### **ISSN 2158-124X** Sports Field Spring 2013 Managers Association of New Jerse Vol. 13, No. 1 P.O. Box 205, Pennsville, NJ 08070 • 856-514-3179 • www.sfmanj.org • e-mail: mail@sfmanj.org

## Somerset County Park Commission Wins 2012 SFMANJ FIELD OF THE YEAR

By Scott Bills, CSFM

The Sports Field Managers Association of New Jersey (SFMANJ) received two applications for 2012 Field of the Year.

The entrants included the Somerset County Park Commission, Torpey Athletic Complex, Softball Field, Somerville, NJ from David Kascinsky and the Northern Burlington County Regional School District, Varsity Softball Field from Bernard Luongo.

After personal interviews and visits to each field, the SFMANJ Board of Directors chose the Somerset County Park Commission, Torpey Softball Field entry by Dave Kascinsky as the 2012 Field of the Year. The Northern Burlington County School District, Varsity Softball Field was selected as runner-up.

In Columbus, NJ, not only have Don Czehut, Facilities Director and Bernard Luongo, Grounds Supervisor of the Northern Burlington County School District improved the main varsity fields, they have made great strides improving the safety and playability of all 27 fields under their care.

Several years ago, Don and Bernard asked Brad Park from Rutgers University to inspect their fields. After reviewing the results of soil samples, Brad recommended a turf management program that included cultural practices such as aeration and overseeding, plus scheduled application of nutrients required by the soil testing. In addition, maintaining a regular mowing schedule which includes returning clippings to the soil and keeping mower blades sharp, have improved the health of the turf. This season Bernard has begun using turf blankets on the stadium football field and wear areas on other fields to encourage faster turf establishment.

As a result of their efforts, Don and Bernard were confident enough to submit an application last year for 2011 Field of the Year for the varsity soccer field. During several conversations with Don and Bernard, I don't think either of them could have imagined having one of their fields meet the qualifications to be considered Field of the Year, much less two fields.

Continued on page 17



2012 SFMANJ Field of the Year: Somerset County Park Commission, Torpey Athletic Complex Softball Field managed by Dave Kascinsky

SFMANJ Spring Field Day **FREE ADMISSION!!** 

(Pre-Registration Required) Tuesday, April 2, 2013 RAIN OR SHINE Northern Burlington County Regional High School Columbus, NJ 08022

#### AGENDA

6:30 - 8:00	Vendor Registration and Set-Up	
7:30 - 8:30	Attendee Registration Trade Show Open (Breakfast)	
8:30 - 9:00	Opening Remarks and Host Introduction	
9:00-12:00	Equipment Demos / Education	
12:00 - 1:00	Vendor Introductions (Lunch)	
1:00 - 3:00	Equipment Demos / Education	
3:00	Closing Remarks / Distribution of Pesticide Credits	
Call 856-514-3179 for more info		

## The tools for all your grounds maintenance needs.

#### Providing quality turf equipment since 1914.

Toro is committed to creating the most durable and reliable equipment to help turf professionals work more efficiently. With a wide range of innovative, high-quality products to choose from, Toro has the right turf equipment and irrigation solution for your job.

> Storr Tractor Company Branchburg, NJ 908-722-9830



## Welcome! New and Renewed SFMANJ Members

Currently we have 149 new & renewed members. Sports Field Managers Association of New Jersey mailed invoices for 2013 membership dues to all current members. If you did not receive an invoice, please contact us at 856.514.3179 or download the membership form available at www.sfmanj.org. Mail membership dues direct to SFMANJ, PO Box 205, Pennsville, NJ 08070.

Daniel Andrus Carmelo Anguilla Anthony Barone Wayne T Barrett James Bedman Jr. Vincent Benenati Chuck Bergamo Mark Berry lames W Betts **Bob Beutel** Ed Biernacki Bernard F Bigley, III Louis Bosco **Jason Bowers** Steve Bradley Kevin S Brown Paul Bruni Joe Canzano Lou Carty Jr. Pete Caruso Fred Castenschiold James Chimento Bruce Clarke Ph.D. Mike Clifford Sean Connell John Coombs Norman Cromwell Jr. Leonard M Debuck Shannon Dech Nicholas W. Delmar William Dent Dennis Desanctis Sr. Bob Disko Jason Dittner Jeffrey Dorer Barry Draycott Theresa A Dunwiddie Frank Ennis Robert Erickson Lance Ernst David Ertle Edwin Esquilin Thomas | Fik PE, CME **Bill Foelsch** Peter Galosi John Gardner Scott Geier Brian Gjelsvik

Blair Academy Pine Hill Public Schools Down to Earth Landscaping, Inc. West Milford Board of Education Edison BOE Tenafly Board of Ed John Deere Landscapes/Lesco Turf Equipment and Supply Co Tuckahoe Turf Farms, Inc. Borough of Tenafly South River Board of Ed Manasquan Board of Ed Turf Equipment and Supply Co Hopewell Valley Reg. School Dist. Storr Tractor Co Seeton Hall University Delaware Valley Spray Service, Inc. **Rutgers University** Jersey Turf Inc. Levitt's LLC Storr Tractor Company IC Landscape Construction Mgmt **Rutgers University** Wilfred Macdonald Georgia Golf Construction, Inc. Coombs Sod Farms LLC Robbinsville Township Debuck's Sod Farm of NY, Inc. Hopewell Valley Reg. School Dist. **Rutgers University** Rancocas Valley Reg. H.S. Double 'D' Turf, LLC Somerset County Park Commission Somerset County Park Commission Morris Hills Regional District Tech Terra Environmental NJ Recreation and Park Association Caldwell-West Caldwell BOE City of Bordentown Turf Equipment & Supply Co, Inc. Ocean County Utilities Authority Princeton Recreation Dept Carroll Engineering Co. Morris Township Cinnaminson Board of Ed Tuckerton Turf Farm, Inc. Borough of Hawthorne Seeton Turf

Continued on page 5

### 2013 SFMANJ BOARD OF DIRECTIORS

#### OFFICERS

President	Matt Olivi, Piscataway BOE
Vice President	Fred Castenschiold, Storr Tractor Co.
Secretary	Scott Bills, CSFM, Sports Field Consultant
Treasurer	Sean Connell, Georgia Golf Construction

#### DIRECTORS

Ray Cipperly Middlesex Count	ty Vocational and Technical Schools
Brad Park	Rutgers University
Matt Pinkerton	Byram Township
Don Savard, CSFM, CGM	Salesianum School
Kevin Shipman	Kingsway Regional High School
Craig Tolley	County College of Morris
Mike Viersma	The Viersma Companies
Rich Watson	Pine Hills Public Schools
AdvisorDr. I	ames Murphy, Rutgers University
	Debbie Savard

#### **MISSION STATEMENT**

Committed to enhancing the professionalism of athletic field managers by improving the safety, playability and appearance of athletic fields at all levels through seminars, field days, publications and networking with those in the sports turf industry.

#### Contact us at: PO Box 205 • Pennsville, NJ 08070 Web site: www.sfmanj.org

Email: mail@sfmanj.org • Phone/Fax: 856-514-3179

National Organization Sports Turf Managers Association www.stma.org Email: stmainfo@stma.org • Phone: 800-323-3875

## INSIDE THIS ISSUE

Somerset County Park Commission Wins 2012 SFMANJ Field of the YearCover
New and Renewed SFMANJ Members
2013 Board of Directors
A Message from The President4
Easy Layout of a Women's Lacrosse Goal Crease
2013 Calendar of Events
A Student's Perspective on the 2013 Sports Turf Managers
Association Conference and Exhibition9
Photo Recap: STMA Annual Conference10
Soil Compaction In Turf
More from theNew Jersey Green Expo

This newsletter is the official quarterly publication of the Sports Field Managers Association of New Jersey.

For information regarding this newsletter, contact: SFMANJ at (856) 514-3179 or Brad Park at (848) 932-6327 Editor: Brad Park, Rutgers University, Email: park@aesop.rutgers.edu Layout and Design: Debra Savard, Email: debbiesavard@aol.com

SFMANJ does not necessarily support the opinions of those reflected in the following articles.

## A Message from The President



Several Sports Field Manager Association of New Jersey (SFMANJ) Board Members recently attended the National Sports Turf Managers Association (STMA) Conference

in Daytona Beach, Florida. Our New Jersey Chapter was once again well represented by both members and directors. Our Chapter Executive Secretary, Debbie Savard, was given an opportunity to share her perspectives on chapter building and outlined her role as an integral part of SFMANJ operations during the Chapter Officers Training Session. Debbie paved the way for the New Jersey Chapter to assume a leadership role in chapter building as we move forward. This year, SFMANJ was recognized on a national stage for its efforts



as we have maintained a cohesive membership, increased financial health, efficiently directed educational outreach and incorporated new technology to better serve our membership. I strongly believe that this is due to an increasing number of members and directors who are stepping-up and becoming more involved in chapter activities and operations. The Board of Directors has been receiving a great deal of feedback from the membership. This exchange of ideas has been instrumental in steering SFMANJ in the right direction. On behalf of the SFMANJ Board of Directors, I sincerely thank you for your contributions to our chapters' success.

We're clearly off to a great start this year and we want to keep that momentum going. SFMANJ will continue its annual tradition of sponsoring a Spring Field Day and Trade Show. This year's Spring Event will be held on Tuesday, April 2 and will be hosted by the Facilities Management Staff at the Northern Burlington County Regional School District. The Board of Directors jumped at the opportunity to showcase this well-maintained public school facility and give members and other interested attendees a chance to visit high quality playing surfaces. Sports Field Manager Bernard Luongo has made many efforts to improve the safety, playability and overall quality of the Sports Fields at this Facility by working closely with School Administrators and Management Staff. SFMANJ is happy to assist Bernard and Staff in coordinating several renovation projects that will further enhance the playing characteristics of these fields. The educational program will highlight effective methods of amending skin soil surface profiles, laser grading infield skins, topdressing and interpreting soil test results.

The program will then place emphasis on maintaining field improvements over long-term periods by demonstrating strategies used by professional groundskeepers. This will show attendees how to get the most for their money after investing in field renovation projects. School Groundskeepers are among those that continue to face the challenges of pest control at their facilities. The program will include an informative talk about some of the effective low-impact products that are available to field managers and grounds personnel to combat pests while still maintaining compliance with New Jersey School IPM laws. The key component of pest management on school grounds and all facilities alike is to maintain proper cultural practices for healthy turf. Academics from Rutgers and the County College of Morris will explain the theory behind such practices in their presentations. Speaking of challenges, one of the most difficult tasks a field manager may face is laying-out and marking women's lacrosse fields. You asked for it and now you have it. By popular demand, you will be able to learn some effective strategies for simplifying the mark-out process from a Certified Sports Field Manager. Be sure to join us for the Spring Field Day Event this year. It always proves to be a great event and all in attendance will be able to take some valuable new knowledge home with them at the end of the day. I look forward to seeing you there and catching-up with you. If you have any questions or concerns please contact us. We're here to help.

Matt Olivi is Sports Turf Manager, Piscataway Board of Education, Piscataway, NJ; and SFMANJ President



Georgia Golf Construction, Inc., 1441 Route 50, Woodbine, NJ 08270 www.georgia golfconstruction.com/609-628-2597/404-216-4445

## New and RenewedSFMANJ Members

Fred Goble Dennis Granahan Ken Griepentrog Bill Griffith Erik Hammerdahl George Herberger Alfred Hird Kevin Hoban Blake Hoerr Fred Hoge Gene Huelster Chris A Hustus Rich Kalish CTP Tom Karszen Fred Kendall Gerard Kerr Scott Klein David Kuczynski Dennis Kunkel Frank Lasasso Tony Leonard Tony Lepore CEFM John Lewless Adam Lieb Glenn Liebehenz Mike Linkewich Bernard Luongo Gerry Macfarlan Steve Magyari Kevin Malone CSFM Robert Manning Loren Martin Bill Mast Ron Matakitis Greg McCarty Raymond McDowell John McKnight Kevin Meredith CSFM **Jeffrey** Miles Mike Minard Tim Moore Evan Moorhead Eric Muentener James A Murphy Ph.D. Dennis Myers Art Neff Dick Neufeld Mike Nicotra Kurt Nilsson Kenneth O'Brien Carl Olivi Zach Owen Mark Ozoroski Brian Pardoe Bradley S Park Bradford Pastrick Tony Pavelec Ir Jeffery Peck Eugene Peer

Welcome!

Washington Township Dryject, Inc. National Seed Piscataway BOE Morris-Union Jointure Commission Ben Shaffer & Associates, Inc. **Collingswood Public Schools** Storr Tractor Co New York Jets CoverSports USA Grass Roots Turf Products, Inc. Lenabe Board of Ed Farmside Landscape & Design, Inc. **TDK** Landscapes City of Salem Board of Education Kearny DPW, Shade Tree Div Rancocas Valley Reg. H.S. Somerset County Park Commission Piscataway BOE Hammonton Board of Ed Philadelphia Eagles Kenilworth BOE Hopewell Valley Reg. School Dist. Borough of Florham Park No. Burlington County Reg. School Dist Seeton Turf Northern Burlington County Reg. School Dist Princeton Recreation Dept Princeton Recreation Dept The Landtek Group Inc. Piscataway Twp Board of Ed Terra Gro, Inc. Aer-Core, Inc. **Delbarton School** Moorestown Board of Education Princeton Recreation Dept US Athletic Fields, Inc. Sports Turf Specialists Inc. Fairliegh Dickenson University Turf Equipment & Supply The Lawrenceville School Princeton Recreation Dept Hopewell Valley Reg School Dist **Rutgers University** Ranney School Village of Croton-On-Hudson Plant Food Company The Turf Trade Turf & Dirt Mendham Borough - DPW Piscataway Twp Board of Ed Fisher & Son Co., Inc. City of Summit Turf Equipment & Supply **Rutgers University** North Brunswick Township Jersey Soil Blending, LLC Piscataway BOE Montville Township, Retired

Tanael Pena Phillip Pensinger A. Charles Perkins III Wes Perrine Ted Platz Marie Pompei Daniel Purner Ryan Radcliffe Charles Ramos Gerard Redmond Gina Reynolds-Palmerin Justin B Sadowski lames Saner Don Savard, CSFM, CGM Michael Schmalzer Joseph P Scullion Lance Seeton Michael Shanko Brad Simpkins Pete Smeretsky Dave Spence Blair Spencer Charles Steel Ben Stentz Brian Stephenson Ken Sutton Steven Ternosky Steve Thompson Craig A. Tolley Larry Toth lay Trstensky Walter Tucker Tom Tuttle Peter Van Drumpt Kyle Van Haasteren Barry Vansant Michael Viersma lack Warner **Rich Watson** leff Weld Bernie White Ryan Woodley

Continued from page 3

Morris Hills Regional District St Andrews School South Jersey Turf Consultants Greenpro Materials Plant Food Company F.M. Brown's Sons, Inc. Somerset Patriots Lakewood Blueclaws Ranney School Metuchen School District Borough of Oradell

Ocean Township Board of Ed Salesianum School Oak Knoll Princeton Recreation Dept Culti Pro Sports Turf Services Peddie School Plant Food Company T.E.S., Inc.- Transport Equipment Sales Piscataway BOE Burlington Twp Rec. Lindenwold Board of Education Princeton Recreation Dept Newark Academy Appoquinimink School District Morris Hills Regional District Aer-Core. Inc. County College of Morris **Rider University** Delaware Township Retired Davisson Golf, Inc. Dryject, Inc. Delaware Valley College National Seed The Viersma Companies Township of Freehold Pine Hill Public Schools Bayer Wilfred Macdonald Trenton Thunder

### <u>Save the Date!</u> SFMANJ Spring Field Day Tuesday, April 2 Northern Burlington County Regional High School

Columbus, NJ 08022

FREE ADMISSION!! (Pre-Registration Required) Free Breakfast and Lunch Trade Show / Demos / Pesticide Credits Call 856-514-3179 For More Info

## Easy Layout of a Women's Lacrosse Goal Crease

By Don Savard, CSFM, CGM

The Women's Lacrosse field configuration is probably the most challenging field marking layout. It involves straight lines, circles, arcs and 90° and 45° angles. The official NCAA rulebook directions can be confusing, especially when the units of measurement for the field and the crease use feet and inches, yards and meters- all on the same field layout! The drawings provided in the rulebook are appear cluttered and are hard to understand. Here is a simplified approach.

Before you begin, obtain a metric tape measure that shows centimeters. This means that you will be laying out this field in metric. It might seem strange at first, but remember that these are just units of measurement. Metric is perfectly acceptable and you will not have do any math conversions.

- First, establish the rectangle field with string lines. Women's Lacrosse, like a soccer pitch does not have one official length and width dimension. The rectangle will be between 101-128 meters long on the side lines and 55-64 meters wide on the end lines. After you have made sure the rectangle has squared corners, paint the rectangle with a solid line.
- 2. Make the center circle. Locate the point at the center of the field where the center circle will be made. Do this by intersecting 2 string lines perpendicular to each other from the middle of both end lines and both sidelines. From the point where the 2 perpendicular string lines intersect, make a 9 meter radius and paint the center circle. On the string parallel to the end lines paint a solid 3 meter line centered in the circle.

Leave the string line that runs the length of the field because you will use it in step 5. Roll up the string that connects the 2 sidelines because you will use it in step 4.

- The goal lines are parallel to and 9 meters from the end lines. Mark the goal line with flags on both sidelines and repeat this procedure on the other end of the field. Do not paint the goal lines yet.
- Now,make the restraining line. From each flag, measure and mark 27 meters down the sideline towards the center of the field. Connect the



Illustrations by Debbie Savard

marks with a string line across the field parallel with the end line. Paint a solid line. Repeat this procedure on the other end of the field.

5. Now, create the crease areas. Starting at one end of the field, run a string line to connect the goal line flags. It shall be parallel to both the end line and the restraining line. It will intersect the string line running the length of the field (connecting the midpoints of both end lines). The center of the goal line at the point where the 2 strings intersect. Make a mark on the center point.



The center point of the goal line is the center point for the goal circle, the 8 meter arc and the 12 meter fan. The goal circle, 8 meter arc and the 12 meter fan will be concentric to each other.

- 6. Mark out the goal circle using a 2.6 meter radius starting from the center point. With the center of the field at your back, consider the circle to be like a compass, (see illustration above) where North is at the top, South is closest to you, West is on your left and East is on your right. If the circle is correct, paint it.
- 7. Mark out the 12 meter fan using a 14.6 meter radius starting from the center point and moving from West to South to East (The fan is 12 meters from the circumference of the goal circle and the goal circle radius is 2.6 meters from the center point). Paint the semicircle fan and the straight lines either side of the goal circle leaving the goal circle empty except for a line which will be painted within the goal cage between the upright poles of the goal structure.

The 8 meter arc causes confusion for many people. The arc itself is concentric to the goal circle and the 12 meter fan, but there are 2 sector lines that emanate at 45 ° angles from a point at the top of the goal circle which we consider as north.

Continued on page 12



Turface Athletics' involvement in the game has run deep for the last 50 years. We've teamed up with grounds crews across the nation over the decades to provide safe and playable fields at every level of play. We are dedicated to providing meaningful industry support focused on responsible field education and consistently delivering the best products in the industry.

Celebrate with us and you can win all year long! Visit www.turface.com/50years.





The #1 Conditioner on America's Most Playable Fields

Go to www.sfmanj.org to download SFMANJ registration information







The Landscape Industry's Leading Plant Health Care Wholesale Products

## Control Weeds within the NJ School IPM Regulations!



NEW 2013! Introducing ADIOS A Low Impact Pesticide.

Selective post-emergent for broadleaf weeds and crab grass!

www.techterraenvironmental.com

## 2013 CALENDAR OF EVENTS

#### NJ School Buildings & Grounds Conference/Expo

March 26-27, 2013 Trump Taj Mahal Atlantic City, NJ www.njsbga.org

SFMANJ Spring Field Day April 2, 2013 Northern Burlington County Regional High School Columbus, NJ www.sfmanj.org 856.514.3179

Rutgers Turfgrass Research Golf Classic May 6, 2013 Fiddler's Elbow Country Club Bedminster, NJ 973.812.6467 www.njturfgrass.org

Rutgers Turfgrass Research Field Days July 30-31, 2013 973.812.6467 www.njturfgrass.org

> New Jersey Green Expo December 10-12, 2013 Trump Taj Mahal Atlantic City, NJ 973.812.6467 www.njturfgrass.org

Be sure to return your REGISTRATION RENEWAL by April 1, 2013 to continue receiving your copy of Update and other SFMANJ information



## A Student's Perspective on the 2013 Sports Turf Managers Association By Erik Taylor Conference and Exhibition

The Rutgers Turf Club would like to thank Rutgers University, Sports Field Managers Association of New Jersey (SFMANJ), and Sports Turf Managers Association (STMA) for making our visit to Dayton Beach, Florida to attend the 2013 STMA Conference and Exhibition possible. Without these organizations we would have not had the opportunity to experience the National Conference and Student Challenge that we enjoy taking part-in to represent the wonderful program here at Rutgers University as well as the State of New Jersey in which we call home.

The Rutgers Turf Club sent two teams of four students to compete in the Student Challenge. We also attended the education sessions and industry trade show. The conference was a great way for students interested in pursuing careers in sports turf to network and interact with many in the industry. Five students were first-time upperclassmen attendees and will be able to compete and attend again in the future. We believe that the STMA Conference allows for wonderful student activities and networking potential as well as an additional tool for those who have a chance to attend the Golf Course Superintendents Association of America (GCSAA) conference later in the semester in which a blend of the experiences learned from sports turf and golf maintenance can be applied to further research for the industry.

Our first day was not limited to travel. We were able to arrive in Daytona Beach and have time to sign-in and attend the Student Networking Session along with the Welcome Reception which had a great keynote speaker this year.

Over the next few days we attended many talks that were specifically designed for students. One session entailed two professional sports field managers and an international university professor. Darian Daily from the Cincinnati Bengals was one of the many sports field managers from the pro level to parks and recreation level that attended the conference and gave a wonderful talk. Darian gave a presentation titled, "The 'Real' Story of Being an NFL Sports Field Manager." During his presentation he spoke of his journey that we all will soon make and how he ended-up with the Cincinnati Bengals. He also detailed many of the daily activities a sports field manager performs. His presentation described how one must continue to learn and speak to people to be well informed beyond graduating. Other professional sports field manager, Luke Yoder and John Turnour, gave presentations titled, "What it Takes to be an MLB Field Groundskeeper." Throughout his speech he described his daily activities. It was very good to see how three professional managers in different sports share similar ideas and tactics to ensure high performance fields. Dr. Jason Kruse also gave us a wonderful speech about how students should take their first steps into the sports field industry. He simplified the steps of working in the industry and the steps it takes to work your way up the competitive ladder in providing high quality athletic fields which in turn lead to high quality performance.

One of our favorite sessions of the trip was the talk on the New Trends and Technology in Sports Turf ". This talk allowed many to hear about the technological innovations of the new modern era in the sports field industry. We got to here from companies like Bulldog Field Equipment, Xtreme Turf Makeover, Wiedenmann North America, Performance Nutrition, PICKSEED, and Campey Turf Care Systems. Many of these companies are growing, which is a sign of our ever-evolving industry and the many contributions that can be made to it.



The trade shows allowed for students to see companies and meet people from those companies that fuel the sports turf industry. These are the people that help make our profession a reality. Talking to these companies and seeing new products is one of the most exciting aspects every year.

A primary reason for us going to Daytona Beach was to compete for our school in the Student Challenge. We competed against over 30 teams and placed 6th which consisted of (Kyle Genova, Nick Delmar, Kenneth Macnish, and Erik Taylor). Our other team of (Greg Benz, Henry Qu, Tyler Astor, and Jason Sun) also did well placing 13th out of over 30 teams. Scores were very close and we were pleased with our performance. The Student Challenge exam is made-up of multiple choice, short answer and identification that include turfgrass, weeds, insects, diseases, soils and equipment parts. The Turf Club is eager to get back to STMA in 2014 and compete again for Rutgers.

Once again we would like to thank Rutgers University, SFMANJ, STMA, and Rutgers Turf Club for enabling us to attend. It is always an honor to be able to represent our university, turf program, and all the people we are lucky enough to work beside and learn from. Thank you!

Erik Taylor is Undergraduate Student, Rutgers University; and 2013 STMA Student Challenge Team Member representing Rutgers University





#### OUR REPUTATION ....

The Viersma Companies are family owned and operated and we stand behind our reputation for quality workmanship with every job we do. We have been in business for over 45 years and believe that service and reliability are key to our success. We are more than willing to accommodate to meet your needs!



#### **OUR SERVICES...**

- Aerification
- Overseeding
- Topdressing
- Laser Grading
- Waterwick <sup>®</sup> Turf Drainage System
- Drainage Installation & Repair
- Infield Renovations & Construction
- Field Renovations
  & Construction





Sports Field Managers Association of New Jersey

Welcome Reception

# Daytona Beach, Florida January 15-19, 2013

by Debbie Savard

Awards Banquet

## **Avoid Costly Rainouts... COVERMASTER™ RAINCOVERS**

are also readily available.

COTS Meeting

## The COVERMASTER® Advantage...

- · Lighter weight, superior strength, easier to handle
- Shield Tek<sup>™</sup> coating technology for greater durability
- Outstanding heat reflective properties

COTS Meeting

- · Raincover graphics available
- · Largest choice of weights and colors

## **TARP MACHINE VIDEO!** Call, fax or e-mail for a free video, material samples and a brochure.



SPORTS STADIUM MANAGERS **SportsTurf** TARP MACHINE™ lets you roll TARPMATE™ roller comes in 3 Covers for football and soccer fields

the cover on and off in minutes.

lengths with safety end caps.

Call Toll Free: 1-800-387-5808 Intl: +1-416-745-1811 • FAX: 416-742-6837 E-mail: info@covermaster.com www.covermaster.com © 2013 Covermaster Inc.



**UPDATE Spring 2013** 

## **Easy Layout of a Women's Lacrosse Goal Crease**

- 8. Make the sector lines of the 8 meter arc. Beginning at the top of the goal circle, on the point we consider North (where the circle intersects the string line), make a straight sector line through the point that intersects East (where the circle intersects the string line) and stop at 12.25 meters and make a mark. Paint the sector lines from the circumference of circle to the 12.25 meter mark, leaving the interior of the goal circle unpainted. Repeat the procedure on the other side of the goal circle with a sector line from North through West.
- 9. Make the curve of the arc. From the center point of the goal circle, make a 10.6 meter radius and swing an arc connecting the 2 sector lines. (The arc is 8 meters from the circumference of the goal circle and the goal circle radius is 2.6 meter radius from the center point). Paint the arc between the sector lines. The arc from the sector lines to the goal line is not painted.
- 10. Make the hash marks along the 8 meter arc. Where the string intersects the 8 meter arc, mark a perpendicular line 30 centimeters (or .3 meters) intersecting the arc. On one side of the crease, from that first mark, measure 4 meters away and make another 30 centimeter mark perpendicular to the

arc and repeat 2 more times, the last mark not actually on the painted arc, but on the path of the arc. Where the 8 meter arc would intersect the goal line make a 30 centimeter line perpendicular to the goal line. Paint these marks. Repeat on the other side of the crease.

- 11. Make another crease on the opposite side of the field.
- 12. Mark the scorer's/timer's table, substitution, and bench areas. The scorer's/timer's table is located midfield 4 meters back from the side line. The substitution area is 4.5 meters away from either side the midpoint of the sideline. Make two 4 meter marks, connected to and perpendicular to the sideline. The team bench area is located from the end of the substitution area to the team's restraining line and behind the level of the scorer's table extended.
- On the opposite side of the field, mark the spectator line 4 meters away from and parallel to the sideline.

Don Savard is a Certified Sports Field Manager (CSFM) and Certified Grounds Manager (CGM); Director, Athletic Facilities and Grounds, Salesianum School; and a member of the SFMANJ Board of Directors.



Clean, Safe Products Manufactured For The Ultimate Plant Health Perfectionist.

## SOIL COMPACTION IN TUR

Editor's Note:This article first appeared in the Winter 2012 issue of Turfgrass Times, a publication of the Alabama Turfgrass Association By Dr. Beth Guertal and Dr. Dave Han

The effects of traffic and compaction in turf are usually easy to see: thin turf, worn paths, areas of bare ground that do not respond to applications of fertilizer or water. Turfgrass growing in compacted areas has shallow rooting, causing greater susceptibility to drought and other stress. The soils in compacted areas have low air porosity and reduced infiltration. Such compaction is most likely to occur in fine-textured soils (those with a higher clay content), but over time all soils are susceptible to compaction.

Turf managers know that one key to correcting soil compaction in turf is aerification. Aerification is performed using a wide range of equipment which drills, slices, spikes, punches or water-injects the turf and its underlying soil to various depths. Sometimes the equipment removes a plug of turf, and sometimes it only cuts a slit or punches a hole. With some equipment there is the additional benefit of a small amount of thatch control, as the slicing or core removal also removes some thatch. Regardless of the exact piece of equipment used, almost every turf manager has a piece of aerification equipment in their shed.

Factors affecting the effectiveness of aerification include soil wetness, tine size, depth of aerification, soil texture, aerification frequency, and equipment type. Turf aerification research is somewhat difficult to perform. Studying soil compaction requires large plots, uniform areas of compacted (and non-compacted) turf, and possibly many different pieces of equipment. Additionally, collecting the data required to show treatment differences requires intensive sampling and a lot of labor. Typical data collected from compaction studies may include soil bulk density, soil penetrometer resistance, surface hardness, water infiltration, shoot density, and root length or weight. The objectives of this article is to provide explanations of the type of data collected in turf compaction experiments, and to discuss some past and current turfgrass compaction research.

## Things we measure in turfgrass compaction experiments

#### Soil Bulk Density

Bulk density is defined as the mass of a unit volume of dry soil. To collect a bulk density reading a sample of known depth and diameter (typically 6 inches deep and 3 inches in diameter) is removed from the soil. The soil sample is dried and weighed and the bulk density is expressed as the mass per volume (grams per cubic centimeter). As the soil is compacted the bulk density increases, because more soil particles are forced into a smaller volume and soil pore space is reduced. Sandy soils typically have a higher bulk density than soils high in clay or loam, because sandy soils have few of the very small pores associated with fine-textured soils that have clay and organic matter. Additionally, sandy soils that contain sand in a range of sizes (as is a typically sand-based putting green) are already tightly packed, as smaller sand grains fit in between larger.

Typical bulk densities for clay and silt loam soils may range from 1.0 to 1.5 g/cm<sup>3</sup>, while the bulk density of sand-based soils may range





A Remik CP-20 cone penetrometer was used to measure the resistance of soil to the insertion of a probe.

#### Hydraulic Conductivity

#### Soil Penetrometer Readings

A soil penetrometer is a device used to measure the compaction of the soil. What is actually measured is the resistance, or amount of pressure needed to push a tipped rod through the soil. The rod tip is equipped with a load-sensing cell, and the soil strength is recorded as the tip is pushed down through the soil. Soil penetrometers used for research are very sensitive, and require some practice to use correctly to obtain accurate measurements. They are also very expensive (~\$6,000.00).

Hydraulic conductivity is the ease with which soil transmits water. In turfgrass what we often measure is the saturated hydraulic conductivity, which occurs when all soil pores are filled with water.

Saturated hydraulic conductivity is typically measured using a double ring infiltrometer, which consists of two metal rings (one around 12 inches in diameter and the other around 18 inches), with the smaller placed inside the larger. Water is added to both rings until a height of water is maintained for a period of time, which indicates that the underlying soil has become saturated. The drop in the height of water inside the smaller ring during a given period of time is used to calculate the saturated hydraulic conductivity, which

is reported in units such as inches per hour. Small-diameter (6 inches) infiltrometers can be purchased from many turf supply catalogs. The intended use of these units is to provide turf managers the ability to measure infiltration rates of their turf soils quickly, and directly in the field. Because research has shown that double-ring infiltrometers with an



A double ring infiltrometer was used to measure infiltration rate of water into the surface of the soil on a putting green.

Continued on page 15



inside ring diameter of at least 12 inches produce the most accurate measurements of water infiltration, the accuracy of 6 inch diameter rings is a concern. A 1991 research study by D.H. Taylor compared single and double-ring infiltrometers with inner-ring diameters of 6, 8 and 12 inches on a variety of turf areas, from golf greens to football fields. They found that infiltration rates varied widely within each sampled turf area, even when the largest diameter rings were used. The conclusion from their work was that infiltration rates measured with ponded water should be used only as a rough estimate, and results should be used with caution (Taylor et al., 1991).

#### Clegg Impact Readings

Typically used to measure the hardness of a turf surface, the Clegg hammer calculates the hardness of a surface based on its reaction to a weight dropped on the surface from a consistent height.

A diagnostic tool for discovering differences in surface hardness due to aerification treatments, work has also started on calibrating Clegg hammer readings to field hardness or softness. For example, a survey of 24 high school athletic fields had Clegg values that ranged from 33 to 167  $G_{max}$ . For comparison, a tiled concrete basement floor had a  $G_{max}$  reading of 1280, which was reduced to 260 when the floor was covered with a carpet pad (Rogers et al., 1988). In another study, compacted Kentucky bluegrass plots had a value of

206  $G_{max}$ , while plots that were not compacted had a value of 93 (Rogers and Waddington, 1992). A survey of college and professional soccer players compared their perceptions of soccer fields that had been used to collect Clegg data. Typically, fields with a hardness reading between 90 and 120  $G_{max}$  could not be differentiated by players (Miller, 1999).

#### The Research

Our previous work at Auburn University found that aerification was less likely to have an effect in noncompacted soils as compared compacted. We looked at the effects of using a deep, hollow tine aerifier (8 inch deep, 3/4 inch diameter) at two locations: a heavily trafficked and compacted marching band practice field, and a lightly trafficked field at the Auburn University Turfgrass Research Unit.

At the heavily-trafficked site, every additional core aerification in a given year decreased soil resistance. This was not the case at the lightly compacted site. Only one aerification was need in a given year to produce a significant reduction in soil resistance. At the heavily trafficked site, the effects of deep-tine aerification usually lasted about three weeks. This supports the conclusions of previous workers that frequent aerification might be needed on compacted sites. However we did not evaluate the effects of different equipment (e.g. tine depth, solid vs. hollow tine) on compaction in



trafficked turf. We also wondered if continuous aerification would allow a compacted layer of soil to form at the bottom of the tine working depth. These "aerification pans" can form over time from the effect of tines pressing down on the soil below the level where they actually penetrate and remove soil.

This research examined three different pieces of equipment (a pullbehind aerifier, a GA-60 standard tine aerifier, and a Soil Reliever deep tine aerifier) using both solid and hollow tines. Plots were aerified four times per year and traffic was artificially applied with a heavy roller to induce compaction. Compaction was evaluated by measuring soil resistance to a soil penetrometer at depths down to 12 inches.

The equipment used has a large effect on the amount of compaction relief and where it occurs. The deep tine aerifier (eight inches deep) reduced soil resistance when either solid or hollow tines (5/8 inch diameter) were used. The standard tine aerifier (four inches deep) often produced a significant reduction in resistance when hollow tines (5/8 inch diameter) were used.

The deep tine aerifier reduced soil resistance from 3.5 to 7.6 inches, but did not reduce compaction in the top 3.5 inches. The standard tine unit did reduce resistance significantly in the top three inches, but had no effect deeper in the soil.

The long term effects of continued aerification with a standard tine unit fitted with solid tines (5/8 inch diameter) for three years in a row were assessed. At a depth of 2.3 to 5 inches, there was significantly more resistance compared to non-aerified plots. This indicates that a layer of compacted soil (known as a "pan" or "aerification pan") had developed near the bottom of the tine stroke. This illustrates the need for periodic deep tine aerification to avoid this problem. The pan of compacted soil was less severe when hollow tines were used, but still could build up over time.

When the surface hardness of the turf was measured using a Clegg hammer, all forms of aerification produced a softer surface at least for one week after treatment The standard tine aerifier with hollow tines tended to produce the softest surface.

#### Conclusions

- Compaction of turfgrass soils lowers the percent macropores in the soil a decrease in macropores limits soil aeration, which hurts root growth.
- Core aerification, especially solid tine, may not help eliminate thatch.
- Effects of aerification in heavily trafficked soils may be shortlived (~ I month).
- Diagnostic techniques for detecting compacted soils, such as infiltration measurements or soil penetrometer readings, are widely variable, even across supposedly uniform surfaces such as a putting green.
- Compacted "pans" develop over time at the bottom of the tine's penetration into the soil, especially when using solid tine equipment.
- Deep tine equipment is more effective at reducing soil compaction at depths below 2.5 inches.

Dr. Beth Guertal is Professor of Agronomy & Soils, Auburn University, Auburn, AL; and recipient of Sports Turf Managers Association's Dr. William H. Daniel Award for 2012; Dr. Dave Han is Associate Professor of Agronomy & Soils, Auburn University, Auburn, AL.



Lean on us for some of your business demands - we know we can work harder for you. This is why we've implemented the Partners Program and Business Solutions, and the Px3 Maintenance Package.

Px3 helps you with the planning process by providing customized bids for each project. We can accurately estimate the square footage of any property.

Customers who join our Partners Program earn points on every John Deere Landscapes purchase and redeem those points at an online store, for various industry events, or for cash on account. Program members are also eligible for our Business Solutions, which can help reduce your day-to-day business expenses.

Please contact your local branch to learn more about these opportunities. We are eager to help you with as many of your business challenges as possible!



800-347-4272 www.JohnDeereLandscapes.com

## More from the New Jersey Green Expo: Turf and Landscape Conference 2012 December 4-6, 2012 Atlantic City, NJ

by Debbie Savard



**Sports Field Managers Association of New Jersey** 

## Somerset County Park Commission Continued from front cover Wins 2012 SFMANJ FIELD OF THE YEAR



SFMANJ member Glenn Liebehenz is Grounds Manager at Northern Burlington County Regional High School, site of the 2013 SFMANJ Spring Field Day.

The North Burlington County Regional School District should be proud of Don and Bernard, their efforts and more importantly, their results. In a time when all we hear about are budget issues and we don't have enough manpower, Don and Bernard have been able to improve 27 fields.

Due to their efforts, Northern Burlington County Regional School District has been chosen as the site for the SFMAN Spring Field Day. The all day program will include a trade show, equipment demonstrations, baseball field laser grading, infield skin surface amending, pitcher's mound and home plate re-construction, demonstration of cultural practices such as aeration, topdressing and overseeding, educational talks from Brad Park and Craig Tolley, plus DEP credits.

The SFMANJ congratulates Don and Bernard for being runner-up for 2012 SFMANJ Field of the Year.

Dave Kascinsky from the Somerset County Park Commission was the Field of the Year winner in 2010 for the Torpey Athletic Complex Baseball Field and co-runner up for the Softball Field in 2011. It was not a surprise to anyone who knows Dave that he re-submitted the Softball Field for 2012 Field of the Year. Dave has transformed both the softball field and baseball field into very playable surfaces that are perhaps two of the best public ball fields in New Jersey. Both fields have natural turf, with the baseball field having a grass and skin infield and the softball field being all skin. Dave credits his years working with Ray Cipperly and Dan Purner at TD Bank Ballpark, home of the Somerset Patriots with giving him the skills and confidence to become a superior sports turf manager. When asked, Dave still helps at TD Bank Ballpark.

In addition to both ball fields, which have lights, Dave is also responsible for a lighted all-purpose synthetic field. From late April until late October, Dave estimates 25-30 ball games are played 7 days a week, on his two fields.

Like many experienced groundskeepers, Dave performs much of the infield grooming by hand. His pre and post- game routine, learned at TD Bank Ballpark, includes making sure all displaced infield mix is swept from the grass to prevent lip build up. Dave will then make sure the pitcher's mound and home plate area are leveled with moistened clay and compacted. If no games are scheduled during the day, Dave keeps tarps these areas to retain the moisture in the clay.

This past season, Dave amended the existing infield skin surface and had irrigation installed on the softball field.

The existing infield skin surface material was high in sand and silt content. Dave wanted to create a surface similar to that of TD Bank Ballpark. The goal was to drop the overall sand content by 8-10% and raise the clay content so the silt to clay ration was less than 1. The result was a material that resisted migrating into the grass lips and had the ability to absorb more water without eroding.

The new irrigation system allowed Dave to manage moisture within the new skin surface and surrounding turf.

The SFMANJ congratulates Dave Kascinsky and The Somerset County Park Commission for winning the 2012 Field of the Year award.



SFMANI member Bernard Luongo is Lead Grounds Manager at Northern Burlington Regional High School, site of the 2013 SFMANJ Spring Field Day. Continued on page 18

Continued from page 17



The well-maintained Girls Softball Field at Northern Burlington County Regional High School, site of the 2013 SFMANJ Spring Field Day

The SFMANJ Field of the Year program recognizes the efforts of member sports turf managers throughout New Jersey. Applications for the 2013 Field of the Year are due by the end of October 2013 and are awarded at the NJ Green Expo in Atlantic City, NJ in early December. In addition to a plaque, the winner will receive a complimentary registration to all education sessions, the two day trade show, dinner and one nights lodging at Trump Taj Mahal.

If you have any further questions regarding the program please feel free to contact the SFMANJ office.

Scott Bills is Certified Sports Field Manager (CSFM); Sports Field Consultant; and SFMANJ Secretary and Public Relations Committee Chairman

## HAVE YOU CHECKED-OUT OUR WEB SITE LATELY?

Check our <u>Events</u> page for upcoming events and pictures of past SFMANJ functions.

- Check our <u>Resources</u> page for past issues of our Newsletter Update, Minutes from past Board Meetings, links to useful information and job postings.
- Check our <u>Contact Us</u> page for direct links to all of the Board of Directors. Call us with any questions or comments.
- Check our <u>Vendor</u> page for interactive links to our advertising vendors' web sites and a complete list of all our vendors. Call them first! They are happy to answer any questions.



### Visit our web site: WWW.Sfmanj.org

## NATIONAL SEED PROFESSIONAL TURF PRODUCTS

Specializing in Quality Grass Seed to Meet All Your Turf Performance Standards

Call for a Catalog

## 800-828-5856

Carrying a full line of quality mixtures especially formulated for:

### SPORTS AND ATHLETIC FIELDS

LOW MAINTENANCE AREAS GENERAL GROUNDS GOLF, LAWN AND RECLAMATION

Technical Agronomic Support and Custom Blending Available





Your grass will be greener and thicker, sooner with CoverSports FieldSaver<sup>®</sup> Winter Turf Blankets/ Growth Covers.

We've got you covered all year long! Protect turf from harsh winter conditions! Promote faster spring growth and green-up!

- 8 Year Limited Warranty
- Heavy 100% woven polypro fabric
- Reinforced hems and grommets all edges



<u>J</u>



The results were incredible.... Paul Heron, Grounds Supervisor,

Unionville-Chadds Ford School District, PA

-24 -7

SoorteTur

#### SportsTurf

For price quotes, sizes and fabric specs, visit www.CoverSports.com • sales@coversports.com • 800-445-6680 We make covers for all athletic surfaces: Rain Covers, Sideline Tarps, Track Protectors



Dennis DeSanctis, Sr. Monroe Twp., NJ dennisdturf@aol.com

RF, LL

Drill & Fill Deep Tine Aeration Galaxy Turf Tires Athletic Field Aeration

**UPDATE Spring 2013** 



P.O. Box 205 Pennsville, NJ 08070





SportsTurf Managers association

Experts on the Field, Partners in the Game.

Or Current Occupant

