Sportsfield MANAGEMENT

October 2020

Vol. 36 No. 10

The Official Publication of the Sports Turf Managers Association

Proper Communication 14 | Mowers 18 | Fall Prep for Spring Success 30

Outside-the-box Thinking

Georgia Tech uses innovation to win College Baseball FOY







With three consecutive 'Field of the Year' awards under its belt, you know you can trust HGT[®]. These bluegrasses have been carefully engineered by our turf-experts to be extremely traffic tolerant, recover

faster from stress, come up strong in the spring, and be resistant to Summer patch and Rust. To top it all off, *Barvette HGT*[®], a component of *Turf Blue HGT*[®], has consistently ranked #1 in recent NTEP trials, so, you know, when you choose HGT, you're planting an award-winning grass.

BARENBRUG

HGT



Contents

OCTOBER 2020 VOL.36, NO.10



28

Maintenance Practices Give Your Soil Some Fresh Air

30

Industry Insights Fall Prep for Spring Success



Facts and Figures SportsField Management Buying Intention Survey



Landscape and Grounds Maintenance Equipment Trends 2020



8

Field of the Year College Baseball Russ Chandler Stadium, Georgia Tech Athletic Association

14

Professional Development The Importance of Proper Communication

18

Equipment and Technology Focus Reel vs. Rotary: Which mower is right for your application?

22

Profile The SportsField Management Interview: Darren Criswell



DEPARTMENTS 6 Breaking News 7 STMA President's Message 17 John Mascaro's Photo Quiz

40 Innovations

44 From the Twitterverse 46

STMA In Action

48 Marketplace

49 STMA Chapter Contacts 50 Q&A

Saving America's Vater

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



Breaking News

Sports Turf Managers Association to host virtual experience for 32nd annual Conference and Exhibition

Sports Turf Managers Association (STMA) – the organization for 2,700 men and women professionals overseeing sports fields worldwide and critical to athlete safety – will be hosting the 32nd annual STMA Conference and Exhibition virtually, January 12-14, 2021.

Committed to serving the needs of the sports field industry and its members, this event will be offered free of charge (regularly \$375) to all 2021 STMA members. As the premier annual event in the sports field industry, a multi-faceted conference will bring together the top academics, practitioners and professional speakers for three days of industry education, networking and a virtual exposition hall. The 2021 STMA Student Challenge, aimed at nurturing the next batch of professional sports field managers, will also be hosted virtually.

Each day of the conference, a diverse track of continuing-education seminars will be coupled with meet-and-greet time windows and the opportunity to connect one-on-one with exhibitors in the expo hall. Attendees will also receive two additional education sessions per week from Jan. 19 through Feb. 16, including interactive technical presentations and personal and professional development sessions. Registration for the 32nd STMA Annual Conference and Exhibition opens on Thursday, October 15.

"The STMA staff, alongside dedicated volunteers have worked hard to develop a robust digital experience that meets the demand of our thousands of attendees while maintaining the tradition of the STMA annual conference," said Jimmy Simpson, CSFM, president of the STMA Board of Directors. "Although we will never be able to fully replace the experience originally planned in Palm Springs, our virtual event promises the high-quality learning opportunities you've come to expect from STMA, as well as engaging events and fun."

To equip sports field managers globally, the association proactively developed its Route to Recovery guides at the beginning of the COVID-19 pandemic. Comprised of a multitude of resources, this three-part guide assists professionals in preparing their field surfaces for safe play as quickly as possible. Route to Recovery covers all scenarios from fields closed with no maintenance to fields with full maintenance but no play. The third guide, which is a stand-alone resource, provides a decision tree to help field managers determine the need for field renovation. **SFM**



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 | Ipalmer@epgmediallc.com **EDITORIAL** Group Publisher | David Voll Associate Publisher/Editorial Brand Director | John Kmitta Technical Editor | Adam Thoms, PhD Art Director | Phil Tippin Media Coordinator | Kelsey Larson 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 Mangagement. SportsField Management (ISSN PENDING) (USPS 000-292)

Sports-Held Management (ISSN PENUING) (USPS UUU-292) (Reg. U.S. Pat. & T.M. Off.) is published monthly by EPG Media & Specialty Information at PO Box 96, Port Jervis, NY 12271.

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.



Connectiv The Business Information Association, a division of SIIA

President's Message

SportsTurf

President:

Jimmy Simpson, CSFM Immediate Past President: Jody Gill, CSFM

President-Elect: Nick McKenna, CSFM

Secretary-Treasurer: James Bergdoll, CSFM

Vice-President Commercial: Jeremy Bohonko

Professional Facilities: Stephen Lord, CSFM

Academic: Adam Thoms, Ph.D.

Higher Education: Clark Cox, CSFM

Parks & Recreation: Brad Thedens, CSFM

Schools K-12: Jeremy Driscoll Commercial: Turner Revels

At-Large Elected: Scott Thompson, CSFM

At-Large Appointed: Joshua Koss, CSFM

STMA OFFICE

805 New Hampshire, Suite E Lawrence, KS 66044 Phone: 800-323-3875 Fax: 800-366-0391 Email: STMAinfo@STMA.org www.STMA.org

STMA EDITORIAL COMMITTEE

Chairman: Jeremy Driscoll

Group Leader: Clark Cox, CSFM

TJ Brewer, CSFM; Joe Churchill; Jim Cornelius, CSFM; Kyley Dickson, PhD; Cliff Driver, CSFM; Scott Stevens, CSFM; and Steve Ware At the time of writing this, I just finished virtual math and science lessons with my son, who started sixth grade this year. In addition to the normal challenges of sixth grade, the virtual component has made school cumbersome and

confusing for students and parents alike. But as we were working through each exercise, Jack would get to a point and say, "Oh, that is simple; I get it now." The more I heard that, the more I kept thinking about our sports field industry.

There is no doubt that we have all faced many problems – we call them opportunities – throughout our careers. We are pushed to the brink with weather, construction, amount of play, a pandemic, and many other challenging scenarios. In too many situations, I find myself overthinking the solution. What we do daily is all rooted in science, but not rocket science. Far too often, I have been guilty of throwing the "kitchen sink" at a problem, only to watch the problem get worse. When we step back from the problem, get collaborative input from others, and break the opportunitu down to its most basic form, then it becomes manageable with a positive solution right in front of us.

In my opinion, this year has been one of the more challenging years for the STMA. As announced on September 24, and as detailed in the official press release on page 6 of this issue, the 2021 STMA Con-



Jimmy Simpson, CSFM STMA President Jimmy.Simpson@townofcary.org

ference and Exhibition will shift from a live in-person event to a virtual conference. Missing the opportunity to gather in Palm Springs, Calif., is going to have an impact on a lot of us. I always use that time to learn, recharge, and refresh my mind, as well as gather with friends. The decision to move to a virtual conference was a very complex one, but when the headquarters staff, our commercial partners, committees, and the board of directors collaborated on the topic, we all broke it down to what is best currently for our membership.

This decision is going to have a ripple effect on this association for years to come. As we recover from these challenges, we are going to have to get back to the basics and keep it simple. We need everyone to come together and let the STMA know what you need. If we work together to continue to make our association stronger and find new ways to approach our opportunities, we will then define the future of the STMA and not let our future define us. **SFM**

Collaborating in change together, Jimmy Simpson, CSFM

RUSS CHANDLER STADIUM GEORGIA TECH ATHLETIC ASSOCIATION ATLANTA, GA

To achieve success, one must be able to adapt and overcome difficulties in any situation. My crew and I have navigated our way through a medley of events and a record-breaking summer, while making a crazy idea reality. Growing KBG in Atlanta, Georgia, has been nothing short of a humbling experience. The old saying of, "Sometimes the hardest things in life are the things most worth doing," could have never been more true than during the past year.

Installing KBG at Russ Chandler Stadium was a bold decision, and

considered to be foolish by some. Barenbrug's HGT bluegrass was the obvious choice — the aggressive and heat-tolerant mix would be ideal for our application. Many questions still lingered: what would happen during a long, hot and dry summer? Well, we didn't have to wait long for answers. The heat plagued us through the fall of 2018, during our 42-day grow in (26 days were above 90 degrees).

January is a busy time at Russ Chandler Stadium. Every year, 50 to 75 professional baseball players use the facility to prepare for Spring Training. The extra foot traffic, accompanied by the unpredictable weather and spring sports schedule, can be chaotic to manage. 2019 would be an even bigger challenge, as this would coincide with AFC Super Bowl practice.

As we moved through the spring, the KBG quickly gained popularity with our team. By April, it was clear we would be hosting NCAA Baseball Regionals. We welcomed the chance; after all, we chose KBG to be at our full growing potential when it mattered the most. Once again, the weather put a damper on things with a slew of 95-degree days lead-



ing up to the tournament. Disease was our biggest fear, keeping hot spots in check without over watering was not easy. We decided to get creative and use ice and fans to cool down the air above the grass. Luckily, the heat subsided on our first day of play.

My number-one concern has always been summer baseball camp. The traffic from 100 kids a week for a month straight wreaks havoc on any field. On average, Atlanta summers only have 37 days of temperatures above 90 degrees, which is three days less

per year than St. Louis and Kansas City, where KBG is widely used. So, in theory, we should be fine.

Unfortunately, the summer of 2019 was anything but average. We experienced a record-breaking 91 days above 90 degrees, the majority coming with drought in August and September. We had little room for error — I knew this idea would be viewed as a failure if we lost any grass. With some elbow grease, a diligent fungicide program and strategic watering, we fought the odds. Yes, we had some close calls, but the KBG always recovered.

Year one with KBG was filled with opportunities to showcase our ability to outthink, outplan, and outmaneuver failure. I believe our outside-the-box thinking will save us time and money while providing a fantastic playing surface for years to come. The culture at Georgia Tech has always been built on innovation, and growing KBG in the southeast is nothing short of this.

> Chris May, director of athletic grounds, Georgia Tech Athletic Association

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



Category of submission: College Baseball

Field manager: Chris May

Title: Director of athletic grounds

Experience: At the age of 19, I began working for STM, an Atlanta-based field construction and maintenance company. Over the next two years, I developed a passion for the industry that fuels me to this day. In July of 2005, I left college and took a job as the assistant sports turf manager at Florida Atlantic University. After 2.5 years at FAU, I accepted the position of sports turf manager at Mercer University in Macon, Ga. I was 23 years old and handed the task of maintaining 11 acres of sports turf with one part-time student worker.

I moved back to Atlanta in 2011 and took a job at The Westminster Schools as the director of grounds and sports turf. While I loved being back home, I missed college athletics and wanted more professionally. So, after 11 months, I left my job at Westminster in search of a new direction.

A few weeks after leaving Westminster, I was offered the position of assistant sports turf manager/baseball field manager at Georgia Tech. In 2016 I was promoted to director of athletic grounds. We have been able to accomplish a lot over my eight years at Georgia Tech — most notably winning the 2014 STMA College Baseball and 2017 STMA College Football Field of the Year awards.

Full-time staff: Chris Conley, Chris Campbell, Mitch Stefan, Nick Daniel, and Chad Austin

Original construction: 2001

Turfgrass: Barenbrug HGT bluegrass

Rootzone: Sand

Drainage system: USGA Spec 10" rootzone over 4" pea gravel, drain tiles on 20' centers in gravel layer





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

MAY: We took a real leap of faith deciding to install bluegrass in Atlanta. I'm proud of my crew for stepping up to the challenge and our administration for supporting us every step of the way. This idea was about reversing the thought process of maintaining a college baseball field is the southeast. The traditional practice of overseeding then transition just to grow bermuda back enough to overseed again seemed broken to me. There had to be a better way.

SFM: Russ Chandler Stadium has won Field of the Year in the past. What sets this win apart?

MAY: The wins in the past were focused around weather challenges. We did face quite a bit of adversity with the heat last summer, but this win was about putting it all on the line and making a crazy idea a reality. I'm really proud of everyone that was involved.

SFM: What are the biggest challenges you face?

MAY: Logistics. Being in downtown Atlanta with multiple facilities is enough to make your head spin. There is so much planning that goes into to simplest things. For example, we have to have our infield mix shipped to our sand supplier so they can load it in tandems and then bring it on campus.

SFM: What advice do you have for other sports field managers?

MAY: Trust your instincts, but do not be afraid to ask questions. Sometimes the best solutions were not learned in a textbook.

SFM: What attracted you to a career in sports field management?

MAY: I really just fell into it. I was fired from The Home Depot during my freshman year of college, and my dad had a connection with an athletic field construction company. They hired me, and I've been in sports turf ever since.

SFM: Who would say are your mentors in the industry, and/or what is the best piece of advice you have received?

MAY: I have quite a few. Jesse Pritchard and Ken Czerniak taught me work ethic and the skills to go out on my own. Jon DeWitt is who took my raw talents and really helped refine them. He is one of the smartest individuals I've ever met, and nobody in this industry is more organized and focused than him. Jon taught me K.I.S.S. (Keep It Simple, Stupid). He used to tell me a field is like a baby, and you can't hold it too tight or you'll hurt it. Meaning too much is not necessarily a good thing.

SFM: What is the greatest pleasure you derive from your job?

MAY: Instant gratification mixed with long-term goals. You can bust your tail all day and immediately see the results. I feel this helps me stay motivated to reach the long-term goals and keep the big picture in mind. As I get older, I also get a great deal of pleasure watching former employees succeed.

SFM: How has your career benefited from being a member of STMA?

MAY: Networking and relationships. The conference really helped me build lifelong friendships throughout the industry.





Judge's Comments

.Congratulations to the 2019 College Baseball Field of the Year winner, Russ Chandler Stadium at Georgia Tech. Chris May and his staff did a fine job, and are well deserved to once again achieve the award. Looking over his application, Chris had mentioned that they switched from bermuda to Kentucky bluegrass. His decision on this was well thought out, and even though it was a bit "radical," as he mentions in his submission, the outcome was a home run! As sports field managers, we need to think outside the box in many situations. The group working on Russ Chandler Stadium has done this with great results. Switching over to a different blend of turfgrass was a huge risk, and they should be proud of the work that was submitted.

- Vince Cassata, parks foreman/sportsturf specialist, The Village of Glendale Heights (Ill.)

Editor's Note: A panel of 11 judges independently scored Field of the Year entries based on playability, appearance of surfaces, utilization of innovative solutions, effective use of budget and implementation of a comprehensive agronomic program. We have asked the judging panel to provide insight into why each winning field was selected, and we will share those comments with the corresponding field profiles. **SFM**

The Importance of Proper Communication

By John Kmitta

As a sports field manager, communicating with others is one aspect of the job that might get overlooked. However, it is of vital importance – especially during the challenges we currently face – to properly communicate with coaches, administration, athletes, parents, the community, as well as your own straff/crew.

"For athletic fields to be successful at a high level, you have to have relationships and the ability to communicate at all levels," said Amy Fouty, CSFM, general manager, Paradise Coast Sports Complex, Naples, Fla. "It's a skill that they don't really teach you in school – the interpersonal skills that you really need to develop your relationships. The way you communicate to each of those – coaches, admin, athletes, parents, the community – can be a different style."

Fouty added that sports field managers need to communicate to the level of understanding of the person or

groups with whom they are communicating. Do not talk over their heads, but also do not talk in a way that is beneath their level of understanding.

According to Chase Straw, Ph.D., assistant professor, turfgrass management and physiology, Texas A&M University, it is important to identify any areas where there is a lack of communication or where stakeholders don't fully understand the situation so that everybody is on the same page, knows everybody's role and can find common ground.

"The overarching thing about communication is to make sure you understand other people's perspectives, because, as a sports field manager, your perspective on the way the field should be used is going to be different from those who use your field," said Straw. "The perspective of someone who might own or manage the facility will be different from how the coach wants to use the field, and that's going to be different from the parents or the players. So, everybody is going to have different opinions, and it's really about understanding everybody's opinion, reaching a common goal, and coming up with a plan from that."

According to Straw, the majority of people who use a field don't understand what it takes to maintain it.



Photo provided by Chase Straw, Ph.D.

"A big barrier is just having an understanding of what goes into general maintenance practices," said Straw. "There is a lack of education. Whenever players go out and do ladder drills all in one spot, and you get these beat-up areas on the field, they are doing it partially because they don't understand that it is destroying the field and it's going to be tough for the field to recover. If the sports field manager doesn't say anything, the athlete isn't going to know any better."

Communicating with coaches

Coaches, in many cases, may have a better understanding of what you are doing as a sports field manager than, perhaps, athletes, parents or the general public. But proper communication with coaches is still vital to ensure you are on the same page.

"When you communicate with coaches, the conversation is always going to be playability," said Fouty. "You ask what they think about it first. Anytime I have had a new coach to work with...the first thing I would ask them is, 'What type of playing style – what type of offensive and defensive scheme – do you like to run?' And, from a safety standpoint, what has been their experience with grass fields, just to understand their perspective and background. Some of them have played on some really great grass fields, some of them have played on some really bad grass fields. They are never shy of words to tell you all about that."

"A lot of times, the coach is going to do whatever they want to do anyway," said Straw. "In that situation, as a sports field manager, you need to really outline the consequences of what they are doing and the impact of field quality on player safety to them before they do it."

If the coach continues to do what they want, to the detriment of the field and player safety, Straw recommends reaching out to ownership or administration to let them know that you want to accommodate the coach but, as a result, field quality is going to diminish.

"I think being upfront about what is going to happen to the field if the team does something that is going to be destructive – before it happens – is going to set you up for success to justify doing something differently to prevent it from happening down the road," Straw added.

"Every time I would have a conversation with coaches, it would always be in the realm of safety, as well as playability, for the different positions to execute what they are trying to execute," said Fouty. "That always seemed to be a very productive way to have a conversation and all get on the same page. Then you are aligning your goals. They don't care about the science of growing grass. Just like we don't want to dive into the game plan for the tight ends and every single play they are going to run. It's making a connection and being around so that they see you. To be part of the team, you've got to be around."

Communicating in a COVID-19 world

Throughout the COVID-19 pandemic, proper communication has become even more important as sports field managers have had to manage COVID-19 messaging and information related to field use, as well as internal communication and messaging within the organization.

"No matter who you are talking to, you have to have a unified message," said Fouty. "Whether you are talking to a coach, the administration, parents, athletes, the community, news outlets, businesses in the community – there should be talking points created for the entire organization to use in terms of communicating safety, the protocols you have in place, and why you have them in place."

According to Fouty, you have to start with one singular message about safety and that you are looking out for the best interest of the athlete.

"You all have to sit down in a room at a table and come up with what that [message] looks like, and then everybody has to agree on the message and provide the same message," she said. "A unified message is the most critical thing so that you can communicate properly."

Chrissie Segars, Ph.D., assistant professor/extension turfgrass specialist, Texas A&M AgriLife Extension, said

that many sports field managers with whom she has spoken in recent months have had guidelines in place regarding field closures, and thought they were on the same page with their supervisors or administration, only to find out at the last minute about cancelled games or field closures – after they already put a lot of work into readying the field.

"Sometimes it's just the way it is – field managers don't know until the public knows," she said. "But being as open and honest as possible about it is really important."

Straw added that it is also important to be as open as possible with your staff – all of the time (not just with regard to COVID-19 messaging).

"One of the big things in communicating with your staff is always be approachable. Everybody is busy, but I always want people to know that they can come talk to me at any time."

- Chase Straw, Ph.D.

"There are a lot of situations where you are in kind of hurry-up-and-wait mode – such as rain delays," he said. "Your staff can become really disgruntled if they don't know what's going on. So just keep everybody in the loop. One of the big things in communicating with your staff is always be approachable. Everybody is busy, but I always want people to know that they can come talk to me at any time.

"With COVID, especially, people are having a lot of personal situations that aren't only work-related situations," Straw continued. "So now is a more important time than ever to be approachable and even ask your staff if they are doing okay – personally and work related. Even if it's as simple as letting them know that you don't know what's going on, that's at least telling them something and keeping them on the same page as you."

Segars added that it is also important to communicate about personal health and wellbeing.

"I think that physical and mental health are becoming topics people feel more comfortable talking about," she said. "We are already in a tough industry, and adding on the pandemic is very stressful. It's important to be honest with yourself on how you're feeling. It's okay to feel sad. It's a bad time, so it's important to communicate how you are feeling both physically and mentally."

When communicating with staff regarding COVID-19 messaging, Fouty added that it's important to let your staff know that the safety measures being put in place are as much for them as they are for the people who are coming to the complex.

ing to the complex. "My concern is always the safety and wellbeing of the staff, and that we have to be a good example, because people will watch what we are doing or take pictures of anything you're not doing right," said Fouty. "When we talk about protocols as a staff, we talk about being an example of those protocols and having a unified message."

Becoming part of the conversation

Fouty, Straw and Segars all agree that having a unified message within an organization involves becoming a part of the conversation, which, as a sports field manager, is not always easy.

"I think it depends on the organization and situation by situation," said Segars. "I've talked to plenty of field managers who have great relationships with their coaches and administration. There are others who don't get to be a part of that conversation until the last minute. Trying to develop those relationships as much as possible is really important. Be open and honest about what you need as a field manager, and make yourself available."

Straw, sharing advice he received from Weston Appelfeller, CSFM (Austin FC), added, "Have a plan. Have a management plan. Know what kind of equipment you need. Know what kind of people you need. Have a general idea of your routine and how you will handle your management. And don't just keep that internal. Articulate it to people who will listen. If they don't listen, try to set something up so that they will listen."

Straw added that it is important to let upper administration know what you are doing, why you are doing it,



Photo by Laura Miller, County Extension Agent Tarrant County (Texas). Photo provided by Chrissie Segars, Ph.D.

and that you need to be aware of any changes that might impact your plan. If you already have a plan laid out for how you manage your field, then, if a wrench gets thrown into the plan, upper administration can let you know so you can adjust your plan accordingly.

"There's a reason for everything we do," said Straw. "So you need to be able to clearly justify that."

Segars added that it is important to not only being able to justify your actions by telling your administrators or management, but also by keeping proper records of what you have been doing so that you have something to fall back on.

Said Fouty, "I think it's important to be as good a listener, if not a better listener, when you are talking to people – picking up on what their needs are and how the role of the sports field manager can meet those needs. I think that's really important, and a lot of people haven't honed in on that skill."

Fouty advises taking extra courses, reading books about leadership and communication, and learning how different people communicate.

"And then being an example is one of the most useful things in the organization," said Fouty. "Be a good listener. Be a good leader and be a good follower as well. The sports field manager isn't the top decision-maker in any organization that I know of, so it's good to have both skillsets and really be on board with what needs to be done. They are much more likely to help you later when you need it." **SFM**

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

JOHN MASCARO'S PHOTO QUIZ

CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM: Dead turf in paint lines

TURFGRASS AREA: High school athletic field

LOCATION: Maine

TURFGRASS VARIETY: Bluegrass and ryegrass mix

Answer on page 33

John Mascaro is president of Turf-Tec International





The professional's choice for high end sports field maintenance.





The cylinder cutting system, with substantial front and rear rollers, ensures a superior cut, levelness of finish and longer lasting, more crisply defined stripes.

With its unique cartridge system one machine is capable of performing up to 8 different turf maintenance operations, including scarifying and dethatching.

Want to learn more? Request a demo today.



See the Allett C34 Mower in action!



Available at Horizon



Reel vs. Rotary Which mower is right for your application?

By John Kmitta

When deciding which mower is right for your application, there are many key areas to consider, including maintenance requirements, the cutting environment, type of turfgrass being cut, the level of competition on your athletic fields and more. When examining both reel and rotary mowers, even more considerations factor into the decision.

"Reel versus rotary is very much application dependent, as well as user dependent," said Lee Frie, product manager, Jacobsen. "Each customer is going to have a specific application in mind. And depending on what that application is, there are so many different ways to go."

"Reel mowers are like a pair of scissors, and cut by a helical blade meeting a bedknife," said Boyd R. Montgomery, CSE, CSFM, regional business manager, Toro. "Rotary mowers are like machetes, and cut by high-speed impact."



Photo courtesy of Toro

According to Frie, both types of mowers do the same job, but the aftermath on the grass blade itself is very different.

"With that clean scissor cut [with reel mowers], the tip of the grass blade is clean, it doesn't have tears, it's not as susceptible to disease or other maladies from an agronomic standpoint," said Frie. "If you are talking about finely maintained turf, a reel mower is going to give you a much cleaner cut."

However, areas that don't require rigorous agronomic maintenance are probably better suited with a rotary mower, Frie added.

Maintenance, staff and training

According to Brad Aldridge, product manager for reels and reel mowers, John Deere, selection between a reel mower and a rotary could go either way, but reel mowers require more time and expertise to maintain, because you have to maintain the reel-to-bedknife clearance.

"You're also talking about clearances between the reel and the bedknife of one thousandth to two thousandths of an inch," said Aldridge. "So they have to be maintained with the utmost precision to get that scissor action and the premium quality of cut."

Frie added that maintaining reels requires more specialized equipment, and better-trained staff. "In many cases, depending on the type of reel mower you have, you may have to have a lift to get that reel off of the machine and put it into the grinder," said Frie. "You need a skilled specialized technician to maintain a reel mower, whereas maintaining a rotary mower requires less technical skill to change or sharpen a blade."

"Rotary mowers require fewer adjustments to change the height of cut, and are generally easier to maintain. Rotary mowers should be sharpened often, but they're more straightforward to sharpen than reel mowers," said Montgomery. "Reel mowers, on the other hand, require more technical knowledge and higher maintenance to maintain the desired aftercut appearance."

Aldridge also recommends backlapping to increase the life of the reels and bedknives over time. Backlapping involves spinning the reels backwards and applying a backlapping compound, which gets between the reel and bedknife and sharpens both edges at the same time.

"You want to backlap before it gets to the point that it's dull or before you see cut-quality issues," said Aldridge. "We even recommend backlapping after grinding to eliminate any burrs that may quickly wear away."

According to Frie, maintenance on a reel mower is also impacted by the turfgrass being mowed. Those mowing a



Photo courtesy of John Deere



Photo courtesy of Jacobsen



Photo courtesy of Toro

EQUIPMENT AND TECHNOLOGY FOCUS





Photo courtesy of Toro



Photo courtesy of Jacobsen

Photo courtesy of John Deere

soft cool-session grass, such as fescue or ryegrass, might only grind once or twice per season. In areas with a tough warm-season grass, weekly grinding may be necessary.

"The frequency of your grinding schedule will directly affect the life of the reel and ultimately how often you replace your reel cylinder," Frie added.

Height of cut and cutting environment

According to Aldridge, height of cut also impacts the decision between reel and rotary.

"If you are mowing at a higher height of cut, more than an inch or so, you are going to want a rotary mower," he said. "Reels, because of the speeds they are spinning, tend to fan the higher-mown grasses over a bit more, and it's more difficult for the reel to pull the grass into the bedknife to be cut properly."

Montgomery agrees that reel mowers offer a better quality of cut and ultimately perform better than rotary mowers at lower cutting heights.

"When it comes to finer turf conditions for competitive or professional sports, reel mowers are a great choice," he said.

"Rotary mowers are going to excel in longer grasses that are weedier and will cope with uneven turf better than a reel," said Frie. "Another area where a rotary does well is around bunkers, flower beds and edges, because typically your wheels are set inside the deck, allowing you to mow close to and even overhang the edges of those types of areas, where you might not be able to do that with a reel mower easily."

"Large sports grounds with many multi-use fields that do not require a low cutting height may benefit from a more efficient rotary mower with a larger cutting width," said Montgomery. "On the other hand, areas with undulations could benefit from a contour rotary or a reel mower to minimize scalping. On undulating terrain, multi-deck rotary and reel mowers are better at following the contours of the field."

According to Frie, for those who do opt for a reel mower, the type of reel mower needed is very dependent on the type of turfgrass, the location you are in and your agronomic requirements. For example, in areas with warm-season grasses, a heavier reel is needed so that the reel can address the grass more aggressively.

"If you use a lighter 5-inch reel versus instead of a 7-inch reel, the 5-inch reel unit will be held off the turf by the grass canopy, resulting in an inaccurate height of cut," said Frie. "By going with a larger reel, it actually sets down into that grass canopy and allows you to cut that grass closer. You must know your environment and then fit your reel to it, whether it's the number of blades, width of reel or diameter of reel."

Competition level

"A higher level of competition among sports teams may demand higher-quality turf and lower heights of cut and a more concerted maintenance regimen," Montgomery added. "Reel mowers would be the optimal choice here." According to Frie, many high schools will opt for rotary mowers due to budgetary considerations, maintenance considerations and the fact that they can't mow as often as is needed with a reel mower.

"For less competitive, recreational-level sports fields, it may not be feasible to choose a more precise and lower cutting height from a reel mower," said Montgomery. "However, an investment in a higher-quality rotary mower typically lasts longer than a residential-style rotary mower, so the cost may be offset over time."

Aldridge points out that rotary technology has come a long way in recent years with improved blade tip speeds, deck technology and improved quality of cut. There are now rotary mowers with a rear roller for striping.

"They are mainly for your higher heights of cut, but you can get the same appearance out of a rotary mower that you can from a reel," he said.

"On undulating terrain, multi-deck rotary and reel mowers are better at following the contours of the field."

- Boyd R. Montgomery, CSE, CSFM

Aldridge added that while some field managers might not be prepared for the level of maintenance required with reel mowers, that is where the dealer comes into play, as many dealers are now are offering service contracts.

"Dealers will have their own grinders, and many will come to you with mobile grinding equipment," he said. "There are also other mobile grinding services companies that will come to you."

As a result, more K-12 and parks and rec field managers nowadays are using reel mowers because of the ability to get serviced, he said.

"Everybody sees higher-end athletic fields on TV, and they want their field to look like them," said Aldridge. "The best way to do that is with a reel mower." **SFM**

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

The *SportsField Management* Interview: Darren Criswell

In this edition of the SportsField Management Interview, we meet Darren Criswell, project manager – turfgrass at The University of Arizona.

SportsField Management (SFM):

Please tell us about the fields/facilities you manage, and your staff/crew.

Criswell: My team and I oversee roughly 60 acres of turfgrass throughout the campus, rec fields and athletic fields. The crew is made up of myself, my assistant, Chico Guzman, and eight full-time employees, in addition to student workers.

We maintain our campus lawns daily, and I have assigned personnel to oversee the athletic fields on a dayto-day basis.

Our campus lawns have a lot of high-priority characteristics to them, due to the nature of our campus and the expectations of keeping it looking great year round for our students, potential students and the local community.

Our athletic fields consist of the usual and then the unique nature to them. We have our soccer, track and intramural facility located off campus about a mile away from the university. Then our baseball stadium and practice baseball field are a little less than three miles away from the university.

On campus, we have our football stadium, indoor practice facility, and intramural practice field, which are all synthetic. In addition, we have our practice football fields, softball field, beach volleyball courts, another practice field and an on-campus intramural facility.

SFM: What attracted you to the sports field management industry, and what was your path into the industry?

Criswell: I've always enjoyed sports as a kid, so when I was a senior in high school I got a part-time job at Peoria Sports Complex as a groundskeeper. It was there that I first learned I could make this part-time job into a profession. I moved around to another Spring Training



Darren Criswell

facility and was encouraged to further my education at the University of Arizona. I interned/studied at the University of Arizona, gaining my B.S. in Agriculture

If it weren't for some great mentors/bosses in my youth and at all my places of employment, I wouldn't be the turf manager I am today. Having that exposure to teams that have a passion and knowledge really opened up my eyes to learning and wanting to do more. Having a foundation of great mentors is a huge bonus for me, I know I can just pick up the phone and give them the call no matter what. It's truly great to see old boss-

es turn into lifelong friends, and for that I'll always be grateful for becoming a turf manager.

SFM: Who are your mentors, and what is the best advice you received during your career?

Criswell: Matt Anderson, John Knight and Chico Guzman. They have helped shape who I am today. I've received a lot of good advice from these turf managers. Knight pushed me to further my education, telling me it is a vital piece to moving up in the industry. Anderson taught me what being a turf manager is, in relation to professionalism, standards and understanding everything in between. Guzman was a foundation for work ethic and team building.

SFM: What would you say are the biggest accomplishments of your career and/or what are you most proud to have achieved?

Criswell: On a personal note, growing through the turf industry is something I take a lot of pride in. From being the part-time groundskeeper to now running a university turf team, it is always nice for reflection.

There is no individual award/accolade that makes me feel any prouder than the recognition my crew can get. I've been very lucky to work with great people everywhere



PROFILE







I have been — this past year we got an award for field of excellence, and that's always nice to be recognized for. I personally would love to win a Field of the Year from STMA in the coming years, though!

SFM: What are the biggest challenges you have faced in your career, and what advice do you have for other sports field managers when it comes to facing similar challenges?

Criswell: Events, administration and building a team.

The first thing that comes to mind is putting out fires. Not literally, but within the turf industry we work around events. Doing this means we need to have a lot of flexibility, because so many other parties have their own agenda. I build a strong customer service base relationship with all our other operational departments, because I know their jobs are just as important as ours. If I can form a personable relationship, which then allows me

I build a strong customer service base relationship with all our other operational departments, because I know their jobs are just as important as ours.

to enlighten them on what our needs are, it makes for a much smoother sail.

Administration. Educating them and having an open-door relationship is key. They are the backbone to allowing us to get equipment, materials and all other needs to get the job done. The better relationship I've had in the past has made the job easier. I'm not saying there are never challenges, but making sure they are aware of them helps out tremendously.

Building a team. Having one goal in mind is what keeps a team united. The other aspects to managing are





based off what I do as a leader because attitude is a reflection of leadership. Key in on an individual's strengths and weaknesses, use these to help build your staff. Keep a positive attitude, but, overall, let your staff know you are human. A sense of humility goes far with guys that work so closely with you.

SFM: What are your passions and interests outside of work?

Criswell: I don't have any certain one passion or interest. What I've taken from life is I like to have fun. So if it is something we can have fun doing, I'm more than happy to do it. Anything from playing video games with my friends to my girlfriend and I taking a spontaneous trip to Vegas, trying different drinks at restaurants — enjoying the time I have on this Earth, basically!

SFM: How has your career benefited from being a member of STMA?

Criswell: It has benefitted in two ways — the networking capabilities and the educational aspects. I've loved

the networking aspect to it. I've created a lot of relationships with other sports turf managers. So networking has been huge, and then the educational aspects are great. Refreshing the brain on topics I haven't seen in a while, or learning new methods, has become something I've really relied on.

SFM: How do you think the profession and industry will change in the next 10 years, and/or what would you most like to see in terms of industry advancement in the future?

Criswell: For the profession, I think it can only go up. We have become essential in this time, and I believe COVID helped highlight that. So I would like to see advancement within organizations, utilizing us and our knowledge to help bring a better product to the organization. I want the grounds departments to have a valued opinion. I think at least sitting at the table can help open eyes to new ideas, and being able to elaborate on new technologies or methods will help administrations all around understand we can be utilized in more ways than one. **SFM**





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

Give Your Soil Some Fresh Air

[Editor's Note: The following materials were provided by Ryan Turf.]

Many sports fields and parks have not seen the same amount of usage this year because of health concerns. This situation, which can bring many challenges, also gives turf managers a unique opportunity to do more involved projects to promote the health and conditions of their turf. One of those maintenance practices is aeration.

Depending on the area of the country, generally the most popular time for aeration is the fall, although many field managers also aerate in the spring. With many fields vacant right now and with the definitive long-term benefits of aeration, this might be the perfect time to do it.

Ron Scheffler, senior product manager for Ryan, has some tips on how to make the most of the aeration process:

CHECK THE SOIL

Aeration loosens compacted soil so that water, air and nutrients can get down to the roots. One way you can determine if your soil is compacted is to throw a screwdriver down into the ground from about waist-high, tip down. If the screwdriver sticks, the aeration process will take less effort. If the screwdriver bounces away, the soil is severely compacted and will need aggressive aeration.

MARK ALL OBSTACLES

The type of tines and the depth of aeration depend on what you are trying to accomplish with your



aeration. Regardless of your tine choice and depth, make sure to mark your irrigation heads, power, and any other lines running just beneath the surface so that you don't cause any damage.

FIND THE RIGHT EQUIPMENT

Aerators come in a vast array of options, from tow-behind to walkbehind to stand-on models. For smaller properties, a walk-behind aerator will likely give you the best results and easiest maneuvering. For large properties such as sports fields, tow-behind aerators are the most efficient. However, consider giving a stand-on aerator a try. They take less of a toll on your body, maneuver easily, provide precise and easily adjustable aeration while also covering more ground than a walk-behind — and also don't require a tractor like a towbehind aerator.

AERATE BEFORE YOU FERTILIZE

The order of your maintenance practices is also important for peak effectiveness. If you're planning to aerate and put down fertilizer/ herbicide, make sure to aerate first. Aerating after an herbicide application can reduce the chemical barrier formed by the herbicide, giving weeds the opportunity to germinate. Applying fertilizer after aeration helps the turfgrass compete against weeds. Water after aeration, too, particularly in areas where drought and high temperatures are common. Finally, if you are planning any overseeding or inter-seeding, following aeration is a great time to put seed down as it will get better soil to seed contact.

RAKE AWAY THE CORES

Criticism of aeration often comes as a response to the presence of the "cores" of turf that the aeration tines pull out of the ground. In sports



fields or on golf courses, those cores can sometimes impede play. Use a power rake to break up the cores to improve the look of your field right after aeration.

We all have to adapt our processes these days. If your sports field or park isn't seeing much foot traffic latelu, it might be a perfect time to aerate and get ready for a beautiful fall. SFM

Get ahead of the game in the cold months with FieldSaver® Winter Turf Blankets/Growth Covers.



November: Season ended with less than 10% of turf cover.

December: After seeding and fertilizing, active turf growth even with temperatures below freezing.

- Protect turf from harsh winter conditions!
- Promote faster spring growth and green-up!
- 8 Year Limited Warranty
- Heavy 100% woven polypro fabric
- Reinforced hems and grommets all edges
- Stakes stay in place & won't rip fabric

For price quotes, sizes, fabric specs and samples, visit www.CoverSports.com sales@coversports.com • 800-445-6680

We make covers for all athletic surfaces: SportsTur Rain Covers, Sideline Tarps, Track Protectors



Spring: Covers have been removed. (Uncovered turf still dormant)







Fall Prep for Spring Success

[Editor's Note: The following was provided by Toro, and was written by Boyd R. Montgomery, CSE, CSFM, regional business manager, Toro, and Matt Anderson, CSE, CSFM, district sales manager, Toro.]

When it comes to taking care of fields, there are some situations that sports fields and grounds managers just can't control, such as weather conditions. However, there are several things field managers can control, such as preparing for those harsh weather conditions that come with winter. and setting their fields up for success for the upcoming spring. Since the fall season signals for a change, field managers can use this time as a buffer to implement proper fall maintenance practices and utilize the right equipment, ensuring that the grass on the fields will have a healthier life in the spring.

When it comes to field management techniques during the fall, standard practices such as fertilization, overseeding, debris management and streamlining irrigation practices are key to the fields' overall health and vitality before going dormant in the winter.

FERTILIZE

Fertilizing in the fall helps restock the field's reservoirs of vital nutrients needed to survive the cold winter, which will help jumpstart the field's health during the upcoming spring. When it comes to effective fertilization, there is a right way of doing things. Field managers should utilize fast-release fertilizers so their field can quickly take



up the nutrients it needs before going dormant in winter. Although the grass needs to actively grow so it will take up the nutrients, the grass can't be growing excessively to the point that field managers will not be able to stay on top of it during the colder months. Field managers can reach out to their local county extension office in advance for expertise and assistance in the process.

OVERSEED

When the temperatures start to cool off, and the grass looks like it could use a boost, overseeding can lend a big hand in helping revive plant growth in areas that need it. Field managers can get the most out of their overseeding program by not just spreading the seeds, but by also prepping and caring for the field before overseeding. Field prep for overseeding relies on the combination of the following field care processes: • Mow the grass — Cut slightly shorter than usual to give the seed enough sunlight. For this cut, it is best to bag clippings. This ensures the seeds have a clearer path to reach the soil. Stay as consistent as possible on the mowing heights and frequencies throughout the fall until the grass begins to go dormant. While the turfgrass will be slowing down as soil temperatures get closer to dormancy, field managers do not want to risk causing injury to their field by letting the grass get out of hand and then stunting it by cutting more than 1/3 of the grass.

When it comes to cutting the grass, investing in a quality mower is essential to the field's longevity. Although several types of mowers are viable options for field maintenance in the fall, opting for an out-front rotary mower that does quick work while delivering an exceptional quality of cut would be highly beneficial. If the rotary mower has an allwheel-drive system, then field managers can rest assured knowing that they can power through various terrain with increased traction. Field managers can also add year-round versatility by opting for a mower that has an all-season cab option for colder temperatures.

• Remove thatch buildup — For the same reasons as bagging the clippings, it's also a good idea to rake up thatch to make it easier for the seed to reach the soil. Dethatching can be done manually or by using a power rake.

• Aerate the soil — Aerating the field before overseeding is an essential step. One of the most important things field managers can do to manage compaction and maintain their fields' health and playability is aerating in the fall on cool-season grass. Doing so loosens the soil, giving the seeds the best chance to take root in the soil.

Seed-to-soil contact is the most important factor in seeding success. Although several styles of aerification units are available, a tractor-mounted aerator is a highly efficient choice for aerating large areas. These units would have a larger aeration swath, which delivers maximum productivity.

• Address soil nutrition — Fall is a good time to have the soil tested for any nutrient deficiencies that may need to be addressed to get the most out of overseeding the turfgrass. Field managers can reach out to their local county extension office in advance for expertise and assistance in the process.

DEBRIS MANAGEMENT

Nothing says fall like a big pile of leaves. Although appealing to look at, these colorful leaves make quite the mess. This is why implementing debris man-

Autumnal Approach

For additional insight into fall prep for spring success, *SportsField Management* asked sports field managers about their approach to autumn.

Before we put our cool-season turfgrass to bed, we will raise the mowing height and only mow as needed in the months of October and November when temperatures cool down. We will aerate all of our sports fields in October with one nitrogen application and one potassium application to build up the carbohydrates for quick green green-up in early spring. Before we put our warm-season turfgrass to bed, we apply three to five applications of potassium in late summer, and will stop applying nitrogen in mid September. We will overseed perennial ryegrass heavy in the months of October and November, which gives us a thick stand of ryegrass in early spring when the bermudagrass is dormant. We raised our mowing height from .75" to 2" to avoid cutting the bermudagrass if any scrimmage or varsity games need to play on the field in the spring. — Kevin Mercer CSFM, CGM, grounds and landscape manager

at Denison University, Granville, Ohio.

Salesianum School in Wilmington Delaware is a private school for young men in grades 9-12 with a successful athletic program. We manage 7.5 acres of improved turf-type tall fescue/Kentucky bluegrass/poa annua on silt loam soil. There are two multi-purpose fields that are used primarily as practice fields for football and soccer in the fall and baseball and lacrosse in the spring. The fields are also used during the school day for physical education and there are sports camps in the summer. With two portable water reels, we do our best to irrigate, but traffic and field use schedules sometimes present challenges. Fortunately, we have an adequate budget that allows us to provide good cultural practices year round. We mow often - up to three times/week if needed. Fertilization based on soil test results occurs in late August, late September and mid November. We control weeds in mid to late August if needed or if weather permits. In late August, we core aerate and overseed the entire area. Throughout September and October we spot aerate and seed the thin/wear areas. Fall sports preseason usually begins in mid August so by mid October, the fields are showing wear and tear. This is the result of many athletes and not enough space to spread out. Many areas are worn down to bare soil. At this point, we are forced to wait until the season is over to repair, renovate and re-grass. Depending how successful the teams are in the postseason, we sometimes find ourselves re-sodding in December. Last December, we seeded and used turf blankets to cover the middle of the football field. I was impressed and very pleased with the results in the spring. Most normal spring pre-seasons begin the first of March, so it is important to repair the practice football fields and soccer pitches, because in the spring they become lacrosse pitches and baseball fields. Both of our multi-purpose fields have baseball diamonds, so it is critical to give each sport the safest, most playable conditions we can so that they can begin their season. - Don Savard, CSFM, CGM, athletic facilties and

grounds manager, Salesianum School

We do a very proactive aeration program to all our fields starting the second week in August. We concentrate on all our irrigated sites first, then move off to the non-irrigated areas. Using the information from our soil tests, we then we will do our late summer fertilization. A heavy overseeding/slice seeding to all the worn areas from the past spring and summer sports (no worn areas this year due to COVID issues). We slice seed all our dedicated sports fields. We will do another fertilization application first week in October. We broadcast seed and slice seed in middle of November on our football fields and soccer goalmouth hoping to cleat in seed for the early spring start to baseball. We will do our cutouts, grading and filling in of all the baseball/softball fields in October/November before the frost to get them ready for spring sports. — *Chris McGinty, superintendent of parks maintenance and cemeteries, City of Framingham, Mass.*

INDUSTRY INSIGHTS

agement into the fall maintenance routine is critical for sports field managers. There are several useful equipment options field managers can consider including in their fleet, such as:

• Debris blower – Investing in a versatile debris blower that makes it easy to clear debris, including grass clippings and leaves, is essential to utilize for fields.

• Sweeper/vacuum – If there are large areas with a lot of leaves and debris to clean up, a sweeper/vacuum is also another timesaving investment. A sweeper machine combines a powerful vacuum with precision pickup capabilities and an impressive capacity to get the job done.

STREAMLINE IRRIGATION PRACTICES

The fall season is an excellent opportunity to audit irrigation systems to ensure the systems are up to par in every way. After the irrigation system has been audited, the system should be winterized. Irrigation winterization procedures include ensuring that there is no damage to the electrical components, draining all of the water from the system, and removing water from anything connected to the source. Being proactive in the fall during the winterization process not only helps protect the integrity of the irrigation system once it is started up again, but also helps the team manage their workload more effectively, as many teams start to experience an increased workload and a sense of urgency to get the irrigation system up and running at the first sign of a warm-up.

CONSIDERATIONS FOR FALL FIELD MAINTENANCE THIS YEAR

Field usage varies wildly this year over "normal" years, and fall sports are



not a certainty in many areas. If field managers don't have fall field activities, they can optimize timing and possibly be more aggressive in fall prep than they would in a typical year.

Imagine the last day of work this fall is opening day. The condition in which field managers put their fields to bed in fall is what they will be starting with in the spring. Therefore, field managers can use this time for aerification of their fields now to relieve compaction later. Additionally, mounds should be sloped and checked, infields edged, divots filled and seeded, and anything field managers can work ahead on now, they should. If field managers have the ability to tarp their fields or mounds, they should do so as well. However, it's essential to remember that they need to manage the environment created under tarps as well.

It's also essential to understand that stakeholders may not fully grasp the impact of the changes in the activities on the fields and the lack of staff. It's up to the field managers to effectively communicate with stakeholders all of the possibilities and jointly agree on priorities and responsibilities.

MAINTENANCE AND STORAGE

At the end of the fall season, specific maintenance and storage practices are beneficial to implement to ensure that field managers will have their equipment fleets ready to roll and set for success next spring. Some practices to implement include changing fluids, replacing worn hydraulic hoses, replacing mowing blades, checking/cleaning air filters, grinding/sharpening or replacing reels, cleaning and rebuilding painter pumps.

When it comes to storage, if the equipment is not stored in a controlled environment and will be exposed to colder temperatures, then it's crucial to make sure to use a fuel stabilizer to ensure clean and reliable engine performance and protection.

By implementing these fall maintenance practices, field managers can ensure that their fields and equipment are in tip-top shape in the spring, which will help mitigate many unnecessary spring equipment and field downtime. **SFM**

JOHN MASCARO'S PHOTO QUIZ

ANSWER

From page 17

The dead turf in these paint lines is obviously caused by a maintenance problem. This photo dates back to several years ago at a high school football field. The employee in charge of painting used to clean out the low-pressure paint machine with P.H.D. Ultra-Friendly Cleaner that will not harm turf. Since it is safe for turfgrass, the employee, who was not able to read English very well, used to leave about a half-gallon of the soap-based cleaner in the tank. This would keep any leftover paint from hardening up. When he would paint again, he would just add additional paint to the painter with solution still in the tank and paint. On this particular day, and since he could not read English, instead of adding the cleaner to the tank, he accidentally added Glyphosate instead. When he painted the athletic field for the second game of the season, a couple days after the game the turf in the lines and numbers looked like this. The turf took a year to recover but eventually grew back and filled in the areas.

Photo submitted by Matt Tobin from Pioneer Athletics.

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 email 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.



SportsField Management Buying Intention Survey

To get a feel for types of equipment, products and supplies sports field managers intend to purchase in the coming year, as well as the projects they have planned, *Sports-Field Management* recently conducted a Buying Intention Survey. We hope the results will provide you with some insight into what your fellow sports field managers are using, and, as a result, a look at industry trends overall.

Before you dive into the facts and figures below, just a few quick observations.

96% of respondents have the authority to buy, specify or approve the purchase of equipment and supplies.

39% are already using (or plan to purchase) battery-powered equipment, which highlights the growth of the battery-powered market and its trend toward commercial-quality performance and runtime.

Irrigation is in high demand, with **76%** of respondents indicating that they plan to purchase irrigation systems/components, and almost a third (**30%**) of all respondents indicating that they plan to install a new irrigation system in the next year.

In terms of building/renovation projects, **63%** plan to renovate an existing field in the coming year and **13%** have new field construction on tap.



Do you recommend, specify or approve the purchase of equipment and supplies? Yes 96% No 4%

What equipment do you plan to purchase in the next 12 months? (Check all that apply)

Aerators 17% Blowers 31% Dethatchers/verticutters 7% Edgers 28% Field groomers 20% Line markers/stripers 22% Mowers (riding) 43% Mowers (walk-behind) 16% Seeders 8% Sod cutters 10% Sprayers 30% Spreaders 24% String trimmers 42% Synthetic turf sweepers 12% Topdressers 19% Tractors 20% Vacuums 10% UTVs 19%

Do you currently own, or plan to purchase in the next year, any battery-powered equipment? Yes 39% No 61%

What other products/supplies do you plan to purchase in the next year? (Check all that apply) Drag mats 37%

Fertilizer 94% Field paint/marking materials/ stencils 80% Herbicides/pesticides 80% Infield mix 69% Irrigation systems/components 76% Seed 83% Soil amendments 63% Turf covers/blankets 16%

What building and/or renovation projects do you plan to conduct in the next year? (Check all that apply)

Install a new irrigation system 30% Install a new drainage system 20% Install new turf (natural) 33% Install new turf (synthetic) 11% Renovate an existing field 63% Build a new field 13% **SFM**

FACTS AND FIGURES











Equipment Trends 2020



Photo courtesy of Hustler

For insight into outdoor power equipment trends, Landscape Business, sister production to SportsField Management, recently reached out to representatives from equipment manufacturers throughout the outdoor power equipment industry to discuss market trends. The following is an excerpt from that effort, and responses are presented in the order in which they were received.

Q: What trends are you seeing with regard to outdoor power equipment for professional landscape applications?

Trends continue to focus on productivity, ease of use and reduced service. And, as landscapers are now navigating the COVID-19 challenges with no more than two – and often only one man – per truck, equipment that offers high productivity for getting through jobs faster with less fatigue is more important than ever. Self-propelled reciprocating aerators with hydro drive and variable hole density for single pass aerations, and overseeders that can verticut and overseed in a single pass are examples of turf renovation units that offer more productivity. Equipment offering longer service intervals for oil changes saves downtime.

– Pierre Pereira, director of sales, N.A. at Billy Goat

We have seen many of our professional lawn and landscape teams paying more attention to their efficiency and effectiveness. Each owner wants to know how products make their daily operations easier and more cost effective. Some have even calculated out how a new machine saves them money and, therefore, how quickly it will pay for itself. Operators and owners are also diversifying their services. Groups that focus on one service, such as mowing, are exploring landscaping, stump removal, snow removal, or installation of hardscapes and landscapes. It has been great to watch the lawn and landscape industry grow and adapt to new needs in the market.

> – Sam Williamson, regional sales manager for Steiner, a Doosan Bobcat brand.

There is a trend around value, with a focus on "What am I getting for my money?" – in terms of the mower itself
and what it can do. Landscape contractors want a durable piece of equipment that is simple to operate. Comfort is also a key motivating factor – especially when it comes to owner/operators. We hear a lot about ergonomics, so we are designing seats that eliminate the chances of ending the day with bumps and bruises.

We are also seeing a desire for an extension of the maintenance intervals. With seasonal work, it's important to keep contractors out there making money instead of facing downtime with their mowers in the shop.

– Brad Unruh, director of new product development, Hustler Turf Equipment

Improved performance and efficiency continue to be on the minds of the lawn care professionals. With a contin-



Photo courtesy of John Deere



Photo courtesy of Bobcat

ued need for labor, commercial landscapers rely on equipment that provides quick and easy service, so as to get back to the jobs at hand. Fast, DIY maintenance and cleaning access allow for more jobs done today, and less time getting ready for tomorrow. Landscaping software is also growing interest and helping contractors with improved planning for the long days ahead. With efficiency being a priority, stand-on mowers are also continuing to gain acceptance.

Battery-powered equipment is gaining a lot of attention and interest in the market, especially with all the discussions on a greener environment happening in the news.

> – Ron Scheffler, senior product manager, BOB-CAT and Ryan

There's been an increased focus on battery-powered solutions, though it's been a slower transition for professionals than it has been with consumers. Many professional landscapers are starting to recognize the benefits of bat-

tery-powered equipment, so they've started to use them as supplemental tools to their gas units. For example, when a crew is working early in the morning in a residential area or doesn't want to bother people in a commercial setting, they'll turn to battery-powered equipment due to the reduction in noise. Crews will also turn to battery-powered equipment when they're working in municipalities and hospitals that do not allow the operation of gas-powered equipment.

Indeed, while the professional market is slower to adopt, those who are using battery-powered equipment are seeing the benefits right away: no gas, ease of use, less noise, less vibration, lighter weight, less maintenance, and lower operating costs.

> – Tony Buxton, senior product manager for Milwaukee Tool

We're seeing a trend of professional landscape contractors looking for multi-application-capable equipment. In addition, we're seeing more contractors take advantage of small sit-in compact track loaders instead of stand-on and walk-behinds. Stand-on and walk-behind loaders offer the same compact benefits of track loaders in terms of transportability and the ability to operate in tight spaces, but, at the end of the day, they can't compete in terms of speed and low ground disturbance, as well as operator safety and comfort.

– Buck Storlie, ASV product line manager

The labor shortage continues to be a top concern for our customers. As a result, manufacturers have developed equipment solutions that help enhance operator productivity. Fuel is another hot trend, driven by customers either looking for ways to decrease fuel costs or exploring alternative fuels such as diesel. To meet this trend, we've focused on expanding our equipment lineup to offer more solutions for customers. – Nick Minas, product

manager, John Deere Commercial Mowing



Photo courtesy of Honda

There is definitely a trend toward stand-on mowers, as more lawn care professionals take advantage of their small footprint, maneuverability and ease of operation. Long-term, we see a slower but consistent move toward battery-powered outdoor power equipment and autonomous functionality that will help lessen the impact of labor shortages. – Josh Sooy, business seg-

ment director, professional products, Cub Cadet

Battery-powered equipment continues to be an area of growth throughout the country, primarily out west, where stronger regulations have pushed many landscape contractors to add more "green"/ battery-powered equipment. Mowers and handheld tools, like trimmers and blowers, effectively reduce/eliminate emissions and help to take advantage of the noise-mitigation that battery-powered equipment offers.

Larger, more productive, and more versatile machines continue to be an area of growth, where larger deck sizes can really step up productivity. In general, higher-horsepower engines continue to be a strong trend across multiple different product categories.

- Mitch Hoffman, marketing manager at Toro

While vacuum excavation is not a new technology in the landscape industry, lawn and landscape contractors are increasingly using vacuum excavators for a variety of jobs. The versatile machines are being used for irrigation installation, garden and flowerbed clean-out and tree care. Vacuum excavators can be less environmentally invasive than other machines, and can be used to remove ground cover without harming vegetation. Landscapers also are turning to soft excavation, which is using pressurized water to excavate the soil while using the vacuum to remove slurry. This practice is commonly used for excavating irritation trenches or around established trees with a shallow root network. Due to their versatility, low maintenance and minimal environmental impact, vacuum excavators are an asset to any lawn and landscape fleet.

– Chapman Hancock, Ditch Witch vacuum excavation product manager Customers remain on the lookout for ways to make their businesses and operations more environmentally friendly. This means that fuel-efficient and zero-emissions products are proving to be attractive, along with batterypowered products.

Noise abatement, both for operators and consumers, is an increasingly important aspect of environmental sustainability. Quieter operation of power equipment helps reduce operator fatigue and increase productivity of crews. And as people in the community are asking for less noise from landscaping activities, quiet operation reduces sound pollution.

Outdoor power product owners remain focused both on how to get the most value from their equipment and how to most effectively complete outdoor landscaping maintenance and projects.

Despite the business challenges presented by the continuing COVID-19 pandemic, outdoor power equipment manufacturers still operate around several constants — chiefly, knowing and understanding that the industry is a very seasonal one, and sales are driven largely by weather patterns and weather events.

- Gary Childress, senior manager, Honda Power Equipment

Commercial users continue to place a premium on dependable tools that allow them to get their work done quickly and with as little fatigue as possible. In particular, the popularity of lightweight products with high power output continues to increase.

- John Powers, director of product marketing, Echo, Inc.

With the combination of labor shortages and rising labor costs, Exmark is seeing landscape contractors looking for ways to become more productive and efficient. Customer feedback from users of our 96-inch Lazer Z models has been overwhelmingly positive. Landscape contractors, parks and rec departments, municipalities and savvy homeowners understand that up-front cost is quickly offset by the machines' increased productivity and reduced labor, fuel, service and maintenance expenses.

We're also seeing increased interest in turf care products. Due to the specialization required, turf care is a more difficult category to enter than maintenance, so profit margins are typically better. Expanding



Photo courtesy of Kioti



Photo courtesy of Toro

into turf care can help contractors overcome low revenue from poor weather and/or economic conditions. As a result, we're seeing a growing number of our core customers dive into the turf care and/or application side of the business.

- Lenny Mangnall, Exmark product manager

We're definitely seeing the need from professional lawn and landscape professionals to pack more performance and productivity into the same sized equipment they use today. We've responded to this trend in multiple ways. The new L23 and L28 small articulated loaders deliver an impressive combination of heavy lifting capability and an agile, turf-friendly package, thanks to its nimble design and smooth articulation.

> – Jason Boerger, marketing manager excavators, Bobcat Company

The biggest industry trend is still the demand for battery-powered products among the professional and consumer markets. Manu municipalities and residential areas are starting to require low to no exhaust emissions and lower noise levels so the market is adapting to meet those needs. We are prepared to support landscapers with this transition over the next few years with a wide-range of powerful professional battery equipment.

The landscaping business is becoming increasingly more sophisticated with high-tech tools like robotic lawn mowers and apps to manage business operations and fleet management from a mobile device. We are seeing more smart technology used in the landscape industry.

– Nick Jiannas, vice president of sales and marketing, Stihl Inc.

We have seen, and will continue to see, the evolution of rechargeable and battery-powered solutions for both handheld – specifically string trimmers, blowers and trimmers – and ride-on equipment. Following the progression of the automotive industry, the adoption of these technologies will continue to spread into consumer and professional outdoor power equipment.

Tweels, an airless tire option, have increased in popularity over the years. The benefit to these tires is that they never go flat, saving on maintenance time and budget, and allowing heavy equipment to carry more weight and engage with more rugged terrain.

– Steve Cathey, Kioti Tractor territory manager - Kansas, Oklahoma, and Eastern Texas

SFM



Bobcat Company launches new zero-turn mowers

Bobcat Company has built its reputation on performance, versatility and toughness. Now, it's bringing the same legacy to the turf market with the all-new lineup of Bobcat zero-turn mowers.

With an extensive 21-machine lineup that includes both zero-turn (ZT) sit-on and zero-turn stand-on mowers (ZS), Bobcat mowers are built to give both commercial and residential customers a professional edge to help them work harder. The addition of mowers allows Bobcat to expand upon its established presence in the landscape industry and capture additional opportunities in the turf and lawncare markets. The new zero-turn mowers join compact track loaders, compact excavators, skid-steer loaders, compact tractors, utility products, small articulated loaders and mini track loaders in the bundle of Bobcat products focused on helping customers accomplish more in landscaping, grounds maintenance and turf applications.

"We have an opportunity to bring high-performance, high-quality equipment that Bobcat is known for to the world of turf with zero-turn mowers," said Ron Scheffler, senior product manager, Bobcat Company. "Our customers in commercial landscaping already know Bobcat equipment, now they can round out their fleet with Bobcat zero-turn mowers. And because we know that residential turf customers are just as enthusiastic, introducing mowers is an opportunity to welcome a new audience."

Bobcat zero-turn mowers will be manufactured in Johnson Creek, Wis. They will be distributed through select Bobcat dealerships in the U.S. and parts of Canada.

ZERO-TURN MOWER MODELS

Bobcat offers an extensive lineup of zero-turn mowers to best meet residential and commercial customer needs. Models vary in engine, horsepower, deck width, and fuel capacity. To determine which models offer the best performance for the



application, refer to each machine's corresponding model number: ZT2000, ZT3000, ZT3500, ZS4000, ZT6000, ZT6100 and ZT7000.

KEY FEATURES AND BENEFITS

The new zero-turn mowers are packed with elements that help give customers a professional edge, with solid engineering to last longer and work harder.

Quality of cut

From its tough and expertly designed mower decks to its even clipping dispersal and remarkable deck cleanliness, the new zero-turn mowers are engineered with the final results in mind.

Optimum mowing with the bullnose AirFX cutting system

Available on the new ZS4000 through ZT7000 zero-turn mowers is the AirFX cutting system, designed to help customers deliver a cut above the rest. Its deep profile and bullnose design lift the grass to the blade, creating a powerful vacuum for a razor-sharp, uniform cut and pristine finish.

High-performance engine

Whether customers are working in residential or commercial applications, the engine provides major strength for professional mowing operations. The new Bobcat zeroturn mowers come with a powerful, high-performance Kawasaki or Briggs & Stratton Vanguard engine.

Heavy-duty Hydro-Gear transmission

With the heavy-duty Hydro-Gear transmission, customers can take on the most challenging turf conditions. The pump and motor are housed together in a single sealed housing for better durability and reduced maintenance.

High-capacity fuel tanks

Fewer refills on the job means more productive mowing for customers. The residential zero-turn models – ZT2000 and ZT3000 – have a rugged, roto-molded and impactresistant fuel tank, which holds up to 3.8 gallons. Customers will also appreciate rugged, roto-molded dual fuel tanks on the commercial models (ZT3500 through ZT7000), which hold up to 15 gallons.

Ergonomic, comfortable design

New zero-turn mowers are equipped with an ergonomic design and placement of controls, pedals and gauges to ensure operation is easy and intuitive. On the right-hand side, customers can find the "comfort command center," as well as a high-back suspension seat, almond-shaped handles, anti-vibration footplate and smooth, responsive controls that provide intuitive operation.

A swing-away bumper also gives operators fast access to internal components, so tune-ups are more efficient. There's also an additional hitch system.

Warranty options

Bobcat machines are known for their durability, but warranty options provide even more protection. The new zero-turn mowers come with industry-leading 36-month warranty that covers everything – bumper to bumper – for up to 2,000 hours. With the Bobcat Protection Plus extended warranty, customers can get extended warranty options up to 60 months or up to 2,500 hours.

Parts and accessories

Bobcat zero-turn mowers can be equipped with high-quality parts and accessories that fit the job:

- Mulching baffle kit *
- ECO plate
- Grass catcher: Poly-dump, 3.75 or 5.0 bushel*
- Weight kit*
- BOSS-Vac Pro 12-bushel collection system*
- BOSS- Vac 8-bushel collection system*
- Deck striping kit*
- ZT hitch kit*
- No-flat caster wheel options*
- Magnetic light kit, 12V
- Light kit, footplate*
- ROPS Kit
- Canopy kit

* Parts and accessories available on select models.



New products from Exmark and Z Turf Equipment for 2021

At GIE+EXPO 2020, Exmark was gearing up to celebrate the 25th anniversary of its Lazer Z commercial zero-turn riding mower. Over the last 25 years, the Exmark Lazer Z may have changed in looks, but has maintained the same standard of excellence with its notable cut quality, productivity, durability and up-time performance. What started as one series in 1995 has grown to include four series, and numerous models for 2021, each available in a range of cut widths, fuel options and configurations. Exmark offers both gasoline- and diesel-powered Lazer Z models, with decks capable of cutting up to 96-inches per pass.

Since one size doesn't fit all when it comes to professional zero-turn mowers, Exmark continues to innovate based on customer feedback. Some of these innovations for 2021 include the updated 96-inch Lazer Z Diesel and the exclusive Exmark Tractus airless drive tires.

On the turf care side, the Z Turf Equipment lineup expands considerably for 2021, with new stand-on aerator and slicer seeder models.

The mid-size Z-Aerate 30 (30inch aeration width) and compact Z-Aerate 24 (24-inch aeration width) models join the Z Turf Equipment line for 2021. Both new Z-Aerate models feature an innovative free-floating center tine design that enables aeration around trees and flowerbeds. Up to 1,200 pounds of adjustable down pressure enables the machines to pull plugs up to five inches deep. Intuitive controls are similar to a zero-turn mower, making the Z-Aerate machines easy to operate. The dual-drive design powers both wheels for zero-turn maneuverability and unmatched traction on any turf. An available seeder attachment empowers one operator to simultaneously aerate and overseed properties for maximum productivity and profitability.

The Z-Seed slicer seeder is a durable, easy-to-use machine that performs three jobs with every pass – verticutting, dethatching and overseeding. Hydrostatic drive and powered reverse make the machine incredibly easy to operate. The large-diameter mixer regulates seed flow based on ground speed for efficient, consistent seed delivery at any speed. Durable high-carbon steel blades effectively dethatch existing turf, delivering maximum seed-to-soil contact for superior seed germination. A 40-pound hopper handles large jobs with fewer refills.

Watch the Exmark and Z Turf Equipment social media channels for more information and a sneak peek at what's new for 2021.





Graze introduces fully autonomous electric commercial mower

Graze introduced its new lawn mower model, set to hit markets by 2021. The evolution of the first Graze fully autonomous, electric lawn mower expands the design to increase efficiency and maintenance speed, enhances cutting blades to perfect trim precision, adds new sensor capabilities to increase safety, improves GPS-based mapping and computer vision, while optimizing intelligent and applicable insights through advanced machine learning capabilities.

Graze introduced an initial prototype model – applying artificial intelligence and robotics to create a fully autonomous commercial lawn mower. The early design proved to attract investor interest from major operators and also individual investors on crowdfunding platform SeedInvest (investment round still open). The new model will expand the design with new optimized features and incorporate in-the-field feedback from industry leaders to bring a sustainable solution to the commercial market.

"We are living in new era of artificial intelligence that stands to transform age-old industries," said John Vlay, CEO for Graze Mowing. "Robotics and automation open up a world of efficiency, and when you apply intelligence, traditional models can be completely re-imagined. I've been in commercial landscaping for more than 35 years, and can confidently say we built a lawn mower that will bring a new level of quality and safety to the market, and we are doing it sustainably. We are excited to unveil the future of commercial lawn mowing with our new Graze commercial mower."

The new model comes equipped with longer battery life. Graze built its new model to consistently learn and apply data via an intuitive user experience, improving lawn care and creating new optimization opportunities for fleet operators. Machine learning, coupled with computer vision and a robust system of sensors allows the new Graze commercial lawn mower to map job sites, plan and execute mowing paths, avoid obstacles and dangerous inclines (i.e. trees, terrain, people etc.), while continuously collecting and apply data to further improve aesthetic quality and efficiency. Powered completely by electric and solar panel technology, the new model allows operators to maximize revenue by deploying mowers during evening hours. Fuel costs are drastically cut, as are carbon emissions.





Rain Bird XFS-CV Dripline

In 2010, Rain Bird introduced its award-winning XFS Subsurface

Dripline with patented Copper Shield technology to protect emitters from root intrusion without the use of harsh chemicals or treated filters. Now, Rain Bird is rolling out XFS-CV Dripline nationwide. This unique product combines benefits of XFS Subsurface Dripline with a patentpending, 4.3-psi check valve in every emitter that keeps the dripline charged with water in elevation changes of more than 10 feet - the highest hold-back in the industry. That makes XFS-CV highly efficient in even the most challenging drip irrigation applications.

"XFS-CV Dripline features the same patented Copper Shield Technology as its predecessor, XFS, but with an industry-leading, heavyduty check valve that makes it suitable for even more irrigation sites," said Rick Foster, principal product manager for Rain Bird's Landscape Drip Division. "Every emitter includes a pure copper chip that protects it from root intrusion, a practice that's better than simply encapsulating the copper in plastic, which diminishes its effectiveness. The XFS-CV's emitter check valves mean it can be used effectivelu on sloped areas, level areas, above ground and below – really, any time a project calls for drip irrigation."

XFS-CV Dripline remains charged with water, so it more uniformly irrigates all plants in the drip zone. The check valve also prevents water from draining out of the dripline at the zone's lowest points, preventing plants in those areas from being overwatered and avoiding wasteful puddling. There's no need to recharge the dripline at the beginning of each watering cycle, so XFS-CV uses less water than other driplines in similar applications. The XFS-CV's durable, proprietary, flexible dual-layered tubing (copper color over black) material resists chemicals and UV damage and also is easier to work with and install. SFM

FROM THE TWITTERVERSE

The following are some industry Tweets from the past month:



@CUBuffsTurf Unseasonable, at best. SEPT.9



@Twillhog75

Ready to roll for the Home Opener. Sprayed Pervade at 2 oz/1,000 with the rain in the forecast. The crew busted their tails to get it ready to Run it Back! **SEPT.8**



@donnatoma216

A happy man! First ring is from 1966 AFC Championship, 2nd From Super Bowl IV, 3rd from Super Bowl LIV! **SEPT.8**

FROM THE TWITTERVERSE



@ganobleberries Morning friend. SEPT.7



@msudawg2004

Double cut (scalp) Thursday for @HailStateFB first scrimmage this Saturday. Finally something that feels normal! **SEPT.3**



@VT_groundscrew

Lane Stadium/Worsham Field. It doesn't get any better than this. GO HOKIES SEPT.2



@T_LenzTurf Let's take a walk SEPT.2

STMA 2021 Renewals Underway

STMA realizes that 2020 has been a very tough year for members and that budget cuts are impacting this year, next year and beyond.

We believe that investing in an STMA membership is a necessity for weathering these uncertain times. Resources and information from STMA can help you save time and money — whether it is a stepby-step field renovation process, a model for reducing your budget that will still allow for you to prepare a safe surface for athletes, or tools to help you communicate your plans and practices to your employer and constituents.

During the pandemic, STMA has provided, and continues to provide, many new resources including the opportunity to listen to peers' solutions during nine Town Hall meetings that explored challenges at parks and rec, colleges and universities, professional stadiums and K-12 facilities. agronomic solutions for fields that had reduced maintenance, and best practices for field management for every outdoor sport. Its Route to Recovery guides (I and II) saw huge usage by members and STMA's chapter network. In addition, there are videos, webinars and technical articles available on any topic to help you with the challenges you are facing including career resources.

The technical resources and education that STMA provides are many; the connection to a

BECOME AN STMA MEMBER TODAY!



NEED FIELD SANITATION ADVICE POST COVID 19?

STMA has developed a field sanitation guide that helps teach our members how to properly sanitize the fields

DO I HAVE THE SAFEST POSSIBLE FIELD FOR OUR ATHLETES?

STMA is here to help with resources including; hardness testing guides, inclement weather regulations and field condition guidebooks to keep your athletes from getting injured



I NEED TO FURTHER MY EDUCATION WITHOUT GOING BACK TO SCHOOL

There are countless opportunities available for continued education! We have a yearly conference that offers education credits, monthly webinars and a Certified Sports Field Manager credential (CSFM).



HOW CAN I ADVANCE MY CAREER?

STMA has a multitude of resources available to our members. Need to become a better leader? Increase communication? Write a better resume or ace an interview? STMA has you covered!



nationwide community of sports field professionals who care about your career success cannot be found elsewhere. It is that simple.

The cost to join or renew is \$130 for a practitioner; \$85 for a second+ person from the same employer. Commercial members pay \$295.

To join or renew your membership, visit *STMA.org* — "Member Log-in" or "Join STMA." If you have any questions, e-mail *STMAinfo@STMA.org* or call 800-323-3875.

Products and services you receive with STMA membership

- Monthly SportsField Management magazine and News Online electronic communication
- Educational Resources bulletins, booklets, DVDs (English and Spanish), online classes, webinars and videos
- Certification programs
- Awards program and scholarships
- Discounts to the annual STMA Conference & Exhibition
- Employment and career resources
- STMA Industry Sourcebook
- A subscription to Michigan State's Turfgrass Information File (TGIF)
- Chapter resources
- Leadership opportunities committee and board of directors service
- Online membership directory



REMINDER: October 15 deadline approaching

STMA's high-profile awards, grants and scholarship programs have a deadline to apply by October 15. Visit *STMA.org*, click on "Programs" and fill out the applicable application for:

 Field of the Year — For practitioners who exhibit excellent field management practices. This program is sponsored by Carolina Green, John Deere, Precision Laboratories, and World Class Athletic Surfaces

- Innovative Awards For commercial exhibitors
- Founders Awards Nominate a peer for one of these prestigious awards
- SAFE Scholarships: The Dr. James Watson, funded by The Toro Co.; the Fred Grau; The Darian Daily Legacy Scholarship
- SAFE Grants: Leo Goertz
 Membership grant, funded by
 Pioneer Athletics; Gary Vanden
 Berg Internship Grant; Terry Mellor
 Continuing Education grant,
 funded by Turface Athletics
- SAFE Research grants (due Nov. 15). SFM





Whatever the sport, count on GreenJacket to make a difference for your turf.

www.GreenJacket.com 888-786-2683





SUBSCRIBE TODAY!

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

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

Chanter Soonso





Q How can we approach the challenge placed upon many sports field managers in northern states who have had their fall sports season pushed back to the following spring?

- Joe Churchill, Plymouth, Minn.

A: This is a tough one, since many fields in the northern states will still have frozen or snow-covered fields in March. Frozen and/or thawing fields could be unsafe for the field user and they would be destroyed quickly, which is not ideal at the beginning of the spring playing season.

My first suggestion would be to schedule games on local synthetic fields until the natural fields are ready. The Synthetic Turf Council (STC) recommends removing snow at the last minute to prevent re-accumulation and the possible formation of ice. STC also advises against using a tarp on the field as it can freeze to the surface.

With regard to natural grass fields, there are many ways they can be primed for early play, and it starts with preparations now. This includes fall cultural practices such as soil cultivation/aeration, topdressing, dormant seeding and fertilization. These operations carried out together produce a much greater result than doing them on their own, and give the field the best possible start the following spring.

The subject of fertilization needs to be revisited, because the recommendations in regard to the later season fertilizer (LSF) application have changed somewhat. LSF refers to the late fall application, usually made around Thanksgiving, when the grass is still green but has ceased growing. The nitrogen source was typically quick-release and applied at a high rate of 1-1.5 lbs. N/msf (49-73 kgs/ha). Research undertaken in the late '80s at OSU showed a great spring green-up response after the LSF application, without the flush of top growth typically seen at that time of year. The study also showed that while the net effect of late fall fertilization on rooting was slight, applications in late fall were more beneficial with respect to rooting than an early spring application. This is because early spring fertilizer appli-

cations can cause excessive top growth at the expense of root growth. But more recent research has shown that the turf's response (nutrient uptake) to this late-season application is determined by how cold the weather is, with only a small percentage of the nitrogen taken up in cold weather conditions with low ET rates. There is also an increased risk of leaching when applying soluble N as temperatures drop below 50° Fahrenheit (10°C). A turf stand's response to nitrogen is further influenced by how old the stand is, with turf older than 7-10 years requiring less input. As sports field managers, we have an obligation to make sure we do not over-apply soluble nitrogen that might be subject to leeching and runoff and adversely affect water quality. Current recommendations from academic turf programs have included lighter rates of 0.3-0.5lbs N/msf (15-25kgs/ ha) of a quick-release source of nitrogen in a complete fertilizer product at the end of October. That rate depends on turfgrass species and whether fields are in use, with highly trafficked fields needing the higher rate for recovery. Higher rates could also be applied to newly established, or younger turf stands. The late October application would complete the standard fall fertilization program for cool-season fields, which typically includes an application in late August, another in late September, and now in late October.

Additional practices to enhance greening include fall applications of a plant growth regulator (PGR) like trinexapac-ethyl, which produced great results with early spring green-up. Using growth covers to extend the fall playing season or kick-start the spring season is also a proven tool. Growth covers might seem cost prohibitive to some, but the benefits they offer make them a sound investment.

Good luck! SFM



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*





COODBYE REWETTING

Cool, damp, or humid weather are no longer a field painting obstacle. Game Day Quick Cure is specially designed to cure quickly and not rewet. An award winning Pioneer innovation to help your field look its best, even when the weather doesn't cooperate.

> PioneerAthletics.com/SF20 800.877.1500





WHAT Toro® Groundsmaster® 3200/3300.



Μ

Unique balance of productivity, durability and value.

OSI On the field or off, quality results, all season long.

Call 800-803-8676 or visit toro.com/outfront

What Matters Most to You Matters Most to Us.

The Groundsmaster 3200/3300 delivers unparalleled productivity. Featuring powerful Yanmar[®] Tier 4/Stage V diesel engines, CrossTrax[®] all-wheel drive and innovative tip-up decks for easy maintenance, this mower makes quick work in even the toughest terrain while delivering an exceptional quality of cut. From the fully adjustable suspension seat and steering column, fingertip controls and optional cab, this new mower is designed for all-day comfort.





TORO





Join the conversation







GSA

ValuePoint