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JULY 2001

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One of the fields in use at the Wright National Soccer Campus in Oneonta, NY.

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July 20-22

Outdoor Power Equipment Institute's (OPEI) 18th annual International Lawn, Garden & Power Equipment Expo (EXPO 2001), Kentucky Exposition Center, Louisville, KY. Contact Sellers Expositions, at tel. (800) 558-8767, or tel. (812) 949-9200. Web site: <http://expo.mow.org>.

July 31

Midwest Regional Turf Field Day, Purdue University, West Lafayette, IN. Contact Bev Bratton, at tel. (765) 494-8039. Web site: <http://www.agry.purdue.edu/turf>.

August 5

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

August 22

Michigan Turfgrass Field Day, Hancock Turfgrass Research Center, Michigan State University, East Lansing, MI. Contact Kay Patrick, at tel. (517) 321-1660 or e-mail: mtfturf@man.com. Web site: <http://www.michiganturfgrass.org>.

September 2-4

GAFA Koln International Garden Trade Fair, Cologne, Germany. E-mail: gafa@koelnmesse.de. Web site: <http://km.nexum.de/gafa>.

October 16-17

Garden Expo, Toronto Congress Centre, Toronto, ON, Canada. For more information, contact Landscape Ontario Horticultural Trades Association, Special Events Dept., at tel. (905) 875-1805 or e-mail: showinfo@landscapeontario.com. Web site: <http://www.hort-trades.com>.

October 31-November 1

The Turfgrass Landscape & Equipment Expo, Fairplex, Pomona, CA. Contact Southern California Turfgrass Council, at tel. (800) 500-SCTC, or tel. (818) 764-5016, or e-mail: expo@turfccouncil.org. Web site: <http://www.turfccouncil.org>.

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sportsTURF The Front Office

Zones & Layers



Although I'm not expert on the rootzones and sub-surface layers of athletic fields, I do feel it's important to point out the research findings of others who are experts.

One such expert, Dr. Lloyd M. Callahan—professor emeritus, grass physiologist, molecular geneticist and agronomist at the University of Tennessee (UT)—has recently completed a seven-year research study to evaluate the use of various geotextiles as an intermediate layer between the rootzone of the athletic field or golf green and the sub-drain coarse aggregate. The two main findings of the study are that A) there needs to be an intermediate layer, and B) the intermediate layer should not be sand.

"Many sports fields are being constructed using USGA and USGA-type profiles," Callahan notes. "Many individuals in the turf industry and researchers support the need for an intermediate layer between the rootzone and sub-drain coarse aggregate in USGA green profiles. However, the need for an intermediate layer has often been questioned and is a major ongoing controversy."

According to Callahan, USGA guidelines (1960, 1973, 1989 and 1993) have some serious and expensive flaws built into them, the last three revisions being only arbitrary, non-research-based revisions. "Our greatest concern is in directing people to the most reliable field guidelines known," he explains, "and that appears to be a USGA profile on the order of the 1960 and 1973 specifications, but with a reliable geotextile in place of the very coarse sand intermediate layer. A rootzone profile with no intermediate layer is a recipe for disaster."

The seven-year study, conducted by Dr. Callahan and his associates at UT, evaluated the effectiveness, reliability, durability and performance of ten geotextiles as intermediate layer drainage separators in comparison to a USGA profile with and one without, a coarse sand layer. These treatments (trt) were: trt 1, sand intermediate layer; trt 2, no intermediate layer; trts 3 through 6, Typars; trts 7 through 10, Terrabonds; trt 11, Pro 5; and trt 12, Duon.

Study results found that the optimum field water infiltration and percolation rate was exhibited by trts 5, 6, 7, 9 and 12; the optimum field water retention range was shown by trts 7, 8, 9, and 10; and the optimum available water holding capacity trts were 7, 8, 9 and 10. "The study found that the most effective, reliable and durable geotextiles were the Terrabond treatments 8, 9 and 10," Callahan notes.

Free copies of the full 67-page study—"Geotextiles As An Intermediate Layer In USGA and USGA-Type Greens," Bulletin 699, February 2001—are available by calling (865) 974-7324.

Michael Oswald
Editor

STMA Message

**Sports
Turf Managers
Association**
www.sportsturfmanager.com



We're On A Roll

The Sports Turf Managers Association is on a roll! STMA international membership is at an all-time high, with the current 2001 numbers over 2,000 at mid-point in the year. This is approaching a level nearly four times as great as the end of year figures in 1995.

STMA Affiliated Chapters number 23. This is over five times the number of affiliated Chapters at the end of 1995. There are numerous groups all across the country working on Chapter formation and moving toward affiliation.

We thank you for your part in making this happen. You are spreading the word that this is THE association for those who want to produce the best possible results in the construction, renovation, management and maintenance of sports fields. You're bringing others in this profession into the information exchange network—and that does so much more than raise membership numbers. Each person who contributes to our overall information "bank" by sharing their knowledge, expertise, experiences and ideas raises the standards for all of us. Providing the best sports surfaces for all levels of play is our goal and, together, we CAN make that happen.

If you are reading this and are not an STMA international and/or Chapter member, please contact STMA Headquarters at 800-323-3875 or via e-mail at SportsTMgr@aol.com to get connected.

We're on a roll for increasing that information exchange as well. The STMA Education Committee and the STMA Chapter Relations Committee are working together to develop a Speakers Bureau. Guest speakers are needed for educational seminars at local, state, regional and national meetings to provide thought-provoking, usable information, which can be taken back to the work environment.

Through the Speakers Bureau, STMA plans to be the "match makers" for those who are seeking speakers on specialized topics related to sports turf management. We plan to make the Speakers Bureau information widely available, on both the local and national STMA levels, as well as to other turfgrass industry related organizations. Forms for potential speakers have been distributed via several methods by both Committees. A form also will be posted soon on the STMA Web Site www.sportsturfmanager.com, if it is not already "up."

We're on a Roll for the STMA 2002 Conference as well. In fact, "We're on a Roll" is the Conference Theme—a great tie in with the progress the Association is making, and our Conference site of Las Vegas! The dates are January 16 to 20. The Headquarters Hotel is the Riviera Hotel and the trade show Exhibition will be held in the Cashman Center. The Conference Committee has been hard at work because it takes more than a roll of the dice to put together another jackpot of a Conference and a Grand Slam Trade Show. In the works are educational sessions and tours, the biggest ever trade show, networking opportunities galore, and more.

Watch for more exciting news, because We're on a Roll!

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FIELD OF THE YEAR



Wright National Soccer Campus, of the National Soccer Hall of Fame, Earns STMA Soccer Field of the Year Honors in the Municipal Division.

by Steve and Suz Trusty

The Wright National Soccer Campus of the National Soccer Hall of Fame earned STMA 2000 Soccer Field of the Year honors in the Municipal Division. The Soccer Hall of Fame is located on a 57-acre site in Oneonta, NY. The current four-field Wright Soccer Complex and the 36,000-sq-ft Hall of Fame facility are the result of a vision that started 21 years ago. Envisioned for future development are two more playing fields and a lighted stadium with a seating capacity of approximately 6,000. Plans also include on-site dormitories and two indoor playing areas.

Turf Manager for the Soccer Hall of Fame, since the completion of its construction, is Kevin I. Meredith. His company, Meredith Maintenance, is contracted to provide field maintenance along with other landscape services associated with the facility. Besides Kevin, who works the typical sports turf manager schedule year-round, Meredith Maintenance employs two full-time seasonal employees from April through November. These personnel assist with painting lines and other specific tasks at the soccer complex, but spend the majority of their time at other company projects. Meredith handles mowing, fertilizer and pesticide applications, striping of the lines, and the management functions of the total field and landscape maintenance programs for the Soccer Hall of Fame. That this is a labor of love shows in the way Meredith talks about these fields, and in the excellent results he has achieved with them.

Following are a few excerpts from a letter Gene Chilion, Summer Tournament Director for the Complex, sent



Kevin Meredith (left), Turf Manager for the National Soccer Hall of Fame, discusses the great condition and incredible drainage of the fields with John Ellinger, the U-17 Men's National Team Coach.



Field Number 1, 2 and 3 (pictured) are often in use at the same time.

to Meredith on August 30, 2000. "Congratulations on another superlative job as Turf Manager at the National Soccer Hall of Fame. We had 209 teams, over 8,000 players, and in excess of 400 matches on the Soccer Hall of Fame fields in Oneonta over a 10-week period." And, "I sent an evaluation form to coaches after each tournament. The rating scale went from 1 (poor) to 4 (excellent). Every coach rated the fields a 4! I believe this is a direct result of your dedication, knowledge and work ethic."

The four regulation fields at the Wright National Campus were built in the fall of 1990. Meredith says, "The New York National Guard did the initial site work, including clearing of the land. The Clark Companies built the fields in about twelve weeks. The soil profile is a ten-inch depth of 85 percent sand and 15 percent on-site organic material. Drainage is facilitated by conventional sub-surface drain tile placed on 18-foot centers. The Kentucky bluegrass-perennial ryegrass sod for the fields was obtained from both Batavia Sod Farms and Saratoga Sod Farm."

The fields are not lighted. There are a total of 1,600 seats spaced around the fields. These seats can be moved to accommodate spectators. When all of the seats are consolidated, they form a "mini-stadium" for major events.

"Irrigation was labor-intensive and arduous the first two years," notes Meredith. "We used 1-1/2-inch black plastic pipe to channel water from fire hydrants to sprinklers. This system had to be moved from field to field every two hours. The Rainbird irrigation system was installed in 1993. It consists of 24 zones, with four R70 rotors per zone, coupled to an ESP-MC controller. As the R70 rotors get older and malfunction more often, we're gradually replacing them with Rainbird Falcons."

"Water now is supplied by a well, 360 feet deep," Meredith says. "While it had been anticipated this would produce water at 100 gallons per minute (gpm), actual output is 38 gpm. This necessitated a reduction of the orifice from 18 to 9 gpm

National Soccer Hall of Fame Field Maintenance Program

FERTILIZATION

Soil test: biannually in spring; pH average 6.5 to 6.6

April: Roots 1-2-3

May 15: Application of 22-4-10

Late June: Application of 22-4-10

Mid-July: Application of 22-3-8

Early September: Application of 18-3-18

End of October: Application of 20-4-10 (all slow-release N for early spring green)

CORE AERATION

Cores: always drag matted back into soil profile

Early spring: Full field, as soon as fields are firm enough not to be damaged

Late June to mid-July: Full field, with timing depending on use schedule and field condition

Throughout playing season: goal mouth area, every two weeks.

August through mid-October: Monthly, center field section, goal mouth width, length of field.

Late October: Full field

MOWING, IRRIGATION, FIELD CARE

Spring: Mowing begins as turf growth dictates in early spring, generally by first week in May, frequency as needed.

By June through end of playing season: mowing at least three times weekly, every other day if needed.

Water: Well water pH averages 7.2.

Early spring: Inspect and start up irrigation system as weather conditions dictate. System operated according to weather conditions and evapotranspiration rates.

Late October: Winterize system, service generator.

Topdressing: Use on-site sand and topsoil mix to duplicate soil profile. Light applications following aeration combined with overseeding. In goal mouth area, weekly from June throughout playing season.

Overseeding: In goal mouth area, weekly from June throughout playing season. Following applications of topdressing; seed raked in.

Painting: Game day painting, and for practices, depending on schedule.

PEST CONTROL

May 15: Dimension for pre-emergent control of crabgrass and broadleaf weed seed.

Late June: Trimec if needed for broadleaf weed control.

Mid-July: Merit for insect control. IPM practices are followed, with controls applied only as needed.



Meredith refers to Field Number 4 (pictured) as his best turf. The rich, dark green color is further highlighted by the white National Soccer Hall of Fame building in the background.

on the heads. The resultant reduction in the volume of water requires watering for longer periods of time. To complicate the irrigation process, there is no power available at the well. Power to run the pump is supplied by a generator which requires near constant attention and maintenance. To deliver an adequate

amount of water during dry periods the pump must run 24 hours per day, 7 days per week. While the new system is far better than dragging piping, it is still labor intensive."

The rapid drainage capacity of the sand-based fields does require greater than average delivery of water, but is a

real plus in terms of playability. Meredith says, "No matter how hard it rains or for whatever period it rains, there is no standing water on the fields. No game has ever been cancelled because of wet field conditions. Lightning yes, water no. Another benefit of this sand-based profile and drainage system is the development of dense and deep rooting. Our turfgrass root depth runs between 6 and 9 inches. I believe this makes for some very strong and divot-resistant turf."

Field use runs from May through November. During the summer tournaments, the majority of play takes place on the weekends. The average weekend will have between 8 and 10 games per field. Meredith says, "The summer of 2000 brought rainfall every weekend and the fields were able to stand up to it. There were very few divots and we had surprisingly little damage to the goal areas."

The fall season produces the most continuous usage. There are few days from mid-August through November when there is not some soccer-related activity at the complex.

Meredith says, "We have the Oneonta State College men's and women's teams practicing and playing their games on the fields. We have the Oneonta High School boys' and girls' varsity and junior varsity teams playing. We also have the Milford Central School boys' and girls' soccer teams practicing and playing their games here."

"Besides these regular field users," Meredith continues, "we have several other teams that play their games at the fields because our facility is located approximately halfway between the two schools. In addition, in 2000, the fields were used by Tufts University and New York University for a week of intense pre-season practice. We also were privileged to have both the U.S. and Canadian U-17 National Teams at the fields for practice, and free clinics for the local youth soccer programs."

Because Oneonta is in upstate New York, late season soccer means dealing with snow. Meredith says, "There are two things I do to help alleviate the problems caused by the

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