Want Transition Control?

It All Starts with the Right Seed

Managing Bermudagrass means overseeding in the fall. This can lead to added costs and unneeded stress. Now there's a better solution. Barenbrug and Texas A&M University have teamed up to create a revolutionary new Bermudagrass overseeding program. Now you can have optimum transition – when you choose.

The program is simple. Go to www.barusa.com. Click on the SOS link. You will then be asked two simple questions:

1) Where are you located?
2) How fast do you want your transition?

Once you've answered these two questions, you will be presented with your ideal overseeding grass mix. Call your local distributor and ask for your SOS mix. Plant this fall and watch how well you can control your spring transition.
Recent advances in turfgrass breeding efforts have introduced new turfgrass cultivars that have potential for use in transition zone athletic fields. Most KBG varieties do not perform well in the transition zone due to a lack of tolerance to heat, drought, and disease. Texas bluegrass (TBG), mainly a forage grass, demonstrates higher levels of heat and drought resistance relative to KBG, but has poor turfgrass quality. Thermal Blue is a hybrid of these two species and possesses genetic traits from each species allowing it to survive the hot, humid summers of the transition zone and provide an actively growing turf grass surface during the fall athletic seasons.

To test these turf grasses under simulated athletic field wear, the Cady Traffic Simulator (CTS) was used. The CTS is a walk-behind Jacobsen core cultivation unit with artificial feet to simulate athletic wear. Two passes with the CTS is designed to generate wear equivalent to that sustained during a football game between the hash marks and the 40-yard lines. The four turfgrass species were subjected to 1 (low traffic) or 3 (high traffic) simulated games per week. Timing of traffic applications was established to mimic fall high school football schedules. Plots receiving crumb rubber were topdressed twice with 10/20 mesh particle size crumb rubber to achieve a depth of 0.75 in.

Results

Hybrid bluegrass (HBG) retained its color and provided an actively growing turfgrass surface after bermudagrass plots had entered winter dormancy. Riviera and Tifway bermudagrasses were more tolerant to wear than Quickstand. Quickstand consistently ranked lowest in percent cover, which shows that Riviera, Tifway, and HBG are better suited for athletic fields. Crumb rubber proved to significantly reduce the amount of wear sustained during traffic events. All plots receiving crumb rubber treatments had improved turfgrass cover at the end of the season than those not receiving crumb rubber topdressing.

Crumb rubber provided a more resilient turfgrass surface, reducing the amount of athletic field wear as a result of traffic. By retaining the amount of actively growing turfgrass cover, crumb rubber provided a safer playing surface. This study has introduced a new management practice for transition zone athletic field managers use to improve the overall performance and longevity of their fields.

Matt Goddard is a graduate research assistant in turfgrass weed science at Virginia Tech. Dr. John Sorochan is an associate professor in turfgrass science & management at The University of Tennessee.
Picking up trash and unwanted matter on synthetic turf has never been so easy. The LitterKat is a ground-driven design built around aircraft aluminum, guaranteeing high strength and light weight. The tubular ladder chassis and connection arm firmly house the wheel and sweeper gearing — giving you what it takes to keep your surface looking good and playing safe.

LitterKat is outfitted with Dual On-Board vibrators in the collection baskets, quickly and easily redistributing infill while the electric actuator allows for an infinite level of height adjustment. The brushed aluminum collection baskets are designed for easy removal and emptying.

The structural parts are equipped with a durable, long-lasting powder coat finish. All this sits on forged aluminum wheels. And don’t forget the tow-behind magnet for pickup of unwanted ferrous objects. The powerful 6-foot wide unit pulls objects from deep in the surface into the magnet — keeping your surface safe and ready for action.

Fill in 115 on reader service form or visit http://oners.hotims.com/14681-115
Dear Editor,

Re the article by Chris Harrison on “Alternative fuels power next wave of equipment” (Jan. '08, p. 40): Mr. Harrison states that “Emissions from bio-fuels and biodiesel blends are lower than petroleum-based diesel fuels making them more environmentally friendly.” This statement is totally false.

In fact, bio-fuels (ethanol) and biodiesel often burn less efficiently and pollute more than most petroleum-based fuels. This type of “Al Gore” reporting that selectively ignores data that shows these fuels, while being an alternative to petroleum-based fuels and lessening our dependence on foreign oil, are not always cheaper or cleaner. The additives that have to be put into the biodiesel fuel tanks, to keep it from growing bacteria, are even worse at polluting the air when it is burned.

Mr. Harrison should have checked the facts (all the facts) instead of writing a “sexy green” article that gives many in our industry incomplete information. I am all for lessening our dependence on foreign oil and being good stewards of the environment, but let’s be wise in how we do it. It is not a quick fix, and this type of article fuels the fire that the “feel good” fix is just around the corner, and does not address the economics. [For example] the installation of an underground, 500-gallon biodiesel storage tank, if a permit can be obtained (currently Los Angeles County will not issue any permits for biodiesel storage tanks) costs a minimum of $50,000. These costs, plus the current information coming from several fleet managers who are now seeing more frequent servicing on equipment using biodiesel, should make us all “look before we leap.”

Richard Farmer, Manager, Landscape Services
California State Polytechnic University
Pomona, CA
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The new ProPlus agronomic formulation JumpStart is designed to improve overall soil conditions and allow faster, more complete seed germination and turf establishment. It can be applied during overseeding or grow-in projects. It has a proprietary formulation that includes beneficial soil bacteria, humic acid, and a wetting agent, which work together to improve water infiltration and retention, and promote faster nutrient uptake and conversion.

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Aminoplex
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Grigg Brothers
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Launch and Focus
PBI/Gordon’s Launch or Focus, formulated as liquids or granules, provide ingredients that increase germination rates and promote growth of fibrous roots. They also transform minerals for absorption by plant systems, promote growth and assist seeds in breaking dormancy. And treated plants recover from play stress more quickly.

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Becker Underwood
For information, fill in 058 on reader service for or see http://www.onershotims.com/14881-058
Experts on the Field, Partners in the Game.

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- Home

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Home phone | Work phone | Cell phone

Fax | Email

Signature

Direct Supervisor Name

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*There must already be a national sports turf manager from your facility or commercial member from your company before you may sign up in the Associate category.

Phone: 800-323-3875 www.sportsturfmanager.org
As I sit here watching the rain outside I am reminded how challenging this spring has been for sports field managers. I don't think we have had more than 3 consecutive days without rain this entire season. I have heard countless stories of saturated fields and cancelled events from frustrated coaches, athletes, owners and administrators. Canceling events is expensive; whether it is lost gate revenue and concessions, travel time and lodging, or having to reschedule or rent other facilities. If you don't pay now for drainage you can expect rainouts, cancellations and to play the games much later.

I have looked at fields this spring where the turf may look great but the field is completely unusable as a result of standing water or drainage problems. What is truly frustrating to the owners is that several of these fields have been built recently or have an installed drainage system that isn't working. Even established turf may have soils that are so severely compacted or where poor grading exists that the drainage is ineffective.

In fact the most common drainage problems I see are the result of poorly graded or uneven fields. I have walked countless fields that hold water and will not drain because of improper grading. Even with properly installed drainage, improper grading may render the installed drainage system useless. Many times, the field is designed correctly and has enough slope to move water but the unevenness of the final grade causes water to pond or not get into the installed drains. Proper grading is the critical factor for a
Can you identify this sports turf problem?

Problem: Area void of grass near sideline
Turfgrass Area: Soccer field
Location: Coconut Creek, FL
Grass Variety: 419 Bermudagrass

Answer to John Mascaro’s Photo Quiz on Page 46
John Mascaro is President of Turf-Tec International

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IRRIGATION & DRAINAGE

well-designed and installed field to drain efficiently.

Athletic fields are designed to have very minimal slope so players do not feel like they're running up and down hill. Here are common slopes for different athletic fields:

- Baseball infield, 0.5%
- Baseball & Softball outfield, 1% to 2%
- Baseball and Softball skin areas, 0.5% to 1.75%
- Football Crown, 1.0% to 1.75%
- Soccer side to side, 1.0% to 1.75%

A .5% slope on a baseball infield means it is falling at the rate of 6 inches of fall in 100 feet of length. At this minimal slope any variance in grade will cause water to stand on the field. Any fields with 1% or less slope almost always require an installed drainage system.

Because the slopes are so minimal, it is suggested that laser guided equipment be used for any new construction or renovation project because of its accuracy. Trenchers can also be equipped with global positioning equipment that will not only install the drainage with accuracy but will also map out the system for future reference.

On existing baseball and softball fields the skinned area should be laser graded as needed to prevent low areas and lips from forming. One of the common misconceptions of infield materials and drainage is that water should pass through the skin and be removed by drain lines under the skin. Actually, the infields should be graded so that the water sheets off of the skin and into the turf where it can infiltrate or be collected in a drain system.

Ponding

Ponding water can also be the result of high wear areas becoming compacted or dissimilar soils settling at different rates. This can often be seen where players stand on a baseball field, in soccer goal mouths, and between the hash marks on football fields. Almost every baseball field I have seen has standing water on the infield as the turf becomes lower than the level of the skin.

On football fields unevenness and drainage problems often arise as areas of repeated use become compacted. Between the hash marks and along yard lines are usually the worst areas. Repeated drills and activities like band practice often contribute heavily to this compaction. Playing under wet conditions also destroys the soil structure. Aeration can help break up compaction thus improving the permeability of the soil.

Adding amendments or topdressing are also ways to increase the infiltration and percolation rate of the soil. The most commonly used amendments are sand and calcined materials. When sand is added as a soil amendment, it is important that the correct amount and proper particle size is used. If the sand is too fine, it can actually slow the internal drainage in the soil.

If the grading is not an issue and compaction has been addressed, yet drainage is still a problem, installation of some form of drainage system is in order.

A 1-inch rain on a football field produces 42,282 gallons of water. That's a lot of water. When thinking about installing a drainage system several factors should be considered:

- How much water will need to be removed from the field?
- What is an acceptable time frame to remove this water?
- What types of soils are on the field?
- What is the budget for the drainage system on this field?
- Using these factors as a guideline, an effective installed drainage system can be designed and installed to meet your needs.

The drainage systems for native soil athletic fields are based on the principles of gravity and capillary action. There are three main types of drainage systems that are used today on native soil sports fields; pipe drains, strip drains, and sand slit drainage.

Pipe drains have been used for years in agriculture. They are primarily used for lowering the water table in an area and eventually allowing the surface to dry. Originally these systems used clay tile and more recently, corrugated plastic pipe. They range from 18 inches to 3 feet deep. The trench is filled with gravel or course sand to within 6 inches of the surface. The top of the trench is then capped off with topsoil.

From our experience, while many sports fields have this type of drain system, few of them are effective in removing water from a field at an acceptable rate. The soils will tend to get saturated above these drains before water will start to move into them. And if the soils above them are too deep or heavily compacted, they are ineffective. Fields with pipe drains installed on 15-foot centers must often wait 2 to 3 days after a signif-