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**BETTER SEEDBED**

First Products' SEEDA-vator uses a patented vibrating rotor to fracture the soil, resulting in a better seedbed. The machine's advantage is being able to accomplish primary seeding and overseeding using one machine, says the company.

When overseeding, the vibrating tines loosen the soil without destroying established turf. In primary seeding, the SEEDA-vator prepares the soil without other tools, saving time and money.

First Products/800-353-8780
www.1stproducts.com
For information, circle 157

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**SOIL FUMIGANT**

Basamid granular soil fumigant is the only granular soil fumigant on the market, and is the quickest, most dependable way to achieve perfect turf, says manufacturer BASF. Basamid penetrates deep to sterilize soil and eliminate virtually all weeds, nematodes, grasses and soil diseases. Reseeding to get new turf off to a vigorous start can be done in as little as 10-12 days following application. The nonrestricted, granular formulation of Basamid requires no complicated application equipment or tarps.

BASF/800-545-9525
www.turffacts.com
For information, circle 155

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**NETTING**

Have a netting problem? Beacon Ballfields can supply custom netting panels of any size or shape, or create shapes that fit together to protect irregular spaces.

Beacon can advise you about the proper weight and mesh size of netting to use for your particular project. All their nets come with finished edges that include a vinyl-edge hem and grommets for easy attachment. Net systems that are designed and made from quality materials and are installed properly enhance a facilities' safety, function, and appearance.

Beacon Ballfields/800-747-5885
www.ballfields.com
For information, circle 156
This fall, for the first time in 33 years, football at Michigan State University's Spartan Stadium will be played on a natural grass surface.

Features

20 Maintaining the Grounds
Regular overseeding either as a renovation a few times per year or in-season to keep pace with traffic will ensure a safe and durable sports turf.

28 Roger Bossard on the future of groundskeeping
The third-generation major league groundskeeper and leading field builder shares his thoughts on where the profession is headed.

30 Around the Grounds
Senior editor John Kmitta visits the danger zone, where baseball fans are at risk, and the materials that can protect them.
It's hard to go wrong when you're choosing between two new warm-season turf grass varieties as outstanding as SeaIsle Seashore Paspalum and TifSport Bermudagrass. These two new patented cultivars can only be sold as certified sod or sprigs, and only by a member of a select group of licensed growers. Our top-quality producers have agreed to a stringent set of production practices. This means the grass you buy from a Florida, Georgia or South Carolina grower is going to be the same grass you buy from a Texas or California grower. And it'll be the same 10 years down the road. If you're involved with the installation or on-going maintenance of a sports field, you'll really appreciate how these turf grasses compare to Tifway 419 and the other older varieties in use today.

While SeaIsle is similar in texture and wear tolerance to hybrid bermudas, it may offer a number of important advantages. First and foremost, it can handle multiple stresses: prolonged drought, high salt levels, waterlogging and extremely high or low soil pH levels. Secondly, SeaIsle can tolerate most types of alternate water sources, including wastewater, effluent, gray water, brackish water, and even ocean water. It requires less irrigating, less fertilizer and only minimal pesticide applications when compared to other warm-season cultivars. It also handles cloudy conditions and the low light intensity of domed stadiums extremely well. That's why it was such a good choice for the Houston Astros' new field. Take a look at its pluses and specify SeaIsle for your new sports field or renovation project.

Looking for a bermudagrass that can stand up to the stress and demands of big-time sports, to the wear and tear of football and soccer cleats, to the punishment of baseball slides, dives and spikes? Relax; you've found it. TifSport also has outstanding color, disease resistance and cold hardiness. In fact, TifSport is performing with flying colors in stadiums as far north as FedEx Field in Landover, Maryland, on up to the Ravens' PSI Net Stadium in Baltimore. If you're a sports turf manager, you know what's important for a playing field — outstanding density, turf strength and turf quality. You need a grass that recovers quickly from day-in-and-day-out abuse. That's just what TifSport has been bred to do. Be sure to ask for TifSport by name. It makes an attractive, dark green turf.
Preparing for the fall playing season

As Murray Cook points out on the page opposite, August brings the start of football practice, as well as many other sports, across the country. This presents opportunities for every turf manager, from the seasoned vets to the novices determined to improve their fields this year.

To help those readers who fall into the latter category, I turned to an expert for some advice. Here's what STMA Board member Mike Andresen, CSFM, athletic turf manager for the Iowa State Cyclones, has to offer:

"Everyone needs to have a 'seeding plan.' If you can only buy 10 pounds of seed, figure out the best plan for that 10 pounds. We spread seed in the middle of our practice fields and along the sidelines beginning with the first week of practice and continue throughout the fall growing season. We use pre-germinated seed regularly to help us work within shortened germination windows," says Mike.

"We use divot mix on our playing field to aid healing. Although every turf manager's situation is different, there are going to be windows of opportunity for all so you absolutely have to be prepared to take advantage of them. If you wait to act until that window is upon you, you have lost a great deal of efficiency and your results will be average."

HERE'S WHAT STMA BOARD MEMBER MIKE ANDRESEN, CSFM, ATHLETIC TURF MANAGER FOR THE IOWA STATE CYCLONES, HAS TO OFFER:

"Numerous climate changes in your area," Mike says. "Excessively wet soils compound traffic effects and bring compaction. The fall playing season is a difficult time to tackle soils-related issues, so avoid bringing one upon yourself. Know your soils, know your infiltration rates, and water only as needed."

"Listening to every coach or player reaction to your playing surface is unhealthy. You know when your surface is 'right' and if you don't, you should turn to a coach or player who can give you a fair appraisal," he says.

"Talk to some wise field managers and you can easily sense the affection they have for their fields. They know them inside and out, how they play, how they feel, how the weather affects them, and even how they smell. Develop that relationship with your playing field and you'll learn to listen to the field and not to the players, coaches or fans!"

"I think many times we set ourselves up to react rather than to act," Mike says. "Too many of us have to spend our time driving buses, coaching teams, raising kids, and we neglect to take the time to plan. We think mowing the field is more productive than visualizing and roughly planning out the week. Reacting during the heat of battle is not conducive to making the very best long-term choices. If you can think through your challenges before they appear, you will be prepared if one of them does happen."

Comments always welcome. Call Eric at 630-678-0034, fax 630-678-0034, email eschroder@iap.com, or send to PO Box 67, Lombard, IL 60148.
Planning equals success

Planning is the key to success. Many of you plan throughout the year to ensure that your facilities and your careers stay on track. Some of you strategically plan at conferences, at your desk, in office structures and so on. I am sure I am not alone on this one, but for years I planned most of my work and career changes on a mower. Two hours a day, every day, without interruptions was extremely valuable. Once in a while the use of a headset for tunes would come in handy for enhanced meditation. (Even now I fight my son for the mower to take care of the home yard.)

It’s so easy to get bogged down on the challenges of the day and put off focusing on the big picture. But the most successful programs come from sorting through those always-too-long “To Do” lists, identifying the truly important issues, and tackling the planning necessary to make a positive impact on those issues. August can be a pivotal period towards preparing for your next sports season. Prioritizing and finalizing those capital improvement budgets also can use those final touches of planning. This can be especially important if you work for a municipality or other entity where multiple departments must submit their individual budgets for consideration in the overall budget.

Before you hop on that mower for another planning session, take a look at Dr. Frank Rossi’s article on field renovation via interseeding (p. 20). Also check out the article by Eric Adkins, CSFM, to see how becoming a certified sports field manager can have an impact on your career (p. 10). I am sure Eric spent a few hours planning his future on a mower as he worked toward certification and as he moved forward in his own career development to his new position at Michigan State.

Two-a-days are here

Are you ready to rumble? Great things happen this time of year. Kids go back to school (which makes many parents very happy). And, from high school to the pros, the month kicks off workouts and exhibition games for FOOTBALL SEASON! The month of August signifies a seasonal change in many types of sports. The dog days of summer normally begin to wind down from baseball in August/September and begin to crank up with football. Fall is just around the corner.

Nature continues as a “hot” topic. Temperatures and growing grass are still tough for many of you bluegrass lovers and of course great for the bermudagrass turf handlers.

When I connect with friends in Arizona they talk about the dry heat and I talk about the humid heat. Well, for much of this summer, it has been just plain hot all over. Combating heat stress on turf is a difficult task for everyone in sports turf. Networking with other sports turf managers is a great step in planning your own heat stress program.

The other HOT news to share with you includes information regarding scholarship criteria. The details are posted on the STMA website now (www.sportsturfmanager.com). Information and application forms will be sent to educators and to all STMA Student members shortly after Labor Day. Scholarships are awarded for those in 2-year, 4-year undergraduate, and graduate programs. To add that important networking aspect, each scholarship recipient also receives free registration to the STMA Conference in January and up to $500 toward his or her travel and lodging expenses to attend the Conference.

Murray Cook, STMA President
murrayc@brickmangroup.com

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President's Message
This fall, for the first time in 33 years, something will take place at Michigan State University’s Spartan Stadium that most people take for granted. College football will be played on a natural grass surface.

A system of 4,800 GreenTech ITM modules was installed in Spartan Stadium in June. The modules are plastic, measure 46-inches square, and have channels every 22 inches on all four sides.

Initial stadium construction started after the last home game in December 2001. The old Astroturf was removed and lowering of the field surface began. The old asphalt pad and 12 inches of gravel base were removed to accommodate the height of the new modular system. A drainage system surrounds the outside edge of the new asphalt pad. A 1-percent slope of the asphalt pad will allow excess water to flow to the perimeter drain lines.

Underground irrigation lines and a new irrigation well were completed before the new asphalt surface was installed. Four irrigation lines run the length of the field, approximately 60 feet apart, beneath the asphalt. Down both sidelines is a series of vents that will allow for the air movement throughout the modular system. Warm air can be forced through the sideline vents and into the channel system of the modules, extending the growing season in East Lansing.

**Homegrown turf**

Growing the turf started at the Hancock Turf Research Center in May 2001. Final assembly and field construction was completed by the Clark Companies of Delhi, NY. During the final field construction phase, root zone materials were added to bring the height of each module to 12 inches. Turf Center manager Mark Collins and the research support staff began the seeding and grow-in phase. The modules were seeded at 1.3 pounds of seed per 1,000 square feet. Nine varieties of bluegrass were used: Limousine, Coventry, Rugby II, Unique, Midnight, Moonlight, Northstar, Champagne, and Serene.

The root zone was composed of 90 percent coarse USGA sand with the remaining 10 percent a combination of silt and clay. Fertilization began as turf growth started and was continued at 2-week intervals. During the first 6 months of growing time, the turf received more than 6 pounds of nitrogen and nearly 6 pounds of potassium per 1,000 square feet. Phosphorus applications totaled more than three pounds per 1000 square feet during the same 6-month time frame.

On June 10 this summer—after 13 months of preparation—moving day finally arrived. The turf was in excellent shape with a healthy, mature root system that seemed to be growing right out the bottom of the module. The nine varieties of bluegrass were becoming very aggressive and competitive with each other. A small thatch layer was starting to form, which is why seed was planted so far in advance of the actual moving day. The result was like bringing 4,800 individual football fields into Spartan Stadium.

As the modules were assembled in May 2001, a 12-inch high grow-in fence surrounded every module. This fence acted like a guard preventing the modules from growing together and also made separating the modules very easy. Forklifts pulled apart each individual module. Separated modules were loaded onto wagons for the 2-mile journey to the stadium. The University Farms staff, led by farm manager Barry Darling, was in charge of transporting the modules from the Hancock Turf Center to the stadium. On Monday, June 10, the first day of moving modules, eight farm tractors with single wagons were used. Each wagon could transport eight modules. Tuesday through Thursday the pace increased. Four tractors pulling two wagons became the...
The modules were seeded at 1.3 pounds of seed per 1,000 square feet. Nine varieties of bluegrass were used.

Days two through four became routine. The University Farms personnel were able to keep up with the demand of supplying modules to the stadium at the rate of more than 100 per hour. The field installation company, Kares Construction, was installing modules at that same rate. By the end of day four, 85 of the 100 rows of modules were in place. Kares crews worked hard to finish project the by the self-imposed Friday deadline.

During the move-in process, moisture levels were monitored to insure that newly exposed edges didn’t become too dry. Staffers at the research center mowed and irrigated each module daily. Maintaining proper moisture in the module made it much easier to separate at the Turf Research Center. As the number of modules increased inside the stadium, proper turf maintenance continued. Thanks to Spartan Distributors, Toro mowers began mowing the Spartan Stadium surface on the afternoon of June 11. Some modules were transported, installed, and mowed all in the same day. By the end of the third day of installation, half of the irrigation system was operable.

As the last day approached, we knew that the installation process would slow because the workspace was becoming smaller. The double wagon tractors went back to single tractors and wagons. Forklifts gave way to pallet jacks. The last two modules were lowered into place by the use of straps and a skyjack. As the last module approached the stadium, the MSU Department of Public Safety provided a police escort into the stadium, acknowledging the momentous occasion. The last row was installed and the installation completed on Friday, June 15, to the delight of everyone involved.

For the first time in 33 years, grass was back in Spartan Stadium. For many people at Michigan State University, it is a dream come true.

For others, it is a job well done.

Eric Adkins, CSFM, is the athletic turf manager for Spartan Stadium at Michigan State University.
The price of being a Certified Sports Field Manager

Now that I have been a Certified Sports Field Manager (CSFM) for more than 2 years, my perspective is changing. In the past, if you watered faithfully, followed some type of fertilization program, maintained good cultural practices, and mowed three times a week, that was all you needed to be a good sports turf manager. Ten years ago, that might have been right.

But now, more fields are becoming state of the art. There are new turf systems on the market every day, from the portable and removable turf systems, to all kinds of stabilized sand-based systems, to modified native soil fields. Today we are inundated with all kinds of soil amendments, the newest and best fertilizers, the best turfgrass varieties, and the latest and greatest chemicals, all of which we need to perform our jobs correctly.

Who are the Sports Turf Managers that will be able to manage the latest and greatest turf systems? I am sure we will have more venues where the grass will be grown indoors, pushing the limits of turf even farther than imagined. Who are the Sports Turf Managers that will continue to improve and up-grade existing fields?

The answers to those questions are the sports turf managers who will continue with their professional development. Professional development is the single most important action you can take to improve your career and further your potential new employment opportunities. The Certification Program guides you in the right direction.

Becoming certified isn't easy. If it were easy, all would be certified. Today's CSFM has made the commitment to learning more about the sports turf industry.

This shows us that, for CSFMs, the education and professional development process never stops.

Here at Michigan State University, you don't have to look far to see the future of the sports turf industry. The 2-year Sports and Commercial Turf Management Program and the 4-year degree program are bringing a better-educated turf manager to the turf industry. Researchers at the Hancock Turf Research Center continue to work toward the next best sports turf grass species and cultivars and toward finding the best combination of sports turf grasses that can take use and abuse, and recover quickly. They continue testing the latest new products that enter the market.

Researchers are continuing to test turf grass soils, based on soil physical and chemical properties. All of the information and learning experience has proved to be invaluable for me. While not everyone has a turf research center at his or her disposal, new information on turf grass research is becoming more available.

The CSFMs of the future will have the best education and experience, putting them at the top of our profession. You can't put a price on education and experience, or maybe you can—your salary. The CSFMs will become the industry leaders in expanding their horizons by pursuing new educational opportunities. To say I know all there is about turfgrass and turfgrass management would be a false statement, but I'm constantly striving to learn more. Being a CSFM has shown that professional development will make me a better sports turf manager, a small price to pay for being recognized as a leader in the sports turf industry. —Eric Adkins, CSFM

About the Certified Sports Field Manager program

Having recognized the importance of fostering and improving professionalism within the sports turf industry, the Sports Turf Managers Association (STMA) developed the certification program for sports turf managers.

The STMA firmly believes that a combination of education and experience are necessary to be the best possible athletic field manager. However, it also recognizes that in a profession as diverse as the sports turf industry, experience should play a major role.

In order to successfully gain certification, you must meet certain education and/or experience requirements. These requirements were set to establish minimum criterion for becoming certified. You will notice, however, that there is a strong leaning toward experience as a sports field manager. For example, it is possible to be certified without having any formal education beyond high school if you have enough years of experience. You cannot, however, become certified by virtue of education alone.

CSFM REQUIREMENTS

A total of 40 combined education and experience points are required to take the certification examination.

EDUCATION

Bachelor's Degree
Non-Turf 8
Turf Related 16
Advanced Degree
Turf Related 24

Note: Education points are not cumulative. No more than 50% of total experience points can be earned on a golf course.

EDUCATION

Activity
Points/Year
Sports Turf Crew
1
Sports Turf Supervisor
3
Sports Turf Manager
6
Golf Asst. Sept.
1.5
Golf Superintendent
3

EXAMINATION

The examination for certification covers four major areas of sports field management:

Agronomy
Pest Management
Administration
Sports Specific Field Management

If you're interested in raising the level of professionalism in the sports turf industry or simply advancing your career, becoming a Certified Sports Field Manager may be the best thing you can do. For more information on the program contact STMA Headquarters at 800/323-2875 or via email at STMAHQ@st.ohmcoxmail.com or check out the STMA Website: www.sportsturfmanager.com.

—Eric Adkins, CSFM