to keep adequate calcium and magnesium levels. The field's normal pH of 7.5 generally stays at that level and never varies above 8 despite these applications.

The Maintenance Program

Playability is the prime consideration in Gifford's maintenance program. Clippings are caught at each mowing to control thatch levels and provide the best drainage conditions. In topdressing, #200 sand is used to match the soil profile. Early in the season, core aeration is used at a 4-inch depth to penetrate the sod layer. Plugs always are collected to eliminate contamination. Late in the season, coring switches to slicing to provide the necessary gas exchange without the risk of surface instability as turf growth rates slow.

Another key challenge in 1999 came with hosting the Denver Broncos for Super Bowl practices, but Gifford and Lamour do a great job of prioritizing their schedules and remaining flexible, so they took it all in stride. To provide optimum conditions, they overseeded the fields in early January with a perennial ryegrass blend at the rate of 15 pounds per 1,000 square feet. They put down the same blend used in the regular overseeding program, pre-treated with fungicide as usual to avoid Pythium problems. Their first overseeding generally comes in late October or early November and is repeated periodically, at least in the center of the fields, until the end of the team's season.

The late application put a strong stand of ryegrass in place at the point of transition back to bermudagrass. "Average winter temperatures here are 75 degree highs and 65 degree lows so bermudagrass doesn't reach true dormancy. In the cooler weather it grows at a slower rate and stays green, but goes off color. Our regular practice of withholding water to force transition didn't phase the ryegrasses but, by March, with the temperatures rising, the bermudagrass was beginning to brown. We had to use a herbicide to knock out the perennial ryegrasses and then baby the bermudagrass to get the turf up to our standards," Gifford said.

Attention to detail is another maintenance program highlight. Gifford and Lamour walk the fields after every practice session, repairing divots and monitoring conditions. "All of our coaching staff is terrific to work with. They're very cooperative about moving drills to different areas of the fields to avoid excessive wear. We basically divide the fields into four quadrants, and they rotate use by concentrating action in one quadrant during a practice session and moving to another quadrant for the next practice," Gifford commented.

Obviously, Gifford knows the fields well. He strives for perfection, seeking fields that look and perform better each year than the year before, and relishing the challenges of making that happen.

Bob Tracinski is the Business Communications Manager for the John Deere Worldwide Commercial & Consumer Equipment Division headquartered in Raleigh, NC. He serves as public relations co-chair for the national Sports Turf Managers Association.



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STMA Year in Review

by Steve Guise

999 has been another banner year for the Sports Turf Managers Association (STMA). The association is continuing to grow in new members and in the services it provides to its membership. The association has completed many short-term projects and moved forward on many longterm projects.

Here's an update on the year in review.

Membership Moves Up

Membership increases show that the STMA is a thriving, growing organization. A second-half of the year new member promotion at a special membership rate was offered via a Fax Blast (offered through Adams Business Media) for the first time this year and was very successful. STMA also continued the last quarter new member promotion. New members electing to join STMA during October, November, or December had their membership in effect from the point of joining through December 31 of the following year—at the one-year membership price.

Because of the last-quarter promotion, the official total for 1999 membership reached on September 30, 1999 was 1,579. Compare this to the membership total on September 30, 1998 of 1,254, and membership total on September 30, 1997 of 975. This is a very good base for future growth. Many potential members may just be waiting for a personal invi-



The STMA Board immediately following their hard hat tour of the hotel site under construction in preparation for deciding the site for STMA's 2001 Conference (top row, I to r: Bob Patt, Bob Campbell, Lynda Wightman, Steve Guise, and Tim Moore; bottom row, I to r: Murray Cook, Bob Curry, Rich Moffitt, and Tom Burns).

tation to join the STMA, so please do spread the word.

With more members, STMA can offer a stronger networking resource, provide more membership services, and gain greater recognition for its members within the green industry, within the sports world, with employers, and with the general public.

Chapters Show Real Action

The affiliation of four more chapters was announced at the 10th Annual STMA Conference & Exhibition, Jan. 13-17, 1999, which was held in Mesa, AZ. The Indiana, Tennessee Valley, North Texas, and Wisconsin Chapters joined the 12 chapters already affiliated: Colorado, Florida #1, Great Lakes, Iowa, KAFMO, MAFMO, Michigan, Midwest, Mid-South, Minnesota, Northern California, and Southern California.

There are new Chapters forming in various areas, with several of these planning to reach official affiliation in the near future.

1999 also marked the first Chapter Officers Training Session (COTS). The



The Soccer Complex at Westminster (CO) City Park, STMA's 1998 Soccer Field of the Year in the Parks and Recreation Category.



Minnesota Vikings Training Camp—up close and personal—during the site tour at the Minnesota STMA Chapters annual wheels tour.

COTS is a combination educational forum and idea exchange session for the leaders of affiliated and forming chapters. Because of its success, a second annual COTS will be held on January 11, 2000, in conjunction with the 11th Annual Conference & Exhibition, Jan. 12-16, St. Louis.

Chapters are the core of regional networking opportunities and also network with each other. They offer close-to-home educational sessions, on-field workshops and demonstrations, and informative site tours. Many Chapters are strong supporters of their regional turfgrass associations. Chapters also give back to their communities through service projects.

Annual Conference & Exhibition Offers More

The STMA Annual Conference & Exhibition continues to grow in size and scope. The 1999 Conference in Mesa, AZ, last January was a great success. In the continuing effort to meet sports turf managers educational needs, the 2000 Conference will offer more choices of educational sessions and has added

an expanded workshop session to the schedule, while retaining the popular features of previous conferences, including the roundtable discussions. Though the number of available booth spaces was increased for 2000, the Exhibition is again a sell-out. The Conference will be held at the Regal Riverfront Hotel in St. Louis, MO, Jan. 12-16.

Awards and Scholarship Committee Grows

Because of the record numbers of scholarship applications and Field of the Year entries received in 1998, the

judging committees were split into two groups for 1999. A five judge panel was appointed for the Field of the Year Awards and a separate five judge panel was appointed for the four Founders Awards and the Scholarships. Each judge independently reviews and rates all materials submitted by applicants



George Toma and Mary Owen get an upclose look at field conditions.

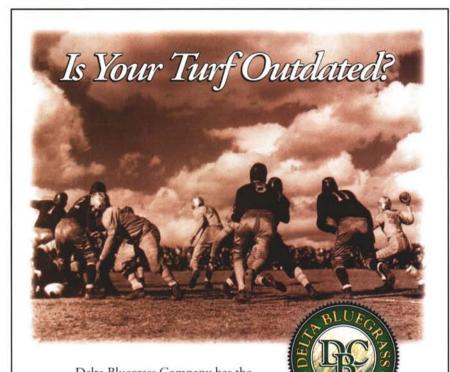
in the designated areas. Each judge's evaluations are forwarded directly to STMA Headquarters. The judges for the two separate committees then review their evaluations via conference call to discuss the results of the independent judging and reach the final decisions.



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By-Laws Committee Updates By-Laws

After much work, the By-Laws Committee submitted updated by-laws for review by the STMA Board. Following the Board's approval in principle, they were subjected to the review of legal counsel. Following that review, the by-laws were submitted by mail to the membership for their review and their vote. The updated by-laws were approved by an overwhelming majority. One of the major changes within the revised by-laws was the separation of the existing Category III membership that had included other schools, research, extension agents, and teaching. Category III is now other schools sports turf facilities managers. The research, teaching, and cooperative extension personnel are now within a separate Category VIII. This change adds another member to the STMA Board of Directors and ensures representation on



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the Board for those sports turf managers at schools other than four-year colleges or universities (which are Category II members), as well as Board representation for those in research, teaching, or extension professions.

Education Committee Addresses Needs

The Education Committee continues to research the development of additional educational resources, such as a resource library and a speakers bureau.

Finance Committee Keeps Stability

The guidance and prudent direction of the finance committee and STMA Board have allowed STMA to increase member services and still increase the amount of funds put away in case of emergency.

Certification Committee Launches Program

After nearly three years of very hard work and countless hours of service, STMA's Certified Sports Field Manager program is up and running. In November, Certification packets were sent to all STMA members and to those non-members who had placed requests for packets. The first group testing will be held on January 16, 2000, in conjunction with the STMA Annual Exhibition & Conference in St. Louis.

Public Relations Outreach

STMA continues to work with our members to spread the word on the importance of our profession to those both within the green industry and to the general public. This outreach comes in the form of speaking engagements and written articles, participation in related green industry conferences, information provided for presentations or articles to those outside the industry, and the new web site (*http://sportsturfmanager.com*) that will be more accessible to those doing computer searches.

Looking Forward

And, while we have come a long way during the past year, we also see much more to do in the future. Next month, we will explore some of those projects and dreams for the future.

Note: For information, contact STMA Headquarters at 800-323-3875.

Steve Guise is President of the Sports Turf Managers Association and Director of Business Development for Marina Landscape, Inc., Anaheim, California.



KAEMO Meeting Draws **250 Attendees**



Vendor demonstrations were part of KAFMO Extension field days. Courtesy: Dan Fowler



Chuck Leeds, Villanova University (right, whitecap) discusses crumb rubber as a topdressing with one of the field day groups. Courtesy: Dan Fowler



One vendor talking to a group during the field day. Courtesy: Dan Fowler

by Don Fowler, Penn State University Extension Agent (retired) and KAFMO Board Member

he Keystone Athletic Field Managers Organization (KAFMO) Chapter of STMA held its summer field day on August 11, 1999, at the Brandywine Picnic Park in Pocopson, PA. The program was jointly sponsored by KAFMO and Penn State Cooperative Extension, with Nancy Bosold, Penn State Extension Agent, serving as the Field Day organizer. Two hundred and fifty people attended the day-long event to learn how they might best manage their sports fields following the dry, hot summer. With the meeting focus maintenance of all-purpose fields and the timing just prior to the fall renovation period, attendees were eager to tap into equipment demonstrations, and sessions covering topdressing, irrigation, seeding, and soil preparation.

Demonstration sites were spaced around the meeting area. Attendees were divided into groups and the groups rotated among the various demonstration sites.

George Hamilton of Penn State University was the presenter for "Techniques for successful renovation from soil preparation to seed-Mike Hartley from the ing." Philadelphia Turf Company presented, "Irrigation from A to Z: Understanding water use and delivery systems." Chuck Leeds of Villanova University focused on "Topdressing and aeration products and procedures, including composts and crumb rubber."

Networking among attendees was another highlight of the day with the combination pig roast and barbecue providing a great forum to keep those conversations flowing.

The August Field Day was just part of another very active season for KAFMO. They once again provided volunteer field maintenance assistance at the Little League World Series in August. This was



followed by another joint venture with Penn State Cooperative Extensionthree, one-day field maintenance semi-The seminars were held at nars. Allegheny College in Meadville, PA, on September 20; the Cranberry Township building north of Pittsburgh on September 21; and the Trinity Middle School in Washington, PA, on September 22. Each seminar covered the following topics: dealing with communication between field user groups and field managers; basic turf management and field safety; fall renovation practices; and preand post-game field maintenance tips.

Chapter news

Mark your calendars now for STMA's 11th Annual Conference & Exhibition, "Gateway to the 21st Century," Jan. 12-16, 2000, Regal Riverfront Hotel, St. Louis, MO. For information, contact STMA Headquarters by e-mail: SportsTMgr@aol.com, or by phone: (800) 323-3875.

KAFMO: The Eastern PA Turf Conference and Trade Show will be held Jan. 11-13 at the Valley Forge Convention Center in King of Prussia, PA. The Western PA Turf Conference and Trade Show will be held Feb. 9-11 at the ExpoMart/Radisson Hotel in Monroeville, PA. KAFMO will hold its annual Athletic Field Conference at the Holiday Inn at Grantville Feb. 24. The meeting will feature nationally recognized speakers and vendor displays. For information, contact Dan Douglas, Reading Phillies Baseball Club: (610) 375-8469, ext. 212.

Wisconsin: WSTMA will join the Wisconsin Turf Association to present the annual Winter Expo Jan. 11-12 at the Marriott West in Madison, WI. For information, contact Rich Riggs, R. H. Rettler & Associates, Inc.: (715) 341-2633.

Iowa: The Chapter will participate in the Iowa Turfgrass Conference and Trade Show Jan. 24-26 at the Convention Center in Des Moines, IA. A special sports turf track will again be offered. Featured speakers include: Pete Taylor, the radio voice of the ISU Cyclones; Dale Getz, University of Notre Dame; Connie Rudolph, Midway Stadium; Dr. Dave Minner, ISU. Dr. Minner will also host a "show and tell" session titlted, "Your idea that works." Kevin Vos. Muscatine Soccer Complex: Dr. Nick Christians, ISU; Jeff Salmond, Baltimore Ravens; Luke Yoder, Iowa Cubs; Brad Vermeer, City of Sioux Center; Francois Hébert. Lanco Amenagement, Inc.; Dr. William Mever, Rutgers University; and United Airlines Flight 232 Pilot Captain Al Havnes. Roundtable discussions return this year with the following topics: "Slow-Release Fertilizers: Pros &

Cons;" "Rapid Repairs and Tricks of the Trade;" "Management of Skinned Areas;" "Using Effluent Water for Irrigation;" "Surfing the Net;" "Nutrition of Soil-Based Fields;" "Nutrition of Sand-Based Fields;" and "Effective Uses of Different Field Covers." For information on the Iowa Chapter or upcoming activities, contact: Lori Westrum at The Turf Office at (515) 232-8222 (phone) or (515) 232-8228 (fax).



Equipment demonstration during the field day. Courtesy: Dan Fowler

Indiana: A Winter Event is in the planning stages. For information, contact Terry Updike, B & B Fertilizer: (219) 356-8424, or Pat Hickner: (800) 672-4273.

MAFMA: For information, contact the hotline: (410) 290-5652.

Michigan: For information, contact Rick Jurries, West Ottawa Public Schools: (616) 395-2364.

Mid-South: For information, contact Jim Calhoun: (901) 755-1305, or Robert



Nancy Bosold, Penn State Extension Agent and a field day organizer, introduces the morning session to some of the 250 field day registrants. Courtesy: Dan Fowler

Bodi: (901) 383-2414.

Northern-California: The Northern California Chapter of STMA will be cosponsoring a sports turf program in conjunction with the Northern California Turf and Landscape Conference on Friday, January 21 at the Santa Clara Convention Center. The sports turf program begins at 9:00 am and ends at noon. Bob Milano, University of California, Berkeley, will



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open the program with an overview of the STMA and introductions. Included in the program are: Jay Beals, of The Beals Group, presenting, "How Clients, Users and Funding Determine A Product Outcome;" Jim Mendenfall, of SporTech, Inc., presenting, "Field Turf, A New Generation of Synthetic Surfaces;" Skip Stevens of Valley Crest Landscape, presenting "Pac Bell Park, The Excitement is Building Toward Opening Day;" and John Donhauser of Enviable Greens, presenting "Aeration, Aeration, Aeration, Today's Market Offers Various Options." The program will wrap up with a question and

People

walk

...and dance, celebrate, rally, party, commemorate, exhibit and feast...

all over us



Nancy Bosold, Penn State Extension Agent and a field day organizer, introduces a group to one of the day's demonstration. Courtesy: Dan Fowler

answer session. For information on the Nor-Cal STMA Chapter or pending activities, contact: Janet Gift: 530/758-4200.

Southern-California: For information, contact the hotline: (888) 578-STMA.

Tennessee Valley: For information, contact Tom McAfee, Nashville Sounds: (615) 242-4371, or Bob Hogan: (888) 224-6426.

Florida #1: For information, contact John Mascaro: (954) 341-3115.

Midwest: For information, contact the hotline: (847) 622-3517.

Great Lakes: For information, contact Joe Zelinko: (800) 897-9714; or Boyd Montgomery: (419) 885-1982; or the chapter website http:// members.tripod.com/~glstma.

Colorado: For information, visit: *www.cstma.org*, or call the hotline: (303) 346-8954.

Minnesota: For information, contact Connie Rudolph: (651) 646-1679.

North Texas: For information, contact Rene Asprion, Diamond Pro: (800) 228-2987; or Dr. James McAfee, Texas A & M University: (972) 952-9220; or visit website: http://www.ntstma.org.

Chapters on the grow

Arizona: For information, contact: Bill Murphy, City of Scottsdale Parks & Recreation Department: (602) 312-7954; or Kris Kircher, City of Chandler Parks & Recreation Department: (602) 786-2728.

Kansas City, MO/KS: For information on this forming Chapter, contact Trevor Vance: (816) 504-4271; John Cundiff: (816) 525-7600; Bill Tritt: (816) 941-4424; Jody Gill: (913) 681-4121; Gary Custis (816) 468-6215; or Jay Sutton: (816) 795-8873.

Nevada: For information on this forming Chapter, contact Ibsen Dow: (702) 649-1551; or Alan Paulson, Clark County School District: (702) 799-8724.

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Feature of the Month:

Sports Fields: A Manual for Design, Construction and Maintenance, by Jim Puhalla, Jeff Krans, and Mike Goatley,

This book covers every important aspect of planning, design, construction and turfgrass maintenance with hundreds of illustrations and step-by-step procedures to help you get the job done right. No other book provides such intricate detail, combined with easy-to understand guidance. Sports Fields is unparalleled in guality, practicali-

ty, and scope. In Part 1, you will learn the basics of turfgrass science and culture. Part 2 provides complete instruction on facility design, construction and renovation - for football, soccer, field hockey, lacrosse, and more. Part 3 covers other facilities such as playground surfaces, and volleyball courts. Procedures for equipment use, quality assurance, and safety are covered in Part 4. In Part 5, you will learn about stadium management, sand fields, turf paints, and many more useful topics. 600 pgs. **4084 \$74.95**



NEW! Fine Art of America's Fairways, by Mike Ventola, Jr.,

This coffee table book, featuring 48 of America's finest golf courses, showcases golf course architecture and legends of the game. Featuring 138 pieces of artwork, this book guides the reader on a unique golf journey from the majestic mountains and stark deserts of Arizona and California to the vast wetlands along the coasts of Georgia and the Carolinas. The book examines the work of

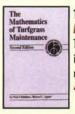
celebrated golf course architects, such as Trent Jones, Tom Fazio and Jack Nicklaus. 256 pgs. 4209 \$59.95



Maintain It Easy(Keep It Safe), by Grounds Maintenance Services

Learn from hundreds of instructional photos featuring all aspects of softball field groundskeeping. Explains: Lip reduction; setting of multiple bases and pitching plates; dragging equipment and patterns; base

line options; unique complex ideas; dugout design; batting cage and hitting station; layout; water removal and much more. Unique field ideas from across the country. **4023 \$37.00**



The Mathematics of Turfgrass Maintenance, 2nd edition, by Nick Christians and Michael L. Agnew,

This book provides you with basic mathematical principles of budgeting, fertilizer and pesticide application, the ordering of top-dressing, irrigation, and many other parts of golf course operations. 149 pgs. 4149 \$34.95



Sports Turf Management Program-Maintenance & Renovation Planning Guide, by Ashman & Associates

This manual was developed to provide a coherent plan for the management of the baseball field playing surface and provides operational guidelines for the grounds crew to use as part of the maintenance plan. Enhances the "playing conditions" of the field by elevating the maintenance standards to the highest level possible. Complete descriptions of the maintenance proto-

col and identification of key issues to be discussed before starting objective maintenance procedures. This book provides a plan of action outlining the tasks to be completed and benchmarks to measure the progress of the program. 160 pgs. 4024 \$105.00



Destructive Turfgrass Insects: Biology, Diagnosis, and Control, by Daniel A. Potter,

This book has the answers you need to control white grubs, mole crickets, fire ants, and other pests. Stinging and biting insects such as yellow jackets and ticks are included, as well as nuisance wildlife such as moles raccoons, and more. Covers the biology, diagnosis, and control of virtually all of the insects and mites that attack warm and cool season turfgrasses. Over 250 to 400 percent 4150 and 565 00

full color photographs. 400 pgs. 4150 \$65.00



Superintendent's Handbook of Financial Management, by Raymond Schmidgall,

Written specifically for golf course superintendents, managers and owners. Official certification textbook of the Golf Course Superintendents Association of America. The book presents useful methods and techniques for understanding and using income statements, balance sheets, accounting procedures, financial statements, operating budgets, capital budgets, record keeping and much more. 150 pages.

4006 \$34.95



Shop Service Manuals Set, by Intertec Publishing Corporation,

This comprehensive 14 book set totals more than 4,500 pages of service and repair information. Covers adjustments, maintenance, overhaul, and reassemble procedures. Titles included: Small Air Cooled Engines Volumes I and II; Chain Saw; Walk-Behind Lawn Mower Service; Riding Lawn Mower; Large Air Cooled Engine, 1988 and Prior, Volume I; Large Cooled Engine, through 1992, Volume II; Yard

& Garden Tractor Single Cylinder Models; Small AAC Generator; Yard & Garden Tractor for Multi-Cylinder Models; String Trimmer and Blower; Rotary Tiller. 4043 \$219.95

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