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# sportsTURF

## PROGRAM

VOLUME 14 , NUMBER 2

FEBRUARY 1998



THE OFFICIAL PUBLICATION OF THE  
SPORTS TURF MANAGERS ASSOCIATION

### MAIN EVENTS

#### 10 ASTM Recommendations for Skinned Area Soils Are in the Works

When a field's skinned areas are in excellent condition, ballplayers can concentrate all of their efforts on the game. Skinned area surfaces provide the traction for a player to round the bases at full speed, and the cushioning for that slide to beat the ball. The ASTM is currently in the process of developing guidelines for the construction and maintenance of these important skinned areas.

#### 13 The Cutting Edge on Reel Verses Rotary Mowers

Mowing is an important part of the art and science of sports turf management. Sports turf professionals must choose equipment and develop mowing strategies to fit the specific needs of their fields. Different cutting units entice turf managers with a range of great features, but if a mower doesn't deliver a cut that consistently meets standards, it is simply unacceptable.

#### 20 Forward Motion: Putting Tissue Tests to Work

Athletic field turf is composed of a mass of complex organisms striving collectively and individually to grow and thrive in what all too often becomes a hostile environment. The job of the sports turf manager is to create and maintain conditions which support the positive elements of that environment, and to reduce the negative elements. Used in conjunction with soil testing, tissue testing is a very important tool in this process.

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#### On the Cover:

Proper maintenance of a baseball diamond's skinned areas ensures optimum field conditions at game time.  
Photo by Barclay Hallowell.

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# THE FRONT OFFICE

## OPINION PAGE



### sportsTURF Takes a New Direction

**T**his month, sportsTURF says good-bye to Jim Williams, its editor for the past two years. Jim established high standards of quality for the magazine, and I hope to continue this tradition as I step into his shoes. We wish Jim all the best in his future endeavors.

As your new editor, I look forward to working closely with the STMA to bring you the most current and pertinent information in the turf industry. I will also count on readers for feedback and new ideas to keep *sportsTURF* on the right track in 1998 and beyond. My schedule is already filling with plans to attend trade shows, and I intend to remain in constant contact with leaders in the field.

I recently attended the 1998 STMA Conference and Exhibition at Disney's Coronado Springs Resort in Buena Vista, FL. The trade show gave me the opportunity to meet the association's officers, and to speak with many of the members who made the trip. The conference's various meetings, seminars and tours were well planned and very informative. They provided me great insight into the workings of the STMA, and gave me many ideas for future topics to explore in the magazine. The association's action-oriented plans promise to aggressively meet the challenges its members will face in 1998.

With the current boom in new stadium construction, the next year should be an exciting and very eventful period for the industry. In a recent *L.A. Times* article titled "Who Wins in Stadium Shoot-out," Michael Hiltzik and Lisa Dillman looked at the recent deluge of new stadiums being built around the country. "More than \$12 billion in stadium and arena construction has been completed since 1990 or is underway or proposed."

This simply reflects stadium growth on the professional level. These figures are negligible when compared to the sum of the rest of the turf industry. For every professional complex that is built, many more high school and college fields, parks and recreational centers are developed to accommodate the burgeoning populations of our nation's communities.

The turf industry will certainly rise to the challenge of meeting these growing needs. With the help of the STMA, *sportsTURF* will continue to bring readers up to date on these developments.

If you have any questions or comments about the magazine, please contact me at my direct extension (847) 427-3005, fax me at (847) 427-2006, or send me an e-mail at [sberens@mail.aip.com](mailto:sberens@mail.aip.com). Better still, look for me in the Adams Business Media booth at the next trade show you attend.

Steve Berens, Editor

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## STMA MESSAGE

Sports  
Turf  
Managers Association



### February is for Looking Forward

By: Steve Trusty  
STMA Executive Director

While others dream of hearts and flowers during the month of February, sports turf managers dream of perfect fields. Though the realization of those dreams isn't nearly as easy as a trip to the florist, the sports turf managers action plan, finely-tuned during the off-season, becomes the basis for the safe, aesthetically-pleasing and highly-playable fields with thriving turf, properly prepared pitchers mounds, batters boxes and basepaths and precise lines, stripes and logos that will soon come.

February is a transition month for most sports turf managers. Winter rains slow the beginning of spring sports in southern climates while actual on-the-field practice and play won't begin for a month or so in the nation's mid-section and northern regions. Budgets have been prepared. Materials have been ordered. Crews are set, or hiring is underway.

It's during this brief interval that some of the most important work of the entire year takes place. Many of you had the opportunity to participate in STMA's 9th Annual Conference and Exhibition this past January. Many of you took part in special sports turf sessions at regional turf conferences and in events developed by your regional chapter of STMA. You've soaked up information through formal presentations, polished techniques in hands-on demonstrations, and perhaps most importantly, you've compared your program with those of other sports turf managers through one-on-one discussions. Your plans to put all this information to work on your fields contributes to the ever-increasing level of professionalism within the sports turf industry.

You can keep fine-tuning your program and finding solutions to the problems that inevitably occur during the event-packed playing season through the educational and networking opportunities of the Sports Turf Managers Association. STMA's role is that of facilitator, a resource to assist you in making the connections that will help you do your job better. You're not alone out there. Because of the willingness of STMA members to share their successes and failures in every area of field care and management, you have a support network that benefits everyone.

During the past two years, STMA has added services and doubled in membership. A large measure of credit goes to the hard work of the 1996 and 1997 Board of Directors and Committee members. THANK YOU!! Credit also goes to those of you in the trenches who took the time to share your expertise, your successes and your horror stories; who encouraged others to face their challenges; and who moved the level of your sports turf program up one more notch. THANK YOU!!

On behalf of the current membership of STMA, I invite those non-members in the sports turf industry to join us now. By working together, this association has made tremendous strides. With an even greater number of industry members working together, STMA will continue to increase its level of professionalism and the recognition of the important role sports turf managers play in creating, maintaining and promoting better and safer sports turf areas.

## TIP O' THE MONTH

### Is Sulfur Effective for Lowering pH in Turfed Soils?

Soil testing is important in lawns to help determine the soil pH and fertilization needs. This is especially true for potassium and phosphorus fertilization. Experts have established the acceptable level of soil pH for turf to be between 6.0 and 7.5.

Some soil testing labs recommend applying sulfur to lawns that exceed these limits to reduce the soil pH. Unfortunately, though, it is only possible to apply 5 lbs. of sulfur for every 1000 sq. ft. of turfgrass per application. Increasing this amount can expose lawns to extensive damage from burning. Further, labs suggest limiting sulfur application to twice a year. At this rate, it takes many, many years to significantly lower the soil's pH level.

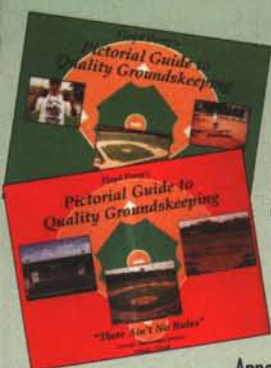
To better solve the problem, slightly increase the annual nitrogen, phosphorus, potassium, and possibly iron that you add to the lawn. This strategic fertilization tackles the problem more quickly and safely than the sulfur solution. Alternatively, you can till sulfur into a soil at much higher rates prior to turf establishment to reduce pH levels. □

*The above tip comes from Zac Reicher, Assistant Professor / Turfgrass Extension Specialist for the Turfgrass Science Program at Purdue University, via the program's web sight: <http://www.agry.purdue.edu>. If you have a tip you'd like to share, send it to sportsTURF 2101 S. Arlington Heights Rd., Arlington Heights, IL 60005, or send an e-mail message to [sberens@mail.aip.com](mailto:sberens@mail.aip.com).*

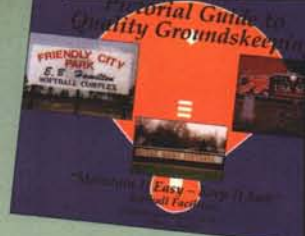
**Correction:** In our January issue, the article entitled "Taking a Closer Look at Rootzones" contained incorrect illustrations. In figure one, the two photos of electron micrographs should be reversed. In figure two, all four micrographs are incorrect. We apologize for the error.



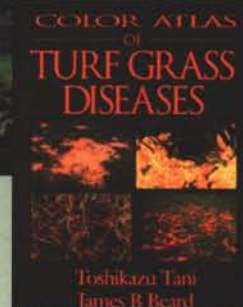
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# ASTM Recommendations for Skinned Area Soils Are in the Works

by Steve and Suz Trusty

**T**he diamond. To some, it's a coveted jewel. To sports turf managers involved with baseball and softball fields, it's equally prized. That grass-free patch is not only where the action is during a game, it's where the majority of field care time is spent.

## Why so much concern about "the dirt?"

Excellent condition of the skinned area allows ballplayers to concentrate all their efforts on the game. Skinned area surfaces provide the traction for a player to round the bases at full speed and the cushioning for that slide to beat the ball. They must possess the right combination of underlying hardness and a cleat-depth layer of soft material overcoating to be effective in the game. Smooth transitions between skinned and turfed areas are also necessary. There must be no lip to alter the trajectory of the ball, so no bad hops will influence the outcome of the game.

If the desired results are so obvious, it must be easy to establish the recommendations for skinned area soils. Well, not really, according to Dr. Don Waddington, who is now Professor Emeritus of Soil Science at Penn State University after retiring from his role teaching and conducting research in the university's turfgrass program. Dr. Waddington also serves as Chair of the Natural Playing Surface Subcommittee within the Sports Equipment and Facilities Committee of the American Society for Testing and Materials (ASTM).

In the first place, baseball and softball diamonds aren't limited to premium fields. Waddington says,

"Unfortunately, at the sandlot level it's not unusual for a backdrop to be set up at the corner of a field and for the basepath to be "created" by wearing away the turf as young players run the bases. These skinned areas really are nothing more than exposed soil.

"With organized play, skinned area soils are part of native soil fields, augmented native soil fields and various construction formats of sand-based fields. All differ in levels of funding for construction and post-construction field maintenance. Even with the same basic construction and equal budgets, there are differences among teams and

practices," says Waddington. "An ASTM practice would give a definitive procedure for performing one or more operations. Guidelines give a series of options or instructions. They do not recommend a specific course of action. Of course, with either guidelines or standards, people have the choice to follow them, or not to follow them. ASTM doesn't legislate any more than the Sports Turf Managers Association (STMA) legislates."

"For example, ASTM has established standard methods in soil analysis. That doesn't mean that everyone in the world has to use those methods.

Other entities, like the United States Golf Association (USGA), can adopt those standard methods and insist that they be followed. That creates an incentive for testing facilities to follow the standards."

"What we are developing for skinned area soils is a guideline for construction as opposed to a standard set of practices. It's designed more for the novice than for those involved at the professional and major college levels, where many already have a feel for what they're doing. We're working to set parameters with enough broadness that skinned area soils could be firm and impervious, or be quite porous and dependent on inter-drainage instead of surface drainage."

## Construction and Maintenance Closely Linked

Waddington notes that when developing the construction plan within the range of reasonable soil consistencies for skinned area soils, the post-construction management of that area comes into play and is extremely important. He says, "The group of



**Skinned soil must be kept moist enough to inhibit dust during play, but not so moist that players have problems making twists, turns, starts and stops.**

groundskeepers on what constitutes the 'right' degree of hardness and softness for the ideal skinned area."

## Guidelines, Not Practices

Because of all these variables and the need to set workable parameters, Waddington and members of the ASTM Subcommittee on Natural Playing Surfaces are working on standard guidelines for skinned area soils. "These are guidelines, not standard