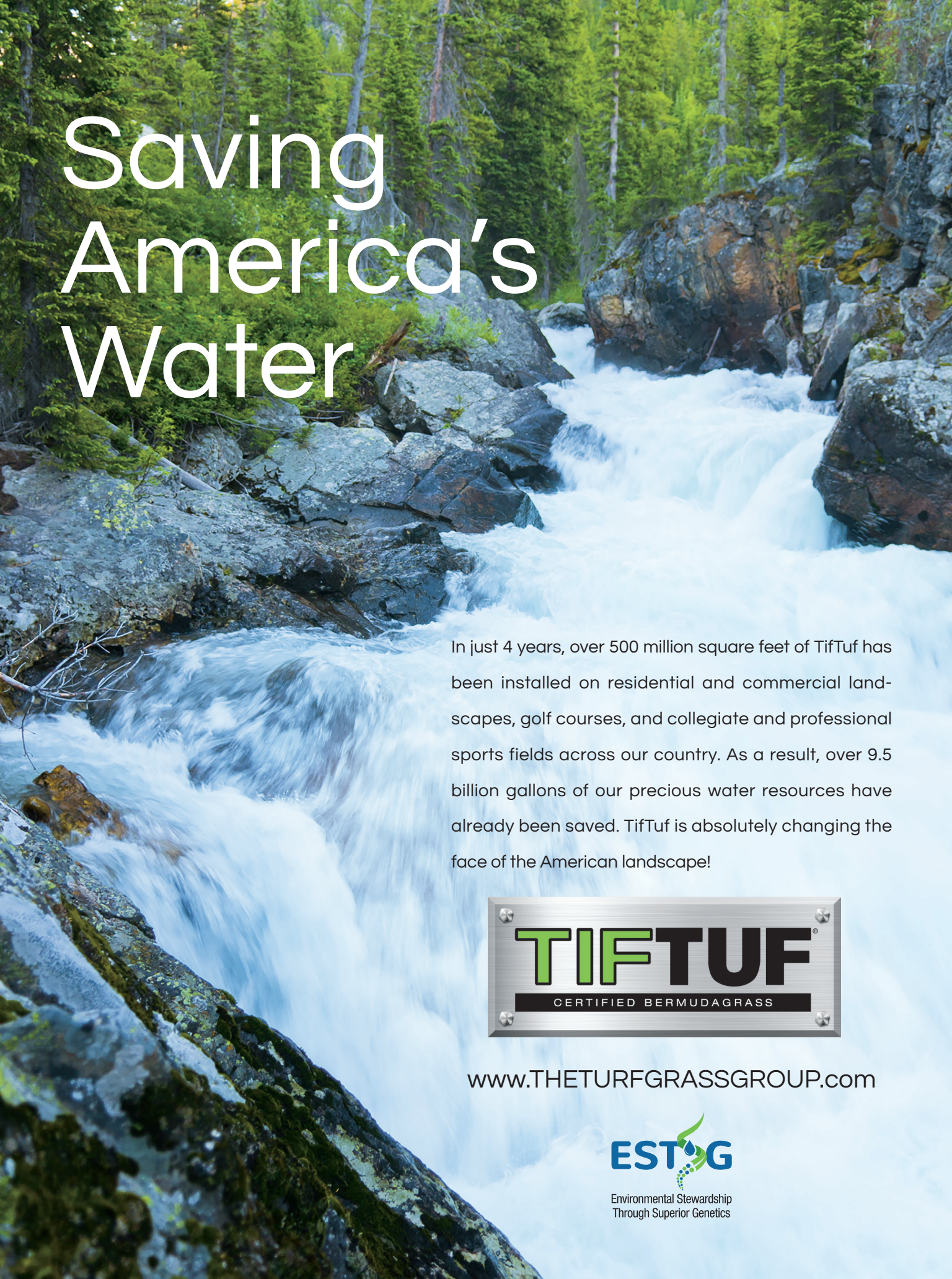
SportsField MANAGEMENT

September 2020 | Vol. 36 No. 9 | The Official Publication of the Sports Turf Managers Association

Field of the Year
Schools and Parks Football

Walsh Field at Pace Academy
Riverview Sports Complex

SportsTurf MANAGERS ASSOCIATION



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!

TIFTUF®
CERTIFIED BERMUDAGRASS

www.THETURFGRASSGROUP.com

ESTAG
Environmental Stewardship
Through Superior Genetics

SYNTHETIC TURF

Infill Remover

Brush

Infiller

Roto Brush

Quick Clean

Renovator

Top Drop

Aerator

Leaf Clean


Quick Brush

Top Clean

Sand Spreader

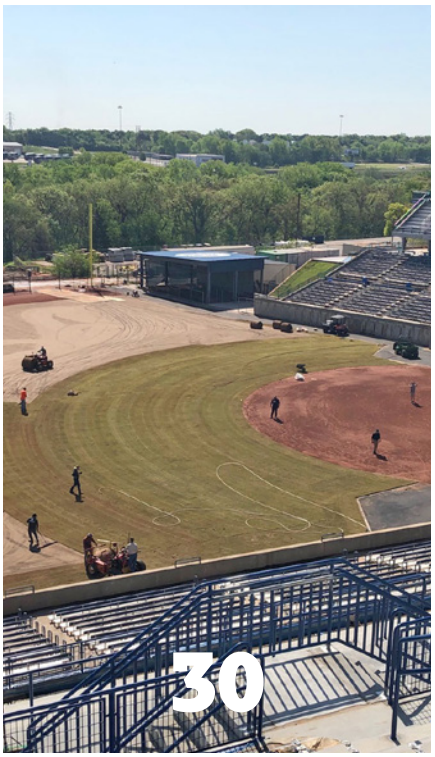

T Brush


Top Finish

STECEQUIP | STECEQUIPMENT.COM | (888) 325 -2532

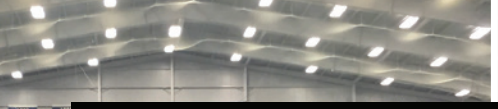
Contents

SEPTEMBER 2020
VOL.36, NO.9



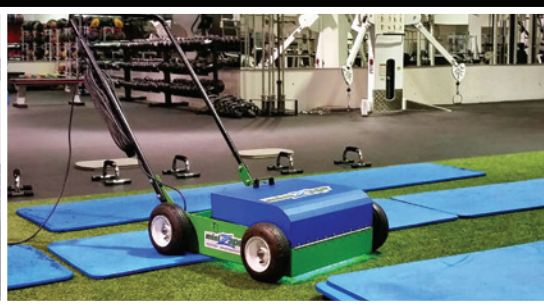
DEPARTMENTS

MASTERING THE ART OF DISINFECTION



The GreensGroomer **GreenZapr** and **miniZapr** germicidal UVC units provide effective control over harmful pathogens by delivering easy-to-use, cost-effective solutions. The units are perfect for indoor and outdoor use such as the broader institutional markets, including sports and fitness facilities, foodservice operations, critical care units, and assisted living communities.

Encapsulated UVC bulbs attack harmful microbes inherent on all surfaces, eradicating them at the cellular level for maximal reduction.



888-298-8852

GreensGroomer® WORLDWIDE

WWW.GREENSGROOMER.COM

Editor's Note

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

In a year that has been challenging for us all, good news and good times have been few and far between. And even the good times are now, in many cases, tinged with apprehension and uncertainty.

So I was excited to see STMA's recent news and notes regarding the 2021 STMA Conference and Exhibition, currently scheduled for January 11-14, 2021, in Palm Springs, Calif.

According to STMA, the 2021 Conference will have seven tracks focusing on the different aspects of sports field and facility management.

- The **Turfgrass Management** track will address cool-season grass establishment, sodding, transition zone grasses and their management, managing high-traffic areas and fraise mowing. This track discusses cultural practices to benefit cool-season, warm-season, and transition zone turfgrass managers.
- **Professional Development** focuses on personal empowerment, self-care, work/life balance, communicating with coaches and other stakeholders, and recruiting the future of the industry.
- The **Soil Science** track offers sessions on understanding and applying soil test results, soil surfactants and their use, and enhancing turfgrass rooting and field performance.
- The **Water** track will focus on best management practices when irrigating turfgrass during water shortages, as well as irrigation system operation.
- The **Pest Issues and Control** track will provide strategies for making decisions about when to apply pesticides, calculating for accurate applications, site-specific management, as well as weed and disease control.
- **Baseball** will cover the 2020 season and beyond, planning, building, and maintaining a sustainable surface, as well as a panel discussion featuring field managers from professional, college/university, and little league.
- The **Facility Management** track will feature sessions on synthetic field testing, low-budget field management, mowing unit troubleshooting, and an outdoor athletic field painting seminar.

For more information about the 2021 STMA Conference and Exhibition, visit *www.stma.org/conference/* **SFM**

SportsField MANAGEMENT

EPG Media & Specialty Information
10405 6th Ave. N., Ste 210
Plymouth, MN 55441

The Official Publication Of The Sports Turf Managers Association

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

EDITORIAL
Group Publisher | David Voll
Associate Publisher/Editorial Brand Director | John Kmitta
Technical Editor | Adam Thoms, PhD
Art Director | Phil Tippin
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

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

EPG MEDIA & SPECIALTY INFORMATION
Connectiv The Business Information Association, a division of SIIA

President's Message

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

Has this year been a sprint or a marathon for you? As I write this, I hope that we are all about to kick off the college and NFL football seasons; but, in this time of uncertainty, who really knows what tomorrow brings? I believe that we would all benefit from some sense of normalcy. A return to full stadiums with people playing a game they love and fans cheering them on would be a great start.

For some of us, the time during this crisis has presented itself as a sprint, for many others as a marathon (sometimes each day can feel like both). However, there is little doubt that it will continue to affect us as a society for many years to come.

I want to thank you for your membership in the association, and share with you what membership has done for me during the last 19 years. Being a member of this association has afforded me the opportunity to meet so many wonderful people, to share ideas and experiences, to learn through continuing education opportunities, and has allowed me to showcase professionalism to my peers at the office with the Certified Sports Field Manager (CSFM) program.

As we continue to deal with the sprints and marathons associated with today's normal, I encourage you to look closely at STMA and consider it an essential part of your sports field management program. Continuing education and travel funding is dwindling for us all, and we are unsure what tomorrow will bring. One constant I can promise you is that STMA will be there for you. STMA will continue with our vision "to be the recognized leader in strengthening the sports turf industry and enhancing members' competence and acknowledgement of their professionalism."

To carry out that vision, we need you and others who you know to continue your membership, as well as recruit new sports fields managers to join us. As author and speaker Simon Sinek once said, "A group of followers has strength because of its numbers. A following has power because of its beliefs." I believe in the mission of STMA to advance professionalism in sports field management and safety through education, awareness programs and industry development. This association provides a great return on your investment. If we all believe in our mission and share our ideas, we can continue to grow the power of this association together.. **SFM**

Collaborating in change together,
Jimmy Simpson, CSFM

Nitrogen Fertilizers: Picking the Right One for Your Needs

By Elizabeth Guertal, Ph.D.

It's time to pick a nitrogen fertilizer source for your facility. How do you make that decision? Advertisements frequently tout nitrogen (N) fertilizer as the "slowest release," "the quickest greenup" or "the most available." Add technical terms — such as methylene urea, ureaformaldehyde and controlled-release polymer — and the topic of nitrogen fertilizers starts to get complicated indeed. But it really isn't. The basic chemistries and manufacturing processes behind most of our commonly available N sources fall into five to six major groups, and you can sort out the ones you should use (and when to use them) from there.

Let's discuss the groups:

General sources of fertilizer

1. Soluble sources of N that are manufactured from inorganic (no carbon in the source) N sources.

Sources of water-soluble N include potassium nitrate (13-0-44, this and all other analyses are always expressed as percent N-P_2O_5-K_2O), ammonium sulfate (21-0-0), and, if you can still find it, ammonium nitrate (34-0-0). [One note: since people are used to buying the analysis '34-0-0,' some fertilizer dealers now sell a product with a '34-0-0' analysis that is actually created from urea, or it may be a blend of ammonium sulfate and urea. This is not an issue, it is simply a way to provide an analysis (34-0-0) that people are familiar with without having to deal with the legal complexities now associated with the sale of ammonium nitrate. The guaranteed analysis on the back of the bag will clearly show the nutrient source(s).]

Any time you need a rapid turfgrass response, be it greening or growth, a soluble material should be in your spreader or spray tank. Soluble fertilizers provide quick turf greenup, which may be important when you need turf to grow and fill bare spots.

Always apply water-soluble sources at lower rates (0.5 to 1 pound of N per 1,000 square feet per month of active growth) and water them in. This helps avoid the turf burn that can occur with heavier rates of soluble products. Care must be taken to not over-apply, especially if you are managing turf on sandy soils, and to not over-irrigate once the materials are out. Also, check your local and/or state regulations to make sure that you are applying your soluble N during months and at the N rates in which it is permitted. In some regions or states, there are specific regulations on when and how much soluble N may be applied.

2. Soluble sources of N that are manufactured from a synthetic organic N source. We have one such source – urea.

Urea gets a separate mention because it is, by the broadest definition, organic (there is carbon in its formula — NH_2-CO-NH_2). But, in reality, urea can be lumped in with the inorganic soluble N sources, because it behaves like those sources — rapid turfgrass response, immediately available to the plant; watch over-application as it can cause turfgrass burn and possible negative environmental effects. Urea is often the choice for use in foliar N programs, and it works well for that, with ample research showing that foliar-applied N is readily taken up by the turf, much of it within 12 hours of application. Urea is often the background fertilizer used for many slow-release N sources (discussed below).

Color response

3. Slow-release N sources that are slow-release because there is a physical barrier around a prill of soluble N fertilizer. Often, these are called "coated" fertilizers.

The oldest coated N fertilizer is sulfur-coated urea, or SCU (~32-0-0). Introduced decades ago, it still is a common product, and there are also newer generation materials that are both sulfur- and polymer-coated. Sulfur-coated urea is made by spraying molten sulfur onto urea granules. Release of N from the sulfur-coated urea granule depends on the time it takes water and microorganisms to break down the sulfur coating. Typically, the thicker the coating, the slower the release rate. Release will be faster in warm, wet soil — conditions that favor microbial activity.

Polymer-coated urea (PCU) products are a major part of the slow-release N market.

There are many terms for the various types of coatings, including resin-coat or reactive-layer coat. Typically, these products work by allowing the fertilizer nutrient to gradually diffuse through the polymer membrane at a rate that, depending on the exact technology, may vary according to temperature, moisture or coating thickness. These products provide a precise N-release rate, and some can even deliver N for an entire growing season. Release rates are widely variable, and products can have release times ranging from 45 to 270 days. Materials with longer release patterns (180 days or more) can be excellent for producing a long-term greening response without the fluctuations in turf growth that may occur with more frequent applications of soluble N. Additionally, a study here at Auburn University found that athletic field foot traffic did not significantly rupture or damage the prill coatings, especially if traffic was withheld for 24 hours after application. The science of polymer coating has gotten quite specialized, and while urea used to be the product that was almost always coated, many other fertilizer sources are now coated (including potassium sulfate, potassium chloride, or ammonium sulfate).

4. Slow-release N sources that are slow-release because urea has been converted via chemical processes into a slow-release N source.

Slow-release fertilizers created by chemical reactions all start as urea. The most common product currently on the market in the turfgrass industry is ureaformaldehyde (UF), formed by reacting urea and formaldehyde to produce chain molecules of varying lengths. The length of the chains controls N release, with shorter chains having quicker N release for turfgrass use, with slow-release N available to the plant anywhere from 8 to 16 weeks, varying with the product.

Ureaformaldehyde reaction products are also often called methylene ureas (MU) — as if it were a synonym with UF (but it really is not). Specifically, methylene ureas tend to be the group of ureaformaldehyde reaction products that are intermediate in chain length, and have an N content of 39 to 41 percent. Many UF products have longer chain lengths, and thus are very slow in the release of N for plant use (14 to 16 weeks).

Regardless of the chain length, N release occurs as microorganisms break the chains, releasing N, which is available for plant use. The release patterns of ureaformaldehyde products are controlled by the length of the chains — the shorter the chain, the quicker the release. Additionally, some short-chain UFs are frequently marketed as liquid slow-release materials, such as triazone. Ureaformaldehyde fertilizers are quite popular in the turfgrass market, and there is a wide variety of products available for your use. Before choosing a specific fertilizer, you should consult the fertilizer label to determine the relative N percentages that are rapidly or slowly available for plant use.

The other slow-release N fertilizer that is chemically slow release is isobutylidene diurea (IBDU). Recent discussions with U.S. turfgrass managers reveal that few use IBDU, often because it is difficult to obtain,

and it is expensive. If available, it is an excellent material for cool-season use for long-term N supply, because it does not require microbial activity for N release. When available, some southeastern athletic field managers preferred it for use on overseeded hybrid bermudagrass athletic fields.

5. Slow-release N sources that are slow-release because they are a "true" natural organic material in which the N must be released via the biological process of mineralization.
These natural organic slow-release N sources are generally manufactured from some type of waste material. Sometimes the material is composted to help reduce odors, or the material may be dried and granulated to improve handling and spreading characteristics. Common organic fertilizer waste materials include sewage sludge, poultry litter, meat-processing waste and other animal byproducts, such as fish or feather meal. Much of the N in such fertilizers is organic N in the form of relatively complex chemical compounds, and is not available for plant uptake until microbes have converted it into nitrate and ammonium. Use of organic fertilizers may have other benefits that are less documented, including stimulation and enrichment of the soil microbial pool, which can lead to possible benefits such as thatch reduction or disease suppression. Such benefits, however, are largely anecdotal and need further study.

Soil temperature greatly influences microbial activity and the rate at which N is mineralized from these organic fertilizers. In cold soils, little activity will occur — an organic N fertilizer applied during winter in the northern United States will just sit there with little N available for plant use until the soil warms. By contrast, fresh poultry litter applied to turf during hot weather is relatively quickly available, as most of the organic N is rapidly converted to nitrate and ammonium.

Some relatively new N fertilizers on the market are blends of organic wastes — such as fish meal, feather meal or poultry litter — and a water-soluble inorganic N, such as ammonium sulfate. Such a product would produce a rapid greening response from the inorganic N and an extended response from the organic N. These "hybrid" materials can still burn turf if you apply them at high rates, and the labels usually have a warning to that effect. Read the guaranteed analysis on the back of the bag to determine the source of the N, and how much of it is soluble and/or slow-release.

6. Urea to which nitrification inhibitors and/or ammonia volatilization inhibitors have been added.
The majority of nitrogen must be taken up by the plant as nitrate-N or ammonium-N. Soluble N sources already have the N in that form, and, as discussed above, slow-release sources either have that N "trickle" out via a physical barrier that degrades over time, or by being released from a chemical formula via hydrolysis or microbial breakdown. Sometimes, however, the plant available forms (nitrate or ammonium) can be converted into other N forms that are less desirable for the plant or surrounding environment. In one case, ammonium-N gets converted to nitrate-N by the microbial process called nitrification. The nitrate-N is still plant available, but, because it is an anion, it can be prone to leaching from the plant root zone. In the second case, another loss path is when N is lost as ammonia gas, out of the plant canopy to the atmosphere (this is volatilization, which is caused by the enzyme urease). To slow down these processes of nitrification and volatilization, inhibitors are added to urea fertilizer. There are different nitrification inhibitors and urease inhibitors, and some fertilizers may contain both. Additionally, there are several different nitrification inhibitors on the market, and thus you should carefully read the label to see what your fertilizer may contain. The most common nitrification inhibitor in turf-

Establishment of color

grass fertilizers is dicyandiamide (DCD), and the most common urease inhibitor is N-(n-butyl) thiophosphoric triamide, (NBPT). Use of a fertilizer with a nitrification inhibitor may help to limit N leaching, and use of a fertilizer with a urease inhibitor may help reduce N loss to the atmosphere. If N is not lost from the plant root zone it is there for plant uptake and use, making your N fertilizer more efficient.

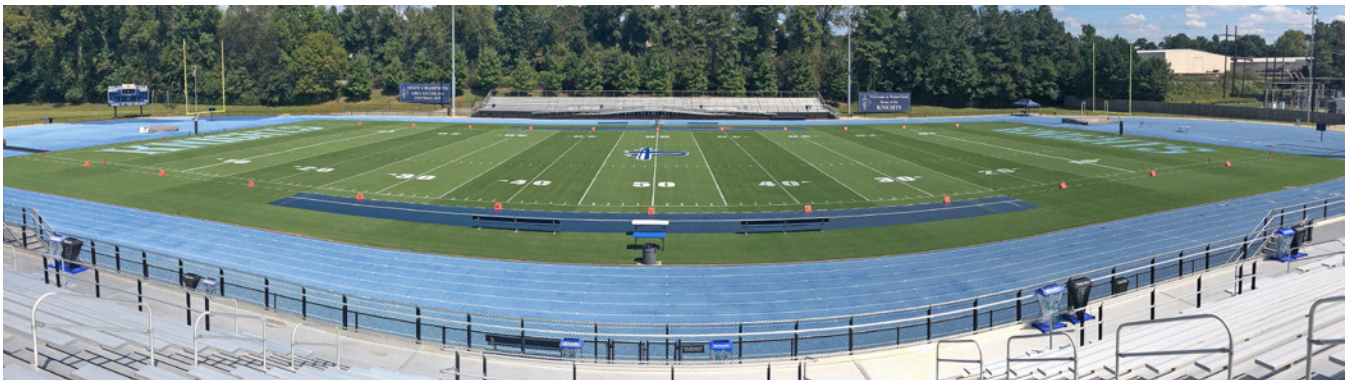
So, there are about six basic groups of N fertilizers. Things get more complicated when other nutrients are added and blends are created. With variations in nutrient ratios, coating types, type and proportion of slow-release N and other characteristics, you can see how the number of possible (and actual) products can become so large.

So, how do you pull all this information into a coherent plan for selecting a fertilizer?

First, think about what you want your N to do. Do you need to heal worn spots and grow turf? In that case, use a soluble and readily available source to promote growth, staying within environmentally safe rates. Or, do you simply need a background green color with minimal growth? A long-chain MU or polymer coat with a long release pattern might work well. Do you have an environmentally sensitive area, one with a high sand content, in an area with intense rainfall? Consider adding slow-release or materials with inhibitors to protect the environment. Last, calculate your cost per pound of nutrient. Comparing N sources on a price-per-pound basis removes the percent N content from the equation, helping you make a cost-effective decision. **SFM**

Elizabeth Guertal, Ph.D., is the Rowe Endowed Professor in Crop, Soil and Environmental Sciences at Auburn University, Ala. Dr. Guertal received her BS and MS degrees from The Ohio State University, and her Ph.D., from Oklahoma State University. Her research program focuses on soil fertility issues in turfgrass management. Guertal served as a technical editor for "Crop Science," and as an associate editor for the "Soil Science Society of America (SSSA) Journal," "Crop Science" (CSSA) and "Agronomy Journal" (ASA). She is a past-chair of Division C-5 (Turfgrass Management, CSSA), a Fulbright Fellow and a Fellow of CSSA, SSSA and ASA. Currently she is the immediate past president of the Crop Science Society of America.

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.



WALSH FIELD AT PACE ACADEMY RIVERVIEW SPORTS COMPLEX MABLETON, GA.

In the state of Georgia, the growing trend for high school football is converting grass fields to artificial turf. Pace Academy has, however, chosen to put its faith in our crew to showcase an all-natural playing surface that, in our opinion, exceeds the look and play of an artificial surface. However, getting to the point we are now has had its challenges. Whether it was accumulating the right equipment, unexpected irrigation problems, or the vast amount of outside events, our crew had to be prepared to showcase Walsh Field year round.

Over the last two seasons we have started doing all our own field maintenance. We have taken the budget previously used for an outside company to do our fieldwork, and invested it into the equipment we need. Obtaining a sprayer and a spreader suitable enough for our agronomical needs was key for us to be able to supply our field with sufficient nutrients, as well as help fight off insects and disease with proper pesticides. We also purchased verticutting reels, an aerifier, and topdresser. This has greatly improved our ability to manage thatch layers and increase drainage. This is important for us, because we are able to play even in harsh weather conditions and recover from the vast amount of games we have per season.

Walsh Field is used for all home middle, junior varsity, and varsity football games for the Pace Academy Knights.

Although we submitted our field in the football category, Walsh Field has been used for much more than just that during the past two seasons. It is the home pitch for Pace's soccer teams and boys lacrosse (all three levels). It is used during track meets and charity "fun" runs, as well as a site for numerous higher-level soccer events. We were the practice site for Juventus during the 2018 MLS All-Stars. We also hosted an exhibition game for Elon University as they took on the Pass4 Academy, as well as an Adidas Women's flag football clinic.

With so many schools converting to artificial turf, it puts pressure on our crew to always put out a great product to prove to our athletic association they made the right call by investing in us.

— *Daniel Prince, Riverview facilities/sports turf manager*

Category of submission: Schools and Parks Football

Field manager: Daniel Prince

Title: Riverview facilities/sports turf manager

Education: Bachelor's degree

Field of study: Landscape Architecture

Experience: I started working on the grounds crew as a student my sophomore year of college at UGA. By my senior year of college, I had gained enough confidence from my director to run a crew of fellow student workers at the softball complex during regionals and super regionals. I was the lead on everything from mowing and chalking to even fertilizing and overseeding. After I graduated, I obtained a full-time position at UGA as the foreman over the Jack Turner Women's Soccer/Softball Complex. I worked there a full year before I was offered the softball position at Georgia Tech. I worked as the softball field manager for a year before being promoted to the baseball field manager. After my first season as baseball field manager, I was promoted to assistant. I worked as the assistant at Georgia Tech while we hosted Atlanta United and won the FOY Award for Grant Field. I then was offered the Riverview facilities/sports turf manager position at Pace Academy.

Full-time staff: Larry Fricke

Student/interns, part-time or seasonal staff: Mike Davis

Original construction: 2014

Turfgrass: Certified 419 bermudagrass

Overseed: We overseed our bermudagrass every fall with Champion GQ rye seed at a starting rate of about 12 lbs./1,000 sq. ft., adding some additional seed as areas thin.

Rootzone: Sand

Drainage system: Sand Cap 4" perf. with 12" collector


TORO
PROCORE


HOME OF THE KNIGHTS
STATE CHAMPIONS
GIRLS SOCCER 2014
FOOTBALL 2015

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?

PRINCE: I'm extremely proud of the hard work my crew put in to make this possible. I had two guys helping me throughout the season — Larry Fricke and Mike Davis. When I came in a couple years ago, I had a lot of different techniques and ways of going about our daily field maintenance and game prep. Those guys really bought in, and the results showed the full team effort.

SFM: What are the biggest challenges you face?

PRINCE: For us, it's probably the shuttling of equipment from our school and our Riverview Sports Complex. They are about 20 minutes apart, and, as anybody who has driven in Atlanta can tell you, that trip can take anywhere from 20 minutes to and hour.

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

PRINCE: Expand your circle within the industry and use that network as a resource. There have been countless times where I have run into a problem, and all it took was a simple phone call to a fellow member in the industry to help formulate a solution.

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

PRINCE: Well, I love sports, and I love working outside. Those pretty much fit hand in hand with this industry.

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

PRINCE: There are many people I would say have mentored me throughout my career. Kent Dickerson and Joe Peters, from my time at UGA, really taught me the basics. Then Jon Dewitt and Chris May, from when I was at Georgia Tech, helped me elevate my attention to detail and how to manage tough situations that arise in the sports turf world.

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

PRINCE: The gratification that comes when players, coaches, administrators and even parents compliment the field after all the work my crew and I put into it. It really makes you feel appreciative of your effort.

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

PRINCE: Just being able to access the vast amount of resources STMA makes available. Whether its online articles or vendor lists on the website, or being able to walk around and visually see new equipment at the conference trade show, STMA makes it easy for sports field managers to see what's on the forefront of our industry, and how to combat problems that arise.

CAN YOU IDENTIFY THIS TURFGRASS PROBLEM?

PROBLEM:
Uneven sod

TURFGRASS AREA:
Private school sports and recreational field

LOCATION:
Miami, Fla.

TURFGRASS VARIETY:
Turfgrass variety: 419 bermudagrass

Answer on page 33

John Mascaro is president of Turf-Tec International

Judge's Comments

I really enjoyed hearing about how Daniel got started and how he was willing to start from the bottom and gain the confidence of his director. It is apparent in how he presents himself and what he does that he has a love for his profession. He has made some major changes that really show his talent. While many schools in the area are going to artificial turf, Daniel wanted to show his skills in maintaining grass fields. He had to battle weather, many hours of use in a short period of time, and unexpected things that went wrong. When you see all he did to make that field look great despite all he was up against, and not go to turf, it's pretty amazing. It's nice that he was able to get his athletic association to invest in him and his crew. He did an amazing job and the award is well deserved!

— Jackie Mroz, inside sales/ customer service manager, Pioneer Athletics

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**

Genesis Rx™

TURFGRASS AERIFICATION RECOVERY



Applying fertilizer before, during and after mechanical aerification all provide unique options for ensuring your turf recovers quickly. The Andersons have designed a line of Genesis Rx products that help determine the right fertility approach for your aerification program. These blends provide the most comprehensive fertilizers The Andersons has ever offered, with the goal of providing a single-product solution designed to save turf managers time in application.

NEW!

Genesis Rx Zeolite+ 3-4-3

- A 50/50 physical blend of Genesis Rx 5-7-5 and Zeolite DG
- Delivers balanced NPK, secondary and minor elements plus Humic acid and Zeolite
- SmartPhos DG provides plant available P over an extended period of time, resulting in superior availability and lower use rates than traditional sources
- Zeolite improves soil CEC levels and improves water retention
- Contains MUtech® slow release nitrogen, Mg, Fe, and Mn

Genesis Rx 5-7-5

- Comprehensive fertility + soil amendment
- All-in-one product solution
- Ideal for construction, renovation, aerification, and seeding
- Simplifies fertility program complexity
- SmartPhos DG provides plant available P over an extended period of time, resulting in superior availability and lower use rates than traditional sources
- Reduces application time and effort
- Soil/USGA Specified Media Amendment

StartwithGenesis.com | @AndersonsTurf

The *SportsField Management* Interview: John Clintsman

In this edition of the *SportsField Management* Interview, we meet John Clintsman, head of grounds at Ensworth School, a K-12, coeducational independent school in Nashville, Tenn.

John Clintsman

SportsField Management (SFM): Please tell us a bit about Ensworth, the fields and facilities you manage, and your staff/crew.

Clintsman: Ensworth is a K-12 private school in Nashville, Tenn. We have two campuses separated by eight miles. The lower school is K-8. I have one assistant who maintains two fields (multi-purpose and softball). He is responsible for keeping the campus clean, as well as all irrigation on campus and at our head master's house.

He also helps at the high school as needed and on paint days for football games. Our high school campus sits on 91 acres, with five bermudagrass fields, one artificial turf field, along with four new fields being constructed. We begin every day by picking up trash and blowing the campus. Ensworth has extremely high standards and that begins with a clean campus and beautiful landscape. Our football stadium field was renovated for the first time in the spring of 2020. We added drainage, changed out irrigation valves and heads, and installed Tahoma 31 bermudagrass. We have four crewmembers between the two campuses (me, Chase Pentecost, Milton Valencia and Doug Wilson).

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

Clintsman: My start was in golf as a groundskeeper, and I loved being outdoors and the fact that no two days are the same. I played baseball as a kid, and having the opportunity to work around baseball keeps you in the first sport you fell in love with. Being able to provide for my family while getting to do what all boys want to do as a kid makes work enjoyable.

I started in the industry at a golf course in Smyrna, Tenn. I spent just over a year there before moving into sports field management at Ensworth school as an assistant. I fell in love with the work and volunteered time with local schools, minor league teams, and anything I could do to get my hands dirty. During my time as an assistant at Ensworth, I also worked game days with the Nashville Sounds (Minor League Baseball) and Tennessee Titans (NFL). I volunteered with multiple other teams and schools, while also completing the Principles of Sports Turf Management through the University of Georgia. I became the head of grounds at Ensworth in August of 2018. Dr. Mike Goatley (Virginia Tech) reached out to me about a certificate course through Virginia Tech, which I completed in the winter of 2019.

SFM: Who were your mentors in the industry, or who has impacted your career the most?

Clintsman: Monica Lalinde (formerly at Smyrna Golf Course) was my first superintendent in the industry. She spent a lot of time answering questions I had. Monica is a big reason I wanted to stay in the industry. Dr. Goatley has been a major influence on me the last three years. He has spent time the last few years at STMA Conference, over the phone and via e-mail discussing ideas and allowing me to run ideas by him. I worked game days for the Nashville Sounds in what became my longest, hardest summer personally and professionally. Thomas Trotter helped show me the kind of boss I want to be. Thomas has been someone I trust when I need to just talk. In the last year, Michael Brownlee (Simplot) has become an important player in my life. Not only is he the hardest-working sales rep in the business, but he has also become a true friend and someone I can lean on daily.


ENSWORTH
Ensworth
10
20

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

Clintsman: I'd say I'm most proud of the crew I've built in a short time. I invest a lot of time trying to be a good leader — either reading books, watching podcasts or webinars from proven leaders, then trying to be the boss I want to work for. Maintaining the grounds of Ensworth School is top priority, but building a strong, winning team has been goal number 1. My team and I continue to volunteer our time with local schools in an effort to help the community. My crew is proof I'm doing something right.

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?

Clintsman: Being told "no" when I felt I had proven myself. Along the way, doors kept closing. At the time, I didn't understand why; but now I see there was a reason. If I can be an influence for the next generation, I hope they see you can take the "no" and keep fighting and grinding. If you don't give up, then one day you'll be where you want to be.

SFM: What is the best advice you received during your career?

Clintsman: Slow down and listen. Monica had to tell me a few times to slow down and listen before jumping in. I have found as a leader that slowing down and listening before reacting will get you farther with the ones above you and with your crew.

SFM: Please tell us a bit about yourself outside of work.

Clintsman: I'm married to my wife of six years, Carrie. I have three children — Preston (age 20), Zachary (age 13), and Corbin (age 10). The biggest advantage of working at a high school is that I get to be involved at

(Left to right) Chase Pentecost, John Clintsman, Milton Valencia and Doug Wilson.

home with my wife and with my son who plays baseball and will be enrolled at Ensworth in the fall.

SFM: How has your career benefitted from being a member of the national STMA?

Clintsman: Building a strong network has been one of the biggest benefits of joining STMA. Being able to catch up at the national STMA Conference yearly. I think we all learn more just chatting with each other. Joining a few committees has helped build the network for me as well. I would encourage any member with the time to join a committee and get involved.

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?

Clintsman: The golf course industry and its superintendents receive a lot of credit for their professionalism, but that didn't come by mistake or happen over night. I hope the STMA members can continue to move further in that direction by presenting ourselves more professionally. **SFM**

Photo Essay: Dare County, N.C.

Dare County, N.C., is the Outer Banks of North Carolina. Between storms, droughts, salt, it can be a field manager's nightmare. I accepted this position two years ago, and when I came on board, the athletic fields were in need of some TLC. My crew of 10 takes care of 35-plus government buildings, 100-plus landscape beds, and 950,000 square feet of athletic turf. Trying to navigate all the needs of the public, internal customer, and emergencies can be trying at times. But, after two short years, the crew have busted their butts and started turning some of the athletic fields around. They took four fields that were 75-percent weed covered, and got them below 10 percent. We developed the first aeration, seeding and fertilization program for those fields. We fertilize eight times per year with a 16-4-8, seed 3 pounds per 1,000 sq. ft. of Highlander bermudagrass during the summer, and seed 4 pounds per 1,000 sq. ft. of Midnight bluegrass in the fall. We aerate four times throughout the year. All material was purchased from Hancock Farms and Seed. The results have been well received and our budget was increased to include six more fields (the Westcott field is rye and bermuda).

— Greg Fiala, superintendent for the Turf Maintenance Division, Dare County, N.C.

Cape Hatteras Hurricanes High School Soccer field, located in Buxton, N.C., is a Highlander bermuda/Champion rye blend field.

Westcott Baseball Field, located in Manteo, N.C., is a blend of Highlander bermuda/Nu-Sprint rye. We will be seeding Champion rye in the fall.

Rec Park Football field, located in Kill Devil Hills, N.C., is Midnight bluegrass/bermudagrass blend.

Westcott Baseball Field, Manteo, N.C.

Rec Park Football, Kill Devil Hills, N.C.

Smart Irrigation for Sports Fields

For insight into smart irrigation for sports field applications, *SportsField Management* recently interviewed Michael Temple, CID, CIC, CLWM, CLIA, CGIA, LEED AP, technical program director, Irrigation Association.

Photos provided by Hunter Industries

SportsField Management (SFM): What types of smart irrigation components should sports field managers consider for their applications?

TEMPLE: The smart irrigation components that should be considered are for the control system. This includes weather-based controllers, soil moisture sensors and flow meters. The combination of these components gives the manager the most control of how much water is applied and allows them to apply the water when it is needed. The weather-based controller automatically adjusts the amount of water applied, and the soil moisture sensor allows the water to be applied exactly when it is needed. The flow meter plays an important role in monitoring the water usage and aiding in management decisions. It also allows for automatic leak detection, isolation and reporting; but just as important is the reporting of missed irrigation. This allows for immediate steps to be taken to ensure the turf gets the water it needs before there are any visible signs of stress.

SFM: Aside from smart irrigation technology, what advice do you have regarding sports field management practices that can reduce the amount of water required while still providing a safe athletic surface?

TEMPLE: The soil is the structure that everything is built on. If it is not healthy, the field will not perform no matter what you do. The soil needs to have the correct pH, texture and organic content, and not be overly compacted so the turfgrass can thrive. When the soil is right, all the inputs (water, fertilizer, pesticides) can be reduced.

SFM: What do you recommend with regard to irrigation audits?

TEMPLE: Irrigation audits are a critical measuring tool. They tell you how uniformly and how fast the irrigation system is applying water. These are both critical to calculating the necessary runtime for the irrigation system. On top of that, audits can help to identify coverage issues so they can be corrected. I recommend auditing every field before you make any changes. Once initial problems have been identified and corrected, audit the field again. This gives you good before and after data to track improvements. Audits can then be performed annually or every three to five years to track how the irrigation is performing and identify issues before they become a problem.

SFM: What advice do you have regarding water-related programs, initiatives and educational opportunities that might be available to our readers?

TEMPLE: We should always be learning. That is what will allow you to perform your job better and keep you at the top of your field. There is a plethora of educa-

tional opportunities available online now that were not there a few years ago. Check with your professional associations and see what they have to offer. In addition to education, your professional associations are involved in advocacy for your industry, and becoming a member helps make sure you have a voice at the table when codes and policies that affect your profession are discussed and created.

SFM: What recommendations do you have regarding proper irrigation scheduling for sports fields?

TEMPLE: Scheduling irrigation on sports fields can be very complicated. Not only do you have to schedule based on the field water requirements, irrigation performance, soils and plant root zone depth, you have to consider the field usage and maintenance requirements. If the field has lights, it could be in use until late at night, and maintenance may have to start early the next morning, leaving little time to irrigate. All of these factors are pieces of the scheduling puzzle, and they will vary from field to field. Therefore, knowing as much about your field and irrigation system as possible is critical. The irrigation system performance has a big impact on the irrigation schedule. A system with low distribution uniformity (how evenly water is applied to the field) will have to run much longer to provide adequate water to the entire field than a system with a high uniformity. This makes it harder to work irrigation into narrow watering windows.

SFM: For those who are using smart irrigation technologies and/or practicing proper water conservation on the athletic fields (and the other grounds they manage), how should they go about sharing that information with their superiors, the public, and other sports field managers to help spread the message regarding the benefits of smart irrigation?

TEMPLE: With the WiFi-connected and Cloud-based control systems that are available today, there is a wealth of information collected and waiting to be used. Irrigation water use information is at your fingertips. If your system has a flow meter on it, you have real data. If you do not have a flow meter, you can run each irrigation zone for 10 minutes and record the water meter reading before and after running the zone. Divide the total gallons used by 10 and you know the flow rate of your zone. Most smart controllers allow you to program each zone's flow rate. By doing this, you have relatively accurate water use data. Couple this with the ability to have weather data and zone-level operation frequency and time, and you can demonstrate how effective you are a managing water compared to a standard controller operating for set times on set days. The main key is the availability of data with smart irrigation. Data drives everything these days, and irrigation is no exception. This data is your main tool in being a better water manager and communicating your results to others. **SFM**

USA Softball Hall of Fame

[Editor's note: The following was provided by Tahoma 31, and was written by Stacie Zinn Roberts, writer, marketing strategist and president of What's Your Avocado? Marketing and PR, Mount Vernon, Wash.]

Rain delays in softball are nothing new. If you play a game outdoors, eventually you're going to get a little wet. But at the USA Softball Hall of Fame Complex stadium field in Oklahoma City, Chuck White, sports turf manager there for the past five years*, had a real problem. As the home of USA Softball, and host to nearly 30 events each year, including the NCAA Women's College World Series (WCWS), the most high-profile field in the sport was drowning. Every time it rained, torrents of water rushed down the slope of the stadium seats, pouring water toward the playing surface like a funnel. The deluge surged into the dugouts, flooded the locker rooms beyond, and pooled on the field.

The USA Softball Hall of Fame — OGE&E Energy Field — was originally built in 1985 with approximately 1,000 seats. Since that time, the field surface, which was constructed on a sandstone base, had not been renovated. The concrete bleacher seating capacity, however, had incrementally increased to accommodate 5,000 fans.

"The problem we had was the field, when it was built originally, was not designed to take the water that comes off of 5,000 concrete seats down onto the field," said White. "The water would come onto the field from the bleacher area and would basically explode the field out. There was no way the water could leave. We had a real drainage and water management issue." Sandstone, he added, "obviously cannot handle the water. There was no way for it to get

out. We had about a foot of topsoil, native soil and that's it."

Under normal conditions, a flooded field would be an inconvenience. A flood during the NCAA WCWS, well, that's a disaster. And it happened not once, but twice.

"The first year I was here, during the 2015 College World Series, we had probably one of the wettest Junes in the history of Oklahoma. I had to put two tarps on the field to be able to shift the water to the point that we could play," White said. "Then, in 2017, we had a rain shower during play and we got so much rain that we could not handle it, and it would not drain. We had to suspend the game and finish up the next day."

Something had to be done. A $27.5 million major renovation of the complex was voted on and approved by the local taxpayers who own the property and lease it to USA Softball. The renovation would add another 4,000 seats to the stadium, new restrooms and other interior improvements. Nearly $2 million of the renovation budget was earmarked for the field itself to install a new drainage system, new irrigation system, new infield dirt, warning track and 52,000

square feet of Tahoma 31 bermudagrass sod in the outfield.

THE RENOVATION

A softball field fit for the U.S. Olympic Softball Team, and a project of this scale, requires a lot of expertise. Timberlake Construction was the general contractor. United Turf & Track did the field construction in conjunction with Floyd Sports Engineering.

"They took the existing field and excavated it down 18 inches to get it down to where it's supposed to be, and then they started building it back," said White. "They built a drainage system, a network of drainage. On top of that, there's four inches of gravel across the whole field. And then underneath the grass surface, there's eight inches of sand. We have Tahoma 31, a hybrid bermuda that we have installed on the field. Tahoma 31 was developed out of Oklahoma State in Stillwater, Oklahoma, specifically for this transitional zone. It's cold tolerant. In other words, it will start earlier in the year, in February and March. It's drought tolerant, it does not take as much water or need it as much. It repairs itself very quickly. And it will also stay green longer into October or November in the climate zone that we're in, in Oklahoma."

The subsurface drainage was designed specifically to solve the water management issue.

"The grass surface can handle up to 15 inches per hour of rain because of the new drainage system," said White. "The infield surface has the same thing, it has the drainage, it has the gravel, then it has four inches of sand, and then it has four inches of engineered infield mix. It's called Pro Red and it.s furnished by Stabilizer Solutions out of Phoenix, Arizona."

For Jefff Salmond, CSFM, (2017 president of STMA), of United Track & Turf, a sports field construction firm based in Arcadia, Okla., Hall of Fame Stadium is the third Tahoma 31 project he's installed in the past year, following a soccer field at University of Tulsa and the University of Arkansas football field.

This renovation was a multi-step process. After excavating down a foot and a half, installing new drainage, gravel and the sand cap, Salmond said his firm installed four distinct playing surfaces at the Hall of Fame Stadium: the skinned-in infield; Hilltopper warning track; bermudagrass sod outfield; and artificial turf along the sidelines, infield warning track and wing areas on either side of home plate. The Astroturf RBI system in the infield is comprised of synthetic turf over asphalt and a pad.

"The reason why it was designed that way was for the amount of traffic that the sideline area gets, they felt that it was important that they had that stable asphalt underneath it but they also had the pad on it for shock absorption," said Salmond.

SOD PREP

Even though Tahoma 31 is a relatively new variety, Charles Binney has grown the grass at Riverview Sod Ranch near Tulsa for five years.

ANSWER

From page 17

This uneven sod was a mystery to the owner of the sports field renovation company. In early May, this field had some worn areas repaired by installing thick cut sod. Knowing his crew was good at these projects, he allowed them to perform the repairs and inspected it the following morning only to find the newly laid sod had been ripped up and strewn across the field. The school had been closed for the COVID-19 situation, so he knew students had not vandalized the area. He previously had raccoons damage this field; however, there was no way raccoons could do this much damage. Upon further inspection, he found coyote prints in the topdressing sand, as the inset photo shows (this school field backs up to a preserve). During COVID-19 closings, wildlife has encroached into more urban areas like this where students used to utilize the fields almost constantly. The crew repaired the area again, and it was torn up the following evening as well. Upon inspecting the perimeter fence, they found an area that was damaged where the mischievous coyote was gaining access. When they repaired the fence the damage stopped and the area was able to root in and recover properly.

Photo submitted by Kevin Hardy, president of Ballpark Maintenance, Inc., Miami, Fla.

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.

His farm cooperated with Oklahoma State University as a test site for the grass while it was in research and development. The sod farm now has some 90 acres in production.

"With other grasses, usually the sprigs come up as little bitty pieces. Tahoma 31 is so dense, it comes up the size of a golf ball," said Binney. "The density is so incredible that we had to buy new tractors to have more horsepower to mow it. When you stick a cleat in this kind of grass, you get better traction."

The sod was grown on a farm field with a sand/silt soil. Thirty days before harvest, Binney applied a 50/50 mix of potassium and potash at 250 pounds per acre to the sod to encourage root growth and add carbohydrates to the plant, so, as Binney said, "it's ready to rock and roll" when installed.

Binney suggested that Salmond apply the same rate of potassium and potash, incorporated into the top three inches of the USGA sand about five days before installation. As the USGA sand has no real nutrients in it, the roots of the newly cut sod will seek out the fertilizer through the sand and tack down faster.

RENOVATION IN THE TIME OF COVID-19

The renovation began December 1, 2019, with the goal of completion in time for the NCAA WCWS first day of play on May 28, 2020. The project was completed on April 21, 2020, in plenty of time to host the event. Unfortunately, COVID-19 had other plans. The NCAA WCWS was scrapped for 2020.

Still, in the winter and spring of 2020, uncertainty about the pandemic was rampant. No one knew at the time how the virus would eventually cause the cancellation of so many sporting events. The construction crews practiced social distancing and the field construction went ahead in case the event was to be played.

"We couldn't stop. You know, we didn't know what was going to happen, if restrictions were going to get lifted, or if they were going to continue," said Salmond. "We had a field that we had to have ready."

The deadline came and went. Vacant stands sat empty. Players stayed home. ESPN's camera crews never arrived. It was frustrating for White and USA Softball.

"You get really psyched up, you go out and you get all your staffing in place, and all your materials and everything going, and then you find out you're not going to have it. It's a real letdown," said White.

That disappointment was short lived, however. A month later, with COVID safety protocols in place, the facility hosted the USA Softball HFL July 4th showdown, a regional fastpitch tournament.

"The playing surface did well considering it's only two months old," said White. "The Tahoma 31 did exceptionally well. It showed very little sign of wear in the out position areas." Rave reviews for the field poured in.

"The facilities are second to none. The new renovations and playing surface were excellent," said Ryan Taylor, who oversees the Aces Fastpitch

organization and is the Commissioner of the HFL, as quoted in news reports following the tournament.

At a press tour of the renovated facility held in June, USA Softball CEO Craig Cress said, "This is the best softball facility in the world... I sit on the International Softball Board, so trust me when I say that. This is the premiere facility in the United States and in the world for our athletes."

While accolades are gratifying, White said the renovation solved so many of the issues he's battled for years.

"In a regular season, we will start games first in March and we will play, depending upon the year, anywhere from 23 to 28 events from March until the middle of October. Our field will get a lot of play. When people come to the Hall of Fame, they basically come for one reason. They want to play on the Hall of Fame Stadium field, the championship field, so that field gets no rest at all. It's got a solid schedule. People play on this week in and week out. I've got to have a field that can handle the water because we're going to have events that catch rain. I've got to be able to get rid of the water," said White.

"I also need a field that can repair quickly because we have eight, 10, 12 games a day, and that's a lot of traffic in the three-day period because most of our tournaments are on a Friday or Saturday and Sunday," White added. "We catch so much traffic on our field that we have to have a surface that can help us manage the water issues both on the dirt and on the grass, and will also help us manage the high traffic issues. Tahoma 31 is a very thin blade, very tight grass so it handles the traffic much better than the old common bermuda that we had. So far from what we've seen of Tahoma 31, we love it." **SFM**

BY THE NUMBERS: USA Softball Hall of Fame Stadium Renovation

- $27.5 million voter-approved project
- $1.8 million on the field
- 4,000 seats added
- 18 inches excavated
- 4 inches of gravel
- 4 inches of sand, 4 inches of infield mix (infield)
- 8 inches of sand (outfield)
- 52,100 square feet of sod
- 15 inches of rain-holding capacity
- 110,000 hours to renovate entire complex

** Chuck White resigned from USA Softball at the end of July and has officially started "Full Scope Restoration," his own sports field management business headquartered in Oklahoma.*

New Shock Pad Guidance Offers Insight Into Selection and Maintenance Process

By Dan Bond, CAE

With the rise in shock pad usage in synthetic turf sports field systems in North America, the Synthetic Turf Council (STC), released the new Performance and Quality Guidelines for Shock Pads. These guidelines provide sports field managers, field specifiers and facility owners with objective measures when specifying a shock pad and comparing the minimum performance and durability of different shock pads.

These guidelines were drafted to compare the performance of different shock pads in an objective way, and, if appropriate, to allow the selection of a shock pad for a specific application. The document also specifies the minimum durability criteria to ensure that when a shock pad is incorporated into a synthetic turf system it will perform adequately for at least two lifecycles of the synthetic turf carpet. In having a shock pad incorporated into the synthetic turf systems, field managers should also ask about shock pads that have long warranties and can be recycled at the end of their useful life.

Shock pads typically come in two varieties. Pre-fabricated pads are factory made from foams, rubber or plastics and are transported to the field to be installed on a prepared field base. Insitu shock pads (also commonly referred to as elastic layers) are mixed onsite from a blend of binders (normally polyurethane) and elastomeric granules (normally recycled tire granulate). They are laid with a paving machine onto the prepared base. Shock pads typically range from 5/16 inch to 1.5 inches in depth, and are placed between the turf surface and stone base. For short pile carpets, the shock pad is typically laid on an asphalt base. In this guidance document, STC encourages manufacturers of shock pads to have their products tested using the methods detailed, and include for certain properties minimum suggested guideline requirements.

The principal objective of a shock pad is to provide a permanent shock-absorbing layer within the synthetic turf system, which provides a minimum level of impact protection to athletes running and falling onto the surface, irrespective of the type of synthetic turf laid over the shock pad, or its condition. For sports where a true ball rebound is important (e.g. soccer, field hockey, tennis, etc.), a shock pad can also assist with controlling how the ball bounces. For short pile carpets, the shock pad can be a key contributor to providing impact attenuation (which is the measure of the shock-absorbing properties).

As performance testing for turf athletic fields has become more robust, shock pad usage has gained in popularity across North America. Shock pads are designed to assist in providing the sports performance and player protection properties that are required for the sport and athlete on the playing surface. They also aid the retention of these properties through the life of the playing surface.

In the goal of maintaining safe and durable playing surfaces, sports field managers are finding that installing a shock pad can supplement an overall maintenance program. However, it is important to note that shock pads do not replace the need for a maintenance program. For example, a shock pad can reduce the amount of infill compaction on the field, so the frequency between decompactions can be extended. For managers who choose a shock pad, many find that it provides uniform resilience, in addition to the resilience provided by the type of infill used in the synthetic turf system.

One of the challenges facing field managers is infill migration (when the infill within the synthetic turf system moves out of the system over time). There are many causes of infill migration, including heavily used fields, certain types of sports, turf fibre, pile height and even Mother Nature. On fields where infill migration frequently occurs, especially in high-traffic areas, the use of a shock pad can help achieve performance metrics. Additionally, for field managers who are looking at ways to reduce the amount of infill (and subsequent infill "splash" and migration from the field), a shock pad combined with lowering the height of the fibre pile and increasing the density of the pile itself can be an answer.

A number of different ways of measuring the impact attenuation properties of synthetic turf sports surfaces have been developed around the world. The international sports governing bodies for a number of sports have participated in the development of these test methods, have standardized on one procedure (ASTM F3189), and have incorporated them into their standards and regulations. The most commonly used test methods and standards have been incorporated into this guidance document, including from ASTM International and the international sports federations (FIFA, International Hockey Federation and World Rugby) and the STC.

It is very important for field managers to consider that a shock pad forms part of the synthetic turf sports surfacing system, and it is the performance of the total system that influences the athlete's perception of a sports field. It also determines if it is providing the required levels of player protection and sports performance. Due to the different types of synthetic turf on the market, ranging from long pile (typically 1.5 inches to 2.5 inches) infilled surfaces that are typically used for football, soccer and rugby, to non-filled short pile surfaces (typically 0.5 inches) used for field hockey, there are many different shock pads, with differing performance characteristics available.

Some shock pads also offer multi-functional properties that are designed to assist in field performance. These include providing horizontal drainage and structural stability to the base, in a similar way to a paved asphalt layer. Poor drainage below the shock pad can cause pooling on the field, especially after heavy rainfall, or it can saturate and weaken the supporting materials in the aggregate base and subgrade. **SFM**

Dan Bond, CAE, is president and CEO of the Synthetic Turf Council (STC). Visit the STC website (https://www.syntheticturfcouncil.org) under the "Resources" tab to review the new shock pad performance guidelines.

Other STC Guidance Documents Available

STC offers other technical guidance documents that can aid in the maintenance of turf fields (available at http://www.syntheticturfcouncil.org under the "Resources" tab).

Guidelines for Maintenance of Infilled Synthetic Turf Sports Fields
Also available in Spanish, these voluntary guidelines provide owners with objective maintenance guidance to augment, and not replace, the maintenance requirements and procedures of the company or companies providing the warranty for the field and the installation.

Guidelines for Synthetic Turf Performance
Also available in Spanish, these guidelines encourage periodic and voluntary testing to indicate the type of maintenance that should be implemented to maximize multi-purpose sports field performance.

Suggested Environmental Guidelines for Infill
Provides owners, buyers and interested stakeholders an additional resource to better understand the environmental and toxicological considerations when evaluating the use of infill materials.

Guidelines for Crumb Rubber Infill Used in Synthetic Turf Fields
Provides producers, customers and the public with an understanding of what crumb rubber infill (CRI) is and how the industry manages its safety, purity and quality.

Guidelines for Minimizing the Risk of Heat-Related Illness
On a hot, sunny day, in addition to taking proper precautions to minimize their risk of heat exhaustion, heat stroke or other heat-related health complications regardless of the playing surface, those who play on synthetic turf should consider the practical risk avoidance strategies recommended in this STC guidance document.

Guideline to Recycle, Reuse, Repurpose, and Remove Synthetic Turf Systems
Helps the reader better understand the range of processes for identifying and managing the removal and disposition of a synthetic turf system once it may have reached the next stage of its useful life.

Topdressers

EARTH & TURF MULTISPREAD MODEL 320

The Earth & Turf product line includes its MultiSpread Model 320, a 1-cubic-yard topdresser spreader with exclusive, wide-spread beater for lawn maintenance professionals, schools, universities, golf courses and athletic fields. This versatile machine spreads topdressing materials, infield mix, calcined clay, and grass clippings. With a convenient light-material sides option, available for dealer or customer installation, this topdresser virtually doubles its capacity – especially great for spreading light compost to improve turf quality. Overall height with light-material sides, plus narrow overall width, allows operators to reach in easily from either side when loading. Maximum load capacity using the light material sides is 3,600 pounds. Two-wheel ground traction drive is standard. Hydraulic drive is available as an option, offering benefits for owners of tow vehicles with remote hydraulic valve and minimum of 6-gpm flow. With hydraulic drive, apron and beater speeds are independent of ground speed – each infinitely and independently adjustable.

ECOLAWN TOPDRESSERS

With its compact size and the lightest footprint in the market, the demand coming from sports field managers is growing very fast for Ecolawn. With a desire of continually improving its products, Ecolawn is working closely with, and listening to, its users. Wanting to increase the quality of all types of applications, Ecolawn has made a huge difference in spreading materiel with a minimum of ground compaction. Winning features include simple design for maintenance, compact size for tight and delicate areas, and capacity for spreading all kinds of material with ease.

GKB TOPDROP

The GKB Topdrop is the ideal machine for the application of topdressing. The brush dresser can distribute all kinds of loose material such as sand, compost and rubber on fields. The brush is hydraulically driven and is easily adjustable in speed. This speed control and adjustment of the mechanical metering valve ensure that the layer thickness can be determined precisely. The machine can be used anywhere thanks to the four oversized turf tires and pendeling axels. The oversized tires ensure minimum ground pressure, keeping compaction to a minimum. Call STEC at 888-325-2532 to find out how this machine can become your new "Best Hire!"

JOHN DEERE TD100

Designed for the John Deere ProGator heavy-duty utility vehicles, the TD100 topdresser is ideal for use on athletic fields and other areas where an efficient means of topdressing is needed. The hopper on the TD100 topdresser has a capacity of 12 cubic feet level-full or 19 cubic feet heaped, a rated capacity of 1,500 pounds, and is made of galvanized steel to reduce corrosion and supported by steel-members to increase strength. The fixed-speed, nylon/polyester cord, endless conveyor belt on the TD100 efficiently moves material under the

metering gate and through a rotating brush for even distribution. The full-width metering gate opening can be adjusted from 0 to 3 inches, with a two-lever system allowing the operator to adjust the gate height and lock the gate into position.

TORO PROPASS 200 TOPDRESSER

The Toro ProPass 200 broadcast-style topdresser offers a variety of cost-saving features including a four-wheel walking beam suspension that allows all four wheels to stay in contact with the ground regardless of terrain. The drop zone system ensures an even application, and the smooth belt eliminates load shifting to prevent material from escaping. Additionally, the 21-cubic-foot hopper capacity level ensures high productivity and the capacity to finish a job with minimal stops. Available in vehicle-mounted and towable models, the ProPass is a highly versatile and productive topdresser.

TURFCO METE-R-MATIC IV

Turfco's battle-tested topdressers make life easier and more productive. Handle all of your topdressing jobs, from routine turf maintenance to renovating an entire playing field, with the Turfco Mete-R-Matic IV topdresser. It provides the proven spread of all Turfco topdressers, with the added efficiency of a one-cubic-meter galvanized steel hopper. The patented Chevron belt assures uniform application of all types of wet or dry materials including sand, compost, peat and humus, grass seed, crumb rubber, gypsum, lime and clays. The hopper can be filled with a front-end loader. Spread application is always uniform and consistent due to the patented ground-driven operating system. The spreader rides on six tires, so it easily adjusts to changing turf conditions. The spread rate is easily adjusted. Top speed is 8 mph at load, 16 mph unloaded. Just hook the Mete-R-Matic IV up to a truck utility tractor and go – no engine, no hydraulics.

TURFTIME EQUIPMENT TOPDRESSERS

TurfTime Equipment has six topdresser models to choose from ranging from .75-cubic-yard to 7.5-cubic-yard capacity. Material handler and utility vehicle mount options available. Choose the size that is the best fit for your business or complex. The long hopper of the Advantage topdresser allows faster loading without spilling. Select the right topdressing spreader for speed and maneuverability to spread compost, apply soil amendments and topdress with sand. The TurfTime Equipment topdresser is an Adantage; use it anywhere – golf course, sports field, clay court or arena, horse track, polo field, open spaces and naturalized areas. TurfTime Equipment offers topdressers/material handlers to fill bunkers, sand-dress greens, apply compost and bio-fertilizers, repair washouts, apply mulch to control erosion, level low spots, maintain paths and even grass runways and airstrips.

NEW MODULE ALLOWS REMOTE MANAGEMENT OF HUNTER ACC2 CONTROLLERS VIA CELLULAR CONNECTION

The new A2C-LTE module from Hunter Industries enables Centralus Cloud management for ACC2 controllers via cellular technology.

This simple, compact cellular kit is easy to install and set up. The module provides near instant connectivity to enable a suite of remote irrigation control capabilities.

"The module allows users to manage ACC2 controllers remotely via cellular connection, in addition to WiFi and LAN options. These capabilities reduce the need for costly and time-consuming site visits," said Dave Shoup, senior product manager, Hunter Industries.

With Centralus, users can receive SMS text alerts in the event of critical alarms, view complete alarm logs and flow histories in a web browser, and adjust, stop, or cancel programmed irrigation as required.

PBI-GORDON UNVEILS A NEW FORMULATION FOR SPEEDZONE HERBICIDE

New SpeedZone EW broadleaf herbicide for turf from PBI-Gordon features a novel, emulsion-in-water (EW) formulation – a technological advance from emulsifiable concentrate (EC) formulations that rely on solvents to solubilize active ingredients.

The emulsion-in-water technology of SpeedZone EW creates smaller particle size than EC formulations. This results in more active ingredients impacting the leaf surface for improved efficacy, plus a lower odor profile and lower Volatile Organic Content (VOC). And the EW formulation is engineered for use in low-volume and conventional sprayers.

Ideal for use on golf courses, residential and commercial turf areas, SpeedZone EW controls more than 90 tough broadleaf weeds, including dollarweed, ground ivy, and spurge. It is labeled for use in the most common turfgrass species, including Kentucky bluegrass, annual bluegrass, annual ryegrass, perennial ryegrass and tall fescue.

Other features of SpeedZone EW include:

- A visual response within 24 hours; Weed death in 7-14 days
- Rainfast in as little as three hours
- Allows for reseeding in one week

*SpeedZone EW will be available for sale in fall 2020, pending state registrations.

SIDEKICK KIOTI CK SERIES

SideKick announced it now fits all Kioti CK series tractors (CK2610, CK3510, CK4010) with no modifications. 11.7 gallons per minute hydraulic flow greatly enhances the SideKick's ability.

SideKick was developed to make installation of sod that's 3/4 of an inch to 4 inches thick easier and faster while more effectively closing seams between the rolls.

And since SideKick never touches the grass, there's no damage to the turf. Using SideKick improves the turf quality by compressing the sod, making it stronger and softer.

SIMPSON PRESSURE WASHERS JOIN THE FIGHT AGAINST COVID-19

Simpson, a brand owned by the FNA Group, announced the release of the new Simpson SM1200 sanitizing mister and pressure washing system.

In the wake of the COVID-19 pandemic, Simpson and the FNA Group have stepped up to support a population in crisis. Powered by an electric induction motor, the new machine is perfect for indoor and outdoor use.

The SM1200 is both a mister and pressure washer all in one system. Switching between misting and pressure washing modes is as easy as adjusting the dual-action metering valve. When used with a disinfectant such as Vital Oxide (sold separately), the SM1200 will deliver a mold- and bacteria-killing mist that is perfect for disinfecting any surface.

"The function of the SM1200 sanitizing mister and pressure washing system is ideal for the times we're facing," said William Alexander, EVP of sales and marketing at the FNA Group. "It provides effective cleaning performance, and makes sanitizing very simple."

The SM1200 features a self-priming chemical pump, a 5-foot chemical hose and filter assembly, and a dedicated misting spray gun. The system also includes a pressure washer spray gun and lance, an assortment of high-pressure nozzles, a dedicated soap nozzle, a second quick-detach mister nozzle, and a non-marking, kink-resistant, 75-foot high-pressure hose. To tackle larger jobs, Simpson offers a 3-way adapter (sold separately) that allows up to three misting spray guns to be used at once.

EGO TAKES SNOW BLOWING TO THE NEXT LEVEL WITH TWO NEW MACHINES

Clearing driveways and sidewalks in winter can be a dreadful chore. EGO has taken a lot of the stress out of starting up the snow blower with its introduction a few years back of a 56V ARC Lithium battery-powered single-stage snow blower. A press of a button and the motor, which delivers all the power of gas, roars to life.

EGO has taken its game up a mega notch with the introduction of a 2-stage battery-powered snow blower and an improved version of the single stage.

The 2-stage model (# SNT2400) is designed for people who want to move a lot of snow or who are plagued with snowplow piles at the end of the driveway. It's 24-inch-wide, thick-gauge steel box, with its aggressive steel augurs and retractable drift cutters, chews through the frozen stuff, and delivers it to the steel impeller that flings the snow up to 50 feet.

Traction is assured on all manner of surfaces with aggressive 15" x 3.5" wheels and a limited-slip differential that allows the machine to make turns effortlessly.

EGO has also paid great attention to the user interface. Dexterity with big winter gloves is not a given, so all the controls are designed to be easy to use while delivering maximum efficiency.

To engage the drive, you squeeze the handle grips. Once in gear, you can let go of either the left or the right handle, which will then allow you to work the other controls with your free hand. In forward, you can adjust the speed from .9-2.7mph. The reverse speed is .9 mph. Each increment is defined with a click of a detente.

Directing the snow is achieved with a sure-handed push of a joystick across a 200-degree arc; and you can put the snow exactly where you want it with another lever that raises or lowers the chute cowling. A bank of LED headlights, high and low on the machine, allows you to see what you're doing no matter the conditions or time of day.

With two 7.5 ah ARC Lithium batteries, you can easily clear an 8-car driveway with 14 inches of medium density snow. It's also available with two 10ah batteries that will give you 25 percent more run time; ideal for very long driveways that hold 10 or more cars or for users who take care of multiple properties. Included in the kit is another EGO innovation, our first-ever Duo charger that charges 2 batteries...getting you back to work in as little as two hours. And, because EGO snow blowers run off of two batteries simultaneously, they deliver peak power; allowing you to operate under high amp draw conditions, enabling the snow blower to gobble up and spit out the heaviest snow; not bogging down like many gas snow blowers!

Now, for the refinement of the original EGO single-stage snow blower; same brushless motor, same one-button start, same 21-inch clearing width, and same easily directed chute. But, instead of hard rubber paddles that fling the snow up and out of the chute 35 feet, the new blower, (model #SNT2110), has steel augurs that

aggressively chew through the snow and end of driveway crud to send the snow flying up to 40 feet. Even more efficient than it's predecessor, it will clear a 17-car driveway of up to 8 inches of medium-density snow on a single charge.

All of EGO's 50-plus tools run off any one of EGO's batteries. All tools come with a 5-year warranty and a 3-year warranty of the battery.

UNDERHILL ANNOUNCES NEW GULP PRO PUMPS FOR 2020

Underhill announced its most advanced pumps yet – the new Gulp Pro super-high-capacity water removal suction pumps.

Whether you need to remove water from sprinklers and valve boxes or other areas or devices, Gulp Pro series pumps are the ideal tools for the job.

New and improved features for 2020:

- Intake foot valve – less clogging
- Larger cylinder body – higher pump volume
- Re-designed plunger – improved suction and pumping
- Re-designed top O-ring – eliminates spraying in your face during pumping
- Completely disassembles for easy cleaning and longer life
- Key replacement parts
- High suction power
- Self-priming
- Polycarbonate smoke cylinder
- Replacement plunger seal

ELITE TURF POWER SYSTEM HITS U.S. MARKET

Elite Turf has partnered with world-renowned artificial grass company Act Global to bring its all-in-one Power System to the U.S. market. Previously only available in Europe, the Elite Turf Power system combines Act Global's triple-fiber woven Xtreme Turf and a non-rubber infill developed to create a first-of-its-kind product that is recyclable while enhancing safety, playability and durability.

"Over the past 20 years, the social and market drivers for greater turf innovation related to environmental, sustainability and player safety factors have significantly increased. Athletic facilities, public and private institutions, and athletes and their families can now rest easy knowing that they're investing and playing on a completely recyclable turf product that's safer for the environment, safer for the player, and performs better," said Paul Adams, vice president of sales and marketing at Elite Turf. "We're proud to partner with a global leader in the market, Act Global, to bring this top-of-the-line, eco-friendly Xtreme Turf product currently only available overseas to the U.S. at a time when player safety and our impact on the environment are more important than ever."

Elite Turf's Power System encompasses a woven turf ,which is stronger and more durable than traditional tufted turf. It's built on the ProPlay pad Foundation, which plays and feels firm while testing soft, reducing injuries. With no polyurethane backing, the synthetic turf is 100% recyclable at end of life, reducing the high disposal cost, and its interlocked fibers stand vertical, offering superior and consistent ball roll, steady footing, and reduced glare and heat. The Power System also provides a safer and healthier infill that's not only better for athletes, but better for the environment. Derived from up to 40,000 pounds of ocean plastic, the patent-pending infill can remove 1.8 million bottles from the ocean per field. Lastly, the high water permeability of the woven backing combined with the Elite Power Drainage system, which drains more than 2x faster than other fields results in more playable hours.

The Power System provides a premium playing surface for a variety of sports including soccer, football, baseball, rugby and field hockey.

Meet your new workforce.

Overseeders

Get your fields in shape faster with the **TriWave®** series of overseeders featuring patented floating heads and fully adjustable depth controls for superior germination regardless of conditions.

Topdressers

Choose from the most comprehensive line of spinner and drop-style topdressers available. **WideSpin™** and **Mete-R-Matic®** models handle a variety of mixtures, are easy to load, simple to operate and super efficient.

Debris Blowers

The **Torrent™2** takes debris cleanup to a whole new level. It's the fastest, most productive blower available with unprecedented power, precision and control to get your job done.

CELEBRATING A CENTURY 1912 100 YEARS OF THANKS 2019 THE KINKEAD & TURFCO FAMILY

Schedule your demo today at **www.turfco.com** or call **800.679.8201**

TURFCO®

The following are some industry Tweets from the past month:

@Zona_TURFlete

Happy Monday. Our Campus Mall is looking top notch. Campus is glowing, putting on the finishing touches. We are ready for the Fall semester to begin. *@FieldExperts @uagrounds #Fall2020 #ArizonaWildcat #BestGrounds #Sunny #GroundsProfessional*

AUGUST 10

@reedag04

#TBT 15 years ago: August 6th, 2005 - Pizza Hut Park opened its doors to soccer. I started May that year when we sodded the stadium field. Thought surely that would be the longest we would go without an event in the stadium. Ready to see *@ToyotaStadiumTX* opened to soccer again.

AUGUST 6

@GeorgiaSTMA

A little mound building in Roswell GA with *@npasercl* at Hembree Park.

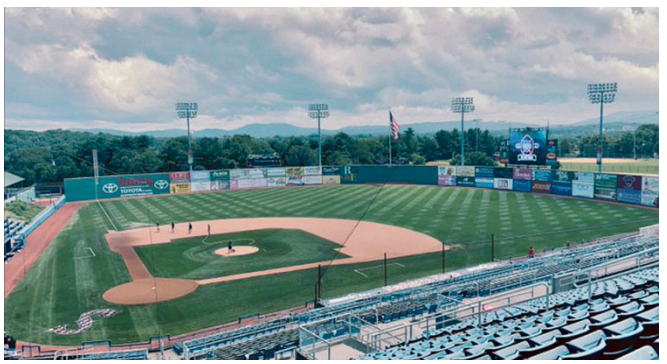
AUGUST 4

@T_LenzTurf

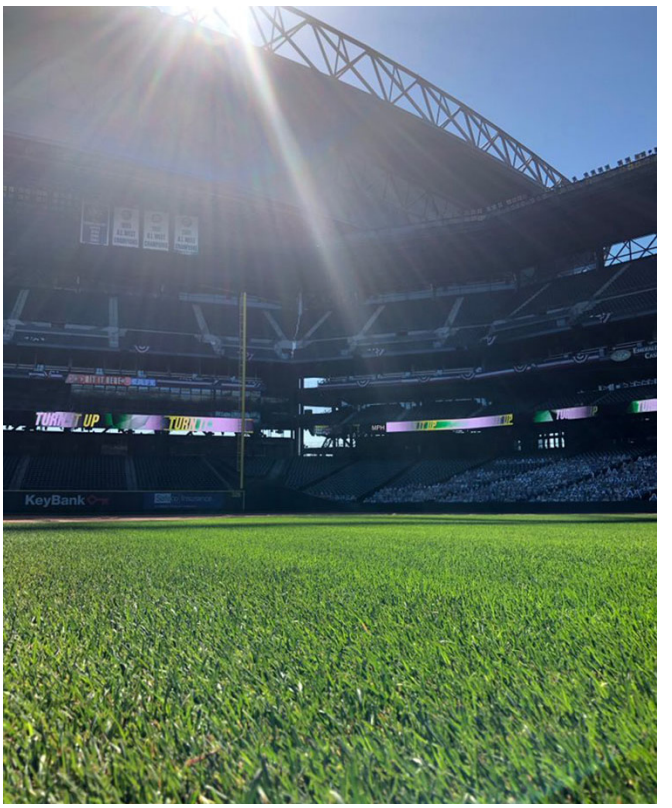
The bats are hot, so are the boxes.

AUGUST 2

@jcblackhurst
All buttoned up and waiting on *#Isaias* to roll through.
AUGUST 1



@JoeyElmore38
I honestly couldn't have a prouder Gkeeper moment. The staff here with the *@salemredsox* and my grounds staff were able to put on one last game for these seniors who lost their last HS season.
AUGUST 1



@TampChamp
Mariners *#OpeningDay* is finally here!
JULY 31

@FieldExperts
STMA member, Joel Crotzer oversees the field at "The Hangar" in Lancaster, California, home of the *@JetHawks*. He and his team showcased their talents with this mesmerizing field design.
JULY 30

Consider Submitting for a Field of the Year Award

Be recognized for your management practices

Do you know what equipment you own or lease?

Do you know your monthly maintenance and fertility programs?

Do you develop an annual budget?

If the answer to the above is "yes," you are a great candidate to apply for a Field of the Year award.

STMA's Field of the Year (FOY) program is definitely underway, and we invite you to participate. The application is completely online.

Due to the closure of some fields during the pandemic, the program has been adjusted slightly with changes to two questions in the application.

1) The Playing Conditions Index (PCI), which previously was required to be used four times during the year (three in season and once out of season) is now optional and not required.

2) In addition, one of the most important questions in the application, "Why should STMA consider your field a winner?" has been expanded to include: "Cite any specific challenges you faced during the pandemic." This has been added to provide applicants an opportunity to tell some interesting stories about their field management activities during the pandemic.

Other information that must be provided includes field photos — no fewer than 15 and no more than 30 — and the number of hours the field is in use for sporting events, as well as other activities.

The FOY program is for natural grass fields and is for a single field — not a complex. However, an individual field within a complex may be entered. Fields may be entered for the sports of baseball, softball, football, soccer and sporting grounds (non-mainstream sports such as lacrosse, rugby, horse racing tracks, etc.) These awards are given in three categories: schools/parks, colleges and universities and professional stadiums.

Applications are due Oct. 15. Winners will be notified in early November. Winners are presented with their award at the STMA national conference during the awards banquet. In addition, the awards package includes signature clothing, three nights of accommodations during the conference and a feature article in an upcoming issue of *SportsField Management* magazine.

A panel of 16 judges independently scores entries based on playability, appearance of surfaces, safety, utilization of innovative solutions, effective use of budget and implementation of a comprehensive agronomic program. Judges may not award a field in each category.

Carolina Green Corp., Precision Laboratories, World Class Athletic Surfaces and John Deere sponsor STMA's Awards program, which includes Field of the Year, Innovative Awards, Founders' Awards, and the Minor League Baseball Sports Field Manager of the Year (on hiatus due to the cancellation of the Minor League season).

For the 2019 year, STMA presented 11 Field of the Year Awards: two in the professional category in soccer and baseball; five to colleges and universities in all five sports and four to schools/parks in sporting grounds, baseball, football and softball.

To apply, visit *STMA.org* and click on "Programs," then "Awards" no later than Oct. 15.

Nine Tips to a Successful Submittal

1. Start now. Even though the application is online and not due until Oct. 15, now is the time to start the process of documenting your good work.

2. Submit a customized application for each field if you are entering more than one field. Each of your fields has a customized program, so be certain to relay that information.

3. Pictures really are worth 1,000 words. You have an opportunity to present up to 30 photos — use them. The judges especially are interested in seeing "before" and "after" photos, so do not submit just beauty shots.

4. Budget information is extremely important; your goal is to make the judges understand your effective use of resources. Winners seldom are the ones who have the most resources.

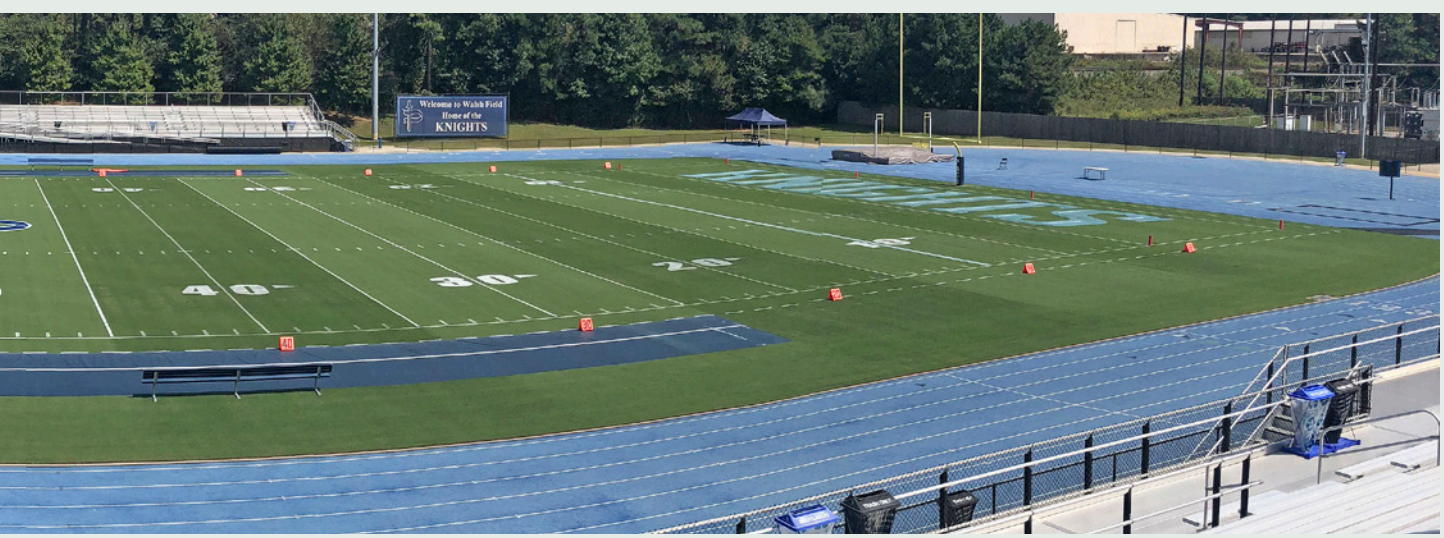
5. Be sure to fully express innovative solutions to any of the problems you encounter in managing the field and provide any special challenges you faced, or continue to face, during COVID-19.

6. Consider submitting your oldest field. (Must be a minimum of 2 seasons of play old). The key is to showcase your field management savvy, and your skills can really show through on older fields.

7. Give credit to your staff. Be sure to outline the personnel you have on your staff.

8. Highlight all of the components of your monthly maintenance program. Include why you are doing something, and don't forget to call attention to the ways you are protecting the environment.

9. Proofread your application before hitting "submit." Catch those spelling and grammar errors that can classify the submittal as subpar.



STMA Affiliated Chapters Contact Information

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

Colorado Sports Turf Managers Association: www.cstma.org

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

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

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

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

Georgia Sports Turf Managers Association: www.gstma.org

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

Illinois Chapter STMA: www.ILSTMA.org

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

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

Iowa Sports Turf Managers Association: www.iowaturfgrass.org

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

Mid-Atlantic STMA: www.mastma.org

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

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

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

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

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

North Carolina Chapter of STMA: www.ncsportsturf.org

Northern California STMA: www.norcalstma.org

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

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

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

Ozarks STMA: www.ozarksstma.org

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

Southern California Chapter: www.socalstma.com

South Carolina Chapter of STMA: www.scstma.org

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

Texas Sports Turf Managers Association: www.txstma.org

Virginia Sports Turf Managers Association: www.vstma.org

Wisconsin Sports Turf Managers Association: www.wstma.org

Chapter Sponsors

Hunter®

JOHN DEERE

Q: I think it is time for a new mower. What are some things I should consider before making this purchase?

A: In full disclosure, this was a question I asked myself last week. But I do get this question from sports field managers from time to time, and I thought since we recently mentioned in this column the importance of a good mowing program, it would be a good opportunity to talk about the selecting the equipment.

Like many of you, I have purchased mowers for my work and for personal use around my home. Over the years, I have purchased reel and rotary mowers from the smallest push mowers and greens mowers to large fairway mowers and tractor-mounted rotary mowers. Like everyone, I want a mower that best meets my needs and is a good value.

Before I mention mower selection, let me first emphasize the importance of your local dealers. Your equipment will eventually break and it will need to be serviced. We all want fair, friendly and responsive service. If the dealer is nearby, that is even better. If you do not have much experience with the service center of your local equipment dealers, ask some of your nearby trusted colleagues about their experiences. In most cases, dealers only want to service the brands they sell, so that may narrow down your equipment selection to one or two brands. And while not essential, it is often helpful to be brand-loyal since a company often uses interchangeable parts across its product line and over several years worth of models.

Sometimes price is a significant part of the decision, but often mowers are so competitively priced within a class that a mower's features are the primary factor in the purchasing decision. There are really a lot of ways to evaluate mowers. It is worth your time to investigate what is out there before you make a purchase. If you have not looked at mowers in a few years, you may be surprised at the features that are currently available.

When looking for your next mower, it is important to have an idea of what is liked and disliked about what you are currently using. For example, my primary mower used at home is a commercial walk-behind rotary mower purchased about 14 years ago. It has been a great mower that has served me well, but there are a few specifications I wish were different. For example, I do not like its fixed deck. Since my current property has cool- and warm-season turfgrasses, I would like the ability to easily change the height of cut. Also, the big, heavy mower does great mowing straight runs, but requires significant operator effort to make turns. The mower's controls were not ergonomically designed and best fit an operator with broad shoulders and really large hands. Lastly, I am not sure how many more years I will want to use a walk-behind mower.

When I was out of town several weeks this summer, my wife became the primary mower operator (she also loves to mow). When I returned home, she mentioned that the mower was hard for her to (pull) start and challenging for her to comfortably operate. So, it was a great time for me to suggest getting a new mower.

My wife said "okay," and then immediately suggested that I only look at key-start models that are easier to steer. It is so important to get feedback from the equipment operators. Like my wife, they can provide feedback on design or preferences that can make big differences in user comfort and safety when they operate the equipment.

With a list of requirements and desires, I have begun my search for our next mower. There are so many new features to consider. Who knew you can get a cell phone charger and holder on a mower? Hopefully we will all finish this crazy year happily mowing. Be safe. **SFM**

Grady Miller, Ph.D.
Professor and Extension Turf Specialist
North Carolina State University

Questions?
Send them to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or e-mail *grady_miller@ncsu.edu*
Or, send your question to Pamela Sherratt at 202 Kottman Hall, 2001 Coffey Road, Columbus, OH 43210 or *sherratt.1@osu.edu*

GAME DAY READY

TORO SPORTS FIELDS AND GROUNDS IRRIGATION

Toro's line of high-performance rotors for Sports Fields and other recreational spaces can help you maintain the beauty and playability of your turf – whether natural or synthetic – better than anyone else. Unique options such as Valve-in-Head models, low flow nozzles, and long radius capabilities will have your field ready on game day and every day in between.

TORO®

Learn more at: **www.toro.com**

A Step Forward in Overseeding.

SOS Turf-Annual ryegrass from Barenbrug USA offers unique solutions to fall overseeding challenges. With three generations of turf-annuals available, we are confident we have a product that can be tailored to your product's budget, on-site requirements, and turf quality needs. Our products, SOS 400, SOS 220 MAXX, & SOS 211 feature some of the best annual ryegrasses available and provide your turf with an economic, fast-to-establish, natural transitioning turf stand, for year-round playability.

Learn more at: ***www.barusa.com***

BARENBRUG®