# **Field Conference Draws Record** Crowd

ver 250 attendees filled the Holiday Inn meeting room to overflowing in Grantville, Pa., on Feb.

24. The KAFMO Chapter of STMA and the Pennsylvania Recreation and Park

Association joined forces on their Fourth Annual Pennsylvania Athletic Field Conference and it was a resounding success.

Vendor displays greeted the attendees as they begin registering at 8 a.m. The registration hour provided an opportunity to connect with suppliers, check out new products and share news with other attendees. Dan Douglas, KAFMO/STMA President, opened the sessions with welcoming remarks. He was followed by Steve Trusty, executive director of STMA, addressing "Sports

Turf Management for the 21st Century." The Certification Program and the logistics of application, verification of information, approval of qualifications and setting up sites for testing were all part of his presentation.

Next, Dr. Andrew McNitt, assistant professor at Penn State University, presented, "Improving Athletic Field Soils." McNitt tackled the basics in a detailed yet down to earth presentation.

Following a break and another opportunity to visit with vendors, Dr. Dave Minner, associate professor, Iowa State University, presented practical ideas attendees

could take home and put to use in his "Ten Tips for Sports Turf on a Limited Budget.

Attendees reported the buffet lunch was great, and the additional opportunity to connect with vendors and do a little networking was much appreciated, espe-

cially with such a good crowd on hand.

Jeff Borger, research assistant, Penn State University, opened the afternoon session with a presentation titled, "Poor Turfgrass Management Instructions Followed Well." This presentation pointed out the importance of knowing what you want to communicate to employees and making sure that: you say what you want to say; you say all you need to say; and your employees hear and understand what you say. His talk was both humorous and to the point.

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Contact: Dale Forester

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Dr. Minner focused on "The Five Most Common Mistakes in Sports Turf Management and their Solutions," in his second presentation. Minner noted it's obviously best to avoid such mistakes but, when they do occur, it's wise to be prepared with efficient and effective solutions. It may take some short-term solutions that will need later, longer-term adjustments to produce safe, playable fields for the current games.

Following the afternoon break, Dan Douglas led a group discussion about "The Drought." (Action taken by KAFMO/STMA and other associations in conjunction with governing agencies to avoid the water-use restrictions and ban most turf and sports turf facilities faced during the drought of 1999 will be addressed in an upcoming article.)

"Great program, great conference," was the overwhelming response of attendees.

### **Chapter News**

Gateway: The next chapter event will be a baseball field prep day at the T. R. Hughes Ball Park, home of the River City Rascals, in O'Fallon, Mo., beginning at 4 p.m. on April 25. Activities will include a field prep demonstration by Mark Cantrell and his River City Rascals crew. Attendees are invited to stay for the baseball game

between Saint Louis University and Mizzou. If you are planning to attend or need more information on this event, contact Mark Jennings at (314) 983-5345. For information on other upcoming events or on the chapter, contact: Jim Anthony, Saint Louis University, St. Louis, Mo., at: (314) 977-3228.

Arizona: The chapter will hold a Fiesta in Tucson on Friday, May 5, at the Pima County Sports Authority Complex at Tucson Electric Park. Registration begins at 7 a.m.; events begin at 8 a.m. Events will include educational seminars, demonstrations and vendor displays. For more information on this event, contact Chris Bartos at (520) 434-1301 or Bill Murphy via email, at bmurphy@ci.scottsdale.az.us, or phone: (480) 312-7954. For information on upcoming events, contact: Bill Murphy.

Wisconsin: The chapter will hold their Spring Meeting on May 9. Events will start at 8 a.m. with a three-hour hands-on infield workshop at the Nienhaus Sports Complex in Appleton, Wis. The group will then travel to The Wisconsin Timber Rattlers Stadium for lunch and a field preparation demonstration. The meeting will end at 2 p.m. Attendees are welcome to stay for the Rattlers game that night. For more information on the Wisconsin Chapter or pending events, contact: Rich Riggs, R. H. Rettler & Associates, Inc. at (715) 341-2633.

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Florida #1: The chapter will meet on May 16 at the Miami Dolphins training camp. Meeting focus will be weed control. A July 18 meeting will be held in the Lantana with overseeding as the educational focus. For information on the Florida Chapter or pending activities, contact: John Mascaro at (954) 341-3115.

Midwest: The chapter will meet on May 18 at Kane County Cougars Stadium. Events will include a field tour. Attendees are welcome to stay for the Cougars' baseball game. For information on the Midwest Chapter or pending activities, call: The Chapter Hotline at (847) 622-3517.

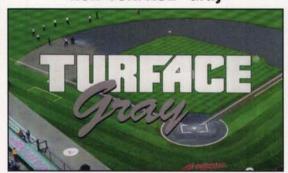
Great Lakes: The chapter will hold a Field Day with the Columbus Crew on May 20. Activities will include a tour of the facility, educational sessions and attendance at the game between the Crew and the Dallas Burn. In the planning stages are a field day with the Columbus Clippers and Diamond Pro and a joint chapter function with MiSTMA and GLSTMA. Details on these events will be announced soon. GLSTMA welcomes its four newly appointed board members: Darian Daily of the Columbus Crew; Jeff Limburg of the Columbus Clippers; Pam Sherratt from the Ohio State University Department of Agronomy; and Brian Gimbel from Ohio State University. For information on the GLSTMA Chapter, the chapter's Field of the Year Program or upcoming events, contact:

Joe Zelinko at (800) 897-9714, Boyd Montgomery at (419) 885-1982 extension 50 or click on your computer to www.glstma.org to visit the chapter's Web site.

Iowa: The chapter will hold its Wheels Tour 2000 on June 8 in Cedar Rapids, Iowa. Registration begins at 9 a.m. at Vets Memorial Stadium, with the tour of that facility beginning at 9:30 a.m. Other tour sites include: Kingston Stadium; Twin Pines Golf Course for a topdressing demonstration; Bluegrass Enterprises for lunch and a sod demonstration; and Xavier High School. ISTMA will hold a Vendor Workshop at Iowa State University on June 21 with registration beginning at 8 a.m. Four concurrent sessions are on the morning program: Dr. Dave Minner with Mowing Principles and Demonstrations; Mike Andresen with Aeration Principles and Demonstrations: Don Larson with Topdressing Principles and Demonstrations; and Dale Roe with Painting Principles and Demonstrations. Next on the program will be lunch with the "Vendors on Parade." During the afternoon session, from 1:30 to 4 p.m., 30 minute presentations at five separate stations will be repeated five times, allowing participants to visit each station. The stations are: Calibrating Spreaders, Calibrating Sprayers, Irrigation Repairs, Renovation Seeding Principles and the Vendor area. The Chapter also will participate in the Iowa Turfgrass Field Day on July 13 at the ISU Horticulture Research Station in

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Ames, Iowa. The Iowa/Minnesota Sports Turf Managers Chapter Challenge will be in Des Moines, Iowa, with the Golf Challenge on July 14 and the Softball Challenge on July 15. For information on the Iowa Chapter or upcoming activities, contact: Lori Westrum at The Turf Office at (515) 232-8222 (phone); (515) 232-8228 (fax); or e-mail: Lori@iowasturfgrass.org.

Michigan: The chapter will hold its Annual Summer Conference on June 22 at the West Ottawa Public Schools in Holland, Mich. For information on the Chapter or pending events, contact: Rick Jurries, West Ottawa Public Schools, at (616) 395-2364 or click on your computer to www.mistma.org to visit the chapter's new Web site.

**KAFMO:** The chapter is in the process of planning their summer field day. The date and location will be announced soon. For information on the chapter or upcoming events, contact: Dan Douglas, Reading Phillies Baseball Club, at (610) 375-8469, extension 212 or via the chapter e-mail address: kafmo@aol.com.

Colorado: The chapter currently is planning several events: a mid-May seminar; the second annual Seminar on Wheels in July; and a Football Seminar at Folsom Field on the University of Colorado campus on Aug. 3. For information on the chapter or upcoming activities, log

on to the chapter's Web site: www.cstma.org or call the CSTMA Chapter Hotline: (303) 346-8954.

**Minnesota:** For information on the chapter or upcoming events, contact: Connie Rudolph at (651) 646-1679 or Ron Werner at (507) 634-1176.

Northern California: For information on the chapter or pending activities, contact: Janet Gift at (530)758-4200.

**Southern California:** For information on the chapter or pending activities, contact: The Chapter Hotline: (888) 578-STMA (toll free in Southern California).

Indiana: For information on the chapter or pending activities, contact: Terry Updike, B & B Fertilizer, at (219) 356-8424 or Pat Hickner at (800) 672-4273.

**MAFMO:** The MAFMO Chapter will hold its annual Irrigation Seminar, sponsored by TORO and Turf Equipment and Supply, on May 4 and 5. For information on the chapter or pending activities, contact the Hotline: (410) 290-5652.

**Mid-South:** For information on the chapter or upcoming events, contact: Jim Calhoun at (901) 755-1305 or Robert Bodi at (901) 383-2414.

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Tennessee Valley: For information on the chapter or upcoming events, contact: Bill Marbet, Southern Athletic Fields, Inc. at (913) 380-0023 or Bob Hogan at (888) 224-

North Texas: For information on the chapter or pending activities, contact: Rene Asprion, Diamond Pro, at (800) 228-2987 or Dr. James McAfee, Texas A & M University, at (972) 952-9220, or check the Web site: www.ntstma.org.

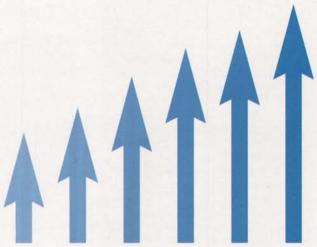
Nebraska: A new chapter is taking shape in Nebraska. For information on the chapter or upcoming events, contact: Greg Bostelman, City of Grand Island, at (308) 385-5426.

New Jersey: For information on the forming chapter or upcoming events, contact: Jim Gavigan, Lesco, at (732) 248-8979 or Eleanora Pene, Director, Township of Clinton Parks & Recreation Department, at (908) 735-5999.

# **Chapters On The Grow** New York: A chapter development meeting for the new chapter taking shape in Central New York is planned

for April 27 in Oneonta, N.Y. Interested? Want more information? Contact Kevin Meredith, National Soccer Hall of Fame, via e-mail at Kevin@wpe.com or by phone at (607) 432-2953.

Kansas City, MO/KS: For information on the newly forming chapter or upcoming events, contact: Trevor Vance at (816) 504-4271; Gary Custis at (816) 460-6215; Jay Sutton at (816) 795-8873 or Jody Gill at (913) 681-4121.



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works well for baseball and soccer, but may be too unstable

for football. For football I prefer a sod with some silt and clay, approximately 75 percent sand and 25 percent silt and clay. The sod usually contains mostly medium, fine and very fine sand. After sodding and before play the field should be aerified, with hollow cores removed, and topdressed with rootzone sand. Core and topdress as much as possible to remove part of the sod/soil layer and to weigh down the sod. Fields that have received two aerifications and a 3/8-inch of topdressing will be more stable by the beginning of the football season. Avoid causing too much stress from coring and topdressing on cool season sod that is laid in late spring or summer. With bermudagrass fields summer topdressing is no problem. The extra

heat from the exposed topdressing will help the field knit together faster.

Money-saving modifications

Recent modifications to the USGA concept have been designed specifically to lower cost and improve performance when building athletic fields. Reducing the rootzone depth from 12 to 10 inches can save about 17 percent of the rootzone material cost without effecting the perfor-

Reducing the rootzone depth from 12 to 10 inches can save about 17 percent of the rootzone material cost without effecting the performance of the field.

mance of the field. In fact, you are likely to regain nearly 2 inches of depth by routine topdressing over the next five years. Changing from the USGA maximum specification of 8 percent silt/clay mixture (examples A and B) to 9 to 15 percent silt/clay (example C) has had good success on athletic fields. Another cost saving factor is the elimination of the 4-inch gravel blanket component of the USGA system.

Budget constraints may require reducing the USGA recommendation depths in both the rootzone and pea gravel layers; however, the finished field must meet performance criteria in such areas as water percolation rate, porosity and water holding capacity. Changing the particle size or

depth of sand and gravel will require thorough testing to insure that field performance criteria are not compromised.

Another cost saving approach to building fields that provides adequate drainage for their intended use is the "shallow sand pad field." The depth of the sand pad can range from 6 to 12 inches with drains placed on 6- to 15-foot centers depending on the rootzone mixture. The shallower rootzone requires closer drain spacing and coarser sand.

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This type of field has been used successfully in Europe and New Zealand where winter sports are often played under wet conditions. Example D represents a 6 inch sand pad field with drains placed on 8-foot centers. This represents one of the best values in rapid removal of surface water at a price that many facilities can afford.

If the above options still are beyond the budget, can you till sand into the field to reduce surface water and field hardness? In on-site mixing, it is difficult to make an accurate mixture by spreading sand and tilling it into a calculated volume of topsoil. Also, large amounts of sand are needed to reach any degree of improvement. As a target, add enough sand so that the final mixture will contain at least 70 percent sand on a weight basis. If your existing soil contains only a small amount of sand (and most problem soils contain less than 30 percent sand), you will need to add a lot of sand to only a small amount of your existing soil. Rootzone E provides an example of the final mix that is necessary to notice an improvement in the field.

The sand used to amend the soil should contain most of the particles in the medium to coarse range. On a weight basis the sand should contain a minimum of 60 percent particles 0.25 to 1 mm, less than 3 percent greater than 2 mm and less than 3 percent smaller than 0.1 mm. Starting with a soil that contains 30 percent sand, 4.4 inches of sand would be needed to mix with 1.3 inches of existing soil to achieve a modified rootzone depth of 6 inches. This process would cost a minimum of \$35,000 to incorporate the sand, level the field and apply seed.

The problem comes in the expectation of field performance. This is not a rapid draining sand-based system. It is unrealistic to think that tillage equipment is precise enough to mix 1.3 inches of existing soil with 4.4 inches of sand. Consequently, it is difficult to specify performance criteria. A percolation rate of 1 inch per hour would be considered very successful for this type of field modification. Because the silt and clay content is still 20 percent on a weight basis it is very likely that compaction and muddy conditions are still possible. However, this modification should improve the ability to absorb small rain showers and produce better growing conditions.

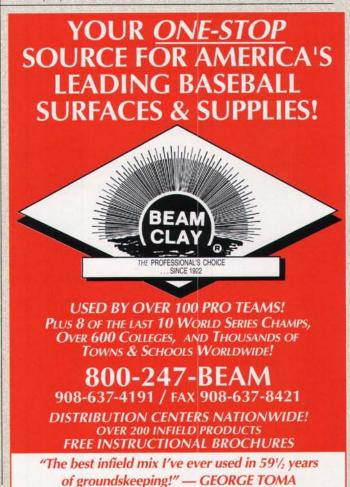
The question is, do you want to spend that \$35,000 and still play in the mud during excessive rain, or would that money be better spend on an aggressive Vertidrain and top-dressing program, or possibly modifying a shallow sand pad to fit your budget?

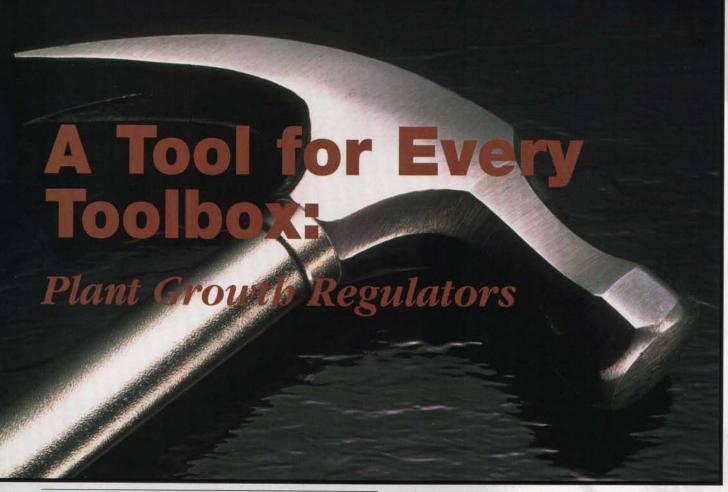
Other systems, such as the sand grid system, have gained popularity in the United States. This system does not have a sand pad and does not mix sand into the existing soil. Instead, the drainage grid consists of a cross matrix of 3-inch wide trenches. Drains are spaced from 5 to 10 feet apart and are filled to the surface with sand. The system has been used in Europe for over 20 years and for \$80,000 to \$120,000 it is an effective way to quickly remove water that normally ponds on the surface of heavy native soil fields.

David D. Minner, PhD, is an associate professor with the Department of Horticulture at Iowa State University. He also serves on STMA's Certification Committee.



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by Bob Milano Jr.

lant growth regulators are not the magic elixir that will solve all of the sports turf manager's ills, but they are a tool that can be successfully and economically used in many instances.

Like any other tool in our arsenal, the costs, benefits and goals of plant growth regulator application need to be carefully evaluated. Each of us are subject to different variables (turf type, soil, climate, client expectations) but the following are general applications that you may want to consider:

\* Mix plant growth regulators with field marking paint to reduce the number of times you need to repaint the field, which will save both time and money.

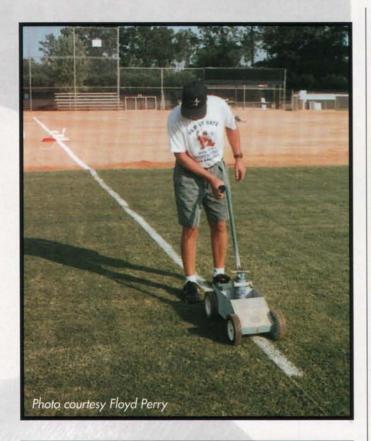
\* Apply plant growth regulators under and around obstructions (grandstands, television towers, light poles) to reduce maintenance and improve regrowth.

\* Apply plant growth regulators to new sod to enhance rooting, reduce need to mow, reduce irrigation demand and improve turf density.

\* Apply plant growth regulators to warm season turf in fall, prior to overseeding, to reduce competition and improve rye establishment.

\* Apply plant growth regulators to establishing, recently seeded turf to improve density, thicken stems and improve plant water use efficiency.

\* Apply plant growth regulators to difficult to maintain turf slopes to reduce mowing frequency and maintenance demands.





Plant growth regulators can be expensive to apply, but many times the benefits will be worth the cost. The end result of a proper application is healthy, durable turf with a high tolerance to extreme conditions. So evaluate the goal of your particular application, research the different types of plant growth regulators on the market and add this tool to your inventory of management options. And good luck!

Bob Milano Jr. is the stadiums' and sports turf manager for the University of California Athletic Department and a founding member of the Northern California STMA Chapter:



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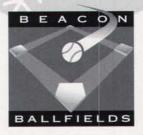
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and built to withstand the stress of high-impact shock loading, day after day. A wheelbase of 44.8 inches provides smooth, stable operating regardless of terrain. An optional high-flow hydraulic package is also available to

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