

“If you use a disinfectant once a year for a few thousand dollars, any thing living will be killed and it can help clean the carpet,” said Cook.

can—this is normal, Cook said. Right now it is legal to put them in regular trash for landfills now, though he says the industry is working on other answers.

Please don’t drag soccer or other goals on the synthetic turf—pick them up. They can catch seams so they need to be lifted. Work with coaches to rotate, rotate, rotate.



Cook said he is not a fan of anti-microbial disinfectants that coat the carpet fibers and pointed to Dr. Andy McNitt’s study at Penn State showing staph doesn’t originate or live on synthetic fields. “If you use a disinfectant once a year for a few thousand dollars, any thing living will be killed and it can help clean the carpet,” said Cook.

Or, an audience member suggested managers could buy enzymes, which he recommended.

If you want a two-toned field, have alternate panels put in rather than relying on striping the field, which can wear the fibers and move too much infill around, said Cook.

Cook said gluing gives a flatter seam and a wider bond. He doesn’t see any benefit to gluing and sewing seams. In-lays are always glued and this is where you see problems with pieces coming loose. To repair, make sure and clean the area with a vacuum, use contact cement, and get weight on it as it dries.

When using a Terraplas or similar system to cover the field, watch how much weight you put on the field, you can still damage the fibers or the base.

Always ask for extra carpet and keep it outside so it stays the same “fade” color as what is on your field.-Eric Schroder ■

The game is on. Is your field protected?



NATURAL TURF
SYNTHETIC TURF

NEW
8' Wide
Rolls

EnkamatPlus®

Field protection for games, concerts,
and other social events.

- New 8' wide rolls
- Won't crush or suffocate grass
- Reusable season after season
- Rolls out and up easily
- Affordable solution for field protection
- Smooth and comfortable walking surface
- Multi-use for many sports
- No special equipment needed for installation

COLBOND

800-365-7391
x 5016

Retaining good employees

BUDGETS AND STAFF are cut. Raises are slim or nonexistent. The weather disrupts best-laid plans.

Human resource consultants would tell you that employee engagement and retention are threatened.



www.Ewing1.com

But you already knew that. You have a more limited bag of tricks to keep good workers and to keep them happy.

In a profession like turf management, in which it can take nearly a full year to train a worker for all seasons, replacing workers can be costly and time consuming. It just makes sense to hold on to the good ones and keep their spirits up. Fortunately, even with limited resources, there are ways to bolster employee satisfaction.

Around the country, some top turf management programs have found that one of the least costly but most appreciated employee benefits is flexible scheduling.

"I try to be as honest as I can about our needs but also respect that they have families and that their time away is valuable," said David Rulli, manager of stadium operations for Jefferson County Schools in Lakewood, CO whose fulltime staff of five manages four stadiums and five fields, putting on more than 400 events a year.

"I've found that the biggest thing is setting the parameters — no surprises — about when our busy times are," Rulli said. "But I also try to be understanding when somebody needs a day off. If somebody needs a flexible schedule, I don't say no if I can possibly do it. I have a younger staff, and I know that weddings come up and things like that, and if I can accommodate them, I'm going to do it because that time off is a reward for the pride they take in what we do."

There are more formal flexible scheduling options used around the country, designed to give workers more days off in a row. One option allows for a work week of three 12-hour days plus a half day on the fourth day.

Another option, used at the University of South Carolina-Upstate, schedules four 10-hour days, giving three-day breaks from the job.

"That helps retention," said Bruce Suddeth, director of building and landscape services. Also valued, he said, are split shifts which let staff members escape the broiling midday heat. Those ad hoc schedules allow employees to work early morning hours and then return later in the afternoon.

The city of Tracy, CA is having good luck with a scheduling plan that gives workers a three-day break every other week. Employees are scheduled for four nine-hour shifts followed by a shorter shift on the fifth work day. To cover weekends, employees' schedules are staggered so that some have different start and stop days for their work weeks.

"It's a selling point. People appreciate it," said Don Scholl, superintendent of parks, sports fields and trees, who acknowledges that "the intent is to minimize overtime. We do incur some, but it's clear that when the budget isn't there, we have to look elsewhere for rewards."

Scholl's department also eases the workload on regular staff by employing youth through a labor department grant and assigning them to litter removal, restroom cleaning and other tasks that require less experience.

Looking elsewhere to share some of the grounds keeping workload is a common tactic. At Suddeth's school in Spartanburg, S.C., students, coaches and maintenance staff help do the grounds keeping for the NCAA Division 1 athletic program that has soccer, baseball, softball, track and field teams. Students on work/study programs, independently hired student employees, and interns from the horticultural program at a nearby technical college help ease the workload on his budget-crunched staff.

"And we get a lot of help from our coaches. They don't just sit on the sidelines and point fingers. They actually help on field

"I've found that the biggest thing is setting the parameters — no surprises — about when our busy times are," Rulli said

Another option, used at the University of South Carolina-Upstate, schedules four 10-hour days, giving three-day breaks from the job.

So Scott MacLean, manager of park maintenance, said he tries to compensate with a popular employee benefit, a pass card for the staff to use the golf course, swimming pool and fitness center at no charge.

maintenance, and that helps a lot to manage costs and workload,” Suddeth said, noting that the buy-in from students and staff helps instill pride in the facilities.

Similarly, there’s been no money for raises for Waukegan Park District employees in Illinois. So Scott MacLean, manager of park maintenance, said he tries to compensate with a popular employee benefit, a pass card for the staff to use the golf course, swimming pool and fitness center at no charge.

More important, MacLean said, is making sure that seasonal workers know they’re appreciated. At the end of each season, he sends thank-you notes and invites the good seasonal workers to return the following year.

“It’s a nice for us because they’ve already been trained, and it’s nice for them because they can concentrate on school and don’t have to worry about finding a job next summer,” MacLean said.

Whether talking about seasonal or year-round employees, managers agree that retention depends on hiring conscientious, self-motivated people, training them well, setting clear expectations and then not overwhelming them with micromanagement. Good workers will stay, Scholl said, if you can “give them the tools they need to be successful, let them take on new responsibilities, give them leeway to make decisions, and give regular pats on the back.”

Rulli said budget cuts in the Jefferson County School district

“seem like the worst of times in my 31 years, but we’re probably no different from anyone else. We’ve all had to learn to be more efficient with our workforce.”

To avoid burning out employees, he said, it’s important to “prioritize what needs to be done” and “don’t beat yourself up, or your staff, if you can’t it all done.”

MacLean agreed; “Communicate your expectations well but be realistic about them. If it rains, we may not get all the parks cut.” And he said he’s found one other key to employee retention that doesn’t cost anything — a sense of humor.

“We talk about attitude a lot,” MacLean said. “You’re outside. Enjoy it. It’s all about attitude. We know that. So I take a lot of time saying please and thank you.” ■

Diane Stafford is a business writer and workplace columnist at The Kansas City Star. This is the fourth in a series of seven articles in the 2010 Ewing Professional Development Series. STMA and Ewing have again partnered in this series to bring sports turf industry professional development and career issues to the forefront. For more information, go to www.STMA.org or www.Ewing1.com.

**ARE YOU A
PRODUCT MARKETING & SALES SPECIALIST?**

Can you implement the introduction of the
re-bounce®
sports performance under your feet
brand shock pad to the
Synthetic Turf and Athletic Flooring markets
in North America?

If you are the right person, then the
Soundcoat Company
has an immediate opportunity available for a
Product Marketing and Sales Specialist.

Position requires specific industry knowledge of and contacts within the synthetic sport field market. You'll need the ability to develop the sales and marketing program required to introduce the product in North America. Subsequently you will oversee the re-bounce product line in the US, Canada, and Mexico. Target applications include synthetic turf for athletic fields, playgrounds, golf courses, commercial and residential landscaping, as well as athletic flooring.

Qualifications:

- 3 years Experience in the synthetic sport field industry
- Bachelor's degree
- Sales and Marketing experience
- Ability to travel • Independent, self motivated.

This position reports to the Vice President of Sales and Marketing. Salary commensurate with experience. Full benefits package. EOE

Send Resume and Salary Requirements to:
re-bounce@soundcoat.com

www.re-bounce.com www.soundcoat.com www.recticel.com

Soundcoat is a US subsidiary of Recticel, a Belgium polyurethane foam manufacturer. The re-bounce brand shockpad is a product of Recticel.

MAINTAIN YOUR FIELD




Dirt Doctor Jr.

NewRider 3000

WITH NEWSTRIPES INC. EQUIPMENT

**STRIPERS: RIDERS • WALK BEHIND • AEROSOL
INFIELD GROOMERS DRAGS & MATS
DRY LINERS & FIELD LAYOUT SYSTEMS • FIELD MARKING & MASCOT STENCILS**

**CALL TOLL FREE
1-800-624-6706
1700 Jasper St., #F • Aurora, CO 80011
www.newstripe.com**



A Game Changer

Business is measured in results and customer satisfaction. Whether you are in charge of fairways and greens, parks and sports fields and / or greenhouse and nursery plants, count on us – to provide the most advanced plant technology available.

We are the leading manufacturer and marketer of controlled-release fertilizers and micronutrients.

We are at the forefront of environmentally-responsible fertilizer technologies and also provide effective pest control solutions.

We deliver innovative, premium quality products with unsurpassed customer service.

We achieve this through the expertise of our employees, strong customer relationships and our passion for developing technologies and leveraging them into new markets.

We will help your business grow.



DIRECT SOLUTIONS

Setting a new standard in service excellence and solution delivery

www.agriumat.com

1-888-757-0072





Agrium
Advanced
Technologies
DIRECT SOLUTIONS

Agrium
Advanced
Technologies
DIRECT SOLUTIONS

Agrium
Advanced
Technologies
DIRECT SOLUTIONS

Georgia high school rebounds from flood to win state honor

NEARLY A YEAR AGO Dominion Christian High School, in Marietta, GA suffered terrible damage to their baseball field due to heavy flooding. In some parts, the water rose 7 feet high almost covered the outfield fence in its entirety. There was standing water for 3 weeks and the flood left a heavy saturation of silt on the field.

Working on a tight budget and led by supervisor Nathan Tidwell of Championship Turf

(www.championshipinc.com), the team began a rigorous restoration program that started with removing the silt. By the first week of November, they had verti-cut, vacuumed, and overseeded the field with rye. By constantly analyzing the state of the field and adjusting the program to its needs, the field was playable by March of this year and was awarded Field of the Year by the Georgia Independent School Association.

“The Dominion Christian High School Baseball Field is without question one of the nicest and best maintained baseball diamonds in the Southeast,” said Earl Ehrhart, president of the Knights Dugout Club, the baseball team’s booster organization. “The perfect playability of the grass and the infield make for a superior game performance for any team. Without exception, when visiting teams first walk on the field, they stop and look around in awe at our playing surface. Again, without fail someone from the other team will kneel down and run their hands over the grass to experience the texture and perfection.” ■

» **By constantly analyzing** the state of the field and adjusting the program to its needs, the field was playable by March of this year and was awarded Field of the Year by the Georgia Independent School Association.



Advice on topdressing

By Jeff Salmond, CSFM

Topdressing is important if you want to reduce thatch. I feel topdressing aggressively growing grasses helps in breaking down that slimy layer that can exist between the plant and soil surface.

Topdressing is needed to protect turf injury after an aerification, depending on the time of year and timing of sports seasons. During football season, for example, after an aerification, topdressing is important to re-fill aerification holes to help provide vertical and lateral stability. Topdressing at lighter rates is important to "level" divots during the season and protect from further turf injury. Topdressing at heavier rates is important to protect turf heading into winter to help prevent desiccation.

I don't feel that topdressing is always necessary after an aerification process. With little spring activity, I feel leaving the aerification holes open and not topdressing will provide increased rooting and cavities in the soil for which roots and water to travel. However, a light application of sand topdressing during slow spring growth may help increase the soil temperature.

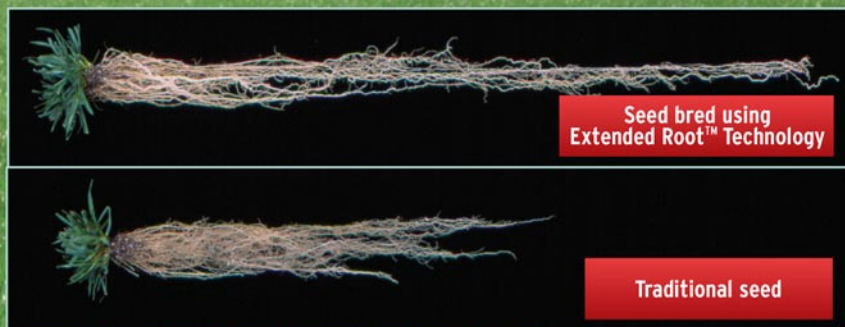
Composition choices could include mixes of different ratios of soils, sands, peats, and calcined clays. For example, a sand-based field rootzone that was originally a 94% sand 6% peat, you might use a 100% sand topdressing that is the same particle size as the sand in the rootzone. On a native soil based field, you might use a well-balanced soil with a little higher sand content mixed with 50% by volume of calcined clay. When you use sand topdressing on some fields, try and stay away from sands with 40% fine/very fine sands.

After the football season is over and your field has been aerified and cores removed, apply a little more than 3/4 of an inch of topdressing over 80,000 square feet, or about 25 tons of sand material. After the sand is spread, allow it to dry and then brush it into the aerification holes and divots. This is the best time to apply a heavy application of sand topdressing while the grass growth has slowed down, allowing the sand to effectively be moved in the aerification holes. The heavy amount also gives you that added protection going into the winter months.

During the season, periodically apply light (1/8 to 1/4 inch) amounts to topdressing between the hashes to help fill divots and protect exposed crowns and rhizomes.

—From Jeff Salmond, CSFM ■

Drought tolerant grass backed by complex technology



Pennington's Extended Root Technology provides increased root depth and mass to create stronger, healthier plants, significantly reducing the amount of water needed to maintain beautiful turf/ It's the perfect solution for your budget and for our environment. Pennington... a trusted brand since 1945.

CENTRAL
Garden & Pet



www.penningtonseed.com

CoverSports FieldSaver® Winter Turf Blankets/Growth Covers!



Turf Blankets for soccer and other fields

Protect turf from Winter conditions! Promote faster Spring growth and green-up!

"The results were incredible!..."

Paul Heron, Grounds Supervisor
Unionville-Chadds Ford School District, PA

FieldSaver® is a longer lasting blanket - 8 Year Limited Warranty

- Heavy 100% woven polypro fabric
- Reinforced hems and grommets all edges



Grommets at 5' intervals



New yellow safety stakes available



Football Field

Special offers **ONLY** at
www.CoverSports.com/ST

For price quotes, sizes and fabric specs,
visit www.CoverSports.com/ST



COVER
SPORTS
USA

In Philadelphia Since 1874
sales@coversports.com • 800-445-6680

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

Overseeding for the transition zone



» Figure 1. NEYLAND STADIUM, Knoxville, TN, overseeded with perennial ryegrass provides an aesthetically pleasing playing surface through the end of the season.



» Figure 2. OVERSEEDING with perennial ryegrass at the University of Tennessee's football practice fields in the middle of September.



» Figure 3. LIGHTWEIGHT ROLLING will promote good seed to soil contact and increase perennial ryegrass survival.

IN THE TRANSITION ZONE fall means two things: football and overseeding bermudagrass athletic fields. Overseeding protects the dormant bermudagrass from the deleterious effects of traffic stress during fall and spring (Figure 1). Research at the University of Tennessee has found that overseeding can increase the number of games a field will maintain acceptable (>70%) cover by up to as much as 23%. While there are numerous benefits to overseeding, athletic field managers should consider several things before moving forward with an overseeding project.

COST

While overseeding can greatly improve the aesthetic and functional quality of a bermudagrass athletic field during the late fall and early spring, it is important to consider the costs of overseeding. In 2004, the total cost of overseeding a bermudagrass field with perennial ryegrass in Tennessee was reported to be \$821.71. This figure includes the cost of seed, extra mowing, labor, and herbicides required for ryegrass removal. The cost of overseeding a bermudagrass athletic field can be significant for some athletic field managers.

SPECIES SELECTION

Field managers that choose to overseed are making an investment in their fields. Selecting a high quality seed is one of the most important parts of this investment. Commonly, blends of perennial ryegrass seed are available that are high in purity and germination percentage, which allows for a uniform stand of perennial ryegrass to be quickly established after seeding. While several species can be established as overseeded turf, perennial ryegrass is often selected as it germinates quickly from seed, exhibits dark green color, and slow growth after establishment (decreasing the need for mowing). Perennial ryegrass also offers increased traffic tolerance compared to other species like intermediate and annual ryegrass. Once a seed source is selected be sure to store it in cool, dark areas that are free of moisture.

SEEDING PROCESS

Seeding rate is a critical component of a successful overseeding project. Research conducted at Tennessee has reported that optimum ryegrass cover throughout the fall can be achieved with overseeding rates of 400 to 800 pounds of pure live seed/acre. Rates lower than 400 pounds of pure live seed/acre have been shown to provide inadequate cover, while higher rates have not resulted in improved performance; thus, the money spent on extra seed was essentially wasted.

Timing of overseeding is also important. The goal is to overseed before the bermudagrass enters dormancy. In Tennessee, most fields are overseeded between the middle of

September and the middle of October; however, these timings may vary in other parts of the country. The goal is to find 7-14 day windows when fields will not be in use to allow the new seed to germinate and mature before being subjected to foot traffic. Seed should be applied in two directions across the field to promote uniform coverage (Figure 2).

In order for an overseeded turf stand to become established, seed-to-soil contact is essential. While scalping the bermudagrass canopy is one method of facilitating seed-to-soil contact, it is not recommended as it places unnecessary stress on the bermudagrass. Rather than scalping, gradually lower the height of cut a few weeks ahead of overseeding. A light vertical mowing can also open the bermudagrass canopy to facilitate seed-to-soil contact. Another strategy is to stand up the bermudagrass canopy by using brooms or grooming equipment.

SEEDLING MAINTENANCE

Sand topdressing after overseeding can help push seed through the bermudagrass canopy and serve as mulch, reducing water loss from the underlying soil. Sand topdressing should be continued throughout the fall even after the perennial ryegrass is mature as it helps prevent the buildup of organic material at the soil-turf interface. Many coaches and players claim that overseeded ryegrass has a “slick” layer between the soil and canopy that results in poor traction. Weekly sand topdressing will help dilute the buildup of any organic material. Topdressing rates should be light enough that there is no sand present in mower clippings.

Lightweight rollers can be used to smooth the surface and further promote seed-to-soil contact (Figure 3). Fields should be rolled when dry to prevent newly sown seed from adhering to the roller and being removed from the seedbed. Starter fertilizer should also be applied after overseeding. Look for fertilizers with 1-2-1 or 1-1-1 analyses. This fertilizer should be applied at a rate of 1 to 2 lb phosphorus (P2O5) per 1,000 ft². Newly overseeded fields will also need to be watered several times per day to prevent newly sown seed from drying out. Once mature, the juvenile perennial ryegrass stand will also require more water than bermudagrass, as perennial ryegrass has a less robust root system.

Mowing should be withheld for at least three days after overseeding to prevent seeds from being accidentally removed from the surface on mower tires, blades, etc. Once mowing resumes newly overseeded perennial ryegrass fields should be maintained at heights $\geq 7/8$ of an inch. Mowing will force the ryegrass to mature sooner. Care should be taken when mowing with a reel mower if field conditions are wet, as the reel mower may pull out newly emerged ryegrass.

RYEGRASS TRANSITIONING

Historically, older cultivars of perennial ryegrass could not withstand summer temperatures in Tennessee and would naturally be eradicated during the early summer as temperatures increased. However, perennial ryegrass breeding efforts have led to the development of heat-tolerant cultivars that can perpetuate during the Tennessee summer heat. This is problematic, as research has shown



Figure 4. Clumpy ryegrass can be both unsightly and a potential safety hazard on athletic fields

that bermudagrass needs approximately 100 days of growth without perennial ryegrass competition to provide maximum performance during the summer. Growth of heat-tolerant overseeded turfs will not be significant; most of these perennial ryegrasses will persist in a dormant state during the summer as dense clumps that are not only unsightly, but also are a potential safety hazard on athletic fields. In these instances, the persisting perennial ryegrass is commonly referred to as a weed termed “clumpy ryegrass” (Figure 4). Clumpy ryegrass is more difficult to control than overseeded perennial ryegrass. Research at the University of Tennessee has reported that a well-timed herbicide application in early spring should provide nearly 100% control of the overseeded perennial ryegrass within 21 days after treatment,

Is your infield a pain?

Then get DuraEdge™ in the game.

DuraEdge™ Infield Mixes are designed for stability—no chunking-out during play. That means fewer wild ball hops and a safer playing surface.

Grant's Engineered Soil Technology allows us to create mixes that are:

Safe • Playable • Easy to Maintain

www.duraedge.us

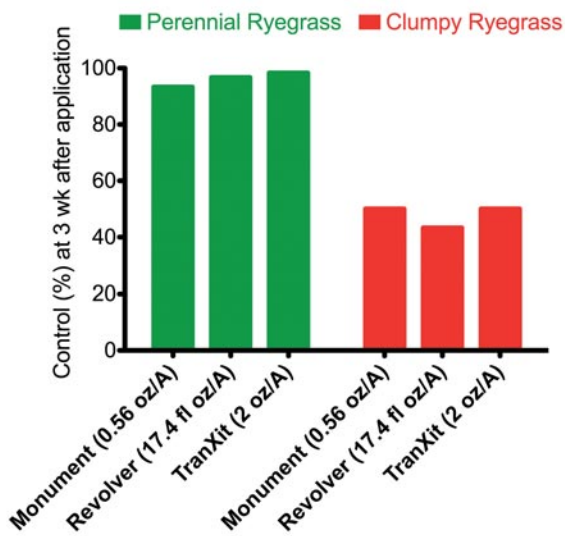
1-866-867-0052

Natural Sand Company // 4783 Harlansburg Road // Slippery Rock, PA 16057

| Herbicide | Formulations | Active Ingredient | Rate/A | Comments |
|-----------|--------------|-------------------------|------------------|---|
| Certainty | 75WDG | sulfosulfuron | 1.25-2 oz. | Repeat applications may be necessary for complete control. Make sequential application when daily temperatures exceed 80 F. If single application is preferred, apply at the 2 oz rate. |
| Katana | 25WG | flazasulfuron | 0.5-3 oz. | Apply at 50% bermudagrass green-up for optimal maintenance of a green turf situation. |
| Kerb | 50WP | pronamide | 1-2 lb. | Very slow, but effective. Highly mobile. Can slow bermudagrass green-up in spring. |
| Manor | 60WDG | metsulfuron | 0.125-0.5 oz. | Repeat applications are often required for complete control |
| Monument | 75WG | trifloxysulfuron-sodium | 0.1-0.53 oz. | The lower rate allows for a more gradual transition. Higher labeled rates and warmer temperatures will result in faster removal. |
| Revolver | 0.19SC | foramsulfuron | 8.8-26.2 fl. oz. | Repeat applications (4 to 6 week interval) may be necessary for complete control. Higher labeled rates and warmer temperatures will result in faster removal. |
| Tranxit | 25DF | rimsulfuron | 0.5-2 oz. | Should not be applied in areas where children can contact turf. Repeat applications may be necessary for complete control. |

Table 1. HERBICIDES that are used in the chemical transition of perennial ryegrass back to bermudagrass.

Figure 5. MORE HEAT TOLERANT CULTIVARS of perennial ryegrass tend to persist into the summer months creating clumps of perennial ryegrass which are more difficult to control.



while many of the same herbicides will only provide an average of 50-60% control of clumpy ryegrass during the same time period (Figure 5).

Turf managers who decide to overseed in the fall should be committed to chemically removing the overseeded perennial ryegrass in spring with a transitioning herbicide. Research at North Carolina State University has reported that cultural practices will not result in complete removal of overseeded perennial ryegrass turf. Herbicidal transition aids are essential. In Tennessee, these transition aids should be applied sometime beginning in mid-April through mid-May. Numerous herbicides are labeled to chemically remove overseeded perennial ryegrass from bermudagrass turf (Table 1). The speed of transition should be considered when choosing a herbicide. Kerb and Manor (formerly marketed as Blade) are older products that tend to work slower than some of the newer sulfonylurea herbicides, like Monument. A slower response does not mean that these herbicides are less effective. In general, warmer temperatures usually increase the speed of transitioning. Applications at soil temperatures lower

than 50 degrees F are not recommended, due to potential reductions in efficacy.

Make sure to take extra precautions if applying transitioning herbicides on slopes or areas adjacent to sensitive cool-season turfgrasses, like creeping bentgrass. Herbicides used to chemically remove perennial ryegrass have been shown to move off-site with not only surface water, but with foot or equipment traffic as well. Maintaining buffer zones between treated and sensitive areas and removing dew with irrigation (<1/8 inch) the morning after application will help to prevent problems.

Overseeding dormant bermudagrass athletic fields with perennial ryegrass will improve color and functional quality during cooler months. Given the cost of overseeding, it is important that field managers take the time to plan each step of the project in advance, from seed selection to herbicidal removal. ■

Adam Thoms is a Research Leader at the University of Tennessee Center for Athletic Field Safety. Dr. John Sorochan is Associate Professor and Dr. Jim Brosnan Assistant Professor at UT-Knoxville.