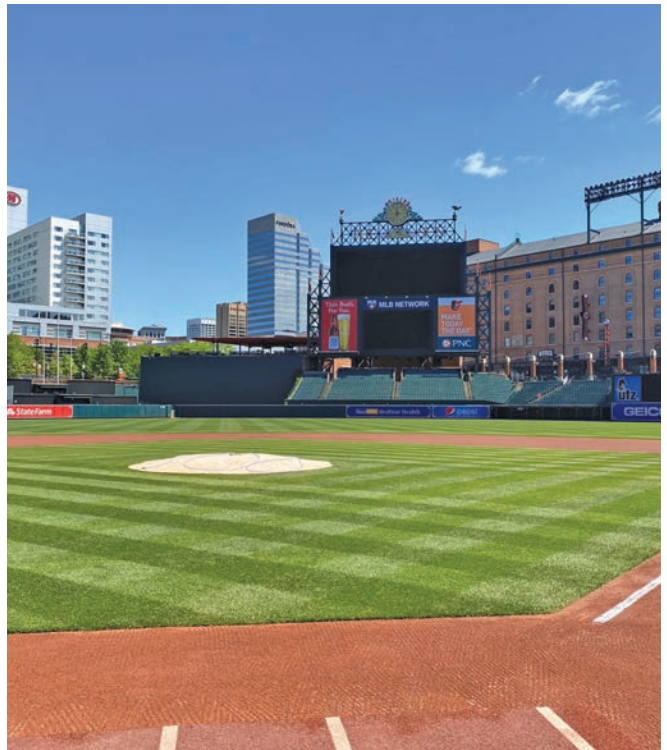
MAY 11



@T_LenzTurf

Wouldn't be a game day without it!

MAY 11



@nsherry2

Eyes Squad killin' it!

MAY 10



@Mike_Kerns_

Rolling out a Homeplate logo this year whenever we can see Mt. Rainier from the ballpark. #WeRTacoma

MAY 10



@kelren31

Good morning @TuckahoeTurf

MAY 8



@AELTCGroundsman

And so it starts the first white lines of the year going down on Championship Courts #MarkingOut

MAY 5



@AndyOmmen1

I stole this pattern off somebody on Twitter, can't remember who, but thank you! I'm really liking the look of it. Gives a little batters eye look. 14u baseball.

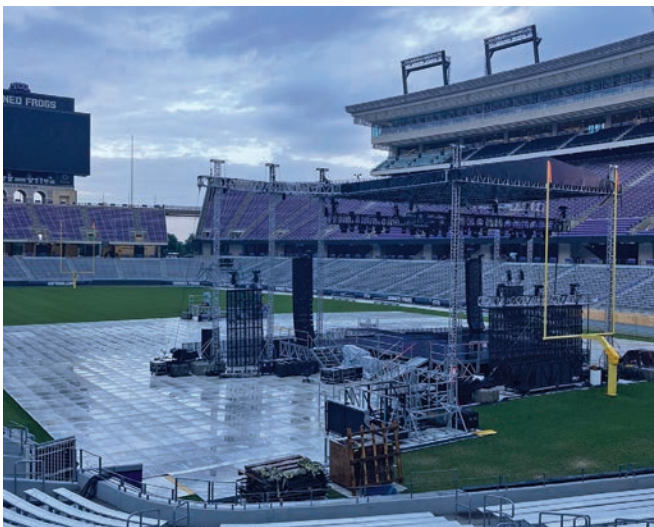
MAY 5



@TurfgrassTiger

Spent the afternoon in Fredricksburg to help out our local Minor League team the @FXBGNats, to get their logo set for the start of their inaugural season! Looking forward to seeing a couple of our students on the grounds crew this summer! #VATurf

MAY 4



@TCUFIELDCREW

Remember that feeling leading to Christmas morning when you didn't know what to expect to find in that box from your grandmother, but you knew chances were slim it was gonna be good? Yea, that's us right now leading into next week.

APRIL 30



@johnwatt610

Corvette mowing in some lines before tournament play! Looks good for nearing the end of spring season.

APRIL 30



@GChace22

Game day!

APRIL 28

Certifications Through STMA Make a Big Impact

STMA offers two certification programs: one for the individual – the Certified Sports Field Manager (CSFM) program; and one for the facility – the Environmental Facility Certification program. Both provide considerable credibility to you with your employer, your community and your peers. These certification programs demonstrate independent confirmation of achievement and inspire confidence in the knowledge and competence of staff.

CSFM

The CSFM program requires successful passing of a four-section comprehensive exam. The exam covers agronomics, pest management, administration, and sports-field-specific management.

To qualify to take the exam, sports field managers must have a combination of education and experience, or experience only (which requires more years on the job). Those taking the exam must achieve an 80-percent pass rate on each section. Once certified, CSFMs continue their education by acquiring CEUs and they renew their



certification every three years. Also required is service to the industry, which are very broad activities. The CSFM can contribute articles, serve on industry boards, give presentations – just about any activity that advances the profession is eligible to be counted as industry service. The CSFM program has been in existence since 2000. To date there are 267 CSFMs.

ENVIRONMENTAL FACILITY CERTIFICATION

The Environmental Facility Certification program has two components: assessment and attesting. The assessment is completed by the sports field manager, and covers 10 areas of practices: stormwater management, fertilization, pesticides/IPM, recycling, mowing, composting, energy conservation, shop buildings/storage, irrigation, and educational outreach. The Environmental Committee is adding two sections to the assessment that they will implement later this summer. The new sections include synthetic field management and managed landscape and open spaces. The assessment must have an 80-percent pass rate for each section. The attesting phase involves



7 REASONS WHY EMPLOYERS SUPPORT CERTIFICATION

- 1. More assurances in hiring.** Because certification programs validate a skill set, employers are hiring a known entity with technical skills. They only need to focus on the “fit” within the organization during the hiring process.
- 2. Credibility in the community.** The credibility that certification brings to a facility can be used effectively to distinguish an organization and its certified employees as leaders in the community.
- 3. Happier employees.** When employees are happier, they are more loyal and less likely to look for a new job. That means less resources needed for job searches to replace those that leave, and less time needed to onboard new employees.
- 4. Higher productivity.** Boosted productivity results in more efficient teams and improves an organization's bottom line.
- 5. More up-to-date employees.** The continuing education component of certification programs keeps employees current with new technologies that save time and money.
- 6. Better efficiency and lower risk.** Certification is a recognizable commitment to excellence and competency. According to Risktek, a risk management consulting firm, “By investing in people and focusing on the competency to carry out both routine and non-routine tasks, companies can build in considerable resilience to the risks they face and thus better prevent, deal with and recover from adversity.” Fields and facilities that are certified and managed by a CSFM provide the safest surfaces possible for athletes.
- 7. Leadership development.** Certification builds leadership traits including confidence, which develops future leaders and projects trustworthiness to those within and outside of the organization.

having a CSFM do a walk-through of the facility with the sports field manager to validate that the practices are in place. Renewal for this program is also required every three years by simply filling out a short form. This program began in 2016, and currently there are 43 facilities certified.

Although these programs differ in requirements, they share common benefits. Certification demonstrates that you are well trained and committed to professional growth. Achieving one or both certifications ensures consistency of knowledge, technical skills and expertise.

According to Indeed's Career Guide, those who achieve certification may experience the following benefits:

- Better employment or advancement opportunities within your current organization.
- A competitive advantage over other candidates in the market who don't have a certification, as it verifies both skills and ambition through the initiative you took to obtain it.
- Higher earning potential.
- Possible tuition reimbursement for continuing education that enhances your own professional development and makes you more valuable to the company.

Field managers report that as certified professionals they earn more than their non-certified peers. According to the STMA Compensation Report, CSFMs receive \$7,000 more per year in salary. Employers who use STMA's job board increasingly request a CSFM to fill an open position.

Facilities that have pursued the environmental designation cite their goal as being more conscious of the impact their facility management practices have on the environment. Those in the community who watch sporting events on certified fields know that the facility has met quality standards for environmental management practices.

John Turnour, CSFM, Washington Nationals, stated, "When STMA began the Environmental Certification program, it was a natural decision on wanting to pursue this certification to bring awareness and recognition to the role that we can all play when it comes to being good stewards of the environment."

For more information on each Certification program, visit *STMA.org* and click on "Programs."

Get excited for Savannah

Get excited for Savannah, Ga., host city of the 2022 STMA Conference and Exhibition. Gorgeous views, historical landmarks, and delicious food await.

The Savannah Convention Center is a quick ferry ride from the Downtown Historic District, which boasts world-class restaurants, rooftop bars, and breweries, all dripping in Spanish moss. After conference sessions conclude, gather a group of friends and sample some fried green tomatoes, extra crispy fried chicken, and Southern BBQ, then wash it all down with Savannah's signature drink, Chatham Artillery Punch.

Coming to Savannah with your family? Within the Historic District, you can visit Forsyth Park, walk the River Market, and visit museums and landmarks, all while eating some locally made ice cream. Tybee Island can be reached by trolley in about 20 minutes. Once there, you can watch dolphins, go fishing and look for seashells.

Registration opens in October of 2021. Visit the STMA Conference page (<https://www.stma.org/conference/>) for more information.

Submit for Field of the Year

The application to submit to STMA's premiere program, Field of the Year, is now available. Visit *STMA.org* and you'll find the link on the home page, or you can access it from the "Programs" tab.

This year's application has one addition: the PCI is required. It was removed for 2020, but has been part of the application process for the previous 11 years.

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 independently judged by the STMA 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 Savannah, Ga., Jan. 17-20; signature clothing; and an award that is presented during the annual awards banquet on Jan. 20. **CSFM**

SUBSCRIBE TODAY!

sportsfieldmanagementonline.com/subscribe

Online | Print | Mobile | E-Newsletter | Facebook | Twitter

SportsField

MANAGEMENT

STMA Affiliated Chapters Contact Information

Sports Turf Managers Association of Arizona: www.azstma.org

Colorado Sports Turf Managers Association: www.cstma.org

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

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

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

Gateway Chapter Sports Turf Managers Association:
www.gatewaystma.org

Georgia Sports Turf Managers Association: www.gstma.org

Greater L.A. Basin Chapter of the Sports Turf Managers Association:
www.stmalabasin.com

Illinois Chapter STMA: www.ILSTMA.org

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

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

Iowa Sports Turf Managers Association:
www.iowaturfgrass.org

Keystone Athletic Field Managers Org. (KAFMO/STMA): www.kafmo.org

Mid-Atlantic STMA: www.mastma.org

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

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

MO-KAN Sports Turf Managers Association: www.mokanstma.com

New England STMA (NESTMA):
www.nestma.org

Sports Field Managers Association of New Jersey: www.sfmanj.org

North Carolina Chapter of STMA:
www.ncsportsturf.org

Northern California STMA:
www.norcalstma.org

Ohio Sports Turf Managers Association (OSTMA): www.ostma.org

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

Oregon STMA Chapter:
www.oregonsportsturfmanagers.org
oregonstma@gmail.com

Ozarks STMA: www.ozarksstma.org

Pacific Northwest Sports Turf Managers Association: www.pnwstma.org

Southern California Chapter:
www.socalstma.com

South Carolina Chapter of STMA:
www.scstma.org

Tennessee Valley Sports Turf Managers Association (TVSTMA): www.tvstma.com

Texas Sports Turf Managers Association:
www.txstma.org

Virginia Sports Turf Managers Association: www.vstma.org

Wisconsin Sports Turf Managers Association: www.wstma.org

Chapter Sponsors

Hunter®



JOHN DEERE

Herbicide-resistant Weeds

Q: What advice do you have regarding herbicide-resistant weeds?

A: Approximately 200 weed species have been found resistant to at least one family of herbicides, and some are important weeds in sports field management. Goosegrass (*Eleusine indica*) was one of the first weeds in which resistance to dinitroaniline herbicides was documented. Annual bluegrass has also shown resistance to several herbicides. For these species, herbicide recommendations have been altered accordingly. For example, oxadiazon is more often recommended for preemergence control of goosegrass.

A common misconception is that weeds acquire resistance to a particular herbicide. There is genetic variability within a population of all living things. A population that is normally susceptible to a particular type of herbicide may have an individual that tolerates the herbicide. If this resistant individual can reproduce, then its offspring will also have the trait that allows it to resist that type of herbicide. If the same herbicide is used repeatedly, the population of resistant weeds will grow and can eventually become the majority. In cases of resistance, application rate quickly becomes a non-factor. Doubling or tripling the rate of the product and reapplying will not be effective. Resistance up to 80x rates has been reported by turfgrass scientists.

The best method to reduce the risk of a weed acquiring resistance is to not use the same product year after year, but rather to rotate among the different herbicidal modes of action (MOA) that are available. The reason for this is that if a weed population develops resistance to a particular type of herbicide, there is a good chance that it will resist all other herbicides that work the same way. A summary of the modes of action of herbicides used in cool-season turfgrass can be found online (<https://hracglobal.com/tools/classification-lookup>).

Proper rotation involves using herbicides with a different MOA for each application. For example, if the objective is to avoid resistance development in crabgrass, then rotating between preemergence herbicides benefin and

prodiamine is not effective because both are dinitroaniline herbicides. It is also not effective to rotate between a dinitroaniline herbicide and the herbicide dithiopyr. Dithiopyr is in a different chemical class (it is a pyridine), but both the pyridines and the dinitroanilines have the same MOA. Compared to production agriculture or even warm-season turfgrass, there are not a lot of practical rotation options available for cool-season turfgrass managers. To help with this, you can include postemergence herbicides and also rotate among these chemistries. For crabgrass, use fenoxaprop one year, followed by quinclorac in year 2, and then either topramazine or mesotrione (different chemical classes but same MOA) for year 3.

For the broadleaf herbicides, if the target is an annual weed, a preemergence herbicide such as isoxaben may be useful. For perennial broadleaf weeds, for a very long time our postemergence herbicides were all synthetic auxins. The registrations (all since the year 2000) of the PPO inhibitors and the ALS inhibitors have provided cool-season turfgrass managers with some important options for herbicide rotation.

So, consider adopting a proper herbicide rotation program. Also, after application, observe whether all the weeds kept growing or if it is just one species that was not controlled. If this is the case, then you may have found an herbicide-resistant population. Report suspected cases to your state extension specialist. They may be able to do tests to verify the resistance, and then offer alter management recommendations for control of the weed. **SFM**

Dave Gardner, Ph.D., professor of Turfgrass Science at The Ohio State University, contributed to this article.



Pamela Sherratt

Sports turf extension specialist
The Ohio State University

Questions?

Send them to Pamela Sherratt at 202D Kottman Hall, 2001 Coffey Road, Columbus, OH 43210 or sherratt.1@osu.edu

Or, send your question to Dr. Grady Miller, North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or grady_miller@ncsu.edu



Count on it.

DELIVER THE GOODS WITHOUT THE NOISE

WORKMAN® GTX LITHIUM-ION

Making the most of your budget is a competitive sport, and this lithium-ion vehicle delivers. Maintenance-free batteries help keep your crew productive with longer daily run time and longer overall battery life. Plus, as the largest-capacity lithium-ion vehicle in its class, it combines quiet, all-day power and zero engine exhaust emissions with the cargo capacity to take on all the jobs you need it to do. **800-803-8676 | toro.com/gtx**



The GTX Lithium-Ion model offers select options only. For hundreds of configurations to meet every need as shown, see the full GTX Series line.

GSA

**NASPO
ValuePoint
SUPPLIER PARTNER**

**OMNIA®
PARTNERS**

Sourcewell
Formerly HJFA

Kinetic GPO

Join the conversation
@ToroGrounds

© 2021 The Toro Company. All Rights Reserved.



SUBSCRIBE TODAY!

Online | Print | Mobile | E-Newsletter | Facebook | Twitter
sportsfieldmanagementonline.com/subscribe

SportsField
MANAGEMENT