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On the cover: Action from Torero Stadium at the University of San Diego, featuring "Bullseye" bermudagrass. Photo by Paul Martinez, PHOTOSPORT.com.

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Soccer - what's not to like?



ERIC SCHRODER
Editor

eschroder@
m2media360.com
717-805-4197
P.O. Box 280,
Dauphin, PA 17018

Just as Jerry Seinfeld's TV mother used to ask about him, I wonder about soccer—what's not to like? As I write this, the 2006 FIFA World Cup tournament has but one game to go. I'll be rooting for Italy because I have a close friend whose parents emigrated to the United States from there, and he's my only friend who has played the game enough to understand its subtleties. Besides, who can root for France?

At 47, I'm too old to have learned the game as a kid. My high school gym teacher would make us try soccer for maybe two or three classes a year and even that limited exposure bored us. I remember the general attitude was we'd rather be stuck inside playing "bombardment" (a.k.a. dodgeball) than kick a ball around. What fun is it if you can't hit someone!

But these days I'm coaching youth soccer for my kids' teams, although for my daughter's U-5 team last spring "coaching" would be a gross misrepresentation of the word. "Babysitter/snack provider" would be more appropriate. I must have done something right though because by the end of the season, the girls were actually playing the game (OK, playing in spurts but at least they'd stopped asking for snack in the middle of a match).

Despite the huge numbers of kids who are exposed to soccer now, the game's popularity nationally doesn't seem to be making much headway. I think it's because Americans, unlike most of our fellow earth-travelers, have so many options. I doubt if there's a hockey rink in Ghana or a BMX bike park in Syria. There's also the old "low-scoring-means-boring" argument, which is bunkum. Tell me you have never thoroughly enjoyed an American football game that ended with a score like 10-7?

You can't watch the World Cup without seeing why the rest of the planet enjoys the game so much. At its best, it is athletic, powerful, and dramatic. What's not to like?

More on World Cup: Ohio State's Pam Sherratt reported on the university's website (hcs.osu.edu) that all 12 German host cities' fields were renovated before the tournament. She wrote, "The sod for each stadium was grown in the Netherlands and Germany and consists of a 75:25 Kentucky bluegrass/perennial ryegrass mix. Plant breeders from the Royal Barenbrug Group were involved in the cultivar selection process, which must meet certain criteria, such as ball performance, wear tolerance, and color. Although the sod had been grown for a year, the window for establishing the sod in each stadium was short, with the German Bundesliga not finishing until mid-May and the first World Cup games played June 9. Selection of grass species, turf maintenance, and even mowing patterns for the tournament were determined by FIFA's Turf Competence Team, the German Turfgrass Society, and groundsmen from each of the 12 host stadiums." Glad to see they asked the "groundsmen"!

760 Market Street, Suite 432
San Francisco, CA 94102
Phone 415-839-5060
Fax 415-398-3511
www.greenmediaonline.com

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STMA Office

805 New Hampshire Suite E
Lawrence, Ks 66044
Phone 800-323-3875 Fax 800-366-0391
Email stmainfo@sportsturfmanager.com
www.sportsturfmanager.org

Editorial

GROUP PUBLISHER Steve Brackett
EDITOR Eric Schroder
ART DIRECTOR Mira Coburn
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EDITORIAL DIRECTOR Richard Brandes

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President's Message

Warming up for Conference



MIKE TRIGG
CSFM

mtrigg@
waukeganparks.org

San Antonio is definitely very hot and very cool. The STMA Board of Directors met in July at the 2007 Conference site for our summer meeting. As you would expect, the temperature was in the 90s. (However the average temperature is 62 degrees in January!)

San Antonio is the 8th largest city in the U.S. and one of the top conference cities in America. The Henry B. Gonzalez Convention Center is conveniently located across the street from the Marriott Rivercenter, our host hotel. The Center will accommodate all of our educational sessions and our trade show. The layout of the center is straightforward and will be easy to navigate as you move from session to session. The meeting rooms have all the conference amenities and the hallways and pre-convention areas are spacious, which will create excellent networking opportunities.

I am happy to report that there will be no price increase for the conference package in 2007. For those registering before December 15, the cost of the conference to members is \$350. That cost covers education, more than eight hours of trade show viewing, 16 hours of networking, breakfasts, and lunches, receptions, and the awards banquet.

The educational program is shaping up to be our best yet. After careful review of our previous conferences, we will officially end the conference on Friday night, but offer to you five post-conference workshops on Saturday. These concurrent workshops include lunch and are the MLB/MLS/NFL hosted off-site seminar; Athletic Field Soils; New Technologies in Sports Turf Management; Fertilizers for Sports Fields; and Spanish for the Sports Turf Manager. Wednesday evening is still the beginning of the conference with our Welcome Reception. On Thursday, we have restructured the day so that you will start with concurrent sessions and then hear keynote speakers in the afternoon. One session will focus on global issues in sports turf and one will offer leadership strategies in a fun and entertaining presentation. Then, you'll go directly into the Trade Show for its Grand Opening Reception with the live auction later on that evening.

I am very pleased to inform you that the Board has studied the conference locations in California that are available and suitable for our 2009 conference and has selected San Jose. The board is very impressed with its high tech focus, its accessibility and amenities, and believes it will be an excellent site for us in 2009.

Keep reading *SportsTurf* and your electronic newsletter for more details on the 2007 Conference in San Antonio. It's going to be impressive!

Mike Trigg

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PRESIDENT/CEO Marion Minor
DIRECTOR OF FINANCE Gerald Winkel
CORPORATE DIRECTOR OF CIRCULATION
Joanne Juda-Prainito

PRODUCTION DIRECTOR Mary Jo Tomei
DIRECT MAIL LIST SALES
Cheryl Naughton 770-995-4964
cnaughton@m2media360.com

Reader Service Services
DIRECTOR OF READER SERVICE
Joanne Juda-Prainito
Readerservice@m2media360.com

SUBSCRIPTION SERVICES
Phone 847-763-9565 Fax 847-763-9569

REPRINTS
Cheryl Naughton, 770-995-4964,
cnaughton@m2media360.com

Advertising Sales Representatives

AK, CO, HI, ID, MT, OR, WA, WY, Alberta,
British Columbia and Saskatchewan.

Steven Brackett
3906 Tecoma Dr.
Crystal Lake, IL 60012
815-459-5189; 815-459-5805 (fax)
sbrackett@m2media360.com

CT, DE, IN, KY, MA, MD, ME, MI, NH, NJ, NY,
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Nova Scotia, Ontario, Quebec and Europe.

Paul Garris
35 Greenbriar
Aurora, OH 44202
330-562-2512; 330-562-3512 (fax)
pgarris@m2media360.com

United States: AL, AR, AZ, CA, FL,
GA, LA, NC, NM, NV, OK, SC,
TN, TX, UT and Mexico

Deanna Morgan
2095 Exeter Road, #80-336
Germantown, TN 38138
901-759-1241; 901-624-0333 (fax)
dmorgan@m2media360.com

IA, IL, KS, MN, MO, ND, NE,
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Colleen Murphy
1326 N. Illinois Ave.
Arlington Heights, IL 60004
847-259-2835; 847-259-2836 (fax)
cmmurphy88@comcast.net

Classified Advertising Sales
Tonya Przybylski
630-679-2061; 630-679-2062 (fax)
tpriz@m2media360.com

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Cardinals Stadium boasts **movable** field tray

By Mike Lloyd P.E.

When the Arizona Cardinals open their new Cardinals Stadium against the Super Bowl champion Pittsburgh Steelers August 12, the team and their fans will be looking forward to an exciting season in their brand new NFL home.

For CMX Sports Engineers it will be an occasion to reflect on our design of the natural grass turf system for the stadium's movable field tray, the first ever in North America.

As a hometown Phoenix company, CMX has held a long relationship with the Cardinals. In 1990, we served as design engineer and construction manager for the team's training facility in Tempe, which includes three sand-based, natural grass fields.

Later, we oversaw the renovation of the natural grass playing field at ASU's Sun Devil Stadium when the Cardinals hosted Super Bowl XXX in 1996. NFL players have annually ranked the field among the top playing surfaces.



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FACTS AND FIGURES

The field is a single movable structural pan and sod assembly with outside dimensions of 234 feet wide, 403 feet, 4 inches long, and 3 feet, 3 inches high. The total weight of the field and tray will be approximately 18.9 million pounds. The stadium door that the field will pass through measures 240 feet wide.

The pan structure supporting the sod and drainage system is about two feet deep and consists of 542 steel wheels riding on 13 parallel steel rails. The center row of wheels will be the guide wheels of the system, with 76 of the wheel sets powered by one-horsepower motors.

The field will travel approximately 740 feet from outside to inside Cardinals Stadium. Estimated time to move the field is about 65 minutes.

The entire 91,916-square foot area will be covered with natural grass turf except for an edge strip of artificial turf three feet wide around the perimeter of the field to allow maintenance staff to keep heavy equipment off the turf.

The 12-million pound turf system will have a uniform depth of 14 inches, consisting of 12 inches of sod and root zone materials with a two-inch drainage mat system at the bottom.

The top of the playing field will be crowned - with the center of the field two inches higher than the sidelines and end zones.

Water will drain through the system to area drains and feed into collector drain pipes running below the field decking.



So, when plans for the team's new stadium were announced, featuring a retractable roof and a movable field, we really wanted to be involved. Consequently, to be selected by the Cardinals and Hunt Construction was a tremendous honor.

Planning

Since a major selling feature of the new stadium would be its ability to host a variety of major events other than NFL and college bowl games, the use of a movable field to support the stadium's multipurpose aspect had always been envisioned.

Although we had recently designed artificial turf systems for the NFL's Baltimore Ravens, Cal-Berkeley and the University of Southern Mississippi, the Cardinals were strong proponents of playing their home games on natural grass. A stationary natural grass field, however, also would create issues.

You would not only have to find a way to consistently grow grass inside the stadium, but more importantly, how to protect it when covered over multiple days for other events.

If the field was going to be natural grass, it would need to be moved into and out of the stadium. How, then, should it be designed? The project team first studied movable fields that had been built in Europe and Japan. Early discussions envisioned a field tray made of concrete or steel, operating on either steel or rubberized wheels. The design team created various wheel and tray concepts and developed cost estimates for different systems.

The final consensus was to build a giant steel tray, 234 feet wide, 403 feet long and three feet high with 14 inches available for the turf system, including drains and irrigation piping. The field would be carried by 542 steel wheels, 76 of them powered by one-