FACILITY & OPERATIONS

"Staphylococcal viability was longest on . . . polyethylene plastic (22 to 90 days)."[5]

As recent as May 2007, an independent laboratory tested an indoor synthetic turf field at a Midwest Division I school and found five samples with significant indication of presumptive staph on separate areas of the field tested [6]. Other independent studies conducted on five separate indoor and outdoor synthetic turf systems at multiple college and professional athletic facilities confirmed the presence of staph on three of the five fields tested [7]. A Clinical Infectious Disease study in 2004 showed that players who have sustained turf burns are seven times more likely to acquire an infection compared to players without turf burns [8].

Dr. Gregory M. Colores, a Department of Biology professor at Central Michigan University, states that, "CMU has been helping in the development of test techniques appropriate for the detection and characterization of bacteria from synthetic turf. Using

PCR (Polymerase Chain Reaction) we have confirmed that there are detectable levels of bacteria that can be retrieved from synthetic turf surface samples."

With the presence of fluids such as sweat, blood, spit, vomit and urine or bird droppings, and high physical contact, sports played on synthetic turf fields could be an ideal place where the non-discriminatory staph bacteria can flourish or serve as a transmission point. Staph's proven ability to live on synthetic turf systems and in other athletic settings can lead to the conclusion that MRSA can survive here also. In fact, according to the New England Journal of Medicine, during the 2003 football season in which eight MRSA infections occurred among the Rams players, all of the infections developed at turf-abrasion sites [9].

Defending against MRSA

In the case of MRSA, prevention is key. The CDC offers the following tips for microbial safety:

- · Keep your hands clean by washing then thoroughly with soap and water.
- · Keep cuts and scrapes clean and covered with a bandage until healed.
- · Avoid contact with other people's wounds or bandages.
- · Avoid sharing personal items such as towels or razors.
- · Regularly clean surfaces of gym equipment with disinfectant before and after use.

The antimicrobial treatment TurfAide, a product of the Sports Antimicrobial System (SAS) from SportCoatings, Rochester Hills, MI, is being used now by the Minnesota Vikings, Cleveland Browns, Ohio State University, and Virginia Tech, and many others, as well as at the high school level. SAS is designed to inhibit and minimize microbial contamination on all sport surfaces for extended periods.

SAS is a family of treatments that are powered by the ÆGIS Microbe Shield technolo-

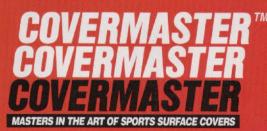
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SportsTurf

FACILITY & OPERATIONS

gy, which has been safely used in consumer goods and medical applications for more than 30 years. Registered with the EPA, the shield imparts an invisible layer of antimicrobial protection that will not leach any chemicals or heavy metals into the environment and will not rub off onto a player's skin.

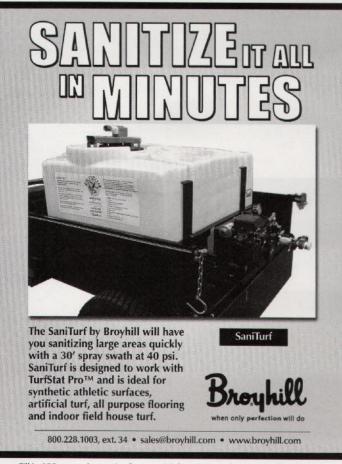
"Using the SAS system is like having an airbag in your car," said Mike Goforth, Director of Athletics Training at Virginia Tech "You may not be able to see it, but the parents of our athletes can feel confident knowing that their sons and daughters are training in safe facilities when they come to Virginia Tech."

On a microscopic level, the SAS treatments bond to the surface and create a matrix of positively charged sword-shaped molecules. Upon direct contact, the membrane of the microbe is physically ruptured by a stabbing and electrocution action. Since the treatment is not consumed or dissipated, it remains active 24/7. ■

Sources:

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 Maintains level playing surface

Natural Turf Benefits: •Drains remarkably faster •Reduces installation time •Reduces irrigation requirements •Extends playing season •Eliminates standing water •Reduces maintenance costs •Below entire playing surface •Superior perched water table •Greater root mass •Gas circulation through soil



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John Mascaro's Photo Quiz



The Soccer goals are not in correct position because the field has moved. This photo is from the Saint Louis Soccer Park during the summer flood of 1993. The park is located between the Mississippi and the Missouri Rivers and during the flood, the synthetic Astroturf field floated off of the blacktop foundation. In fact, the entire synthetic turf soccer field became a large raft and is actually floating 4 feet off the ground, notice the field height relative to the soccer goal. Synthetic turf in a flood plain can be risky... even the new rubber infill systems can pose a risk as the rubber has a potential to float away.

Photo submitted by Dr. Dave Minner, Iowa State University Horticulture Dept, Ames, Iowa.

If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to Turf-Tec International, John Mascaro, 1471 Capital Circle NW, Suite # 13, Tallahassee, FL 32303 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted become property of *SportsTurf* Magazine.



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IRRIGATION & DRAINAGE

New aggregate product being used for sports field drainage

hen landscape architect John Collver of TSH Engineers, Architects & Planners began researching methods and materials to address drainage issues for the construction of an athletic field for the minor league Clarington Tiger-Cats in Ontario, Canada, he became unsure whether or not a conventional tile drain would be the best solution for the challenge of

draining a heavily used athletic field.

Collver decided on an alternative to systems historically used for sports fields, the EZ*flow* drainage system. This system, manufactured by Ring Industrial and formerly used mainly for septic drain fields, features a recycled, expanded polystyrene product as an aggregate rather than gravel. The product is constructed with polystyrene beads com-

IRRIGATION & DRAINAGE

According to Wile, "This product could very well revolutionize the way we address drainage. It lowers labor and equipment costs, and it takes approximately half the time to install."

pletely surrounding and affixed to the outside of a drainage pipe. This provides a consistent infiltrative area for absorption and removal of water. The geosynthetic drainage beads are uniform in size and shape for optimal permeability, the company says. The 10-inch diameter product is encased in netting and covered by geotextile, and each 10-foot length weighs 7 pounds, says *EZ flow* marketing manager Trey Brady. Ring Industrial holds a patent on both the product and the process.

The system can be covered with native soil instead of sand. Native soil will recuperate faster than sand, and it can take more of a beating from players. Also, when using this product, the slope around the field can be reduced making it easier to view the action on the field. Collver estimates the overall cost savings were 25%.

When this system was specified for the job, installer Edwin Wile of DolTurf Inc. had many questions and concerns, as he was used to constructing athletic fields with traditional gravel and tile. He found that the installation process was simple. First, the subgrade was leveled at 1 degree. Then trenches were dug 12 inches deep and 16 inches wide in a herringbone pattern. The pipe was placed in the trench, covered with Kraft paper (provided by the supplier), and then topped with screened native topsoil. Approximately 5,200 linear feet of EZ*flow* was installed for this job.

According to Wile, "This product could very well revolutionize the way we address drainage. It lowers labor and equipment costs, and it takes approximately half the time to install."

Wile measures the success of a drainage system on how well it handles the freeze/thaw cycle in Canada. The product has performed well over the last cycle, and there has been no settlement.

This article was supplied by Jennings Communications, Atlanta, GA. For more information see www.ringindustrial.com and click on "Product Information."



TOOLS & EQUIPMENT



SLF-1880

Jacobsen's SLF-1880 weighs just 2,200 lbs. and reduces turf compaction. The patented vertical lift-arm mechanism allows the reels to follow uneven or undulating terrain without scalping or sacrificing quality-of-cut. Equipped with individual 18-inch wide reels that produce an 80-inch cut, the SLF-1880 is available in both gas and diesel two- and four-wheel drive models. The FlashAttach reel mounting system allows simple, quick reel removal for maintenance. **Jacobsen**

For information, fill in 054 on reader service for or see http://www.oners.hotims.com/13974-054

2653B trim, surrounds mower

John Deere's 2653B mower boasts improved traction, operator comfort and serviceability. The new traction system provides flow equally to each wheel motor, reducing slippage and improving hill climbing, while still maintaining the well-known quality of cut. The redesigned operator station provides easier access to operator controls, better access on and off the machine, and four additional inches of legroom. Two-post ROPS standard. John Deere



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2006-2007 Report to Membership | 2006 Financial Report



A Position of Strength

The strength of STMA comes from each one of you. Your commitment and passion for this profession has moved us forward to where we are today. I am proud to report that your association has accomplished much in these 12 months, with many new programs and benefits on our horizon.

Financially we've never been stronger, which has enabled us to meet our operating fund reserve goals and take on new projects. Membership continues to grow, and through our 30 chapters we are reaching out to those who have responsibility for athletic fields – though this might not be their primary job – and sharing our knowledge. We're committed to having you deeply involved in your association and the 20 committees and task groups attest to your participation. Our conference, which was challenged by severe weather, was a great success for its learning and networking opportunities because of you. You braved the weather and delayed flights, rerouted yourselves, took alternate transportation and made it work, just as you do on your fields every day.

I am personally committed to advancing our profession through education, and providing that education through STMA. In the next 12 months, look to STMA to have many more educational and informational tools available to you. As we each improve our individual skills, we advance the entire profession.

Uike andreser

Mike Andresen, CSFM STMA President



Our Performance and Accountability

STMA's responsibility is to you, our membership. We maximize each dollar earned by providing benefits back to the membership. We also realize that it is prudent to build a reserve fund for financial stability. A solid reserve allows STMA to be very agile so that it can take advantage of emerging opportunities. It also provides a cushion in case of a down economy or a crisis that affects our major revenue source—the conference and exposition-- so that we can continue to offer uninterrupted programs and services.

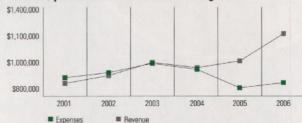
It is our goal to have one-half to one full-year of our operating budget in reserve. To that end, the STMA Board of Directors allocated \$174,914 from the 2006 year-end revenue to reserve funds, bringing those funds to \$573,737.

Independent Auditor's Report

	2006*	2005**	2004**
Support & Revenue	1,111,763	998,452	947,316
Expenses	878,544	834,677	961,939
Excess (Deficit) Revenue over Expenses	\$233.219	\$163,775	(\$14,623)

\$174,914 Allocated to Board Restricted Fund

5 Year Snapshot of STMA's Financial Strength



Figures provided by * Long CPA, PA, Lenexa, Kan.; **Bogner & Long Certified Public Accountants, Lawrence, Kan.



The Power of Partnerships

STMA continues to work on strengthening national partnerships, and we are currently working with 11 organizations. Two have resulted in significant joint projects:

The National Interscholastic Athletic Administrators Association (NIAAA) together with STMA and SAFE produced a high quality DVD on Baseball Mound-building and Home Plate Maintenance. STMA has also authored several articles for the Interscholastic Athletic Administration magazine.

For many years, STMA members have presented at the National Recreation and Park Association (NRPA) conference. That involvement has led to our development of on-line resources for NRPA and their partner, USA Football, to help volunteers and other non-sports turf managers take care of youth football fields. These, and other alliances, create greater recognition and influence for our organizations, our representative professions, and our members.

A Passion for Becoming Better

STMA is committed to providing relevant, accessible and affordable education. Last year, our members overwhelmingly indicated through the membership survey that continuing education and access to technical information are high priorities for STMA. Since then (and, in addition to the practical, technical and professional development information in our magazine, our electronic newsletter and annual conference education), we have:

- developed four technical bulletins on synthetic and natural turf
- produced a DVD on home plate maintenance and mound building
- improved the usability and content on our web site; and
- offered six on-line technical training classes with eight more available this month.





Leading for the Future

In the coming months, look for an influential public relations campaign that will enhance the image of the profession and bring recognition to members. Your Board of Directors has also given much attention to strengthening STMA's governance system, and in developing a long-range Strategic Plan. Committee work has been extremely productive and a greater emphasis will be given to member involvement. Our chapter network is gaining in momentum and STMA is dedicating even more resources to their efforts.

We are proud of our many accomplishments and look to a future that is filled with huge potential for even greater successes.



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TOOLS & EQUIPMENT



New zero-turn mowers

Kubota's new ZD-300 series of zero-turn commercial mowers feature state-ofthe-art, energy-efficient Kubota diesel engines. These engines are designed to produce higher torque to aggressively take on heavy mowing jobs for extended periods. They use as much as 30% less fuel than gasoline engines; have fewer emissions; and operate more quietly. Plus, each model features dual fuel tanks to total 11.9 gal., which means fewer stops for refueling. **Kubota Tractor**

For information, fill in 056 on reader service for or see http://www.oners.hotims.com/13974-056

New intermediate zero-turn mower

Husqvarna's new iZ5223T intermediate zero-turn mower is powered by a 23 hp Vanguard engine and features a 52-inch deck, the iZ5223T offers ground speed up to 9.5 mph and a productivity rate of up to five acres per hour. The exclusive design configuration of the Tunnel Ram deck provides impressive performance in heavy cutting conditions, allowing operators to work with increased speed and precision. Husqvarna

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