

Making It Work - Whatever – Whenever

Highlights from recent STMA Chapter Meetings

Making it work - whatever, whenever, is a common theme for sports turf managers, whether it's whipping fields into playable condition despite difficult weather and heavy use, or putting together a dynamite meeting.



Great Plains: STMA, Wichita, KS

Working smarter is essential for success in today's fast-moving envi-

ronment. Gathering the knowledge, tech-

niques and tools to do just that, through meetings and workshops, is the major function of local and regional STMA Chapters - and forming Chapters.

These are hard working sessions often combining a wide-ranging group of activities: classroom-type education sessions, hands-on demonstrations of maintenance practices, tours of the host facility, and an exhibitor's booth visitation period and/or demonstration time.

Networking a Highlight of Wichita Workshop

After two snow cancellations, the Great Plains Sports Turf Managers Association got a break in the El Nino weather pattern and was able to hold their Field Preparation and Maintenance Workshop on April 23rd at the Linwood Recreation Center in Wichita, Kansas.

A combination ice-breaker and headstart on networking opened the Wichita meeting with each individual "pairing off" with someone they didn't know. These pairs exchanged names and details about their facility and their position. Then, moving around the room, rather than introducing themselves, each of the 34 atten-

dees introduced their new acquaintance to the group.

Highlighting each meeting are similar networking opportunities, those

meet, greet and share sessions that not only provide you with ideas you can take home and put to work, but

which also give you the connections for the give and take of the

long-term information exchange. Networking

is the basis for those times when a quick phone call or note sent over "the net" helps you sort through the options of problem-solving or gives you back-up support for an idea or procedure you want to use. You learn from the shared successes – and mistakes – of others and pass along similar information of your own.



STMAAZ, Chandler, AZ

The Field User's Perspective a Highlight of Colorado Chapter Seminar

Eighty-four people braved a 10-inch snowfall to gather at the United States Air Force Academy's Falcon Stadium Press Box in Colorado Springs for



CSTMA, Colorado Springs, CO

continued on page 15

Proud to Support STMA

TORO

It's about playability

SPORTS TURF MANAGER

Official Newsletter of the Sports Turf
Managers Association
1375 Rolling Hills Loop
Council Bluffs, IA 51503-8552
712/366-2669, 800/323-3875
(FAX) 712/366-9119
(e-mail) TrustyTips@aol.com
(world wide web)
<http://www.aip.com/STMA>



Volume XVI Number 3
May/June 1998

OFFICERS

President

Stephen H. Guise
Marina Landscape, Inc.

President-Elect

Rich Moffitt
Saint Louis University

Commercial Vice President

Bob Curry
Covermaster Inc.

Secretary

L. Murray Cook
Disney's Wide World of Sports™ complex

Treasurer

Bob Patt
Thurman Munson Memorial Stadium

BOARD MEMBERS

Tom Burns

Texas Rangers Baseball Club

Bob Campbell

University of Tennessee

Mary Owen

University of Mass. - Extension

Tim Moore

M-NCPPC

Lynda Wightman

Hunter Industries

Immediate Past President

Mike Schiller

Rolling Meadows Park District

NATIONAL HEADQUARTERS

Executive Director

Steve Trusty

Support Staff

Suz Trusty

NEWSLETTER EDITOR

Stephanie Gamache

Trusty & Associates

TECHNICAL EDITOR

Dr. Gil Landry, Jr.

The University of Georgia

Sports Turf Manager is a publication of Sports Turf Managers Association (STMA). It is published bi-monthly and is free to STMA members. Sports Turf Managers' goal is to promote the mission of the association by providing a channel for communication between the representatives of the board and its constituency. STMA is not responsible for the opinions expressed in this publication. Address changes, advertising, photographs, and editorial inquiries should be directed to the executive offices. © 1998 Sports Turf Managers Association. All Rights Reserved.

President's Message

Making Do With What We Have

by Steve Guise, President

As I reviewed this newsletter, a general theme hit me. It seems at least in my little world, that sports turf managers are constantly "making do with the time and resources available to them."

As you read through our chapter updates, consider the struggle and energies it takes to bring each of these chapter boards together to discuss their local events and membership services. It takes time to arrange a date to meet that fits everyone's calendar. I know our national Board of Directors meetings dates can only be decided after reviewing 3 to 4 separate weeks until we reach a majority consensus on a "workable" time.

Even more complex is working out the arrangements and all the details for Chapter events – and then doing everything it takes to make them happen successfully. Remember, each board member and all the other chapter volunteers are just as involved in their own job responsibilities as you are with yours. So, please, take a minute to say thanks to those in your chapter who are devoting the time and effort to keep things running and are helping to raise the level of professionalism throughout the industry. And, offer to lend a hand. As always, the more you give – the more you get.

It's great to continue to read Dr. Kurtz's column to better understand the past of the STMA. Again, we owe a debt of gratitude to all those who had the foresight to envision the need for an organization of sports turf managers, and the determination and commitment to get the ball rolling and keep things together during those formative years. It's never too late to say THANKS!



Steve Guise

Grady Miller's article keeps with the theme of "making do with what we have" by discussing the use of effluent water for sports turf applications. I can tell you, that if the use of gray water is not a standard practice in your town, and you are working in the southern half of the US, it will be a standard option in the near future.

For those of you that have not heard, Bob Campbell, board member from the University of Tennessee, had open heart surgery a few weeks back and is on his way to recovery. I've been told that the University has installed a 12 foot fence around his stadium in order to keep him away during his recovery stage. All of you who know Bob, know that it will take more than five bypasses to keep him away. We all wish Bob a fast and complete recovery so that he can again prepare the fields for future NFL number one draft picks to play on.

I wish all of you a prosperous and safe spring season and don't forget to help out the less fortunate groundskeepers in your community.

Employment Opportunities!!

Pima County (AZ) Parks & Rec. has an opening for a Complex Supervisor for Tucson Electric Park.

The **Milwaukee Brewers and Nashville Sounds** are always willing to talk to those interested in internships.

For more information on these openings contact STMA Headquarters at (800) 323-3875 OR call the Jobs Hotline at (712) 366-1145.

How Do You Do...?

The Question -- How Do You Schedule Chemical Applications to Avoid Interference with Field Use?

Answered by Dale Getz, Athletic Facilities Manager, University of Notre Dame (IN)

Managing sports turf is a TOUGH JOB. As sports turf managers, we are expected to produce a turf that can withstand the use and abuse of 300 pounders, practicing twice per day, sometimes 7 days a week. The turfgrass not only needs to withstand this kind of use/abuse but it also must look like the front lawn of the White House that may only get a few footsteps on it each year by scurrying 120 pound female interns.

All joking aside, it is our job to produce sports turf that both looks and performs at the highest standards. To accomplish this we must mow, aerify, verticut, spread fertilizers and apply pesticides often. One of the critical issues we face is the timing of the pesticide applications so as not to interfere with practice and/or play schedules and yet provide the plant protection necessary for healthy turfgrass.

I do four things when determining a spray program. The first is to know your turfgrass. Know where you have had disease or insect problems in the past so that you can plan preventive sprays prior to field use. This should decrease the number of "contact" pesticides needed during the busy part of field use.

Second, if you find it necessary to spray during the play or practice season, and eventually you will, choose pesticides that are the least toxic and yet will accomplish the control you are looking for. This is sound advice for any spray program and is the backbone of integrated pest management.

Third, time the applications so that you adhere to all label regulations for re-entry. This is extremely important since most sports turf is not just walked on, but it is rolled on and ground into clothes, skin, cuts, etc.. Whenever possible try to even extend the re-entry period stated on the label. To do this you may have to apply a spray in late evening or at night followed by irrigation to water it in or you may have to wait until a road trip or

an away game. Whatever it takes to ensure the safety of the players.

Fourth, you must communicate with the coaches, administrators and/or medical staff the reasons for the spray, your plan for timing the spray application and the associated safety precautions of the product(s) you plan to apply. They may choose to practice on another field, they may re-schedule a practice or they may decide to live with the damage that could occur if you did not spray.

Answered by Eric Shawn, Plant Manager, Catlin Gabel School, Portland, OR

We give priority to avoiding chemical applications whenever possible. When there is no alternative, we use the least toxic product that we can find for a specific problem. We schedule field spraying for week-ends, teacher in-service days and vacation periods whenever we can.

Our greatest challenge is working through scheduling conflicts with coaches and teachers. We try to assist them with frequent reminders via e-mail, voice mail, memos and/or individual conversations, and we will post workers on the field to turn classes around when they arrive for unannounced use of the fields after chemical applications.

Answered by Tom Burns, Director of Grounds, Texas Rangers

Scheduling chemical applications is seldom as easy as loading the sprayer and doing the application. Here at The Ballpark in Arlington, in addition to the usual applicator and environmental safety concerns, we have tours that run year round. The tour office sends out a schedule every two weeks outlining special tours in addition to the regular 9:00 A.M. to 4:00 P.M. schedule. Our marketing and public relations departments also use the field for various commercial and photo shoots, in addition to promotional and sponsor related events. The team gets to use the field on the days that are left.

So, we are left with nights and early mornings. When the team is out of town we can make applications in the early evening and if necessary turn on the lights and work at night. We often will spray liquid fertilizers and micro-nutrients an hour or so after a game has ended. This helps us keep the turf color more consistent and reduces stress on high traffic areas. Winds are generally lighter at this time and there is less risk of drift to non target areas.

Answered by Brian McCabe, Foreman, Town of Methuen, MA

In April, we start to soil test the
continued on page 12

CONSTRUCTION & RENOVATION

Serving MD, NJ, PA & DE

ALL OF OUR RENOVATIONS

INCLUDE ONE YEAR TREATMENTS

Lawrence V. George, President



"Building Turf is our Game"

Fax: 609/427-9684

800/942-0134

Irrigation: Use of Recycled Water on Athletic Fields

by Dr. Grady L. Miller, University of Florida

There are a number of terms that have been used to describe recycled water. These terms include: gray water, effluent water, secondary and tertiary treated water, treated wastewater, multiple use water, reclaimed water and nonpotable water. While these do not all describe the same type of water, they may all be lumped under the heading of recycled water.

Why should we use recycled water? Why is it gaining in popularity? First, it seems inevitable that the 80 to 85 percent of fresh water currently allocated for agriculture will be reduced and made available for other purposes. The states with the most widespread use of recycled water include Arizona, California, Florida, and Texas. Each person in Florida generates about 100 gallons of wastewater each day. In 1995, there were about 400 reuse systems in Florida. These systems provided about 360 million gallons of reclaimed water each day for beneficial purposes. Total capacity of these facilities was about 860 million gallons per day (mgd). In the past, discharging the treated water into a surface water was the most common form of wastewater management.

Rationale for recycled water use include:

- opportunity - location in proximity to recycled water sources
- need - increased freshwater demand with limited supplies
- conservation - reduce freshwater demand
- reliability of supply - may be more reliable in times of freshwater shortages than potable water
- well-established technology - well tested over time
- economics - may be cheapest source of water
- pollution abatement - if you did not use it, it may be discharged into environmentally sensitive areas
- public policy - public supports reuse and it may be mandated in your area
- successful experiences - literally hundreds of successful water reclamation and reuse operations in the U.S.

The applicability of recycled water for athletic field use depends on its physical, chemical, and microbiological quality. The effects of recycled water's physical parameters chemical constituents are, for the most part, well understood, and recommended criteria have been established by the U.S. EPA. Turfgrass managers should become familiar with federal, state, and local regulations to understand their own obligations, and to assure themselves that their supplier is in compliance. Some regulations include the following:

- identification of pipes, pumps, outlet, and valve boxes

- horizontal and vertical separation of potable and reclaimed water lines
- backflow protection devices on potable water lines
- pipeline design and construction criteria
- may require use of the color purple to denote reclaimed water
- Several states do not permit hose bibs on reclaimed water systems because of potential misuse.
- potable wells, eating and drinking facilities are a fixed distance from irrigation heads or spray patterns
- may be required to post notification on all points of entry and exit that recycled water is being used for irrigation purposes only

The immediate effects of using recycled water can be beneficial; however, turf can be stressed if high concentrations of some compounds are present or allowed to accumulate. If you are going to switch from potable water to recycled water, I
continued on page 10



1926 Acton Hwy • Granbury, TX 76049
1-888-NEW GRASS
639-4727

GRASS

Ours **IS** Greener
On Your Side Of
The Fence!

SAND BASED
SOD

BAyr Root
Turf

42" Big Roll
SOD

Products & Services You've Trusted
For More Than **25** Years!!



73,656 seats at the stadium, but only one is padded.

Unsurpassed comfort, convenience and performance. That's why the Jacobsen Tri-King was selected to maintain Sun Devil Stadium in Tempe, Arizona for the 1996 Tostitos® Fiesta Bowl™ and Super Bowl XXX®. Since the Tri-King always delivers a precision cut on all types of grasses, premier groundskeepers count on it to perform at the high standards they demand. And with a new seat, easy-to-reach controls and handy steering wheel, it also

has the convenience and comfort operators prefer. Ask your Jacobsen distributor for a demonstration today. For information on Jacobsen leasing and financing, call **1-800-722-TURF**.



THE PROFESSIONAL'S CHOICE ON TURF

JACOBSEN

TEXTRON

800-727-JAKE www.jacobsen.textron.com

Welcome New STMA Members

Pablo Acevedo

Univ. of Illinois/Chicago
Chicago, IL

Shea Carrington

Student/Univ. of Tennessee
Knoxville, TN

David D'Andrea

MVP Sportsfields
Orange, CT

Fertichem, Inc.

Chris Prud-Homme
St. Michel, PQ

Chuck Garcia

Cal State Fresno
Fresno, CA

Matthew M. Hallman

Student
Pennsburg, PA

Robert W. Hunt

Hope College
Holland, MI

Michael Kraemer

Rutgers University
Milltown, NJ

Neale D. Magill

Hampden Township
Mechanicsburg, PA

Pete Miller

Cal State Fresno
Fresno, CA

Northern Nurseries, Inc.

Robert R. Carson
Fairport, NY

Michael Pollard

TruGreen/ChemLawn
Valley Cottage, NY

Rohling Green Corp.

Gary Rohling
Sauk Rapids, MN

Ken Schoeni

Bowling Green State Univ.
Bowling Green, OH

Keith Stachowski

City of North St. Paul
N. St. Paul, MN

Don Storr

Dutchess Comm. College
Poughkeepsie, NY

Bill Taylor

Cincinnati Hills Christian Academy
Cincinnati, OH

Rodney Walter

Bartlett Park Dist.
Bartlett, IL

Edgar Willie

High School Dist. #211
Palatine, IL

Greg Burkhardt

USD #443
Dodge City, KS

Gary Clarke

Franklin Road Academy
Nashville, TN

Darrell Denney

McCreary Co. Board of Ed.
Whitley City, KY

Mark Fields

Aimcor
Birmingham, AL

Casey Gifford

Miami Dolphins Ltd.
Davie, FL

Tom Horn

George Mason H.S.
Falls Church, VA

Lee Jarrett

Luke Air Force Base
Glendale, AZ

Bryon Krutsch

Mitchell Parks & Rec. Dept.
Mitchell, SD

Marina Landscape, Inc.

Stephen H. Guise
Anaheim, CA

Michael Mitts

American Golf Corp.
Flushing, NY

Ohio Seed Co.

Kevin W. Keckley
W. Jefferson, OH

Tim Purdy

Univ. of Tampa
Tampa, FL

SFC Associates

Dr. Edwin S. Kajihiro
Duncanville, TX

Shearer/Penn

Bill Siegel
Trenton, NJ

Bernie Stewart

Brookings Parks & Rec.
Brookings, SD

Miles Studhalter

Texas A & M Ath. Dept.
College Station, TX

TruGreen-ChemLawn

John E. Crossmock
Park Ridge, IL

Stephen Weber

City of Orem
Orem, UT

Karen S. Williamson

Spotts, Stevens & McCoy
Whitehall, PA

Kevin Calkins

City of Holland
Holland, MI

Wes Conway

Denver Broncos
Englewood, CO

Raymond J. Dolce, Jr.

Raymond Dolce Landscaping
Newtown Square, PA

Kirk Fraser

SUNY-Plattsburgh
Plattsburgh, NY

Robert Glascott, Jr.

Township H.S. Dist. #211
Palatine, IL

Billy Hughes

Effingham Co. Board of Ed.
Springfield, GA

Todd Jeansonne

Student/Louisiana State Univ.
Baton Rouge, LA

David R. Lenker, II

Silver Spring Township
Mechanicsburg, PA

Gene Marion

Marriott School Services
Lubbock, TX

Jim Mueller

City of Westminster
Westminster, CO

Alan Paulson

Clark Co. School Dist.
Las Vegas, NV

Jeffrey (Jeff) Riggs

Cal. State Long Beach
Long Beach, CA

Yehuda Sabah

Israel Football Federation
Netanya, Israel

Edward W. Smith, Jr.

Culver Ed. Foundation
Culver, IN

Mike Stine

Sulphur Parks & Rec.
Sulphur, LA

W. Michael Sullivan

Univ. of Rhode Island
Kingston, RI

Turf & Garden

E.P. Curling
Chesapeake, VA

Jill Weeditz

Student/Texas A & M
College Station, TX

Gary R. Winstead

Upland High School
Brea, CA

Ernie Carlomagno

Montgomery Township
S. Plainfield, NJ

D.A. Hoerr, Inc.

John William Hoerr
Peoria, IL

Bob Dunteman

Dunteman Turf Farms
Kaneville, IL

Douglas Gamber

L.D. Astorino & Assoc.
Pittsburgh, PA

Paul Griffin

City of Woodbury
Woodbury, MN

Steve Hughes

Ewing Irrigation
Glendale, CA

Mike Jones

Pennant Sports Field Svcs.
Liberty, MO

Links Aerification Plus, LLC

Dan Gamble
Noblesville, IN

Mike McCannon

City of Steamboat Springs
Steamboat Springs, CO

Layne Nash

Marist High School
Atlanta, GA

Tom Platner

Sheboygan Falls School Dist.
Sheboygan Falls, WI

Michael K. Ripley

Boca Pointe Country Club
Coral Springs, FL

Charles Schertzing

Fairview S.D. #72
Skokie, IL

Spring Valley Turf Prod.

Patrick Staehler
Jackson, WI

Rick Stoller

Penta Co. Schools
Perrysburg, OH

Jim Tanner

Aimcor
Buffalo Grove, IL

Timothy Walsh

Town of Westwood
Westwood, MA

William J. Weigert

Four Seasons Resort, Wailea
Wailea, HI

David J. Zolnoski

Brattleboro Union H.S.
Brattleboro, VT



Chapter Events

The MAFMO Chapter STMA

MAFMO will hold a Seminar on Wheels on June 26th. Tour stops will include Byrd Stadium, home of the Maryland Terrapins; Jack Kent Cooke Stadium, home of the Washington Redskins; and Prince George's Stadium, home of the Bowie Baysox. Following the tour of Prince George's Stadium, the group will share a picnic dinner in the left field pavilion and take in a game between the Baysox and the Portland Seadogs.

For information on this event, the MAFMO Chapter, or other upcoming activities, contact the Hotline: (410) 290-5652.

Iowa Sports Turf Managers Association

The Iowa Sports Turf Managers Association will meet on July 8th at Kinnick Stadium at the University of Iowa in Iowa City. Featured speakers for this event are Dale Getz of the University of Notre Dame, Ted Thorn of the University of Iowa and Mike Andresen of Iowa State University.

The Chapter also will participate in the Iowa Turfgrass Field Day which will be held July 16th at the ISU Horticulture Research Station in Ames.

For more information on these events, the Iowa Chapter or other upcoming activities, contact: Lori Westrum at The Turf Office at (515) 232-8222 (phone) or (515) 232-8228 (fax).

Mid-South Chapter STMA

The Mid-South Chapter STMA is STMA's newest affiliated chapter. Their next meeting will be held on July 8th at Millington, Tennessee, in conjunction with Floyd Perry's Groundskeepers Management Academy.

Construction of the new Redbird Stadium in Memphis is under way. A tour of this facility is in the planning stages.

For more information on these events, the Chapter, any of the regions, or other pending activities, contact: Chip Houmes at (901) 377-5081 or Jim Calhoun at (901) 755-1305.

Colorado Sports Turf Managers Association

The Colorado Sports Turf Managers Association will hold their CSTMA Mountain Seminar on July 17th at Steamboat Springs.

CSTMA's Annual Golf Tournament, "Lawnmower Man Open," will be held on Monday, July 13th, at West Woods Golf Course in Arvada. For more information on these events, or on the Colorado Chapter and other upcoming activities, call the 24-Hour CSTMA Chapter Hotline/FAX: (303) 438-9645.

Minnesota Chapter:STMA

The Minnesota Sports Turf Managers Association will hold their Workshop on Wheels on July 15th with the starting point Midway Stadium in St. Paul. The next stop is McMurray Field for groomer demonstrations. The tour moves on to Winter

Park, the Minnesota Vikings' Training Facility; then to Canterbury Park, a horse racing facility. Following lunch at Canterbury Park, the group heads to Lakeville for a tour of the high school athletic fields and on to the University of St. Thomas. The Workshop wraps up back at Midway Stadium for tailgating, networking and enjoying the St. Paul Saints game. The Chapter also is planning a September Workshop.

For information on the Workshop on Wheels, the September event, the Minnesota Chapter or other pending activities, contact: Connie Rudolph at (612) 646-1679.

Keystone Athletic Field Managers Organization (KAFMO)

Plans are in the works for a mid-July meeting. For information on this event, other upcoming activities, or the KAFMO Chapter STMA, contact: Dan Douglas, Reading Phillies Baseball Club, at (610) 375-8469, extension 212.

Midwest Chapter: STMA

The Midwest Chapter will hold an Athletic Field Construction Seminar on July 29th at the Carol Stream Park District, Carol Stream, Illinois. The Panther Football Field will be highlighted at this Seminar.

For information on this event, the Midwest Chapter or other pending activities, call: The Chapter Hotline (847) 622-3517.

Florida Chapter #1: STMA

For information on the Florida Chapter or pending activities, contact: John Mascaro at (954) 938-7477.

Northern California Chapter: STMA

For general information about the Nor-Cal STMA Chapter, contact Gail Setka at the UC Davis Grounds Office at (916) 752-5035 or Fax at (916) 752-9631.

Southern California Chapter:STMA

The Chapter is planning its annual community service project for early August at Mount San Antonio College in Walnut (LA County). Further details will be announced soon.

continued on page 11

OFFICIAL STMA CHAPTER SPONSORS

Gold Sponsors

 **NOVARTIS**



Silver Sponsors



Doc's Dugout - An Inning from our Past & Present

by Dr. Kent Kurtz - STMA Historian

TURF ESTABLISHMENT & CULTURE IN THE EARLY 1900'S

A sports turf manager in the early years of the 20th century faced a lot of issues that he couldn't explain or, in many instances, he didn't know how to manage on his turf with the limited information that was available. Also remember, in those days there were no official turfgrass publications from which to glean information, or, for that matter, no farm advisors or research centers to gain new knowledge. This newsletter contains excerpts from the diary of an early turf manager who probably worked for a school with a fairly large acreage used for playgrounds and athletic fields.

Note: In the last issue, the diary stated that they seeded the turf on April 10, 1916.
September 7, 1917

Our grass is now considered to be the finest in our area. Due to the drought and heavy summer play the grass has deteriorated somewhat. Because of this we have negotiated to rent a fine, 10-foot wide, horse-drawn seeding machine. The reason for renting and not purchasing it at this time will save us money since our seeding operations occur only once a year in the fall. Also since we plan to seed quite heavily (about 12

bushels per acre) the cost of seeding will use up all of our reserve money. With the seed sowing machine we can do 10-12 acres a day, which is considerably faster than seeding by hand.
November 30, 1920

I shall note in my grass records that today the United States Golf Association adopted a resolution to form a Green Section for the purpose of collecting and distributing information of value respecting the proper upkeep of turf, including that of golf courses. This is a great step forward, since we have so many problems with disease, insects and lack of general knowledge most important to growing good turf. I am looking forward to receiving the first bulletin of the Green Section.

February 2, 1921

It is well worth noting that the second bulletin volume of the Green Section was devoted entirely to grass culture. This is truly a step in the right direction. I shall make a note of the following recommendations:

Item I. Buy grass seeds by the pound and not by the bushel. The number of pounds in a bushel is not definite and continued on page 9

ARE WE INSTALLING TURF OR STRIPPING??



**JACKSONVILLE STADIUM
HOME OF JACKSONVILLE JAGUARS**

Actually, we are **stripping**. Our process is so clean and efficient that it's easy to be confused. So, whether it's to strip a field, or install a field using our turf or yours, **CYGNET TURF** is able to perform under all kinds of conditions and we are able to respond to most emergencies.



Stripped and installed Jacobs Field Cleveland Indians



Installed Jack Kent Cooke Stadium Washington Redskins



Stripped and Installed Ohio State & Univ. of Iowa Football Fields

Our patented machines carry the rolls, turn them at ground speed, and install down a controllable slide for tighter seams.

**NO ONE ELSE CAN MAKE THIS CLAIM.
U.S. Pat. #5,215,248 & 5,307,880**



Phone: (419) 354-1112
Farm: (419) 655-2020
Fax: (419) 352-1244

Doc's Dugout

continued from page 8

the purchaser has no means of knowing just how much he will get.

Item 2. It is well to establish a proper level of cutting grass as early as possible in the spring, as it is quite difficult to lower the level when it is once established. Especially is this true during the hot months of summer. Under such conditions, if the grass is crowned, it recovers very slowly.

Item 3. Earthworms begin to be active with the first warm days in spring just as soon as the earliest grasses take on a live green color. The number of worm casts is a good index to their abundance. If they are numerous the grass should be wormed just as soon as the soil is fairly dry so the poison will go down into their holes.

February 10, 1921

The U.S.G.A. Green Section has appointed two scientist, Dr. C.V. Piper and Dr. R.A. Oakley, to conduct experiments and disseminate the results of their findings.

March 21, 1921

Street sweepings as a source of manure for topdressing and general planting should be avoided. We killed a consider-

able amount of grass using this material. After consultation with authorities the following conclusions were drawn:

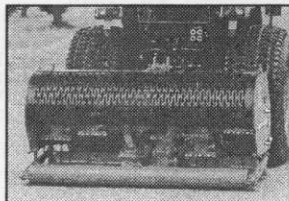
Street sweepings were for many years an excellent source of manure. With the advent of asphalt-paved streets and the increase of horseless carriages it appears that oil from the asphalt and the automobile is absorbed in the street sweepings. When mixed into compost the oil remains and if applied to the grass, will most likely kill it. Beware and avoid street sweepings.

Many of the early mysteries that confronted turfgrass managers were alleviated in the past 80 years with the establishment of state experiment stations, the U.S.G.A. Green Section, the Cooperative Extension Service, annual turfgrass conferences and trade shows, numerous publications to aid in the establishment and care of turfgrasses and, in 1981, by the formation of the STMA. Each of these have contributed to better and safer sports turf areas and continue to provide the athlete with the best possible surface available.

STM

COMMERCIAL TURF & TRACTOR

NORTH AMERICA'S #1 VERTI-DRAIN DISTRIBUTOR
Built on Experience, Service, and Customer Satisfaction!



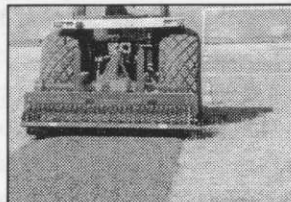
VERTI-DRAIN



VERTI-SEED



MASSEY FERGUSON



ROTADAIRON SOIL RENOVATOR

QUALITY CONTRACTING!

- Complete athletic field renovation.
- Turf grids installation.

1-800-748-7497

Bryan Wood, Owner

—HOME OF—
Bryan's Blend
Barbeque Sauce!

RainBuster

Polytarps



- Black/White reversibles for the ULTIMATE A-L-L SEASON turf protection!
- Lightweight AND Economical!
- Sizes from Golf Greens to Soccer Fields.

Complements our complete line of vinyl covers, patented zipper systems, geotextiles, grids and more! Call for your FREE BUYER'S GUIDE now.

1-800-621-0146 TOLL FREE

M. PUTTERMAN & COMPANY, INC.

4834 South Oakley • Chicago, Illinois 60609
773-927-4120 (In Illinois)

Irrigation: Use of Recycled Water on Athletic Fields

continued from page 4

suggest you establish baseline values when the turf is doing well and then watch for the development of undesirable trends before the turf shows signs of stress. Some recycled waters contain the right amount of many plant nutrients, others may have excess salts. A typical secondary treated sewage effluent will have sufficient nutrient levels to be considered fertigation and should be treated with the same care. Recycled water and potable water varies considerably by location and level of treatment. Secondarily treated municipals effluent can have considerable levels of plant nutrients, while tertiary treatment removes many of the compounds containing nitrogen and phosphorus.

Nutrients

Testing Laboratories will analyze a water sample and report nutrient and salt concentrations in parts per million (ppm). To estimate how many pounds of an element the irrigation system is applying per 1,000 square feet per month, simply multiply the ppm of that element by 0.0052 to obtain pounds of the element in every inch of water per 1,000 square feet. The amount of nutrient or salt added by irrigation can then be estimated by multiplying this value by the inches of water applied over the desired period of time.

Salts

Electrical conductivity (EC) and total dissolved salts (TDS or TSS) are a measure of salinity. As salt concentration increases, plant water uptake becomes less efficient. We also have some salt sensitive plants such as many of our ornamentals and trees. Salt-sensitive problems can occur when the TDS of irrigation water exceeds 480 ppm. Values greater than 1920 ppm causes severe restrictions for most plants (*See chart*).

Damage signs

First signs of recycled water problems usually show up in broadleaf plants (trees, shrubs, flowers) that are not as toler-

ant to higher salt or higher nitrogen content of some recycled water. The first problems noted with grasses are usually during establishment of grasses, particularly the cool-season grasses. Permanent or overseeded ryegrass establishment will commonly show the first signs of a problem. A high level of salinity in irrigation water can reduce or delay seed germination and seedling development. The first sign of salinity problems on established turf is blue-green colored plants that appear to be drought stressed. But the drought is osmotic in origin and not due to lack of irrigation. As damage from salinity stress increases, the turf will wilt, leaf tips will die and turf density will decline.

Management of Saline Water

Several management techniques can be used to handle salinity in water. The first line of defense is to use a tolerant grass. The first cultural practice to incorporate is to improve drainage. Salts are usually carried away in excess water, either from irrigation or rainfall, below the rootzone. If salts do not move through the rootzone they will accumulate. Drainage may be improved from something as simple as regular aerification to more extensive installation of a subsurface drainage system.

In those parts of the country where annual precipitation exceeds evapotranspiration, salts are naturally leached from the soil profile. Where precipitation does not exceed evapotranspiration, salts will accumulate in the rootzone unless they are leached. Leaching is the intentional application of excess water beyond the needs of turf to transport salts below the root zone. The goal is to maintain a salinity level in soil that the turf species can tolerate. Of course there are limitations as to how much salt can be removed from the rootzone since irrigation water contains salts.

STM

Table 1. Hazardous salt concentrations. (Note: multiply dSm^{-1} by 640 to convert to ppm).

Salinity Hazard	Total dissolved solids (TDS) ppm or mg L^{-1}	Electrical conductivity (EC) dSm^{-1} or mmhos cm^{-1}
Low Water with little likelihood of boosting soil salinity	<160	<0.25
Medium Water which may have detrimental effects on sensitive plants	160 to 480	0.25 to 0.75
High Water which may have adverse effects on many plants and requires careful management	480 to 1,440	0.75 to 2.25
Very high Water generally not recommended for irrigation	>1,440	>2.25

taken from C. Throssel. 1996. Golf Course Management. 64:61-64

Chapter Events

continued from page 7

For information on the service project, the Southern California Chapter or pending activities, contact: The Chapter Hotline: (1-888) 578-STMA (toll free in Southern California).

Chapters On The Grow

Arizona: The Sports Turf Managers Association of Arizona is planning a July meeting in Show Low. For information on this meeting, the Sports Turf Managers Association of Arizona or upcoming events, contact: Bill Murphy, City of Scottsdale Parks and Recreation Department, at (602) 994-7954, or Kris Kircher, City of Chandler Parks & Recreation Department at (602) 786-2728.

Indiana: Plans are moving forward for the formation of a new chapter in Indiana. For information on this developing chapter, contact: Terry Updike, B & B Fertilizer, at (219) 356-8424 or Pat Hickner at (800) 672-4273.

Michigan: A new chapter is taking shape in Michigan under the name Michigan Sports Turf Managers Association. They will be meeting from 7:30 AM to 3:00 PM on June 25th at the West Ottawa Public Schools. Recertification credit can be earned through this meeting's educational sessions: "Calibrating Spray Equipment," presented by David Gilstrap of Michigan State University (MSU); "Timing is Everything" and "Putting an IPM Program to Good Use," presented by Dr. Paul Rieke of MSU. Also making presentations are Doug Coe, 1998 Football Hall of Fame Coach, and Steve Trusty, STMA Executive Director. The meeting's afternoon events include outdoor demonstrations of equipment and materials for baseball and football field care.

Plans for additional meetings include a July event at Michigan State University which will include a presentation on field marking and a tour of the athletic facilities and an August event with presentations on football field compaction. More details will be announced soon.

For information on these events, the developing chapter or other pending activities, contact: Rick Jurries, West Ottawa Public Schools, at 616/395-2364.

The Great Lakes Sports Turf Managers Association continues to move forward. They have elected the following officers for the 1998 term: President - Joe Zelinko, Athletic Field Services; President-elect - Boyd Montgomery, Sylvania Recreation; Vice President - Dave Conover, Conover Supply; Commercial Vice President - Rick Wiegand, Medalist America Seed; Treasurer - Karen Zelinko, Athletic Field Services; and Secretary - Duane Smith, Baldwin-Wallace College.

A June event, an August Golf Outing and a November meeting in Toledo, Ohio, are all in the planning stages.

A July 10th Field Day will be held at the Akron Arrows Stadium beginning with a tour of the facility at 9:30 AM. Events include on-field demonstrations, lunch, and an evening ball game.

Executive board meetings are scheduled for June 30th, July 28th, August 25th, September 29th, and October 27th.

For information on these events or the newly forming Chapter, contact: Joe Zelinko at (800) 897-9714 or Boyd Montgomery at (419) 885-1982.

Great Plains Sports Turf Managers Association: For information on the Great Plains Sports Turf Managers Association or upcoming activities, contact: Mark Schimming, City of Wichita, at (316) 337-9123.

Nevada: The newly forming Nevada Chapter of STMA continues to make progress. For information on this developing Chapter or upcoming events, contact: Ibsen Dow at (702) 649-1551 or Alan Paulson, Clark County School District, at (702) 799-8724.

Wisconsin: The newly forming Wisconsin Chapter is working on the details of their first meeting. It will be held on July 22 in Stevens Point, Wisconsin. More details will be announced soon. For more information on this event, or on the forming Chapter, contact: Rich Riggs, R.H. Rettler & Associates, (715) 341-2633.

SOUTHERN ATHLETIC FIELDS

MARBET'S
Mule Mix

*Minimizes Compaction!
Results in a safer, more constant playing surface!*

Athletic Field Conditioner

Use Marbet's MULE MIX on your field and you'll:

- Have a compaction free, safer playing surface.
- Reduce moisture — you get fewer rainouts.
- Control maintenance costs.
- Hold down dust.

For information, call

1-800-837-8062

Member STMA / Sports Turf Managers Association

How Do You Do...?

continued from page 3

fields that we plan to work on. This gives us a good program to work with.

This year, in addition to re-doing two of my fields (a job in itself), I am going to need to use and apply insecticide on two or more of the fields due to grubs. In order to accomplish all this, we work very closely with the schools to make sure that we know their schedules for practices, etc. **and** that they are notified when we are treating an area as to which area and how long they will need to stay out of that particular area.

In April, June, August and October, I do my major applications on the fields and we have the teams scheduled for at least three open days a month for fertilization, etc.

In addition to the weather, which we ALL know you can't predict to schedule around, we have what we call outside teams (t-ball, soccer, field hockey, baseball and softball) to schedule around. We basically have to rely on communication and teamwork to help us to schedule our chemical applications and everyone else's practices and games around each other.

STM

Members on the Move

Bruce Boman, formerly with the City of San Diego's Park & Rec. Department, has taken a Lead position with the Grounds Department at Southwestern Community College, Chula Vista, CA.

Chris Bunnell, formerly with the City of San Marcos, has taken a position with Pro Greens Turf Services.

Steve Dugas, formerly with Pepperdine University, has taken the position of Manager for Landscape Services at Cal State Fullerton.

Anthony Leonard, former student member, is currently doing research for Hummer Turfgrass Systems in Lancaster, PA.

CONGRATULATIONS GUYS!!

If you, or someone you know, has changed positions, give us a call here at Headquarters. We'll be happy to help get the word out!

Educational Opportunities!!

1998 Groundskeepers Management Academy - conducted by STMA member & sportsTURF Magazine's 1997 Sports Field Manager of the Year, Floyd Perry.

Dates and locations are:

July 6-10 - Millington, TN

August 17-21 - Bethel, CT

August 24-28 - Colonial Heights, VA

August 31-September 4 - Kissimmee, FL

September 27-October 1 - Salt Lake City, UT

If you are interested in learning more about the Groundskeepers Management Academy, contact Floyd Perry at (800) 227-9381.

Q: What do all of these teams have in common?

Oakland A's
Arizona Diamondbacks
University of Texas Longhorns
San Diego Chargers
University of Southern California Trojans
California Angels
Arizona State University Sun Devils
San Francisco 49'ers
San Diego State University Aztecs
San Francisco Giants
San Diego Padres
Los Angeles Dodgers
Oakland Raiders
Arizona Cardinals

A: They are at "HOME" on West Coast Turf!

**WEST COAST
TURF**

GROWERS AND
INSTALLERS OF
PREMIUM QUALITY
SOD AND STOLONS

P.O. Box 4563, Palm Desert, CA 92261 (800) 447-1840

Painting a Warning Track - Plus - More Creative Thinking

by Mike Hebrard, Athletic Field Design

With The Babe Ruth World Series scheduled for action at the campus field of Lower Columbia College in Longview, Washington, there were many adjustments and reconstructive measures that needed to take place. Since the tournament was to be played at a Jr. College facility, the outfield fence was deemed to be too far and high for boys 14-15 years old to have a chance to win a game in the last inning with a heroic home run. The World Series Committee, headed up by Kirc Roland and Tony Murillo, decided to install a temporary 5' high cyclone fence down both the foul areas and the outfield. In order to accomplish this, the new red cinder warning track would be used as the base for temporary bleachers, and another warning track would need to be created. The Committee asked for my assistance, as I was in the midst of preparing my own tournament venue in Portland, the Girls Softball World Series.

As we have all done at one time or another, I decided to experiment. I used a product called Mulch Magic, which is used for coloring bark to its near natural appearance, in the shade of red that best matched the bright red cinder, and applied it to the 10' wide grass areas along

the fence. First, I marked and painted a straight line 10' from the outfield fence, using the wand and hose method to fill in the remainder of the grass. Success! There was an area in center field where the fence line went back to the existing warning track, and from a glance, you couldn't tell the difference between the cinder and the sprayed grass! Next came the infield, which was a recycled artificial turf that was faded from the sun with 10' wide walkways from each dugout. I decided to paint the walkways with the Mulch Magic too. This really highlighted the homeplate area! To finish the effect, taking a tip from past Super Bowls on artificial turf, I painted mowing patterns. I first marked off each of the four sides in 4' widths. Stretching a string between the points, I sprayed every other section and then repeated it in the other direction. For a more drastic pattern, you might spray the entire infield first, then measure off and spray the 4' widths.

This is not for the low budget or everyday ballgame, but if you have that one time special event and want to highlight your skills and show off your field, this might be a project that could make a difference.

STM

Because 50,000 fans know the
difference between Cardinal Red
and Crimson Tide.



We know your sponsors are very particular about their colors, and so are the fans.

Becker-Underwood can create any color you want to paint your turf—including white for line striping that won't wear out before your team does!

**BECKER
UNDERWOOD INC.**
THE COLOR OF INNOVATION

Makers of the
World's Favorite
Colors

For more information call us at 1-800-232-5907.

Sprint[®] 330

*the Strong Chelated Iron that will keep
your field looking its best!*

When players hit your field, it's only natural that they expect the turf to be, well, green. If your field is not green, treat with Sprint 330, the chelated iron micronutrient from Becker-Underwood. Sprint's strong chelates protect iron availability in soils with pH levels up to 7.5 for long-lasting green turf. For easy measuring and mixing, Sprint is available in a highly soluble, concentrated powder that offers excellent tank mix flexibility with NPK and plant growth regulators.

Packaged in 5 pound containers and 50 pound drums.

*The grass is
always
greener with
Sprint!*



**BECKER
UNDERWOOD INC.**
THE COLOR OF INNOVATION

801 Dayton Avenue • Ames, Iowa 50010 • 1-800-232-5907 • fax 515-232-5961 • <http://www.bucolor.com>

Headquarters Update

by Steve Trusty, Executive Director

You might think that when you are in the midst of your busiest season that things would slow down at your headquarters. In some respects that is true. We don't have conference registrations to handle. Membership renewals have slowed down, but new member applications are still coming in strong. Since I last spoke to you through this column, we have finalized the details on the Compendium and have almost finalized the new Roster. Watch for your copies shortly. Newsletters are an ongoing process.

One area that expands this time of year is phone calls with questions. We hear from members that have a problem that they would like assistance on. We hear from non-members that want to know how to do something. We hear from builders and architects with this question or that. While we answer the questions as directly as we can, we usually rely on you, the member, to provide the bulk of the assistance. Some of you have expressed a willingness to be on call, so to speak, when questions arise. Others haven't formally offered assistance, but we are aware of their strengths and situations that they have been involved in so we pass their name and number along. So far, in all my years of contact with Sports Turf Managers, I have never been told by anyone that they don't want to help others.

We would like to provide even more assistance to callers and to readers of this newsletter and industry publications. If you have had a learning experience that you would like to share, just let us know. It could be some idea that would warrant a sentence or two. It could lead to a "How Do You Do?..." topic. It could be a topic worthy of consideration for a feature story in this newsletter, sportsTurf or some other publication. You might want your name added to our "willing helpers" list. In any event, your helping someone else will make them even more willing to share their experiences when the time comes. Your problems can create someone else's solutions and your solutions can prevent someone else from having problems.

In keeping with the sharing of information, we are introducing a new feature in this issue of STM. Trusty Tips® will include short items that just might save you a little time or money. They will be tips that I have picked up from others in the industry, and from my years of experience in the horticultural field. The number of tips in each issue will depend on space available and information passed along to

me, or whatever I can come up with when it's time to finalize the newsletter.

Until next issue, and as always, stay in touch.



Trusty Tips®

- Take soil samples at least once a year to assure that you are providing the nutrients that match your turf's needs.
- Drag a hose across the turf in the early morning or use some other method to remove the dew and fungal mycelia from the leaf blades. This should reduce disease incidence.
- Consider purchasing an extra set of blades for your rotary mowers. This way you can always have sharp blades on the mower and sharpen the spare set as your schedule permits for a ready replacement.

YOUR ONE-STOP SOURCE FOR AMERICA'S LEADING BASEBALL SURFACES & SUPPLIES!



**USED BY OVER 100 PRO TEAMS!
PLUS 8 OF THE LAST 10 WORLD SERIES CHAMPS,
OVER 500 COLLEGES, AND THOUSANDS OF
TOWNS & SCHOOLS WORLDWIDE!**

800-247-BEAM

FAX: 908-637-8421 908-637-4191 GSA #GS-07F-6143A

**DISTRIBUTION CENTERS NATIONWIDE!
OVER 200 INFIELD PRODUCTS
FREE INSTRUCTIONAL BROCHURES**

**Introducing REGIONAL INFIELD MIXES
BLENDED FOR YOUR STATE & CLIMATE!**

Making It Work - Whatever – Whenever

continued from page 1

the Colorado Sports Turf Managers Association's April 16th Spring Seminar. The seminar's classroom-style educational sessions were capped off with show and tell tours of Falcon Stadium, the fieldhouse and athletic complex.

One of the highlights of this Seminar was the opportunity to look at the field from a different perspective, as Fisher DeBerry, USAFA Football Coach, shared his views on "what a well-maintained field means" in the "mind game" of football. Open communication between those in charge of on-field activities and the sports turf managers provide the give and take that result in the highly-playable field conditions both are seeking.

Community Service Project Highlights STMAAZ Meeting

The April 24th meeting of the Sports Turf Managers Association of Arizona was held at the Chandler, Arizona, Boys & Girls Club, site of their field renovation service project. A highlight of the meeting was viewing the results of their efforts.

The commitment to give something back to one of their local communities in the form of a similar service project outreach is a goal of most STMA Chapters and forming chapters. The selected site is always a field in need, often for a wide variety of reasons, which lacks the resources for necessary renovation or repair.

According to STMAAZ President, Kris Kircher, the call for assistance was issued in late January. More than 25 vendors kicked in with donations of various types in equipment and supplies. Individuals, sports turf managers and local members of the community, gathered at the field on Friday nights and Saturdays until early April to get the job done.

Join In

It takes support to pull off successful chapter meetings. So, besides making sure you and your staff participate by attending, consider lending a hand to "make it happen."

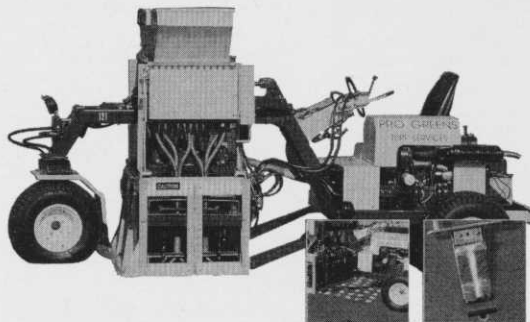
STM

ProGreens


The #1 Turf Service Specialist

DRILL & FILL AERIFIER

- ✓ Penetrates Hard Pan
- ✓ Changes Soil Profile
- ✓ Increases Root Depth
- ✓ Relieves Compaction & Allows Better Percolation For Soccer & Turf Fields



Call To Schedule Our Service
1-800-639-7731



Green in an Instant!

That's all the time it takes with Green Lawnger™ turf paint from Becker-Underwood. Green Lawnger restores the natural look and color to dormant and discolored turf for up to 14 weeks. Its lush green color is ideal for sports turf and golf courses, and anywhere else healthy-looking turf is required.

With **Green Lawnger** on your turf, you'll see the difference!

BECKER UNDERWOOD INC.
THE COLOR OF INNOVATION

801 Dayton Avenue • Ames, Iowa 50010 U.S.A.
515-232-5907 • Fax 515-232-5961
<http://www.bucolor.com> • e-mail: request@bucolor.com

EVERGREEN

THE PROVEN TURF GROWTH BLANKET

- Earlier spring green-up
- Faster seed germination
- Deeper root development
- Delays dormancy in fall
- Ideal winter blanket
- Best for quick turf repairs
- Available in any size
- Longest lasting - 7 year warranty



CALL TOLL FREE 1-800-387-5808
FOR SAMPLES AND LITERATURE

COVERMASTER
COVERMASTER
COVERMASTER

MASTERS IN THE ART OF SPORTS SURFACE COVERS



Visit our Website!

WEB: www.covermaster.net
E-MAIL: info@covermaster.net

Turf Management Made Easier!



Easy to install



Anchor pegs supplied



Deeper root development



Any size cover

COVERMASTER INC., 100 WESTMORE DR., 11-D, REXDALE, ON, M9V 5C3 TEL 416-745-1811 FAX 416-74-COVER (742-6837)

STMA Headquarters
1375 Rolling Hills Loop
Council Bluffs, IA 51503-8552

Return Service Requested

BULK RATE
US POSTAGE
PAID
PERMIT #705
OMAHA NE