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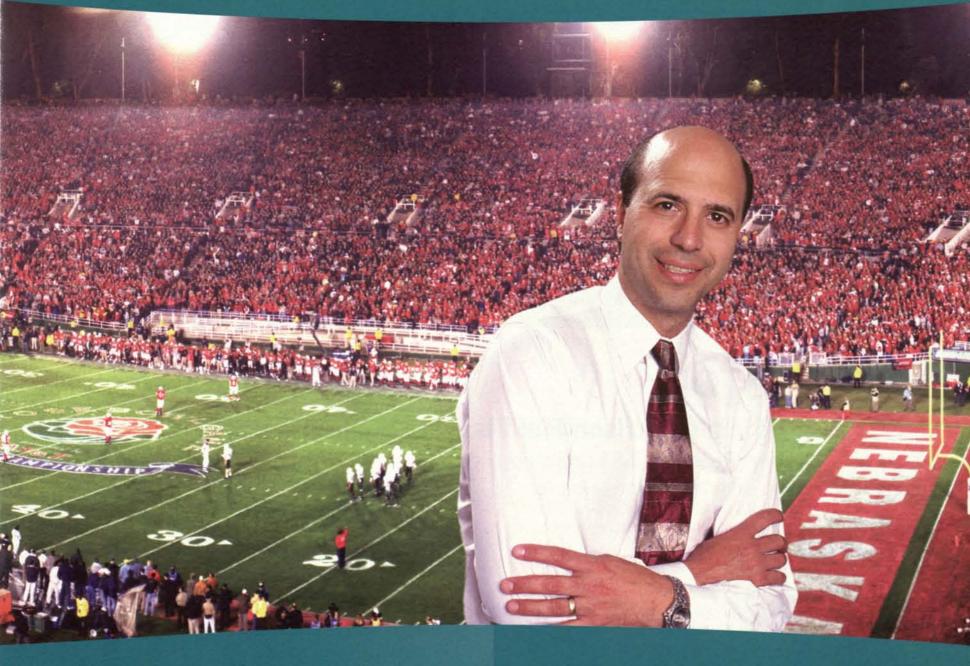
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September 2002 / Volume 18 / Number 09









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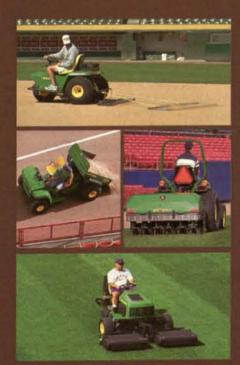
ON THE COVER FOY winner University of Virginia's David A. Harrison III Field at Scott Stadium. Courtesy of UVA.

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the front office

Am I ready for some football? YES!

sually I don't pay much attention to football until after Labor Day or the first Penn State game, whichever comes first. But it's mid-August as I write this and I'm looking forward to this autumn as much as any I can remember. "Upon further review," here are some reasons why:

- The Nittany Lions have a quarterback. Lefty Zack Mills showed the poise, speed, arm, and heart necessary for success last season.
- I get to watch Brian Urlacher play linebacker for the Chicago Bears.
- Steve Spurrier's coaching in the NFL! I admire Coach Superior's guts for taking his air show to the pros. Successful or not, he's bound to be entertaining.
- Parity. To some it's a dirty word, but you gotta love the NFL when its champion is the New England Patriots. Even the snowplow driver can't believe they won the Super Bowl.
- Major league baseball's labor situation. Barring a miracle, baseball's owners and players won't have reached an agreement on how to divvy up \$3.5 billion by the time you read this, which is ludicrous. I won't be as interested in a World Series even if there is one because MLB can't get out of its own way.

There's one more reason to anticipate a return to the gridiron: All of you readers producing wonderful playing surfaces and painting the local pride on them have opportunities to take photographs, which might someday appear in this magazine. Please take some pictures!

This Football Issue of SPORTSTURF marks the beginning of our 2nd year coming to you in this format. We hope you've grown more comfortable with us as we tweak here and there (most notably on the covers!) to assemble a useful magazine each month.

I have been neglectful in not telling you that Dr. Jeff Krans of Mississippi State is now on our masthead as Technical Editor. This means when we receive a submitted manuscript on research or similar topics, I send it to Jeff for his expert opinion. Plus, he's been very helpful in helping us line up topics and authors for technical stories that have been running in the past several issues, and will be in future issues. Thanks, Jeff, and good luck to the Bulldogs this season as they, like my Lions, try to come back from a disappointing year.

I also would like to acknowledge the work of Senior Editor John Kmitta (he prefers to talk hoops about his alma mater, Southern Illinois), who contributes a great feature story each month, and our alternating duo of "Q & A" columnists: Dr. Grady Miller from the University of Florida (what will they do without The Visored One?), and Dr. Dave Minner from Iowa State (Cyclones have best team name in the land). Thanks for keeping it real.

So whether your favorite team plays on Friday nights, Saturday or

Sunday afternoons, please enjoy fervently rooting them on this fall!

Jungehisten

Comments always welcome. Call Eric at 630-678-0054, fax 630-678-0334, email eschroder@aip.com, or send to PO Box 67, Lombard, IL 60148.

SPORTSTUR

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president's message

September's a Great Month on God's Green Earth

W ell it's budget crunch time for many of you this month. With last-minute requests from your superiors to take yet another look at your budget to determine if there is any way on "God's GREEN earth" you can save the company or facility some more funds. It's a request we all receive from our bosses and it is answered in a million different ways. The first question you ask yourself is, "How will I get my job done if I cut the budget any more?" Sometimes there isn't a clear answer, but there are a couple of thousand other sports turf managers in our organization that may have a suggestion or a thought on how you could do something with a little more efficiency. And to borrow a line from a phone company, "They're only a phone call away."

College and professional football take the snap and get the ball moving on their fields as many of you head back to school. The seasonal transformation from summer to fall for minor league baseball teams means a breather for about half of our professional team and facility members yet, on the other hand, our college and university members are cranking it up. Those with high school and middle school football programs also are in the thick of the season. Many of these fields may be the focus of the community, with onsite attendees and radio, newspaper and TV coverage as important to the local crowd as any of the university or professional team sports news.

Sports turf international took another step forward this month. From down under I was put to the test to illustrate a few "groundsman techniques of ball field maintenance" for the Australian Baseball Federation. There was a great turnout from staff, field managers, and owners. Though the terminology (and the language) may differ, the concepts and concerns about field condition, playability, and safety are the same worldwide. They were very keen on the concept of developing an Australian sports turf chapter. More to follow on this wonderful experience and the development of sports turf in other countries.

Your STMA Board met in Florida this past month. One of the main items of discussion was future sites for the annual conference. We determined that in 2005 we would return to Arizona at a loca-

tion to be determined. Your Board took the time to evaluate the Florida hotels and convention centers that had submitted proposals for the conference that fit our date requirements and space needs, but felt the cost for the rooms and overall costs would be too great of a burden on many of our members. We are now looking at year 2006. We are growing so rapidly it is difficult to project how big we will become by 2006, so that's about as far as we can look ahead. Our hopes are to be in Florida in 2006 but that's down the road.

How about January 2003! Texas is getting ready for us in a BIG way! So while you are working on those budgets be sure to keep enough funds in there to bring yourself and one or more of your crew members to San Antonio for our National Conference, January 15-19, 2003. Check out the ad in this issue (page 19), the website www.sportsturfmanager.com or give Headquarters a call for more details.

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Field of the Year



Virginia Wins Field of the Year

focus on excellence earned the University of Virginia's David A. Harrison III Field at Scott Stadium the 2001 STMA Football Field of the Year Award in the College/University division.

Located in Charlottesville, Scott Stadium first opened for play in 1931 with a native soil field. This was converted to an artificial turf field in 1978. In 1992, a Motz PAT system was installed with a 12-inch sand-based soil profile, a multi-zone in-ground irrigation system, and Kentucky bluegrass turf. The subsurface drainage tiles, on 20-foot centers, funnel water into a mid-field drainpipe that feeds into a storage tank at one end of the field. The system can be used to either pump or draw water off the field into the storage tank or to draw on the stored water to sub-irrigate the field.

Jimmy Rodgers, CSFM (Certified Sports Field Manager), joined the University of Virginia Athletics Department in June of 2000 as sports field manager. He says, "After 2 years of bluegrass play, the decision was made in 1994 to convert to Vamont bermudagrass overseeded with perennial ryegrass. Vamont, a wider bladed bermuda hybrid, has been the workhorse in the transition zone for more than 20 years. Its cold weather hardiness is better than most older varieties. It greens early in the spring and, if supplied the proper amounts of nitrogen, will begin to run and cover quickly in June. It served the football program's needs better than the bluegrass, but spring dead spot was a recurring problem."

Structural renovation of the Scott Stadium in 1999 and 2000 created additional seating. In the spring of 2001, the stadium and field hosted a Dave Matthews Band concert that drew 55,000 fans. Through Dave Matthew's generosity, funds were set aside to protect the field's turf.

Rodgers says, "We investigated renting high end protective field covers and soon realized that the associated rental fees came close to the expense of renovating and replacing the Vamont. We opted for a geotextile cover to protect the inner profile of the field and began planning the renovation. We investigated the newer bermudagrass cultivars seeking those exhibiting excellent wear tolerance, aggressive summer coverage, good cold hardiness, and longer fall season green coverage. Enter Tifsport. Performance reports were excellent and I was impressed with the certification process required of all the licensed Tifsport growers to provide a higher insurance of purity in the product."

Scott Stadium's Field Maintenance Program

March

- Early season maintenance as needed and weather permits
- Mowing begins as needed with height of cut at 7/8 inch

April

- Core aeration at 3 to 4 inch depth (early April; cores not removed)
- Mowing height of cut at 7/8 inch

May

- Mowing height of cut lowered to 5/8 inch
- Core aeration at 3 to 4 inch depth or deep tine coring to 6 to 8 inch depth (cores removed)
- Topdressing with 50 to 60 tons of "Matoponi" sand

June

- Dethatch if needed, combined with additional topdressing (early June)
- Slice or core aeration at 3 to 4 inch depth (late June; cores not removed)

July

- Core aeration at 3 to 4 inch depth (6 weeks from first field use; cores removed)
- Topdressing with 30 to 40 tons of "Matoponi" sand
- Slice aeration 3 weeks from first scrimmage (late July)
- Raise mowing height to 7/8 inch

September

Overseeding with perennial ryegrass begins

October-November

Overseeding with perennial ryegrass continues as needed

December-January

End of season maintenance as needed and weather permits

Throughout the Growing Season

- Fertilization/nutrient applications in accordance with soil and tissue test results the amount, source and timing adjusted to fit the needs of the dominant turfgrass
- Weed and insect control conducted on an as needed basis following IPM guidelines

Pre-game Practices

- Clippings collected and removed only on mowing the day prior to games and game day
- Field painting begins on Tuesday of game week and completed by Thursday (Friday for rain day and touch ups)

Renovation began in April 2001, 2 days after the concert and was completed within 40 days. Carolina Green Corporation was the general field contractor for the project. The existing Vamont surface was stripped away, the sand matrix was blecavated, and a soil fumigant was applied. The field was then laser graded and resodded with Tifsport supplied by Sandhill Turf.

Rodgers notes, "One of the issues we faced in the first year was under-applying the nutrients needed for the grow-in of the new sod on the field. When the old Vamont was stripped away, we lost the rich organic layer that had built up at the top of the profile and helped retain nutrients. With the new field, we irrigated and applied fertilizer per specifications, but it was not enough. We found to adequately nurture our new base we needed to cut our nitrogen (N) application rates from 3/4 to 1 pound per thousand square feet to 1/3 to 1/2 pound per thousand square feet, and apply weekly rather than every 2 weeks.

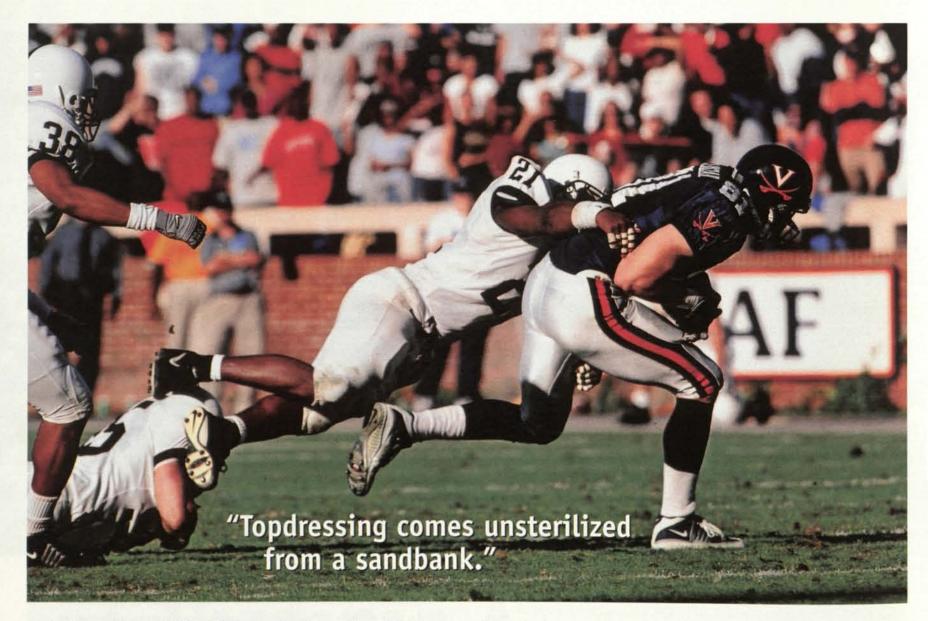
"The different soil matrices also proved to be a challenge from the nutrient standpoint. We have a rim of natural organics that surround the PAT area of the field. Though we sodded wall to wall, these different soil profiles had different responses to our nutrient amendments and thus required some differences in the other maintenance procedures.

"The other adjustments we made involved our height of cut. By raising the height and increasing the canopy we were able to increase the green material seen. Frequently, as bermudagrass matures over the course of the growing season, it can get so thick and dense that scalping can become a problem if you are utilizing different mowing patterns, which you should be doing. We've found that, when this patterned scalping does occur, increasing the height of cut can be a way out of an ugly situation."

Charlottesville is in the middle of the transition zone, which presents Rodgers with the biggest challenge in the field maintenance program—which grass to manage and how to manage it.

The perennial ryegrass-overseeding program generally will begin in early September, based on the season's game schedule. Usually one or two of the fall games are played on straight bermudagrass before the perennial ryegrass is established. By late September, the nights are turning cold. Rodgers will use a combination of irrigation,

Field of the Year



running the system between 3:00 and 5:00 a.m., and well-planned use of field covers to keep the frost off the Tifsport as long as possible, to help hold its color. A killing frost will occur by the second or third week of October.

Rodgers says, "When the frost hits we had better have green cover from the rye for the playability of the field and for the aesthetics, both for the fans onsite and those watching on national TV. We use a mix of three or four perennial ryegrass cultivars and that selection varies. We're looking for exceedingly good germination rates, not longevity. We want the ryegrass up and growing quickly so we can manage it for a few months and then phase it out. The overseeding rates are adjusted based on field playability and aesthetics. Normally, we are seeding at very heavy rates as November approaches, reaching overall season totals of at least 25 pounds per thousand square feet. As the percentage of ryegrass increases in the bermudagrass base, we'll begin hitting the field with a dew sweeper at 7:00 or 8:00 a.m. on game days to better dry down the field for a noon or 1:00 p.m. kickoff. Once the bermudagrass is dormant, we'll adapt the fertility, irrigation, and mowing to the needs of the rye."

Rodgers waits for the degree days to catch up with the bermudagrass in the spring to switch the focus of the maintenance program. He says, "We'll core aerify to a 3-4 inch depth, generally in early April, right after the spring game. As green up of the bermudagrass base begins, we'll start spoonfeeding N and K at a one-half to three-quarter pound rate. By May, we'll drop the mowing height to 5/8 inch to help transition out the perennial ryegrass. We'll start the first full balanced feeding of nutrients as May temperatures warm.

"In late May, we'll core aerify at 3-4 inches or deep tine core to a 6-8 inch depth. Compaction is not our prime concern at this point. Coring and topdressing are used to drive root development to aid our sheer strength toughness. We will collect plugs to remove the thatch debris. This is followed by an application of 50 to 60 tons of straight "Matoponi" sand. This topdressing sand is unsterilized and comes from a sandbank south of Richmond on the James River. The supplier, Luckstone Corporation, named it for the Native American tribe that was located along the river back in the 1600s. We match the particle sizing to our existing sand profile and keep 80 to 85 percent in the medium to coarse grade range.

"We'll slice aerify in late July, three weeks from the first scrimmage. This is designed to sever the bermudagrass rhizomes and stolons, enabling the turf to develop a greater degree of thickness. We'll also adjust the mowing height up to 7/8 inch and keep it at that level throughout the fall football season." Soil and tissue tests are conducted annually, with the fertilization and nutrients program adjusted in accordance with test results. Generally, 8-10 pounds of N are applied per thousand square feet during the growing season, through a combination of slow and quick release sources. The amount, source and timing adjusted to fit the needs of the dominant turfgrass. Generally frequent applications of 1/3 to 1/2 pounds per thousand square foot of N will be made over short intervals, rather than higher ratios over extended intervals. The slow release applications combine balanced levels of phosphorous (P) and potassium (K). The quick release source is often 46-0-0 Urea, which is applied only when no rain will occur and the water levels can be monitored accurately in an environmentally appropriate manner through irrigation.

Additional P will be supplied before overseeding in September. Once the bermudagrass is dormant, additional K will be supplied to the perennial rye-