

## The Most Bang for your STMA Buck!

by Mike Andresen, CSFM, Membership Committee Co-Chair

From the STMA office, Board of Directors and the membership committee I want to thank each and every person that took the time to complete and submit your feelings about STMA through the recent membership survey. The response was higher than anyone expected and the different committees are now taking the results and developing workable plans to help bring the strategic plan into adulthood.

The amount of feedback you provided by written comments was especially valuable to committees and makes this document-of-results a true gem for us to work from!



*Nor-Cal Chapter Meeting - Networking at the Local level!*

As co-chair of the membership committee, I can verify that the volunteer group of professionals serving on our committee has a mountain of great ideas to dissect and we are excited to see fruition of better, and new, initiatives in the near future. Every other committee feels the same excitement and is dedicated to helping STMA become the professional organization that you envision it to be. If you find yourself wanting to participate in this important step in the future of STMA, and haven't yet volunteered to serve on a committee, please call the STMA office and offer your service. Many hands make light work!

It is my honor to co-chair the membership committee with Kurt Nilsson, and I am grateful for the dedication of each person who has volunteered to serve with us. Without naming everyone, be assured

we've tried to assemble representation from all geographic and category memberships. We will be working very hard dissecting two major areas, member retention and member recruitment.



*Networking on a Seminar on Wheels Tour, Tampa, Florida, January, 2001.*

For member retention, we will be looking for ways to quickly involve each member into the STMA family. We want to make individuals feel connected to the organization from their first interaction with STMA, either at the chapter level or national level. Member orientation, as it relates to services, is a priority every member should be offered. Mentoring of new members is another priority item. Many of us know how to network with other members, but there are a lot of members who are intimidated by making that first call. This committee will work to help every member feel good about knowing where to go to get the answers they are looking for, and more importantly, having each realize that this is one of their major benefits from joining STMA! Other committees,

*continued on page 3*

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## President's Message

### Stepping Up to the Plate

By Rich Moffitt, President

As I write this message, the field is narrowing for the men's baseball teams who will top off their 2001 season at Omaha's Rosenblatt Stadium in the College World Series. At this point, media attention to this already well-covered event is expected to be even greater than usual because President George W. Bush is scheduled to throw out the first pitch. For many of the young players, making it to the College World Series is a dream come true. For some, it will be a stepping stone to professional baseball. Others will believe this is their last opportunity to step up to the plate for their team. Each player hopes all those years of study, practice and game experience pay off in their performance "when it counts."

Yet, while swinging a bat may not be part of your routine, I'm sure each of you step up to the plate for your team every day. Your performance is the culmination of your study, practice and experience to date. Your performance counts every day and in your ballpark, a 350 average isn't good enough. You strive for perfection with the goal of developing and maintaining the best sports surfaces for every level of play.

One of the greatest resources in accomplishing this is networking, tapping into the knowledge and expertise of other sports turf managers. The Sports Turf Managers Association was formed to help facilitate this sharing of information. An important function of the association is making it easier for sports turf managers to connect with each other.

The comments and suggestions provided through the survey earlier this year have been very beneficial to the STMA Board, Committees and Headquarters as they also step up to the plate.

STMA Headquarters is currently in the process of finalizing the 2001 membership roster and has asked every member to review their contact information on file in the STMA database and make any changes



Rich Moffitt

or additions necessary to bring it up to date. Members can use the membership roster or contact Headquarters to tap into this information for one-on-one communication.

The STMA Website Committee currently is in the process of upgrading the website ([www.sportsturfmanager.com](http://www.sportsturfmanager.com)) to make it more "user-friendly" as a communications tool and to increase the information posted there.

The STMA Membership Committee is working on developing methods to make interaction between members easier and to enhance membership benefits.

The 23 affiliated Chapters have just completed a series of six regional Conference Calls to share ideas on programs and services. The Chapters are expanding their outreach to provide greater educational resources to their members and potential members. The Chapters also are reaching out to others their members interact with: athletic directors, city managers and city councils, coaches, players, field user groups and team booster clubs.

The Marketing Committee is interacting with all of the other committees to communicate this. Using the STMA Strategic Plan and incorporating the information provided in the survey, this Committee is working to build public awareness/image awareness of the profession and the professionals - the sports turf managers. They also are working to build awareness with the people sports turf managers work for and with, and with other groups and associations within the green industry.

## The Most Bang for your STMA Buck!

*continued from page 1*

such as the website, marketing, conference, and chapter relations, are taking on similar issues of membership services. Each of us has the goal of giving you the most bang for your STMA buck!

With regard to member recruitment, we will explore ideas, such as regional STMA events, brochures, registrations, and trade shows. Our goal is to publicize, externally, the commitment and dedication of STMA members to our profession. We also want to explore the potential of hosting a "mini-conference," possibly in an area of the country where a winter-timed conference is unworkable. We will also be exploring an incentive program for referring members. Is it possible to offer you incentives, such as discounts on clothing or conference offerings for referring

a new member? I don't know, but I assure you the answer will soon be coming!

I apologize for the rambling, but I hope you are as excited about STMA, and its future, as I am. I encourage you to speak well of the offerings that STMA now provides, and trust you will have more things to boast about in the future. Every one of us is important to STMA. I encourage you to sign up a new member and begin to mentor him, or her, today. The magazine, newsletter, compendium, website, and conference are all vital resources that we all depend on, but it's the unique camaraderie, networking, and communication that makes being an STMA member special. Thanks again for answering the survey. These are exciting times!



### MEMBERS ON THE MOVE

**STMA President, Rich Moffitt**, now holds the position of Horticulture Curator at the Saint Louis Zoo. Moffitt also will continue to operate his sports field consulting company. Rich's number is 314/781-4520.

**Abby McNeal**, former Athletic Turfgrass Manager for the University of Colorado, has joined the team at Invesco Field at Mile High, as Sports Turf Manager. Invesco is the new home of the Denver Broncos. Abby can be reached at 720/939-8589.

**Meldon Mitstifer, III**, formerly the Assistant Head Groundskeeper for the Baltimore Orioles, is now Stadium Groundskeeper at Hershey Sports & Entertainment, Hershey, PA. You can reach Mel at 717/520-5573.

### CONGRATULATIONS!

*If you, or anyone you know has changed positions, give us call so we can help the word out!*

### CONGRATULATIONS!

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# Sports Turf Topic:

## Biostimulant Basics – What and When

Turf managers need to determine their objectives in order to determine what biostimulant components are required and when they can best be utilized in the management program.

The timing of the biostimulant application can dramatically affect the results achieved. The natural growth cycle of the turf is an important consideration. Applying biostimulant material to improve the natural growth of the turf usually requires different timing than an application made to solve a problem. For cool season turf, fall and spring applications will accent natural root growth. Applications to warm season turf are best made during the summer growth period.

Applications intended to solve problems, must take into consideration the cause of the problem. If the problem is a natural stress which can be anticipated, such as summer drought or excessive heat and humidity, optimum results are obtained with applications made prior to the occurrence of the stress. Turf growing in shade, for instance, can be assisted by a biostimulant application to enhance chlorophyll production under low light conditions.

While biostimulant applications can not eliminate stress conditions, they can dramatically lessen the damage incurred, as well as speeding up recovery.

Specific cultural practices can also be augmented with biostimulant applications. Aeration, for instance, can be enhanced. Seeding, sodding and sprigging results can be dramatically affected.

The use of biostimulants when seeding can provide a variety of benefits. Germination times are reduced with biostimulant applications. Natural plant hormones also affect speed of establishment and coverage. Biostimulants can be applied to the soil, directly over the seed, or added to hydro-seeding mixtures.

Biostimulant applications have been shown to dramatically increase root mass which can mean quicker sod knit-down and sprig development. Root mass will correlate with the turf's ability to resist and recover from environmental stresses. In fact, root mass is regarded as the easiest measure of the success of a biostimulant program. Core samples are simple to check and will provide the turf manager with assurance that his turf is ready to withstand the many pressures to which it is subjected during the growing season.

Biostimulants are tools that can be used to enhance the vigor of the playing fields under the care of the sports turf manager. Where good agronomic basics are in place, biostimulants can take your turf to new levels of beauty and durability.

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## Professional Development: Growing Leaders Within Your Staff

**S**ports turf management is hard work. The job is complex, ever-changing, with multiple facets to consider and multiple people to please. As the boss, you know the workload becomes manageable if you have knowledgeable, reliable, dedicated individuals in key leadership positions.

These positions may range from crew leader to project, field or complex supervisor, to assistant sports turf manager, or multiple other areas. Whatever the title or level of responsibility, key traits are shared by those with leadership ability.

You can make your own job easier by identifying those on your staff with leadership ability and helping them sharpen their leadership skills.

### Look for these Traits

**Knowledge.** Competent employees have a solid base of knowledge. They know they won't have all the answers, but have appropriate sources of information to find the answers. They aren't satisfied with what they know, but always are seeking more information and advice.

**Ambition.** These individuals look for greater areas of responsibility, work hard on additional, higher level assignments, and prove they are not only capable of handling them, but also are eager to take them.

**Initiative.** Self-starters don't need reminders to get the job done. They tackle their assignments promptly and completely. Depending on your system, they may then either report for the next assignment or begin on the next project without waiting to be told to do so.

**Decision Making.** These individuals are decisive. They gather the details, weigh the options, and reach a decision. Then they act on it.

**Problem Solving.** Problems are part of every job. Watch for those individuals who can identify a problem, analyze the details of the problem, and inform you

of both. Note especially those who take the additional step of suggesting a solution or range of solutions.

**Teamwork.** No one works in a vacuum. Identify those people who work well with others. Watch for those

who work equally well on a team when they are in the leadership position and when their role is to follow. Even better, note which individuals establish and use a team approach to accomplish tasks more efficiently.



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# DOC'S DUGOUT - An Inning From Our Past

By Dr. Kent Kurtz - STMA Historian

## Lubie Veal - One of the Last of the Early Groundskeepers

### *A New Era Dedicated to Building New Tradition*

Lubie Veal was born in Kentucky in 1924. Once he finished school he worked for several years at a clothing store in Murray, Kentucky. In the mid 1960's he went to Richmond, Virginia, to visit a friend who had a connection with the Richmond Braves. While in Richmond, Lubie asked if he could assist the head groundskeeper with the field at the stadium and was given a job on the grounds crew. A couple of years later he moved on to work for the Louisville Colonels. In 1969, another friend went to Montreal to work for the expansion team - the Montreal Expos - and asked Lubie to come along to train the new grounds crew. Lubie agreed to spend four weeks training the new crew but ended up spending four years. He left in 1972 for the challenge of building a new field in Daytona Beach, Florida (now Jackie Robinson Stadium).

Once the field was completed, he interviewed with the Cincinnati Reds Baseball Club for a better paying, full-time position. In 1972, Lubie was hired by the Reds as their Turfgrass Superintendent and remained with them for 10 years. Each ball club Lubie worked for sent him to spring training to get the fields ready for the exhibition season. These included all practice facilities and the stadium where spring training games are played.

In 1982, when Dallas Green came from the Philadelphia Phillies to assume the position of Executive Vice-President and General Manager of the Chicago Cubs, he encouraged Lubie to leave the Cincinnati Reds and come to the Cubs as Assistant Director/Stadium Operations at Wrigley Field. In this position he was responsible for overseeing the grounds crew and the stadium operations crews. This he did with distinction as the Cubs entered a new era of building a new tradition.

Although Lubie officially retired in 1990, he continues to serve the Chicago Cubs organization as a special advisor to the spring training complex in Mesa, Arizona, where he "keeps an eye" on STMA member Hoke Holyoak and assists him with his work with the City of Mesa. In addition, he looks after sites at Daytona Beach, Florida; Lansing, Michigan; Jackson, Tennessee; Boise, Idaho; and Des Moines, Iowa. At 76, Lubie maintains his vigor and positive attitude as he continues to work at what he loves - making sure the fields within the organization are properly established and maintained.

When asked about some memorable events Lubie related to me the following:

"When I was with Cincinnati, manager Sparky



Anderson wanted the front of home plate very soft so the pitches from sinker ball pitchers would die in the dirt rather than skip past the catcher."

"When Gene Mauch was the manager of the Montreal Expos, and when we played the St. Louis Cardinals, he wanted the infield dirt soaked more and longer to slow down the Cardinal runners and prevent

them from stealing too many bases on his pitching staff."

"When Joe Morgan played second base for the Cincinnati Reds he wanted hard clay put around the edges of the Astroturf® so his left foot wouldn't slip when he attempted to steal bases."

"When you (Doc) came to Wrigley Field in the fall of 1984 to help us select a new sod for the ball park, Dallas Green saw the four of us (Lubie, Frank Caparilli, Roger O'Conner and Doc Kurtz from STMA) off on a trip to visit sod farms in northern Illinois and Indiana. We spent the entire day visiting four sod farms as you drove us from place to place. After each place visited we would ask you what you thought and you would say, 'What do you think? It's your field and your grass, I'm just the driver and I don't think.' When we finished visiting all four sod farms and we stopped for lunch we again asked you who you thought had the best sod and the best service, etc. and you quizzed us once again and when we said probably the first place we stopped, you said 'That's where I would buy my sod if it were my stadium because they have a top quality product, will give excellent service, its free of Poa annua, and the grower is an STMA commercial member.' And when we said that we could have eliminated all the extra stops if we could have gotten an answer after the first stop, you said, 'It's your grass, your stadium, your decision and you have to learn to solve your own problems.' "Then I realized you were a true friend and wouldn't let us make a bad decision and you did this to force us to begin to depend on our decisions and have confidence in ourselves. And I knew then that the STMA group you and Harry Gill were promoting really was there for us, to provide us with help, guidance, education and friendship."





## SAFE Foundation Drawing

**T**he SAFE Foundation is running a drawing for an NFL Hall of Fame Game and golf scramble package, as a fundraiser for SAFE (Safer Athletic Field Environments). SAFE's Mission Statement is "to support sports field-specific research, educational programs and environmental concerns to promote user safety," and SAFE's Vision is "to use science as the foundation to benefit sports fields in areas of playability, user safety and the environment."

*The package for two (one winner, and his or her guest) consists of the following:*

- \* Admission to the Pro Football Hall of Fame (HOF), August 5th
- \* Admission to the NFL Experience, August 5th
- \* 2001 HOF Golf Scramble (with NFL players), Shady Hollow Country Club, August 6th
- \* HOF Tailgate Party, August 6th
- \* Tickets to the 2001 NFL HOF Game, St. Louis Rams vs. Miami Dolphins, August 6th

- \* Special Parking Credential
- \* Hotel room for the nights of August 5th and 6th
- \* Travel to and from Canton, OH, for these events
- \* **Please Note: Winner is responsible for all other expenses not outlined above**

The cost of one chance in the drawing is a \$5 donation to SAFE. Or, to get a volume discount, receive five chances for \$20. The drawing will be held on July 4th, and the winner will be notified on July 5th. Please mail your donation (one entry per \$5, or five entries per \$20) to the address below. Be sure to include your daytime telephone number.

Please make checks payable to "SAFE Foundation."

### SAFE Foundation

Attn: Hall of Fame game

1375 Rolling Hills Loop

Council Bluffs, IA 51503-8552

Phone: 800-323-3875

e-mail: SAFEFoundation@aol.com

## SAFE Board Meeting Report

**T**he SAFE Board of Trustees met in Denver, CO, on April 5th, 2001. The Board approved the minutes of the SAFE annual meeting held on January 16, 2001, in conjunction with the STMA Conference in Tampa, FL. The stage one goal established by the Board at the annual meeting was to collect one million dollars within two years. The SAFE Board also approved the treasurers report which noted the addition of funds raised at the STMA Conference through the live and silent auctions, the raffle, and the Textron-sponsored golf tournament.

The SAFE Scholarship committee will be administering the scholarship program. The SAFE Board voted to allocate up to \$15,000 for the 2001 scholarships and related travel to the STMA Conference in Las Vegas in January of 2002. This amount includes the Dr. Jim Watson scholarships. Scholarship funding is to be allocated at the discretion of the committee.

Further discussion by the Board at this meeting included: Definition of donor categories and anticipated funding from each to reach the one million dollar goal; Agreement to proceed with the Hall of Fame drawing promotion; Establishment of the development team and timelines to produce a strong marketing piece for fund-raising; Development of the SAFE policy on research grant agreements and formation of the committee to develop guidelines for research projects; Definition of SAFE and STMA roles in disseminating the discovered knowledge of research results and other sports-turf related information; Definition of the initial informational materials needed and establishment of the committee to develop them.

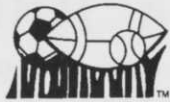


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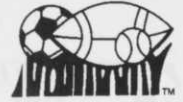
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# Sports Turf Happenings



## Chapter Events

### Tennessee Valley Sports Turf Managers Association (TVSTMA):

TVSTMA's Summer Educational Seminar will be held June 20th at Neyland Stadium of the University of Tennessee in Knoxville. Making presentations in the morning session are: Dr. Dave Minner and Mike Andresen, CSFM, both of Iowa State University; Darian Daily, Columbus Crew Major League Soccer Club; and Dr. Tom Samples and Bob Campbell, both of the University of Tennessee. Afternoon Workshops will be conducted by Dr. Alan Windham, on "Turf Diseases and Weed Identification;" by Dr. Frank Hale, on "Insects;" and by Bill Marbet, on "Evaluating Infield Soils." Vendor exhibits will be on display on the University of Tennessee football field from 12:30 p.m. to 3:30 p.m. Also planned is a July meeting at Vanderbilt in Nashville, Tennessee.

For information on the TVSTMA Chapter, or upcoming events, call Bill Marbet, Southern Athletic Fields, Inc., at 931-380-0023 or 800-837-8062.

### Michigan Sports Turf Managers Association (MiSTMA):

MiSTMA will meet on June 21 at Okemos High School in Okemos, Michigan. Morning educational sessions will include "Professionalism and Certification," by Steve Trusty, STMA Executive Director; "The Business End of Sports Turf," by Tim Moore, CSFM, Ballfield Coordinator for MNPPC and Secretary of STMA; "The Future for the MiSTMA with the MTF," by Tom Smith, President of MTF; "Effects of Cultural Practices for Athletic Fields," by Lisa Lundberg, MSU graduate student; and "Athletic Field Systems Study," by Jason Henderson, MSU graduate student. A tour of MSU Athletic Field Research and the Okemos High School Athletic Fields will take place in the afternoon.

For information on the Chapter or other pending events, call Rick Jurries, West Ottawa Public Schools, at 616-738-6974, or go to [www.mistma.org](http://www.mistma.org) to visit the chapter's new website.

### Colorado Sports Turf Managers Association:

The Colorado Chapter will hold its Annual Seminar on Wheels Tour on June 21 in Denver, with stops to include All City

Stadium, All Star Park and North Area Athletic Complex.

The Chapter's Mountain Seminar will be held on July 20 at Canyon View Park in Grand Junction. The 65-acre park is home to eight soccer fields, four softball fields and a baseball field.

Watch for more details on the 6th Annual Lawnmower Man Open Golf Tournament, to be held on July 24 at Westwood Golf Course in Arvada. Also coming this fall is Turf Day At Invesco Field at Mile High, the new home of the Denver Broncos.

For information on the Colorado Chapter, or upcoming activities, visit the Chapter's website--[www.CSTMA.org](http://www.CSTMA.org)--or call the CSTMA Chapter Hotline at 303-346-8954.

### Sports Field Managers Association of New Jersey:

The New Jersey Chapter STMA will meet on June 22 at the Somerset Patriots facility, Bridgewater, NJ. The program will focus on Baseball Field Maintenance Practices. Speakers include Dr. James Murphy of Rutgers University, and Ray Cipperley, Head Groundskeeper for the Somerset Patriots.

For information on the New Jersey Chapter, or upcoming events, call Jim Gavigan, Lesco, at 732-248-8979; or call Eleanora Murfitt, Director, Township of Clinton Parks & Recreation Department, at 908-735-5999.

### Keystone Athletic Field Managers Organization (KAFMO/STMA):

The KAFMO Sports Turf Managers School will be held June 25-27, 2001, at the Little League National Headquarters in Williamsport, PA. This school stresses a practical approach to field management. Techniques for baseball, soccer and football fields will be covered. Classroom and hands-on instruction about soils and soil amendments, field layout, construction and maintenance will be offered. For registration information contact KAFMO, 1451 Peters Mountain Rd, Dauphin, PA 17018, tel. 717-921-8803.

For information on the KAFMO/STMA Chapter, or other upcoming events, contact Dan Douglas, Reading Phillies *continued on page 10*

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**Ken Kushner**  
Anderson Park District  
Cincinnati, OH

**Dave Maloney**  
Northfield Parks & Rec.  
Northfield, MN

**Jose Matos**  
City of Southlake  
Southlake, TX

**Rich Meyer**  
Florissant Sod Company  
O'Fallon, MO

**Jim Ozmun**  
Farmington I.S.D. #192  
Farmington, MN

**Steve Ratto**  
Bergen County Parks Dept.  
Teaneck, NJ

**Chuck Reinert**  
Garden City Comm. College  
Garden City, KS

**Kirk Sausser**  
Toledo Mudhens Baseball  
Maumee, OH

**Robert Stewart**  
Dow AgroSciences  
Zionsville, IN

**Matt Thomas**  
Tallahassee Comm. College  
Tallahassee, FL

**Dwight D. Anderson**  
Chicago Turf & Irrigation  
Itasca, IL

**Sara Best**  
Student  
Stephensville, TX

**Chris Fesler**  
Goose Creek Rec. Comm.  
Goose Creek, SC

**Jan Frainie**  
City of Laguna Hills  
Laguna Hills, CA

**J. Richard Geiselman**  
City of Danville Parks & Rec.  
Danville, VA

**Roger Hernandez**  
City & County of Denver  
Denver, CO

**Bradley R. Jakubowski**  
Nebraska College of Tech. Ag.  
Curtis, NE

**Ariel Kerner**  
Sports Management Services  
Berryville, VA

**David Lewis**  
Tallahassee Comm. College  
Tallahassee, FL

**Josh Marden**  
Student/Virginia Tech  
Blacksburg, VA

**Rob McDonald**  
City of Kentwood  
Kentwood, MI

**Vincent A. Meyer**  
Mounds Park Academy  
Maplewood, MN

**Harold S. Pierce**  
Winslow Township B.O.E.  
Atco, NJ

**John Rector**  
Turf-Seed, Inc.  
Hubbard, OR

**RotaDairon Emrex, Inc.**  
Jim Gates  
Pittston Township, PA

**Greg Scott**  
Scott's  
Pittsburgh, PA

**David Stokka**  
Leavenworth Public Schools  
Leavenworth, KS

**Thomas J. Torpey**  
Monroe Township  
Monroe Township, NJ

*New members continued on page 16*

## Chapter Events

*continued from page 8*

Baseball Club, at 610-375-8469, ext. 212; or chapter e-mail address: kafmo@aol.com.

### **Iowa Sports Turf Managers Association:**

Upcoming events for the Iowa Chapter include a Construction Workshop, to be held at the Prairie Ridge Youth Sports Complex in Ankeny on June 27; an Irrigation Workshop, to be held at the Iowa City Kickers Soccer Complex in Iowa City on July 18; Iowa Turfgrass Field Day, to be held at the ISU Horticulture Research Station in Ames on August 2; and a Baseball/Soccer Workshop, to be held at Upper Iowa University in Fayette on October 9. The Iowa Chapter also will be joining the Minnesota Chapter for the annual Chapter Clash on July 13 and 14, 2001.

For information on the Iowa Chapter, or upcoming activities, contact Lori Westrum of The Turf Office at tel. 515-232-8222, or fax 515-232-8228, or e-mail: Lori@iowaturfgrass.org.

### **Sports Turf Managers Association of Arizona:**

The Arizona Chapter will participate in the Summer Flagstaff Conference on Cool Season Grass. It will be hosted by the City of Flagstaff Parks and Recreation. Phillip Garcia is the contact for this event.

The Arizona Parks and Recreation Annual Conference will be held in Phoenix on August 16th. For information on this event, please contact Chris Calcaterra, City of Peoria.

For information on the chapter, or other upcoming events, contact Bill Murphy, Recreation and Facilities Manager, City of Scottsdale, at e-mail: bmurphy@ci.scottsdale.az.us or 480-312-7954.

### **South Texas Sports Turf Managers Association:**

The South Texas Chapter is planning a June/July meeting in the Houston area. More details will be announced soon.

For information on the chapter, or upcoming events, call Tom McAfee, Nelson Wolff Municipal Stadium, San Antonio, at 210-207-3754.

### **Minnesota Chapter STMA:**

The Minnesota Chapter's annual Minnesota/Iowa Chapter Clash is set for July 13 and 14, 2001. The annual Tour on Wheels will be held on July 25. The Chapter will participate in the MTGF Field Day to be held at the University of Minnesota on July 26. Details on these events will be announced soon.

For information on the Minnesota Chapter, or upcoming events, contact Ron Unger, Director of Parks & Recreation, City of Kasson, at 507-634-4165 or e-mail: ParkNRec@CityofKasson.com.

### **Ohio Sports Turf Managers Association (OSTMA):**

OSTMA will host the second annual Regional Chapter Workshop on July 18th at Ohio State University. The event will include presentations by L. Murray Cook, President of Global Stadium Services and President-Elect of STMA; and Steve Trusty, STMA Executive Director; as well as a tour of the OSU athletic

facilities, conducted by Brian Gimbel; a tour of the Ohio Turfgrass Foundation Research Center, conducted by Dr. John Street; a tour of Cooper Stadium, home of the Columbus Clippers, conducted by Jeff Limburg; and a tour of Crew Stadium, home of the Columbus Crew, conducted by Darian Daily. The day will conclude with attendees enjoying dinner at the Crew Stadium and then watching a professional soccer game. The Ohio Chapter anticipates attendees from the Michigan, Midwest, Indiana, Tennessee and KAFMO Chapters and issues an open invitation to others to attend. Contact OSTMA or STMA National Headquarters for more information on this event.

This event will be followed on July 19th by the OSTMA first Annual "Chapter Challenge" Golf Outing, also in Columbus, Ohio, with the proceeds to benefit the OSTMA scholarship fund.

OSTMA is accepting scholarship and Field of the Year nominations until October 1, 2001. Visit the website or contact Boyd Montgomery for further information.

For information on the OSTMA Chapter, or upcoming events, call Joe Zelinko at 800-897-9714 or Boyd Montgomery at 419-885-1982, ext. 50; or visit the chapter's website at [www.glstma.org](http://www.glstma.org).

### **Midwest Chapter STMA:**

Upcoming events for the Midwest Chapter include: a Tour on Wheels in August, a Fall workshop at the Lincolnshire *continued on page 18*

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\* Travel to and from Canton, OH, and 2 nights lodging also provided

Phone: \_\_\_\_\_

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# ROOTS: GETTING TO THE BOTTOM OF TURFGRASS

by Ms. Mary Owen, University of Massachusetts, Extension Educator & Turf Specialist

**R**oots are the foundation of a turf. They perform functions vital for plant growth. This article will discuss the structure and function of roots, the effects of the environment and cultural practices on root growth, and strategies for increasing rooting. We will look at roots and root systems of both cool season grasses (Kentucky bluegrass, perennial ryegrass, tall fescue and bentgrasses) and warm season grasses (principally Bermudagrass but also zoysiagrass) used for sports field and other natural turf playing surfaces.

## ROOT SYSTEMS

Turfgrasses have two different root systems during their lives. The first, known as the primary or seminal root system, develops from the embryo and emerges directly from the germinating seed. The seminal root system provides for water and nutrient uptake for the tiny seedling and functions actively for six to eight weeks.

During this seedling growth phase and shortly after the first leaf emerges, an adventitious root system will begin to form. This root system originates from buds at nodes on the crown. It replaces the seminal root system, becoming the main functioning root system for the plant. Adventitious roots will also form at nodes on the lateral stems: stolons, rhizomes and tillers. These root systems allow the lateral stems to eventually develop into plants functioning to a large degree independently of the main turfgrass plant.

Turfgrass roots are fibrous and multi-branched. The tip of each root is covered by a cap, which protects the tender meristem (growing point) as the root bores through soil. The meristem replenishes the root tip and provides for growth of new cells in the root. The new cells behind the meristem eventually stretch and lengthen; this action pushes against the root cap and is what makes the root actually grow longer.

As a root matures the cells become specialized. The cells of the endodermis (the outer layer of the root) behind the area of cell elongation are able to develop the long, slender, almost microscopic extensions called root hairs. These hairs greatly increase the surface area, which can actively absorb water and nutrients. While the roots of cool season grasses can

only form root hairs from specialized cells in the epidermis called trichoblasts, warm season grasses have the advantage of being able to develop root hairs from all cells in the epidermis.

A new root is white and slender. As it matures, it turns brown and becomes thinner. Its ability to absorb water and nutrients declines. Eventually the whole root will die and will slough off just below the crown. This cycle of root growth, maturity, aging, death and replacement is a natural and ongoing process. It may be speeded up by environmental or climatic conditions or by cultural practices.


Just as different grasses vary in their leaf texture or color or growth habit, so too do they vary in the size, depth and distribution potential of their root systems. Warm season grass root systems are deeper and more extensive than the finer more shallow systems of cool season grasses. Warm season grass roots tend to be larger in diameter than those of cool season grasses.

Healthy turfgrass roots are well branched. In fact, the ability of a turfgrass plant to effectively compete for water and nutrients is directly related to the extent of branching.

## HOW DO TURFGRASS ROOTS GROW?

**Cool season grasses.** To understand the cycle of cool season grass root growth, consider the cycle of carbohydrate production and use.

In photosynthesis, plants, using the energy of sunlight,  
*continued on page 12*

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## ROOTS: GETTING TO THE BOTTOM OF TURFGRASS

continued from page 11

produce carbohydrates from  $\text{CO}_2$  and  $\text{H}_2\text{O}$ . These carbohydrates, when broken down through the process of respiration, provide energy to the plant. Roots do not contain chlorophyll and so cannot photosynthesize. They depend on the leaves for carbohydrates for their energy needs. The absorption of nutrients and the movement of water and nutrients from cell to cell within the root requires energy.

Carbohydrates produced at the time that shoots are actively growing will be used in the areas of most rapid growth (leaves) before they are sent to the roots for respiration and energy production.

When temperatures are too cool for rapid shoot growth, carbohydrates will be available to the roots. When temperatures are warmer, and when shoot growth is stimulated during very warm weather, carbohydrates will be used by the leaves before any are translocated to the roots.

The roots of cool season grasses grow and

function most vigorously when soil temperatures are cool. The most intense period of root initiation and growth is in the spring. A slightly less active period occurs in the fall. The temperatures for maximum root growth are slightly lower than those for maximum shoot growth, and so roots will be growing rapidly before shoot growth begins in the spring and after shoot growth stops in the fall. When temperatures drop in the fall and the shoots stop growing, roots are still actively growing. Carbohydrates are moved into stems and to a lesser extent into roots at this point, providing for slow but continued growth in cold (not frozen) soils until active growth resumes in spring.

Tall fescue tends to slow and stop growth at warmer soil temperatures than other cool season grasses.

Turf grown in reduced light situations will lose even more roots. Turf which has been stimulated by high levels of nitrogen for rapid shoot growth during warm weather may lose large amounts of roots even while shoots remain active.

When air temperatures rise in summer, the efficiency of photosynthesis in cool season grasses is reduced. The leaves produce fewer carbohydrates for translocation to the roots. Energy available for root growth and work is reduced and as a result root growth slows. As root growth slows, the root system becomes limited in its ability to absorb water and nutrients from the soil and transmit them to the other parts of the plant.

As air temperatures rise, soil temperatures will follow. As soils warm, root respiration increases. As respiration increases, more and more carbohydrates are used up. So, when temperatures warm, the use of carbohydrates increases while the supply decreases. Eventually this can lead to root starvation and death. There will be a net loss of roots to sustain the rest of the turfgrass plant. Roots will not be replaced until cool weather resumes. Creeping bentgrass roots, for instance, stop new root initiation at soil temperatures greater than 75F.

**Warm season grasses.** Photosynthesis is more efficient in warm season grasses than it is in cool season grasses. As temperature and light increase, so too do shoot and root growth. Root initiation and activity peaks in late spring and summer. When temperatures cool down, root as well as shoot growth slows. When the plant enters dormancy, root growth ceases. The peak loss of roots for warm season grasses is in late winter.

### WHAT DO TURFGRASS ROOTS DO?

Roots absorb water. They are the principal entryway for this essential compound. Water is needed to maintain vigor and for photosynthesis and many other processes in the plant. Water is needed to replace that lost through transpiration

continued on page 13

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## ROOTS: GETTING TO THE BOTTOM OF TURFGRASS

*continued from page 12*

as well as through mown leaf ends.

Roots absorb nutrients. While carbon, hydrogen and oxygen, the main building blocks of organic compounds, are derived from the atmosphere and from water, the remaining thirteen essential mineral nutrients are principally absorbed from the soil by the roots. Nutrients do not just "seep into" or passively move into roots. The process of nutrient absorption requires energy. This energy comes from respiration: the breakdown of carbohydrates in the presence of oxygen with a subsequent release of the energy captured by the plant in the process of photosynthesis. When carbohydrate reserves are low or not available, roots will not have the energy needed to absorb nutrients.

Deep, extensive root systems are able to access more nutrients as well as water, from a larger volume of soil than can weaker, shallower root systems.

Roots anchor plants. Plants with deep and extensive root systems are less likely to rip out from divoting. Plants with deep and extensive roots contribute to a stable playing surface.

### HOW CAN YOU ENHANCE ROOT GROWTH?

Pay attention. Make regular inspection of the root system a habit. Note its depth and distribution. How does its condition relate to time of year, climate and your management?

Maintain a well-aerated rootzone. Depth and extent of roots as well as root branching increase when the rootzone is kept well aerated. When the soil is not compacted, roots expend less energy as they bore through the soil. Good drainage, both surface and subsurface, management of thatch, relief of compaction and appropriate top-dressing in conjunction with aeration will ensure a well-aerated soil.

Roots in a poorly aerated soil tend to be thicker in diameter and less branched than roots growing in well-aerated soil. These roots are inefficient at water and nutrient uptake.

Irrigate intelligently. Irrigation events should be spaced as far apart as possible without sacrificing turf quality. Turf watered deeply and infrequently has been shown to have a deeper, more extensive root system with a higher level of carbohydrate reserves than turf watered frequently and shallowly.

Fertilize judiciously. Provide adequate nutrients at the proper time for balanced turfgrass shoot and root growth.

Time nitrogen applications so as to maximize root growth. Strive to maintain a healthy balance between root and shoot growth. Apply potassium before expected stresses of heat, cold and possible drought are likely to occur.

Take care not to overly stimulate shoot growth during periods environmentally unsuitable for root growth (i.e. in the summer for cool season grasses).

The timing of nitrogen applications influences rooting of cool season grasses. Applications made in late summer and late fall will result in an increase in rooting. Applications made in spring and especially in summer will result in an increase in shoot growth with a corresponding reduction in rooting.

The balance between shoot growth and root growth in warm season grasses is less affected by timing of nitrogen applications.

Cool season grass roots have the ability to store some nitrogen applied in the late fall for use when growth resumes vigorously in the spring.

Maintain soil pH at 6.0 - 7.0. Turfgrass roots grow very poorly at reduced pH, especially at pH < 5.0.

Mow appropriately. Mow cool season grasses as high and as infrequently as possible given the use of the

*continued on page 16*

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## MU builds new baseball 'field of dreams'

"If you build it, they will come - goes the memorable line from the baseball movie, "Field of Dreams."

University of Missouri-Columbia turf grass researchers will test that theory with a state-of-the-art infield diamond now under construction at its research facility at the MU South Farm. The goal is to draw students learning the profession of sports field management.

The diamond, on par with the playing surfaces used by professional teams such as the St. Louis Cardinals, will provide the only working laboratory in the country for students seeking careers in this area, said Brad Fresenburg, turf researcher in the MU horticulture department.

"No one in the country, to my knowledge, has a full-size infield like this for teaching," he said. "This will be an outdoor classroom for us. We can show students just about everything."

The laser-graded diamond is being installed free by MJM Services of Belleville, Ill., a company that installs sports fields and golf courses. The firm installed two Bermuda grass practice fields for the Mizzou Tigers football team.

In research, as much attention will be paid to the study of skinned infield soils as to the lush green grass diamond.



University of Missouri research associate Brad Fresenburg, right, works with Mike Munie, center and Dave Niebruegge of MJM Services to grade the new infield. Using a laser-leveling device they were able to create a .5 percent slope on four quadrants surrounding the pitcher's mound as the center point.

"Seventy-five percent of the baseball game is played on infield dirt," said Chad Follis, a graduate student from Fredericktown, Mo. "You have the pitcher's mound, batter's box and base paths. To date, there has not been much research generated on infield (soil) mixes."

The field will be nearly pool-table level. It will have one-half of one percent grades on four planes around the pitcher's mound. A laser beam is shot across the field and picked up  
*continued on page 16*

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## Welcome New STMA Members

continued from page 9

Robert Trevino  
Denton, TX

Turf Equip. & Supply Co., Inc.  
Lance Ernst  
Jessup, MD

Danny Turner  
Clearwater Landscaping Co., Inc.  
Sun Valley, ID

Roger Weinbrenner  
University of St. Thomas  
St. Paul, MN

Tony Wilcenski  
Monroe Township  
Monroe Township, NJ

Curt Williams  
Town of Castle Rock  
Castle Rock, CO

Scott Wilson  
City of Fairhope  
Fairhope, AL

## MU builds new baseball 'field of dreams'

continued from page 14

by an electronic eye on a tractor. That controls the valves for a blade on the tractor.

"We don't touch the controls," said Mike Munie, MJM Services owner. "When we did the two MU football practice fields, we laid a Number Two pencil on the far end and you could lay down and see the pencil from 300 feet away. We were within a hundredth of a foot."

A playing surface must be firm and playable yet workable so that cleats can dig in for traction. "Safety and playability are the main things we look for on skinned infield areas," Fresenburg said.

While the infield diamond will be "Baby" Bermuda grass, the aprons will be planted in a turf-type tall fescue, he said. Bermuda grass holds up better and can be mowed to five-

eighths of an inch for a better playing surface.

MU is considering replacement of the bluegrass on its diamond at the infield of Simmons Field, home of the baseball Tigers, with "Baby" Bermuda grass.

In addition to installing the infield diamond, MU researchers plan to add research plots nearby to test different soil blends. Mixtures will include combinations of round and sharp sand, silt and clay from native soils and calcined clays. "It's possible that the MU baseball team may come over and use the field," Fresenburg said. "That's been discussed. It would relieve their game field from excessive wear and allow us to look at wear patterns to teach field maintenance."



## ROOTS: GETTING TO THE BOTTOM OF TURFGRASS

continued from page 12

turf. This is especially important during times of environmental stress. Low mowing can dramatically reduce the depth and extent of roots of cool season grasses, though bentgrass is not as severely affected as the others.

Warm season grasses are less dramatically affected by low mowing. Bermudagrass especially will tolerate low mowing without significant reduction in rooting.

Constant defoliation by frequent mowing reduces the photosynthetic potential of the turf. The result is depleted carbohydrate supplies available for root growth. Cool season grasses are especially sensitive to this cultural stress.

Take care with herbicide applications. Avoid using herbicides when turf is under stress or when root growth is restricted.

Bensulide, benefin, oxadiazon, oryzalin, pendimethalin, prodiamine, siduron, DCPA and other herbicides may inhibit root growth. Healthy turf may be able to recover from this quickly. A turf stressed by drought, heat, traffic or with a root system already limited may be more seriously damaged and take a longer time to recover.

### CONCLUSION

Roots are the foundation of a turf. Attention to the growth, development and health of the root system by the turf

manager can ensure a deep and extensive root system able to sustain a vigorous, properly performing playing surface.

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# STMA Board Meeting Report

The STMA Board of Directors met on April 6 and 7, 2001, in Denver, CO. The Board approved the minutes as submitted of the Tampa, Florida, 2001 meetings: the January 16th pre-Conference Board Meeting; the January 20th STMA Annual Meeting, and the January 20th post-Conference Board Meeting. The Board also approved the Financial Reports as submitted. Major areas addressed by the Board follow.

Representatives from Adams Business Media met with the Board and introduced their concepts for revamping and upgrading the magazine. Their presentation met with Board approval.

The STMA Survey Committee presented the preliminary data. This also was supplied to Committee Chairs. Committees are to request data to be further refined to fit their primary functions.

The STMA Marketing Committee submitted a series of proposals to the Board with a request for the Board to review the proposals as outlined and define which were primary functions of the Marketing Committee and which were primary functions of other Committees to be supported by the Marketing Committee. The Board was asked to then prioritize the Marketing Committee primary functions in line with the ongoing timelines of the overall STMA Strategic Plan. With Board Members either serving as Chairs or as key members of the other major STMA Committees, the meeting provided the most efficient forum for accomplishing this.

Abby McNeal, Chapter Relations Committee Chair, presented Committee requests for Board approval, including: recommendations for revision of the Chapter Procedures Manual, authorization for a series of regional Chapter Conference Calls; approval of the Speakers Bureau forms and authorization to proceed with developing it. All of the Committee's requests were approved.

M. J. Calvert, member of the Website Committee, presented the Committee's recommendations to upgrade the site which she had

incorporated into a graphics website format. She and Committee Chair, Lynda Wightman, asked for feedback for Committee review. The Committee also will be reviewing design proposals and proposals for ongoing maintenance.

The Board reviewed the updated trade show plans for the 2002 Conference in Las Vegas utilizing the Cashman Center, provided input for the Conference program, and assigned a committee to review the vendor sign up process for future trade shows.

The next STMA Board Meeting will be held July 27 and 28, 2001.



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## Chapter Events

continued from page 10

Sports Complex in October, and the annual North Central Turf Expo at Pheasant Run Resort in December.

For information on the Midwest Chapter, or pending activities, call The Chapter Hotline at 847-622-3517.

### Nebraska Sports Turf Managers Association:

The Nebraska Chapter is planning an August 6th event at the Mead Turf Show in the morning and Seward in the afternoon.

In the planning stages is an October meeting at Haymarket Park in Lincoln, Nebraska, the new home of the University of Nebraska Huskers Baseball Team and the professional baseball Northern League team, the Saltdogs. More details will be announced soon.

For information on the Nebraska Chapter, or upcoming events, call Gregg Bostelman, City of Grand Island, at 308-385-5426.

### Mid-Atlantic Athletic Field Managers Organization (MAFMO Chapter STMA):

The MAFMO Chapter is planning an August 24 Design and Construction Seminar at the Annapolis Waterfront Marriott Hotel.

For information on the MAFMO Chapter, or pending activities, call the Hotline at 410-290-5652.

### Florida Chapter #1:

For information on the Florida Chapter, or pending activities, call John Mascaro at 954-341-3115.

### Indiana Chapter:

For information on the Indiana Chapter, or pending activities, call Terry Updike, B & B Fertilizer, at 219-356-8424.

### MO-KAN Sports Turf Managers Association:

For information on the MO-KAN STMA Chapter, or upcoming events, call Trevor Vance at 816-504-4271; Gary Custis at 816-460-6215; or Jody Gill at 913-681-4121.

### Southern California Chapter:

For information on the Southern California Chapter, or pending activities, call Ron Kirkpatrick at 858-453-1755.

### Gateway Chapter Sports Turf Managers Association:

For information on the Gateway Chapter, or upcoming events, call Mark Jennings at 314-983-5345; or Jim Anthony, Saint Louis University, St. Louis, MO, at 314-977-2956.

### Nor-Cal Chapter of the Sports Turf Managers Association:

The Nor-Cal Chapter is planning their annual Seminar on Wheels event. Details will be announced soon. For information on the Nor-Cal Chapter, or pending events, call Janet Gift at 530-758-4200.

### North Texas Sports Turf Managers Association:

For information on the North Texas Chapter, or pending activities, call Kayla McAfee at 972-234-6584 or Rene Asprien at 972-647-3393, or visit the website at [www.ntstma.org](http://www.ntstma.org).

### Virginia Sports Turf Managers Association:

For information on the Virginia Chapter, or upcoming events, contact: Randy Buchanan, County of Henrico Recreation and Parks, via e-mail: [buc06@co.henrico.va.us](mailto:buc06@co.henrico.va.us) or at tel. 804-261-8213.

### Mid-South Chapter STMA:

For information on the Mid-South Chapter, or upcoming events, contact Robert Bodi at e-mail: [TURF419@aol.com](mailto:TURF419@aol.com) or Jim Calhoun at tel. 901-755-1305.

### Wisconsin Sports Turf Managers Association:

For more information on the Wisconsin Chapter, or other pending events, call Richard Miller at 608-756-1150.

## Chapters On The Grow

**Las Vegas:** With the STMA Annual Conference & Exhibition headed for Las Vegas January 16-20, 2002, plans for the formation of a Las Vegas Chapter also are moving forward. For more information, please contact Rod Smith, Grounds Manager/Cashman Center at e-mail: [rms@lvcv.com](mailto:rms@lvcv.com) or at 702-386-7140.

**New York:** A chapter is forming in Central New York. The group will meet at 10:30 a.m. on the third Wednesday of each month at the National Soccer Hall of Fame. For more information, contact Kevin Meredith, National Soccer Hall of Fame, at e-mail: [Kevin@wpe.com](mailto:Kevin@wpe.com) or at tel. 607-432-2953.

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# Headquarters Report

by Steve Trusty, Executive Director

It has been another busy period for your STMA Headquarters since the last newsletter. Your Board met on April 5 and 6 in Denver. Committees have been hard at work. Efforts to finalize the Membership Roster and Resource Manual continue. Phones have been answered. E-mails read. Final dues notices have been sent out. The survey results are in the final process of being analyzed. Your Executive Director has made some chapter visits. He and the Communications Director visited a member who is working with a High School. We also visited a Chapter's community service project. Both of these visits will produce most interesting stories about what can be done to enhance the image of professionals and their professionalism. Things just keep rolling along.

Information on the Board Meeting is found elsewhere in this issue. The Marketing Committee's first conference call set some groundwork for future meetings and goals. The Board has further delineated the Marketing Committees charge and they will be holding another call about the same time this newsletter goes to press. You can do your part to help market STMA by telling your peers in your part of the country about what you have gained from STMA and urging them to get involved.

The Chapter Relations Committee set up a series of six conference calls to include the President or another representative from each chapter in one of the six regions covering all 23 affiliated chapters. The current plan is for these calls to occur twice a year to allow chapters to share more information, address concerns and help chapters grow. These calls were very productive. Watch for information on the new Speakers Bureau and other initiatives undertaken by the Chapters. If you don't have a chapter in your area and would like to be a part of the important team to get one started, let headquarters know. There are probably others in your area that would like to help also.

To all of you that participated in the Every Member Survey - THANK YOU - your input is greatly appreciated. Many of you took time to provide very detailed thoughts on things that can be done to enhance the benefits of STMA. Your Board and Committees are now analyzing the survey results to determine the most important issues and tackling them. If you did not turn in a survey form, your input is still welcome. While it was most important to get the size response that we did, it is never too late to express your thoughts on making a great organization even better. Watch for details on some of the survey results in upcoming newsletters and other publications.

Does your local high school have an FFA Chapter and/or agriculture classes? If so, you might want to contact them about working in partnership to provide: training for future sports turf managers, some excellent workers for you in the form of interns

and maybe even full time employees down the road. Watch for details in an upcoming story on how member Chris Calcaterra, Baseball Supervisor for the City of Peoria (AZ) Sports Complex, and High School Agriculture Education Instructor, Mike Gillispie, are working together in a combination that is a winner for the community and all participants.

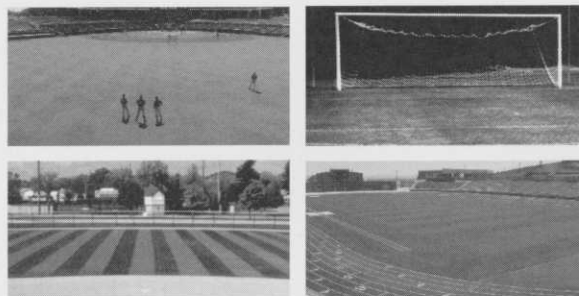
Is there a field in your area that has the history and the need for some top-notch care that could turn it into a showplace for the community and for those whose profession is maintaining fields? The Mo-Kan Chapter worked with the Kansas City community to help renovate Satchel Paige Memorial Stadium. They helped secure donations of materials and equipment and over 50 Chapter members spent a day learning from each other as they helped renovate the field. Watch for details on how this exciting project gained recognition for what sports turf managers do and will provide a learning laboratory for the chapter for years to come.

We hope to see you soon at a chapter event or Turfgrass conference. In the meantime, continue being the professionals that you are and provide input to Headquarters to advance your professionalism in the eyes of those you deal with.



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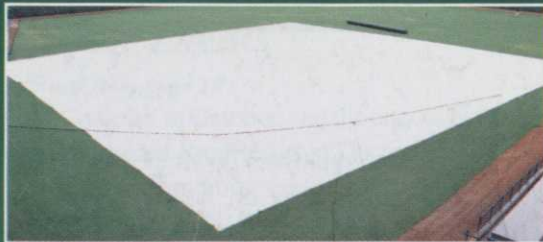
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