Ahead Of The Game In



To play at their best, your team needs a field that is smooth and firm, without any hard spots, with a perfect surface and bright markings. A field that plays safely and looks great. Smithco sports field maintenance equipment is expertly designed to always give you the ideal playing conditions you want for your games.

A new accessory is our enhanced-design Ballfield Scarifier, with twin caster wheels that maintain precision depth control and provide absolutely level surfaces regardless of field conditions and the operator's driving patterns.

Put Smithco on your team now and have a field that is one of the best in your league.

Sports Field Maintenance

Super Star AFC Field Conditioner. A leader in our big line of sports field conditioning equipment. It features an advanced, highly-responsive hydraulic drive system and hydraulic controls for all of its implements - and offers a choice of either two-wheel or three-wheel drive. With a high performance, air-cooled gasoline engine, it operates quietly and requires little maintenance. Only from Smithco.

SUPER RAKE AFC Field Conditioner



SUPER STAR AFC Field Conditioner

Super Rake AFC Field Conditioner. One of our most popular

conditioners for maintaining all types of athletic fields, it is well know for its outstanding performance and reliability. With either gasoline or diesel power, it also offers both two-wheel and three-wheel drive. Its smooth hydraulic system controls drive, braking, implements and all accessories. Only from Smithco.

Top Liner V Field Marker.

Here is the newly redesigned and improved model of our all-purpose field liner and marker, with its many new and special features. I. Single Vanton Flex-I-Liner Pump. II. Electric Clutch. III. Quadro Z-Gate Shifter. IV. Two Spray Boxes With Double-Tip Nozzles. V. TeeJet Electric Foot Paint Switch. Only from Smithco.



Look At These Smithco Features. New Ballfield Scarifier with precise conditioning depth control • patented Speed Boss system that governs speed during conditioning • automotive-type power steering • tilt steering wheels and high-backed adjustable seats for the best operator comfort • and a big selection of optional implements for the conditioning and maintenance of every type of sports field.

Your Smithco distributor would like to show you how to have the most playable field for your team. Call for a demo now.





VOLUME 16, NUMBER 8

...........

Cover Story

8 Field of the Year Perserverance earns College Field of the Year honors for Boston College.

Main Events

12 Spread Out! Tillers, Rhizomes and Stolons Mary Owen discusses the science beneath the turf that leads to thick, healthy fields.

- **18** Rootzone Materials for Athletic Fields in the U.K. Take an in-depth look at the practices and beliefs of turf managers from across the pond.
- 24 Deep Roots: How Important Are They? Think deep roots are the key to great grass? Think again.

Web Site Content

www.sportsturfonline.com

STMA Newsletter Editor's Review: Industry News Show Calendar Reader Survey Rookies

Line-Up

- Front Office6
- Tip o' the Month.........6
- Calendar......7
- STMA Message7
- •
- Classifieds41
- Advertisers' Index41
- ♦ Q&A.....42

On the Cover:



Two opponents battle it out on Boston College's soccer field, the STMA College Soccer Field of the Year. Photo Courtesy: Boston College

Adams BUSINESS MEDIA



.........

AUGUST 2000

2101 S. Arlington Heights Rd., #150 Arlington Heights. IL 60005 Ph: (847) 427-9512 Fax: (947) 427-2006 Web: http://www.greenindustry.com THE OFFICIAL PUBLICATION OF THE <u>SPORTS TUREY MANAGERS ASSOCIATION</u> PRESIDENT RICH MOFFITT PAST PRESIDENT STEPHEN GUISE PRESIDENT ELECT L. MURRAY COOK COMMERCIAL V.P. LYNDA WIGHTMAN SECRETARY TIM MOORE TREASURER BOB CAMPBELL STMA BOARD MEMBERS MIKE ANDRESEN, TOM BURNS, TONY KOSKI, MONTY MONTAGUE, DAVID RULLI, MIKE TRIGG EXECUTIVE DIRECTOR STEVE TRUSTY

EXECUTIVE DIRECTOR STEVE TRUS

STMA OFFICE 1375 ROLLING HILLS LOOP. COUNCIL BLUFFS, IA 51503 PHONE: (800) 323-3875 E-MAIL: SportsTMgr@aol.com WEB SITE: www.sportsturfmanager.com

INTEGRATED CONTENT TEAM

GROUP CONTENT/ EDITORIAL DIRECTOR KURT LUCHS EDITOR MIKE SANFILIPPO CALENDAR EDITOR STEVE NOE

PRODUCTION TEAM SENIOR ART DIRECTOR SUSAN ZIRBEL-BELLM GRAPHIC DESIGNER DON FERRIERA PRODUCTION MANAGER ANNA DRONJAK

ADAMS BUSINESS MEDIA

PRESIDENT, CEO MARK ADAMS EXECUTIVE V.P., PUBLICATIONS THOMAS J. CORCORAN SR. V.P., CHIEF FINANCIAL OFFICER GEORGE KANE V.P., H.R., R.M. MARGIE DAVIS V.P., INTERNET DANIEL J. CORCORAN V.P., MARKETING SVCS. GROUP LIZ SANTELLI V.P., TRADE SHOW & CNFC. GROUP BAILEY BEEKEN V.P., DIRECTOR OF CIRCULATION JACQUELINE M. SERRA ASST. V.P., MIS PETER BALINT

DIRECT MAIL LIST SALES LIZ DASCH (800) 548-5918 REPRINT SERVICE LISA ADKINS (847) 427-2024

(847) 427-20

SUBSCRIPTION SERVICES PHONE: (856) 786-6805 FAX: (856) 786-4415 ADVERTISING TEAM

SEE PAGE 41

Publisher's Notice: We assume no responsibility for the validity of claims in connection with items appearing in *sportsTURF*. Reader Service Numbers are given to facilitate further inquiry. Commercial product names are used for the convenience of the reader. Mention of a commercial product does not imply endorsement by *sportsTURF* or Adams Business Media, or preference over similar products not mentioned.

sportsTURF (Reg. U.S. Pat. & T.M. Off.) (ISSN 1061-687X) (USPS 000-232) is published monthly by Adams Business Media. Material in this publication may not be reproduced or photocopied in any form without the written permission of the publisher.



RATES

ONE YEAR \$40 TWO YEARS \$65 FOREIGN (ONE YEAR) \$65 • \$130 Airmail or Single Copy \$5

CHANGE OF ADDRESS AND SUBSCRIPTION INFORMATION Provide old mailing label and new address; include ZIP or postal code. Allow 6-8 weeks for change. Send payments and correspondence regarding subscription service to: *sportsTURF*, P.O. Box 10515, Riverton, NJ 08076-0515 (856) 786-6805.

PERIODICALS POSTAGE PAID at Arlington Heights, IL and at

additional mailing offices. Postmaster: Please send change of address to *sportsTURF*, P.O. Box 10515. Riverton, NJ 08076-0515.

sportsTURF • http://www.sporsturfonline.com



For Tough Turf Tasks.



For more than 30 years, Kubota has been building diesel powered equipment to handle tough turf and landscaping projects.

Kubota M-Series utility tractors, from 47-90 net engine HP, offer a user friendly design and an ergonomically engineered operator platform for comfort and ease of operation. These tractors are powered by quiet Kubota E-TVCS diesel engines. Cab models provide a zone of operator comfort and all weather protection.

The compact sized B21/L35 TLB's are designed to work in tight places and are easy to transport from one job site to the next with a ³/₄ ton pick-up and trailer. Versatility is provided with Kubota's quick-attach backhoe, Category I, 3-point hitch and rear PTO.

Kubota Grand L-Ten Series from 30 to 46 net engine HP offer a variety of transmission choices – fully synchronized main and shuttle transmission (FST),





clutchless glide shift transmission (GST) and the new "FeatherStep" HST.

The F60 front mowers increase a crew's productivity with ease of operation and precision



cutting. The Auto Assist 4WD with dual-acting, over-running clutch system delivers turf saving traction, in forward and reverse.

When you have tough turf and landscaping jobs to get done, get Kubota.

KUBOTA TRACTOR CORPORATION P.O. Box 2992, Dept. ST, Torrance, CA 90509-2992 Toll Free 1-888-4 KUBOTA, ext. 408 (1-888-458-2682, ext. 408) • kubota.com *Financing available through Kubota Credit Corporation.*



SportsTURF The Front Office



Roots on Parade

H appy summer! This month's *sportsTURF* is our third theme issue of the year, dedicated to roots. As with our two previous theme issues, concerning the STMA Conference and baseball, this issue is completely dedicated to its subject, offering a broad range of articles on one common theme.

I received a terrific batch of features from a wide variety of writers from such locations as Colorado, Michigan, Massachusetts and the UK. No matter what type of turf you manage, no matter whether you are a novice or an expert, I guarantee you will find plenty of useful and relevant information in this issue.

Interested in the science behind healthy roots? Read Mary Owen's insightful piece on the physiology of plant growth. Looking for data backed up by research trials? Then Steven Baker's feature on rootzone material will be of interest to you. Think deep, healthy roots are essential to quality turf? Tony Koski will tell you otherwise in his article.

I hope this issue is as instructional, entertaining and informative to you as it has been for me. Thanks to all the writers for doing such a fantastic job.

New location

Speaking of roots, we here at Adams Business Media have lifted ours and planted them in a new location. We have left our suburban-Chicago office in favor of an office downtown. Here is our new contact information:

250 S. Wacker, Suite #1150 Chicago, IL 60606

Tel: 847-882-1942 Fax: 847-882-6842

I actually remain in the suburbs, working from my home office. My desk is near the window overlooking my backyard, so I can spend plenty of time doing the job I do best—watching the grass grow. My wife calls it day dreaming, I call it research.

Calendar update

We have made a slight change to our editorial calendar for the end of the year. Our November issue, which was originally slated to be a theme issue geared toward winter readiness, will now be dedicated to the 2001 STMA National Conference in Tampa, Fla. This should be a great help for all the conference's guests, as it will highlight vendors, speakers, workshop schedules and everything else attendees will need to successfully navigate and get the most out of the show.

Certification update

As of August 1, there are two new additions to the Certified Sports Field Manager group: Boyd Montgomery, facilities and maintenance director of Sylvania Recreation, and Mike Andresen, athletic turf manager for Iowa State University, passed all the requirements and exams necessary to earn CSFM status, joining the five others who have already done so. Andresen is having quite a year, having also been elected in January as the Category II Board Member for the STMA.

Congratulations, Rob and Mike, and good luck to all the others who are going through the certification process.

Michael Sam Filippo

Michael SanFilippo (847) 882-1942

Tip of the Month

Your Athletic Field and Your Child

Part II

by Floyd Perry

This column is presented in two parts. Part One was published in the July issue of sportsTurf.

uestion: What can be frozen, baked, trampled, starved, dehydrated, saturated, compacted, cut too short, not cut at all, overfed, underfed, sliced, probed, smothered, painted and kicked, and still survive?

Answer: Quality athletic turf grass

For the lawn maintenance company that crosses over and handles quality athletic turf on a contract basis, remember to treat your new baby (sports turf) just like your family lawn with time tested methods.

Mowing and grooming

For best results according to the turf you're working with, the type of mower you're using, the mowing schedule you're trying to keep and the playing schedule you're trying to work around, it's best to not remove more than 1/3 of the leaf stem at any one time. It's also desirable not to have excess clippings or waste remaining on the turf surface. The most important segment of the mowing program is working with sharp blades to create a clean finished appearance.

Attempt during the playing times of the year to stripe or pattern the turf for the professional

continued on page 31

Calendar of Events

August 15

Cornell Field Day, Cornell University, Ithaca, NY. Contact Joann Gruttadaurio: (607) 255-1792.

August 23

Michigan Turfgrass Field Day, Hancock Turfgrass Research Center, Michigan State University, East Lansing, MI. Contact Kay Patrick: (517) 321-1660.

August 30-September 2

WorldScape 2000, a special millennium edition of CalScape Expo, Fairmont Hotel, San Jose, CA. Contact California Interior Plantscape Association: (707) 462-2276; fax (707) 463-6699; cipa@cipaweb.org. Web site: www.cipaweb.org.

September 15

Troubleshooting the in Landscape: Identifying ad Solving Tree and Landscape Problems, Doubletree Hotel, CA. Contact Ted Ontario, Stamen: (909) 787-5804; sci-C e e n S ucx.ucr.edu. Web site: www.ucr extension.net/ns/ns.html.

October 2-3

Mississippi Turfgrass Association's (MTA) annual Conference and Trade Show, Hilton Hotel, Jackson, MS. Contact MTA: (662) 325-0517. Web site: http://msgrassnursery.com/mta.

October 4-5

Southern California Turfgrass Council's (SCTC) Turfgrass Landscape and Equipment Expo, Orange County Fairgrounds, Costa Mesa, CA. Contact SCTC: (800) 500-SCTC (7282)/(818) 764-5016; fax (818) 764-3363; expo@turfcouncil.org. Web site: www.turfcouncil.org.

STMA Message





Strengthen and Enhance

A ugust is a major transition month. Summer is drawing to a close; fall has not yet begun. Some summer sports have wrapped their season while others are in full swing. At the high school,

college and professional level, many athletes in traditional fall sports have already been hard at practice or participating in pre-season activities prior to the official season openers. Turf managers may have their fields in a state of change, perhaps setting up a baseball outfield as a soccer practice field, or maybe putting the finishing touches on the football game field.

STMA has been making some transitions too, as the STMA board and the Strategic Planning Committee have begun the task of preparing the association to move forward and reach new heights in the new millennium.

A major item that took shape during the strategic planning meeting was the development of an updated mission statement. Now, a mission statement is much more than a lofty sounding sentence to put on association literature; it is a clear statement not just of what we are, but also of what we are becoming and what we will achieve. It's a powerful tool to give a united sense of direction and focus to an organization.

Here is the new STMA Mission Statement: "To be the recognized leader in strengthening the sports turf industry and enhancing members' competence and the acknowledgment of their professionalism."

This mission statement was discussed, debated and totally worked over at the Strategic Planning meeting, then ratified by the STMA board at the June board meeting.

The words were carefully chosen for the messages they represent. For example, consider the word "strengthening" in the phrase, "strengthening the sports turf industry." Strengthening is the process of making stronger. Key areas associated with being strong are performing well, being morally powerful, being intellectually powerful and leading with authority.

Consider the word "enhancing" in the phrase, "enhancing members' competence." Enhancing is the process of improving the quality, of making better. And competence in that same phrase is the condition of being competent, well qualified, capable, fit to accomplish the requirements of the position.

Also consider the word "acknowledgment" in the phrase, "the acknowledgment of their professionalism." Acknowledgment is the recognition of something and the affirmation that something is true. In this case, that sports turf managers are professionals whose professionalism is to be recognized and affirmed.

And speaking of professionalism, now is the time to mark your calendar and start making your plans to attend STMA's 12 Annual Conference & Exhibition, Jan. 17-21, 2001, in Tampa, Fla. The conference theme is "Upward and Onward." Upward, because we're reaching new heights as individual professionals, as the profession and as an association; onward, because we're moving forward at this higher level, looking ahead and tackling the challenges.

The Tampa conference is the place to be to key into the educational and networking opportunities to strengthen and enhance your own level of professionalism as you move upward and onward.

Kich Moffat

Rich Moffitt STMA President (314) 977-2956

FIELD OF THE YEAR



Perserverance Earns College Soccer Field of the Year Honors for Boston College

by Bob Tracinski

Boston College's Championship Soccer Facility is perhaps the most stunning setting for college soccer in the Northeast, according to the feedback from visiting coaches. "Nestled in the lower corner of Boston College's Law School Campus between a residential neighborhood and Edmund's Park in Newton Centre, Mass., the field is surrounded by a cathedral of mature oaks, maples and locusts," reports Patrick Maguire, director of Geller Sport, Boston.

The company spearheaded the development of the soccer game and practice facility, including the permitting, design and construction administration.

Maguire notes the soccer field development was first conceived by the Boston College administration in 1997 and project development began then. The intent was to provide premium facilities for the program, alleviate overuse of existing facilities and eliminate the need for the men's and women's soccer teams to travel up to 35 miles to various off campus sites for its "home" games when the existing facilities were scheduled for other use.

Alumni Stadium, an artificial turf field, was the original playing field for the Boston College soccer programs. Play was later moved to the native soil Shea Field, which serves the school's baseball and softball programs in the spring and doubles as the practice field for football in the spring and fall. It's also the site of Saturday tailgating by prior to football games in the fall. At times, one of these Saturday



Patrick Maguire (left) accepts the STMA College Field of the Year award from former STMA President Steve Guise. Photo courtesy: STMA

afternoon tailgating sessions would be followed by a Sunday soccer game on the same site.

Boston College's last undeveloped property was at the Law School Campus. Maguire says, "The site was near wetlands and a stream encompassed by the city-owned Edmund's Park. It was necessary for the field to be permitted under the Commonwealth of Massachusetts Wetland and River Protection Acts. There also were issues expressed by the neighborhood, city and a local advocacy group that needed to be addressed. In June of 1999, the college reached an agreement with the City of Newton and the advocacy group to allow construction to begin.

"With the soccer season starting in early September, just 12 weeks were left for demolition, construction, sodding and grow in. The facility's first game was played on Sept. 12, just 5-1/2 weeks after the installation of the sod. Remarkably, the field was playable despite enduring one of Boston's worst rainstorms in almost a decade the night prior to the game. Remnants of Hurricane Floyd dumped over 5 inches of rain on the field less than 24 hours before kickoff. At game time, the field surface was dry, the footing was stable and the game proceeded without any problems."

Construction details

The 360-by-225-foot game field was developed within the wooded area next to the park. The smaller practice field is within 200 feet of the game field and directly adjacent to it, but is separated from it by the wooded area.

Preliminary work had taken place prior to June with the clearing and stockpiling of trees in areas outside the site where construction agreements and protection permits had been needed. Following some additional tree clearing, approximately 1,000 yards of the existing sandy loam were stripped from the game field site and moved to the practice field area to be mixed with the existing native soil.

Maguire says, "On the game field, a 6-inch gravel base was installed. Embedded in it are three subdrain pipes running across the field and draining away from the park into a dry well on college property. This was topped with an 8-inch layer of 70 percent sand, 15 percent native soil and 15 percent All Gro compost mix tested to meet the particle size and physical performance criteria of the USGA rootzone mix. Each load was tested at the pit and again on site to insure specifications were met. The field is crowned from the center to .085 percent. Around the top of the penalty areas it becomes converse to drain toward the goal area. The field was sodded with big roll washed bluegrass sod.

"The field is fully irrigated with a low flow, low pressure

stellar performance...



But don't take our word for it, both university trials and customers are attesting to Signature's premium results.



www.uhsonline.com • 800-847-6417

Check with your UHS salesperson for more details.

UHS Signature Brand Fertilizers are a product of United Horticultural Supply

Call 1(800)817-1889 use Fast Fax #1030800 and/or Circle 103 on Inquiry Card

system consisting of a Weathermatic LMC Series controller, Weathermatic valves and Hunter I-25 full and part circle heads with rubber covers. Four quick couplers are located half way down each half of the field and off the field surface."

Maintenance details

The soccer game field is the first, and the only, sand-based field in Boston College's athletic program. As part of the construction contract, Maguire developed the initial maintenance program for the field working in conjunction with Bob LeBlanc, superintendent of grounds at Boston College (now retired). Shortly after construction was completed, Scott McCoy was hired by Boston College as assistant supervisor of athletic facilities to focus on the development and maintenance of the new facilities and the maintenance programs of the other facilities.

McCoy was prepared for the monitoring and program flexibility necessary for the establishment and maintenance of sand-based fields. He spoon feeds a soluble fertilizer package every two weeks, supplemented by monthly applications of a granular fertilizer. He switched to an organic granular fertilizer following the mid-July aeration. He's also using a growth regulator to improve overall thickening and turf quality.

He says, "Being able to keep the

Maintenance Program

Fertilization:

Based on soil test results

pH monitored to 5.8 to 7.5 range

Slow release polyon-constructed fertilizer with N:P:K ratio of approximately 4:1:4 (21-5-20)

First application when field tarp removed and growth initiated

Additional applications at four-week intervals (or more frequently if indicated) along with micronutrient needs as indicated by soil tests

Final granular application made in late September or early October

Liquid fertilizer package applied every two weeks according to test results

Irrigation:

As needed based on evapotranspiration

Mowing:

Mowed two to three times per week as growth dictates with ride-on triplex reel mower

Off season height-of-cut 1-1/2-inches In season height-of-cut 1-1/4-inches to 1inch

Aeration:

Spring aeration-two passes in different

field out of play from the end of the fall 1999 soccer season to the start of the fall 2000 season has proven very beneficial. Rooting depth has reached 6 to 8 inches with good root mass. We're using the combination of

MICRO 44	The perfect watering system for sportsfields, golf courses and landscaping. For low pressure systems the Micro 44 SS has its own booster pump included.
For further details contact:	P.O. Box 909, Villa Rica, GA 30180 I-800-832-6224 770-459-4401; 770-459-6877 Fax

directions with ^o-inch hollow tine cores penetrating 3 to 5 inches

Fall aeration—three passes in different directions with "-inch hollow tine cores penetrating 3 to 5 inches

Aeration of goalmouths, sidelines and other high traffic areas as needed

All cores shattered in place and dragged back into field

Overseeding:

Early May and mid-September with slice seeder at the rate of 2 to 3 pounds per thousand square feet followed by a broadcast application at the same rate and a light topdressing with a sand based medium matched to the soil profile Goalmouths, sidelines and other high traffic areas overseeded as necessary

A blend of dwarf bluegrass varieties used for all overseeding

Pest Control:

Weed, disease and insect control as needed following integrated pest management practices with manual and cultural solutions preferred

Chemical controls used only as necessary

Painting:

Twice per week during playing season, depending on game schedules

biostimulents and organics to increase the root mass even more. With the deeper rooting, the field stability also has improved as anticipated. Drainage remains excellent. If we get a pouring rain in the morning, the field will be ready for play by the afternoon. We've been mowing at 1-1/2 inches and may drop that to 1-1/4 inches or even 1 inch for play.

"Temperatures in the sand-based field have been consistently 10 to 15 degrees higher than the native soil fields, so we've been running an 8- or 9-minute irrigation cycle on the extremely hot days to cool it. That's in addition to the regular irrigation program.

"Where the sand profile ends, the modified native soil base around the field was sodded with non-washed sod. Our maintenance program is increasing the percolation rates in that area."

Spring did bring one surprise. According to state regulations, a sod producer can only cut and wash a limited amount of sod each day, approximately enough for one-third of the field area. Thus the field's sod was installed over a three-day period. McCoy says, "The field was tarped

Circle 116 on Inquiry Card