for sport fields CAN NOT be maintained without irrigation." He also did a calculation describing our aerification practices. It showed that if you aerify with 1/2-inch tines on 4-inch centers, the results would be a removal of only 1.23- percent of the surface. This last comment is remarkable when you think what your field looks like after an aerification. You would swear it was much

This portion of the field day was filled with an enormous amount of information. All of the attendees I talked with left with many new ideas and a much better understanding of their turf and changes they will attempt to make in the future to their fields.

Following Dr. Stier two raffle prizes were drawn. The Great Wolf Lodge in Wisconsin Dells donated two packets of 4 passes, which Jerry Ramseier from Frontier FS and Ron Hazzard from the University of Wisconsin-Superior won. Thank you Great Wolf Lodge and Craig Schlender for this donation.

After a terrific lunch the entire group made their way to Lambeau Field where we were treated to a tour of the new facility. All I can say was WOW, the renovation is very impressive. Thank you to all the Packer Staff for this opportunity. ST

STMA Chapter News

Florida Chapter # 1: The Chapter will participate in the Florida Turfgrass Association Show to be held in Tampa September 8-10. A Sports Turf Tour is scheduled September 8 with a Free Trade Show Day September 10. For more details on the FTGA show, call FTGA at 800-882-6721. The Chapter will meet October 21 at the City of Pinecrest. The educational focus for this event is "Overseeding Bermudagrass Athletic Fields." For information on the Chapter, or pending activities, contact John Mascaro at 954-341-3115 or STMA@Turf-Tec.com.

Ohio Sports Turf Managers Association (OSTMA): The Chapter's Fall Field Day 2003 will be held September 9 at the OSU Intramural Complex (Fred Beckman) in Columbus. Now is the time to prepare you applications for the OSTMA Educational Scholarship Program, STMA National Conference Scholarship Program, and the OSTMA Field of Distinction Award. See the OSTMA newsletter or website for details

For information on the Chapter, or upcoming events, call OSTMA Headquarters at 888-824-9805 or 419-824-9805 or Boyd Montgomery, CSFM, at 419-885-1982; or visit the chapter's website at www.ostma.org.

The Greater LA Basin Chapter of the Sports Turf Managers Association: The Chapter's General Meeting, including the Nominations for 2004 Board members, will be held September 10 at 2:00 PM at Mt. San Antonio College. The speaker for this event will be announced soon. The Chapter will hold its General Meeting and Election for 2004 October 22 at 3 PM at the Japanese Garden of Cal State University

- Long Beach.

For information on the Chapter or pending events, call Steve Dugas, California State University - Fullerton, at 714-278-3929 or email sdugas@fullerton.edu.

MO-KAN Sports Turf Managers Association: The Chapter's Fall Field Day will focus on strategies for High Use, Low Budget Fields. It will be held September 10 at Kansas City, KS, Parks and Recreation. More details will be announced soon. The Chapter also will meet at the Kansas Speedway and Community America Ballpark from 8:00-3:00 PM October 15. Registration begins at 7:30 AM. This will be a unique opportunity for a behind the scenes tour of the Kansas Speedway. Following lunch in the infield garage area, attendees will tour the new Community America Ballpark, home of the Kansas City T-Bones Baseball Club. Look for more details in August.

For information on the Chapter, or upcoming events, call Jody Gill at 913-239-4121 or JGill2@bv229.k12.ks.us.

Iowa Sports Turf Managers Association: The Chapter will hold a September 17 workshop at North Scott Community Schools.

For information on the Iowa Chapter, or upcoming activities, contact Jeff Wendel of The Turf Office at tel. 515-232-8222, or fax 515-232-8228, or email: Jeff@iowaturfgrass.org.

Midwest Chapter STMA: The Chapter will hold a Baseball Field Maintenance Seminar at the Schaumburg Flyers facility in Schaumburg September 19, with the event repeated on Saturday, September 20. This will be a hands-on workshop



The Toro Foundation steps up to bat for SAFE

he Toro Foundation has issued a grant in support of the Foundation for Safer Athletic Field Environments (SAFE), noting the following:

"The Toro Foundation is pleased to make a donation in the amount of \$8,500 in support of research that supports sports turf managers and volunteer turf practitioners. On behalf of The Toro Company, thank you for your efforts toward improving the playing surfaces across the country.

"This grant, along with a \$3,500 scholarship award given earlier this year, brings The Toro Company support of your work to \$12,000. We value your organization's contributions to the industry and are proud to be a supporter of your efforts."

SAFE was created by the Sports Turf Managers Association (STMA) to provide research, educational programs and scholarships geared to sports fields. SAFE greatly appreciates the grant from The Toro Foundation and The Toro Company's support of the scholarship pro-

The SAFE Foundation believes in pro-active research and education. We are dedicated to fund the kind of research that sports turf managers need to improve the playing surfaces they oversee. Our close relationship with STMA provides an excellent perspective of the needs of today's sports turf managers. At the same time, STMA's sports turf managers and educators are the experts in the industry and will be capable of leading our research and education efforts. SAFE also recognizes that research must be effectively disseminated to professional turf managers and volunteer turf practitioners. Thus, our goal is to fund sports turf research and education.

Also, as part of our mission, SAFE is dedicated to supporting students focused on the profession of sports turf management through our scholarship program. Scholarship funds are earmarked for students of 2-year programs, students in 4-year undergraduate programs and for grad students.

The SAFE Foundation has much work to complete before it can supply the sports turf industry with the desired level of programs. Additional funding is needed to fulfill the scholarship, research and education arms of our mission. Your willingness to consider the SAFE Foundation's request for funding is truly appreciated.

Want to help us start a Sports Field revolution? Contact Steve Trusty at 800-323-3875 for more information on how you can make sports fields SAFE!

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STMA Chapter News

with multiple drill stations focused on the specific daily tasks and techniques used to accomplish quality field maintenance. Attendees will rotate to participate in all of the drill stations. Chapter members are urged to invite coaches and volunteers to join in this Seminar. Mike Veeck, baseball team owner and master of ballpark promotions, will be the featured speaker. Drill stations include: turf maintenance with Jeff Salmond, CSFM, Northwestern University; skinned maintenance with Jeff Eckert of the Joliet Jackhammers; mound maintenance with Connie Rudolph, CSFM of the St. Paul (MN) Saints; mowing practices with Ryan Nieuwsma of the Kane County Cougars, and game day routines with Mike Faust of the Gary/South Shore Railcats and Eric Fasbender of the Flyers.

For information on the Chapter, or pending activities, visit the Chapter's website, http://mcstma.org/, or call Libby Baker at 847-263-7603 or email Bake60ft6in@aol.com.

Virginia Sports Turf Managers

Association: The Chapter will meet during the Virginia Tech Turf and Landscape Fields Days, September 23-24, with the meeting date and time to be announced. For information on this event visit the website: www.thevtc.org or call Susan Floyd at 540-942-8873.

For information on the Virginia Chapter, or upcoming events, contact: Bob Studholme, Fairfax County Park Authority via e-mail: Robert.Studholme@FairfaxCounty.gov or at 703-324-8590.

Colorado Sports Turf Managers Association: The Colorado Chapter's September 23 event will be held at the Broomfield Soccer/Football Complex in Broomfield

For information on the Colorado Chapter, or upcoming activities, visit the Chapter's website, www.CSTMA.org, or call the Chapter Hotline at 303-346-8954,or contact Chapter President Phil McQuade at 303-237-7188 or pmcquade@jeffco.k12.co.us.

Gateway Chapter Sports Turf Managers Association: The Chapter is planning a September meeting that will combine a golf outing, lunch, and a field tour at the City of Bridgeton in north St. Louis County. More details will be announced soon.

For information on the Gateway Chapter, the golf outing, or upcoming events, call Mike Krone, Missouri Baptist College, 314-392-2328 or email krone@mobap.edu.

Sports Field Managers Association of New Jersey: The Chapter will hold an Athletic Field Maintenance & Renovation Field Day October 2, co-sponsored by SFMANJ and Rutgers University, Snyder Research & Extension Farm, at the Farm. Registration begins at 11:00 AM.

For information on the New Jersey Chapter, or upcoming events, call SFMANJ at 908-730-7770 or Eleanora Murfitt at 908-236-9118; or e-mail to HQ@sfmanj.org.

Minnesota Chapter STMA: The Chapter is planning a Fall Workshop for October 16. Details will be announced soon.

For information on the Minnesota Chapter, or upcoming events, contact Jeff Hintz, Bethel College &

Seminary, St. Paul, at 651-638-6075 or e-mail: j-hintz@bethel.edu.

Northern California Chapter of the Sports Turf Managers Association: The Chapter's Annual Seminar on Wheels event is in the planning stages. Please email Emory Hunter at emhunter@usa.net if you have questions or suggestions about this program.

For information on the Nor-Cal Chapter, or pending events, call Janet Gift at 530-758-4200.

Pacific Northwest Sports Turf Managers Association: The Chapter is looking into sites for their community service Fall Work Day. This will be a hands-on community renovation and training day. Details to follow soon. For information on the chapter or upcoming events, contact: Jay Warnick at JayW@Seahawks.com or Mike Wagner at MWagner@Oregon.UOregon.edu.

Keystone Athletic Field Managers Organization (KAFMO/STMA): Planning for the Chapter's Annual



October Golf Outing is underway. For information on the Chapter or upcoming events, contact Dan Douglas, Reading Phillies Baseball Club, at tel. 610-375-8469, ext. 212; or e-mail to: kafmo@aol.com.

Sports Turf Managers Association of Arizona: For information on the Chapter, or upcoming events, contact Chris Calcaterra at e-mail: chrisc@peoriaaz.com or tel. 623-412-4231 or Bill Murphy, at e-mail: bmurphy@ci.scottsdale.az.us or 480-312-7956.

Southern California Chapter: For information on the Chapter, or pending activities, call Michael Tarantino at 858-679-2526 or MTarantino@powayusd.com.

Georgia Sports Turf Managers Association: For information on the chapter or upcoming events, contact gastma@earthlink.net.

Indiana Chapter: For information on the Chapter, or pending activities, contact Stan Moscrip, Indiana University, at 812-856-2256 or smoscrip@indiana.edu.

Kentucky Sports Turf Managers Association: For information on the chapter or upcoming events, contact Tom Nielsen at TNielsen@batsbaseball.com or Aaron Boggs at AVBoggs@netscape.net.

Chesapeake Chapter STMA (formerly called Mid-Atlantic Athletic Field Managers Organization -MAFMO Chapter STMA): For information on the Chapter, or other pending activities, call the Hotline at 866-818-8873 or email Nick Gammill, CSFM, at ngammill@american.edu.

Michigan Sports Turf Managers Association (MiSTMA): For information on the Chapter or pending events, contact MiSTMA Headquarters at 517-712-3407, or email Amy Fouty, University of Michigan, at fouty@umich.edu, or go to www.mistma.org to visit the chapter's website.

Nebraska Sports Turf Managers Association: For information on the Chapter, or upcoming events, call Loren Humphrey at: 402-461-2324 or email to lhumphrey@cityofhastings.org.

Tennessee Valley Sports Turf Managers Association (TVSTMA): For information on the Chapter, or upcoming events, call Chapter President Bob Elliott, Tieco, at 800-239-9547 or Glenn Lucas at

800-837-8062; email to Glenn@tvstma.org, or visit the chapter's website: www.tvstma.org.

North Texas Sports Turf Managers Association: For information on the Chapter, or pending activities, contact Kathy Cassmeyer at 972-603-2869 or

Katherine.Cassmeyer@lmco.com, or visit the website at www.ntstma.org.

South Texas Sports Turf Managers Association: For information on the Chapter, or upcoming events, contact Tim Loesch at 210-207-3734 or TLoesch@alamodome.com.

Wisconsin Sports Turf Managers Association: For more information on the Chapter, or other pending events, contact Chris Brindley at 715-346-3622 or

cbrindle@uwsp.edu.

Chapters on the Grow:

South Carolina: Efforts are currently underway in South Carolina to form a Chapter of the Sports Turf Managers Association. The contact is Dr. Trent Hale, a Research and Extension Turfgrass Specialist in the Department of Horticulture for Clemson University. He is located at the Pee Dee Research and Education Center in Florence. On April 15, Dr. Hale hosted a meeting of athletic field managers, Clemson University professors, and turfgrass industry personnel interested in forming a Chapter. A steering committee is currently being formed and plans were made to hold the first meeting September 30 from 7 to 9 PM at the Horry Georgetown Technical College, Grand Strand Campus, Building 600 in Myrtle Beach, SC. For more information contact Dr. Hale at 843-662-3526 or by email at tchale@clemson.edu or the web: www.clemson.edu/turfornamental/.

New York: For information on the chapter forming in central New York, contact Kevin Meredith, National Soccer Hall of Fame, at e-mail: Kevin@wpe.com or at 607-432-2953.

Editor's note: The Sports Turf Association of Canada will hold their 16th Annual Field Day from 8:00 am to 3:00 PM September 17 at the University of Toronto at Scarborough. For more information contact 519-763-9431 or info@sportsturfassociation.com.

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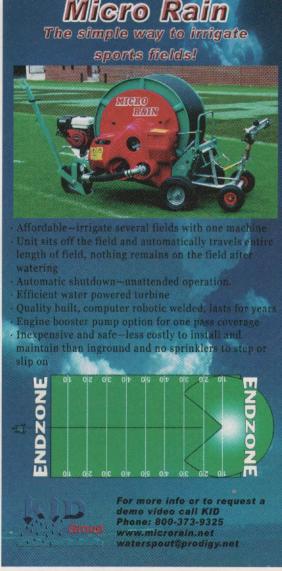


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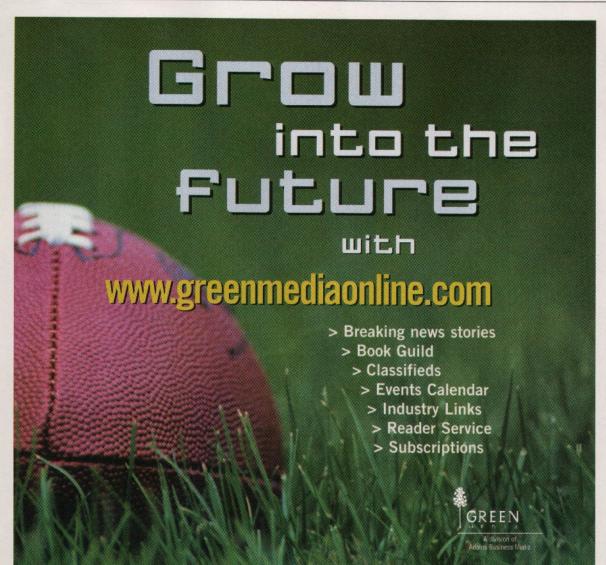
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Worms and mudcats

Right field has had a problem with "liquefaction" over the last year. Watering, aerification, topdressing, verticutting, and fertilization have been consistent through the entire field. In August we placed our infield rain tarp in the outfield from 7 PM until 8 the next morning. There were approximately 100 earthworms per square foot stuck to the underside of the tarp in the area that was covering the softest area of right field. Could the amount of earthworms be a factor in how soft that area is getting?

John Packer Jr. Director of Field Operations Carolina Mudcats/Florida Marlins Affiliate

ohn and I visited over the phone and I just received two core samples from his field today. We will run them for organic matter and particle size to determine how much water the rootzone will actually hold. The field was originally a "native soil" field with a high clay and silt content but through John's aerification and topdressing program it appears that he has incorporated at least an inch of sand into the top 3 inches by aerification.

John notes that sections of his field become very wet and lose stability. His description of "liquefaction" is very telling in that the field is soft to the point of making sunken footprints. The term "liquefaction" also makes me think of what earth contractors refer to as "pumping ground," that which moves up and down under foot or vehicle traffic. This type of "pumping ground" must often be left alone until it dries out and becomes solid enough to tread on.

High silt and clay contents hold large amounts of water and drain slowly leading to the "liquefaction and pumping" action of the ground. The aerification and sand topdressing is probably letting more water enter the surface three

inches but the silt and clay subgrade keeps both the subgrade and the surface 3 inches excessively wet. The earthworms are prolific because they prefer the continually wet conditions but they probably are not contributing to the wet or unstable condition.

In this case I would not be concerned with the worms nor would I try to control them. Earthworms typically provide a turf growing benefits such as soil aeration, aggregation, mixing, and topdressing from worm casts. I don't have a good explanation why they came out of the ground during your August covering of the outfield. Worms typically come to the surface to get oxygen





when soil becomes waterlogged.

I believe the aerification and sand topdressing should continue. Additionally, deep tine aerification with a vertidrain would help break-up the subgrade that was probably compacted during construction. The solid tine can fracture the subsurface and a hollow tine with sand topdressing and core removal will speed the transition from clay to sand. This approach is worth the effort but a more substantial fix is to place trench drains in the outfield to regulate both the surface and sub-surface water problem.

Since the clay subgrade seems to be the biggest problem I would be sure that drains are placed deep enough and close enough to regulate the water table in the field so that the subsurface does not stay saturated and cause water to stay too near the surface. Additionally, narrow sand trenches that range from 1-3 inches wide can be placed on 1 foot to 10-foot centers to provide rapid removal of surface water before it has time to settle into the clay subsurface. At the same time you may want to compare the cost of this type of retrofit drainage vs. the cost of a completely installed sand carpet system.

Could the worms be contributing to part of the problem with the field "liquefaction"? I don' think so . . . but from that fateful August night and under cover from rain the worms whispered their Mudcat advice . . . "lose the mud and win the game."

Have Questions?

Send them to Dave Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011, or email dminner@iastate.edu. Or, send them to Grady Miller at the University of Florida, PO Box 110670, Gainesville, FL 32611, or email gmiller@mail.ifas.ufl.edu.



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