

The *Sideline* Report

Iowa Sports Turf Managers Association

April 2014



The Table of Contents

3	A Letter from the President -TJ Brewer, CSFM
4	Hazard Communications -Jeff Wendel, CGCS
6	And the Award Goes To -Sarah Hodgson
8	Nitrogen Fertilizers for Iowa Athletic Fields -J.B. Sartain & J.K. Kruse
14	Spring Facility Workshop
16	Sports Turf Specific Research -Brent Smith
17	Emerald Ash Boer -Chris Jensen
18	Skin Cancer Protection -Brad Vermeer

Publishing June 2014 Issue;
Articles and Advertisements are due May 1, 2014

For more information regarding articles and advertising rates contact the editor.

Sarah Hodgson, Sideline Report Editor

1605 N Ankeny Blvd Suite 210, Ankeny, IA 50023

Email: sarah@iowaturfgrass.org

Phone: 515-635-0306

Fax: 515-635-0307

Advertisers

Agrium Advanced Technologies	2
Diamond Pro	3
CoverMaster	4
Commercial Turf & Tractor	5
Floratine Central Turf Products	5
Beacon Athletics	7
River City Turf & Ornamental	11
PACE Supply	12
Hunter Industries	13
Bush Sports Turf	17
Turfce Athletics	19
MTI Distributing	19

We would like to say thank you to all the companies that have placed an ad in this month's issue of the Sideline Report. Your support for the Iowa Sports Turf Managers Association is very much appreciated.

DIRECT SOLUTIONS™
Committed to Growth™

Introducing the
one supplier who
can help you cover
all the bases...

And all the
fairways, end
zones, and well
groomed lawns.

Direct Solutions will work with you to develop the best solutions for your everyday challenges, and deliver top-notch service, products, enhanced-efficiency fertilizers, infield conditioners, mound clay, and quality seed---everything you need to grow green, healthy turf.

A strategic division of  Agrium
Advanced
Technologies™

Jeff Kjolhede
515-201-4718

© 2012 Agrium Advanced Technologies (U.S.) Inc. DIRECT SOLUTIONS and COMMITTED TO GROWTH are trademarks owned by Agrium Inc.

jkjolhede@agriumat.com

A Letter from the President

TJ Brewer, CSFM, Burlington Bees



I hope by the time this issue lands on your desk you have all been out mowing lush green fields. Hopefully we have another winter safely behind us and are rolling into spring and summer. I sit here looking forward to the day I am complaining about how I can't keep up with the mowing, weed-eating and edging... that will be a welcome change. With spring comes workshops, and your education committee has once again gone above and beyond setting up education packed days that I hope you are all able to attend. We are looking forward to the first one, on May 8th in Waukee, a construction based workshop that will be beneficial to managers who are looking to rebuild, renovate, maintain a new field, or just looking for ideas. It could also be beneficial to administrators that might be involved in the planning, design and construction process. Don't ever hesitate to invite your boss to these events, they will learn a lot and gain a greater appreciation of what you do, it will also help justify future attendance.

Some exciting news out of the board room this spring

is that we have endowed our scholarship fund. This means that the future of our scholarship program is gaining security. We now have an investment that will create enough returns to sustain itself and produce scholarships on a yearly basis. We still plan on holding the silent auction at the Iowa Turfgrass Conference & Trade Show and that will increase our ability to give out more and bigger scholarships in the future. This is a huge accomplishment that has been in the works for years. Thanks to the vision of a past board and the dedicated support of members and vendors who have donated items for our silent auction we are finally able to reach that goal. I would also like to make note that this goal was a part of our Strategic Plan and it was a two year goal that we accomplished early, in just over one year. We do have direction and we are following it with success.

More news out of the board room includes the formation of a research committee. The purpose of this group will be to identify our members interest in supporting research, finding avenues to fundraise for research, and find research opportunities to support. In this issue you will find an article from Brent Smith, the Committee Chair, explaining their goals and objectives. We want your input on this topic, keep us posted on what you think. Remember your board and committees work for you, the member, we want your input. I think this is an exciting opportunity and I look forward to hearing more out of this committee.

In order to stay connected with our membership and your needs we are going to be sending out surveys. I know we all get enough email and fill out enough surveys, but please take a couple of minutes and complete our surveys. We want to make sure we are catering to you and spending your money in all the right places. We want to make sure that marketing dollars are headed in the right direction as well as our strategic plan. Speaking of our strategic plan we should be releasing that in the near future.

Finally I know your time is valuable and if you have made it this far through my ramblings I appreciate it. I look forward to seeing all of you at workshops this year and hope you all have a great spring!!

DIAMOND PRO
PROFESSIONAL GROUNDSKEEPING PRODUCTS

DIAMOND PRO
INFIELD RED
CONDITIONER

RED INFIELD CONDITIONER
BULK DELIVERY 10, 15 AND 24 TONS

STAY CONNECTED



800.228.2987 diamondpro.com

Hazard Communication

Jeff Wendel, CGCS, Iowa Turfgrass Institute

Hazard Communication – Keep your employees and your company up to date.

December 1, 2013, was the deadline for training workers on the new label elements and the Safety Data Sheets (formerly known as Material Safety Data Sheets, or MSDS).

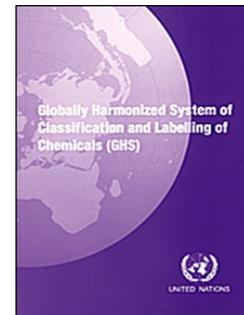
If you have not completed this training yet, don't delay! Make certain as you bring on new or returning staff members that each completes the training and understands the upcoming changes. Some of the label changes include:

- Product identifier
- Signal word
- Pictogram
- Hazard statements
- Precautionary statements

Download the Training Record form for your employees to sign at: <http://iowaturfgrass.org/pdfformat/SDS-employee-training-record.pdf> or click the link on the ISTMA main page. This document will also help you understand other items you need to include in your employee training.

Link to OSHA Hazard Communication website: <https://www.osha.gov/dsg/hazcom/>

Follow this link for the complete manual. http://www.unece.org/trans/danger/publi/ghs/ghs_rev03/03files_e.html



Outsmart Mother Nature... Year Round!

EVERGREEN™ TURF COVERS

With 30 years of field proven experience and the longest warranties, EVERGREEN™ from COVERMASTER is the smart choice

SMART EDGE TECHNOLOGY™

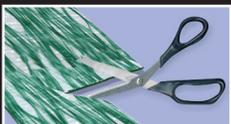
- Hems and grommets are not required
- Unlike Polypro fabrics, EVERGREEN™ will not unravel
- Can be cut to custom sizes and shapes on site
- Anchor pins can be placed anywhere on the cover

UNIQUE DESIGN CREATES A TRULY 4-SEASON TURF COVER

- Winter blanket • Early spring green-up • Summer overseeding & repair • Frost protection • Extend your growing season

BE SURE TO ASK FOR EVERGREEN™, THE ONE WITH COLOR

- Provides additional light spectrum benefits for the turf
- Choose color based on your climate



Can be cut or shaped without fraying thanks to Smart Edge Technology™



The with and without look of natural turf using the EVERGREEN™ cover



COVERMASTER™

AHEAD OF THE GAME

Call Toll Free: 1-800-387-5808
Int'l: 416-745-1811 • FAX: 416-742-6837
E-mail: info@covermaster.com
www.covermaster.com



© 2013 Covermaster Inc.

covermaster.com/evad/

Hazard Communication is the law. The GHS/HazCom 2012 changes update three main areas:

- 1) Chemical Classification
- 2) Safety Data Sheets (formerly MSDS)
- 3) Labels

Training for employees precedes the deadline for manufacturers to provide the new SDS and labels. (See table)

Training before the new sheets begin to arrive is critically important.

Your Hazard Communication program must be specific to your operation. It must contain a written Hazard Communication Plan/Program, Written Chemical Inventory, Ensure proper use of Labels and Warnings, Maintain SDS Sheets, provide Right-to-Know access to employees and provide Employee Training.

If you have questions check with your suppliers or call the Iowa Turfgrass Office at 515-635-0306.

Effective Completion Date	Requirement(s)	Who
December 1, 2013	Train employees on the new label elements and safety data sheet (SDS) format	Employers
June 1, 2015	Compliance with all modified provisions of this final rule, except: The Distributor shall not ship containers labeled by the chemical manufacturer or importer unless it is a GHS label	Chemical Manufactures, importers distributors and employers
December 1, 2015		
June 1, 2016	Update alternative workplace labeling and hazard communication program as necessary, and provide additional employee training for newly identified physical or health hazards.	Employers
Transition Period to the effective completion dates noted above	May comply with either 20 CFR 1910.1200 (the final standard), or the current standard, or both.	Chemical Manufacturers, importers, distributors and employers

COMMERCIAL TURF & TRACTOR

AUTHORIZED DISTRIBUTOR

800-748-7497

- Deep tine aerating and topdressing • Seeding / Overseeding •
- Golf course and athletic field renovation •
- Synthetic turf cleaning and grooming •
- *Specialized equipment for the turf industry* •

Home of **BIGWOODYSAUCE.com**

www.commercianturfandtractor.com

Bryan Wood

Agronomist/Turfgrass Consultant
Serving the turf industry since 1982

**Cell: 660-646-9394
or 816-665-6207**



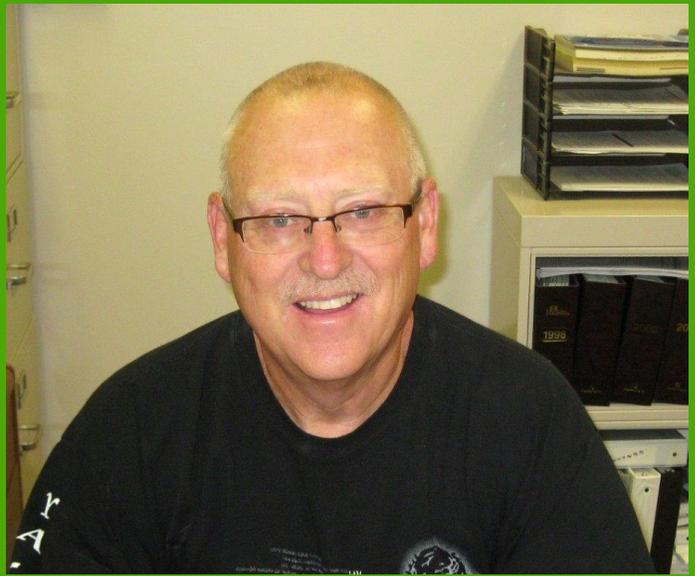
Brent Smith
563-210-1616

Jason Allen
402-250-2609

www.floratinecentralturf.com



And the Award Goes To



Brad Vermeer Sports Turf Manager of the Year

Brad Vermeer is the recipient of the 2014 ISTMA Sports Turf Manager of the Year Award. Brad is dedicated to the Turfgrass Industry and represents ISTMA on the ITI Board of Directors. Congratulations to Brad and huge thanks for his contribution!

How long have you been with the City of Sioux Center?

In March I am starting my 27th year.

What is your job/career history?

After graduating from college, I worked in a clothing store and was on the board of the local golf course. The golf supt. quit one spring, so I offered to try it out. I spent 15 years running the inside and outside of the golf course. I started at the city in 1987, running the golf course and the city parks dept. After 2 years of that, I decided I needed to do one or the other, so I have been at the city ever since.

What do you do for the City of Sioux Center?

I started out being in charge of all athletic fields and one park, and now we have added 5 parks and 8 ball fields, plus we maintain 240 acres of grass on city property. I love the athletic field maintenance the most, but get involved in all aspects of care.

What type of staff do you have and what important role do they play?

For 9 months of the year, our staff is one person beside

myself. That makes spring and fall very busy, because we maintain fields for college baseball and softball in the spring and fall, with high school sports on those fields in the summer. We have 8 part time people who are around for the busiest time of the year with little league, men's slow pitch, adult soccer, and taking care of two campgrounds. They are life savers because I can turn over many fields to them and not worry about them being ready for games.

What are your career goals?

Truthfully, I don't have career goals. I do the best job I can with fields and with the parks so the players and park users can enjoy a quality atmosphere. I love to help people, so if I can make someone's day by helping them along on the road of life as I care and maintain the fields and parks, then my goals have been met.

What does it mean for you to win Professional Sports Turf Manager of the Year? .

This was a total surprise. Like I said before, I don't really have career goals, so the last thing on my mind is to win an award for something. I really don't like attention, so I downplay winning the award, but deep inside I really feel good, because my name was put in the hat by my employee. That makes me feel very good because as a boss, I usually doesn't know what the employees think about me, but when he nominated me, I felt like I'm being rewarded for being a people manager more than for managing turf.

Who was the first person you called about this award?

I didn't have to call anyone because Lee arranged for my wife, my daughter and her husband and 2 of my 9 grandchildren to be there to support me and congratulate me. My daughter put it on Facebook, so without me telling anyone, the whole world knew.

What does it mean to you to be a part of the ISTMA?

I have been associated with ISTMA for over 20 years, and many of the things I do on the fields today are results of things I picked up at ISTMA workshops and putting on workshops in Northwest Iowa. Some of the guys I have been privileged to rub shoulders with are now doing great things nationally and in the big leagues, and they shared their knowledge with me and with anyone else who attended those networking type meetings.

What other hobbies do you have?

When I ran the golf course, I never had time to golf, and now when I take care of athletic fields, I don't have much time to golf either, but I do love that sport. I have 9 grandchildren, so any time I can be with them, I make that a priority.

What is your advice to other Sports Turf Managers or Students?

My advice would be to not try to be a hero and do all your field maintenance on your own. There are a lot of very experienced and knowledgeable people who are willing to share what they know to make you a better sports turf manager. Every time I go to a workshop I come away with at least one thing I can use to make the turf I manage a little bit better for the players that use it. Another bit of advice I have found is if you are in this for the glory, then you better sign up for therapy now. If you are doing this for YOU, it will not be a fun ride. The focus should be on making the safest field possible for the players who play on those surfaces you take care of. When the focus is on others, then you will do well.

What do you love best about being a Sports Turf Manager?

I love the interaction with coaches and players. I enjoy making a field look nice, but when I receive comments from players about being the best surface they have played on, then I'm heading the right direction. One college team was on their knees on the football field because they thought it was synthetic turf with the feel of grass. Since I have been in this for so many years, I have many home owners ask me to come and look at their lawn and recommend what to do. I also love being asked by other schools if I will come over and help them with a problem field, or show them how to build a mound properly. As you can tell, I love many things about this opportunity in my life.

Do you have any projects being planned or in the works?

We actually have several plans coming up. The high school is starting soccer, so they will probably be taking over the 4 soccer fields we care for now. We are looking at building a new soccer complex on a 17 acre cornfield, so this fall is the start up for that. This past year we had 42 events on the football field, so between the high school, college, and the city, we are proposing to do synthetic turf next summer. In July we plan to take out the backstop and bleachers of the softball field and do a brick wall with netting and a raised bleacher and press box for the high school and college teams.

**Rugged.
Consistent.
Dependable.**

The Best Field Chalker in the Business. Beacon Streamliner.

Beacon Streamliners are simply the best dryline field chalkers you can buy. Our field testing has proven the Streamliner delivers the most consistent, solid line while saving chalk and reducing costs. It uses 30-50% less chalk than other chalkers. Use your smart phone to scan this code and *watch it in action!*

800-747-5985 BeaconAthletics.com

BEACON ATHLETICS

FOR FACILITIES . FIELD MAINTENANCE . GAME-PRACTICE EQUIPMENT

Nitrogen Fertilizers for Iowa Athletic Fields

J.B. Sartain & J.K. Kruse, University of Florida Gainesville



Sports fields act as an important cultural, financial, and sociological component to many of Iowa's small communities. The fields provide a source of income, aesthetically pleasing green space, and increased overall physical and mental health. To achieve a healthy attractive field, it is necessary for sound cultural practices.

One of the most important cultural practices is fertilization. The benefits of a well-maintained fertilization program are good turf color, quality, density, and field playability, safety, and durability. Fourteen elements are often referred to as mineral nutrient elements and are generally obtaining in the soil via root extraction. The quantity of most of these nutrients contained in the soil is high compared with the requirements of turfgrass plants. However, the demands for nitrogen often exceed the supply in the soil. Thus, it becomes necessary to add nitrogen through fertilization.

Nitrogen nutrition is important to turfgrasses because it can affect shoot growth and density, root growth, and susceptibility to damage from disease, heat, cold, traffic, and drought. This article will examine the chemical and nutrient release properties of several nitrogenous fertilizers available to sports field managers across Iowa.

tions of these materials to obtain uniform growth over a long period of time. Soluble nitrogen sources are less expensive per pound of nitrogen than the slow-release fertilizers.

Quick-Release Nitrogen Sources

Ammonium Sulfate (AS) contains 20-21% N and 24% S and in most cases is a greyish crystalline material. Pure ammonium sulfate is white, but the pure form is rarely marketed. The more common greyish market material is due to carbon contamination. As ammonium sulfate is broken down in the soil, the conversion of ammonium to nitrate produces 5.35 pounds of acidity per pound of N applied. The acidifying nature makes it the desired N source on alkaline-based (high pH) soils. To limit volatilization losses, AS should always be watered into the soil following application. Ammonium sulfate's high burn potential (salt index 3.25) restrict high application rates. After application with AS, the general response is a dark green color for at least 30 days. Turfgrass response to AS tends to last longer periods than for the other soluble N sources, and for this reason AS tends to be the preferred soluble N source of many sports field managers.

Ammonium Sulfate

- White crystalline material
- 20-21% N and 24% S
- Acidifying
- High salt index (3.25)
- 30 days of dark green color that is longer than many other soluble N sources
- High potential for volatilization, when not watered in



Urea is a quickly available N source that contains 45-46% N. Urea is less acidic (1.8 pounds per pound of N) and has a reduced burn potential (1.62 salt index) in comparison to AS. The lower salt index allows Urea to be applied at higher application rates with little threat of turfgrass burn. However, just like AS, Urea must be watered into the soil to prevent the loss of N through volatilization. Urea may also be lost through leaching from sand based fields because of its non-ionic nature (no net charge). In most situations Urea produces an inferior response in comparison to AS, but because of its ease of application in solution form, its high solubility, its low burn potential and low cost per pound of N, it is a popular soluble N source among sports turf managers.

Urea

- White crystalline solid
- 45-46% N
- 1.8# of acidity/1 # N
- Lower salt index
- High volatility
- Non-ionic compound



Potassium Nitrate (PN) is used in lesser quantities than AS and Urea, but is still important in a fertility management program. Potassium Nitrate is commonly marketed under the trade name Peter's Special and contains nitrogen and potassium (13-0-44). The prill form has good handling properties and is moderately soluble. When surface-applied, PN has the potential to burn the turfgrass (Salt index 4.25). Therefore, all application

should be watered into the soil. Potassium nitrate is not acidifying like AS, in fact it produces a small alkaline reaction (increasing pH).

Potassium Nitrate

- 13-0-44
- Moderately soluble
- High salt index
- Non-acidifying
- Foliar applications
- Good handling characteristics
- Thought to promote establishment and rooting of turf



Stabilized Ureas (UFLEXX and UMAXX) are commonly believed to be slow released products. In fact, UFLEXX-like products are soluble stabilized ureas. Stabilized urea is urea that has been engineered to inhibit the action of nitrification acting bacteria (slow conversion of ammonium to nitrate) in the soil as well as a urease inhibitor to block the conversion of urea to ammonium in essence slowing volatilization. The goal of stabilized urea products is to create a situation where N is available in the soil longer, allowing for increased plant uptake efficiency.

Stabilized Urea

UFLEXX - Urea + Agrotain

UMAXX - Urea + 2x as much Agrotain



- Both products 46% N
- Relatively cheap, composition inhibits volatilization and nitrification

Less frequently, monoammonium phosphate (MAP) and diammonium phosphate (DAP), calcium nitrate, and non-pressure nitrogen solutions (Uran and Feran) can be used as soluble N sources.

Continued on Page 10...

Slow-release fertilizers include natural organics, synthetic organics, and coated nitrogen materials. The release of nitrogen from these materials may be due to microbial decomposition alone, or in combination with chemical and physical processes. Since the activity of microorganisms is dependent on soil temperature and moisture, nitrogen availability from slow-release fertilizers may vary with the time of the year and weather.

Controlled and Slow-Release Fertilizer Sources:

The terms controlled-release and slow-release fertilizer sources have slightly different meanings to selected individuals, but for purposes of this article the two terms are synonymous. In the past few years, the fertilizer industry has seen a shift from soluble products to slow-release. Slow-release products are growing in utilization faster than soluble products.

Ureaformaldehyde Reaction Products (Nitroform, Ureaform, UF, Methylene Urea, Blue Chip, Nutralene, and Methex) represent the oldest controlled-release nitrogen technology.

Ureaform is sparingly soluble (< 15% unreacted urea) and contains 38% nitrogen with greater than 60% of the total nitrogen made up as cold water-insoluble nitrogen (CWIN). Ureaform is composed largely of long-chained ureaformaldehyde polymers. Ureaform is commonly marketed under the trade names of Nitroform, UF, Blue Chip, Powder Blue or Methex.

Ureaform (38% N)

- Longer-chain UF polymers
- Small soluble fraction (<15%)
- Marketed under (Nitroform, UF, Blue Chip, Powder Blue or Methex)
- Insoluble organic
- Released by biological activity (Soil temperature influenced)



Methylene Ureas products contain predominantly intermediate chain-length polymers with 15 to 30% unreacted soluble urea. The total nitrogen content is 39

to 40% with 25 to 60% of the total nitrogen made up as CWIN. Methylene Urea is typically marketed under the trade name **Nutralene**.

Methylene Ureas

- Developed in 1960s and 1970s
- Intermediate-chain polymers
- 40% N
- 15-30% soluble
- Biological activity released
- More rapidly available than UF (8-12 weeks)
- Commonly marketed as Nutralene
- Not as adversely influenced by cool temps



UF solutions such as the product CoRon (28%N) are clear water solutions. UF solutions contain only very low molecular-weight, water soluble Ureaformaldehyde reaction products and unreacted urea.

Agronomic properties and nutrient release mechanisms of UF products

The conversion of UF reaction products to plant available N requires dissolution and microbial decomposition. Once in the soil solution, UF reaction products are converted to plant available N by microbial decomposition or hydrolysis. Environmental factors such as soil temperature, moisture, pH, and aeration affect the rate of N release. The rate of N release from UF reaction products is directly affected by polymer chain length.

Isobutylidene Diurea (IBDU) is a white crystalline solid produced by the reaction between urea and isobutyraldehyde. The most commonly marketed IBDU contains 31%N with 90% of the nitrogen as CWIN. Isobutylidene Diurea is released through hydrolysis, which is dependent upon adequate soil moisture. Acidic soils with high soil temperatures increase the rate of hydrolysis. Because the nitrogen release from IBDU is not dependent on biological activity, N can be released at low temperatures. These characteristics make IBDU the preferred choice in early spring and late fall applications. A majority of the IBDU used in turfgrass is in a blended fertilizer bag.

IBDU

- **Non-hygroscopic white crystalline solid**
 - Available in fine, coarse, and chunk particles sizes
- **Minimum 31% N with 90% as WIN**
- **N released by hydrolysis** (More water = More dissolved)
 - Not as affected by temperature or pH
 - Great spring/fall response
- **One of the most expensive products**

The Tennessee Valley Authority developed **Sulfur Coated Urea** (SCU) in the 1960's and 1970's. Sulfur was selected because of its low cost and its value as a secondary nutrient.

The color of SCU is influenced by the use of a sealant and the source of urea. Sulfur coated ureas can range from brown to tan to yellow. Soft sealants act as secondary coating to minimize the effect of sulfur imperfections.

Agronomic properties and nutrient release mechanisms of SCU

The mechanism of N release from SCU is by water penetration through cracks or incomplete sulfur coating coverage. Once the water accesses the core, there is a rapid release of dissolved urea. When wax sealants are used, there is an additional step requiring microbes in the soil to break down the sealants to reveal the imperfections in the sulfur coating.

Sulfur Coated Urea's release rate is directly affected by the coating thickness and quality. Particles with thick sulfur coatings typically have fewer imperfections; however, this can dramatically slow nitrogen release. The weather, sulfur coating weight, and N application rate of SCU can vary turfgrass response (6 to 16 weeks). Several mottling has been observed in spring and fall applications due to the lack of coating uniformity.

Sulfur Coated Ureas

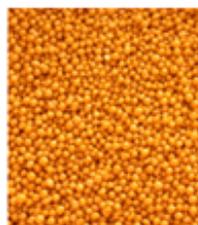
- Developed in 1960's and 1970's
- Sulfur chosen because of low cost as well as use a secondary nutrient
- 32-38% N
- Cool season response erratic
- Fragile coating



Polymer-Coated fertilizers (PCF) represent the most technically advanced state of the art in terms of controlling product longevity and providing nutrient efficiency. Polymer-Coated fertilizers composition and thickness affect the rate of diffusion, varying from 30 to 270 days. The relatively high cost of coatings has restricted use to high-value applications. Polymer-Coated fertilizers are commonly marketed under the following names: Osmocote and Meister.

Polymer Coated Fertilizers

- Most technically advanced state of the art in controlling longevity and efficiency
- Released through diffusion through semipermeable membrane
 - Can be altered by composition of the coating and coating thickness
 - Temperature and moisture effect rate of diffusion



Reactive Layer Coating (RLC) is a relatively new coating technology that polymerizes two reactive monomers in a continuous coating drum. These in-situ reactive layer polymerizations generate an ultra-thin

Continued on Page 12...



Dan Klindt

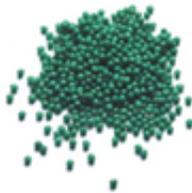
Seed Fertilizer Chemicals
Ice Melters

563-370-2515
dklindt@goldstarfs.com

membrane coating that controls nutrient release by osmotic diffusion. A number these products are being marketed under the trade name Polyon. The ultra-thin membrane coating reduces manufacturing costs in comparison to many other PCF's. The coating thickness determines the diffusion rate and the duration of release. Polyon-coated urea at 4% coating (44%N) will release at twice the rate and will have half the duration as an 8% coating (42% N).

Reactive Layer Coating

- 40% N
- Polyurethane coated urea (Polyon)
- N release influenced by coating thickness, diffusion rate, and soil temperature
- Good for year-round use
- Coating is abrasive resistant
- A 4% coating (44%N) will release at twice the rate and will have half the duration as an 8% coating (42%N)



Polymer/Sulfur-Coated Fertilizers (PSCF) are hybrid products with a primary coating of sulfur and a polymer secondary coat. These fertilizers were developed to deliver controlled-release performance at a reduced cost. Sulfur was chosen as the primary coating because of its low cost. A thin continuous polymer surface-coat is used to regulate nutrient release rates by controlling water diffusion. Polymer/Sulfur coated fertilizers have excellent abrasion resistance and handling integrity. Unlike SCU products, the PSCF's do not leave waxy residues on application equipment.

A combination of diffusion and capillary action influence the nutrient release. Water vapor first diffuses through the polymeric membrane layer. The composition and thickness of the polymeric film control the rate of diffusion. Once reaching the sulfur/polymer interface, the water subsequently penetrates the imperfections in the sulfur coat through capillary action. The water-soluble fertilizer is able to escape the coating and available for plant uptake. The diffusion-controlled mechanism enhances the uniformity of nutrient release and allows for longer residuals of up to 6 months. In addition, the combination coating provides a less temperature sensitive release.

Polymer Sulfur Coated

- Hybrid products, primary coated with sulfur w/ a secondary polymer coating
- Combination permits cost/benefit value
 - Excellent abrasion resistance and handling
 - No waxy residues
- Release dependent on temperature and soil moisture. Water vapor must first diffuse through polymeric membrane. Water then penetrates sulfur coating and solubilized core

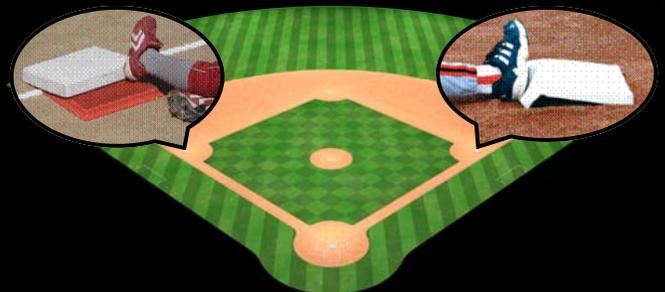
Revised article by Ryan Adams, Iowa State Turfgrass Extension. 2013. Originally composed by J.B. Sartain & J.K. Kruse, 2001. Selected Fertilizers used in Turfgrass Fertilization. Inst. of Food and Agric. Sci. CIR. 1262. Univ. of Florida, Gainesville.

Pace Supply

TURF & LANDSCAPE

Iowa's source for Turf, Landscape, & Sports Field Products

Authorized **schutt** Dealer
SPORTS



1-800-396-7917

www.pacesupplyia.com
pacesupply@southslope.net
FAIRFAX, IOWA



BUILT TO **PERFORM**

**HUNTER SPORTS TURF ROTORS.
TOUGH, VERSATILE, AND DEPENDABLE.**

THE HUNTER I-40 IS THE ROTOR OF CHOICE for top stadiums throughout the world. Built to tough commercial standards, it delivers water with accuracy and efficiency at distances up to 70 feet. With a patented non-strippable drive and arc settings from 50° to 360°, the I-40 always produces winning results.



Achieve even coverage with 6 color-coded nozzle choices on both adjustable/full models and opposing 360° models.



A factory-installed thick rubber cover is built to prevent injuries; arc adjustment is easily made through the top.



RESIDENTIAL & COMMERCIAL IRRIGATION | *Built on Innovation*
Learn more. Visit hunterindustries.com

Hunter[®]

**Iowa Sports Turf Managers Association
Spring Facility Workshop - May 8, 2014
Waukee Stadium - Waukee, IA**



The Iowa Sports Turf Managers Association is excited to present the first workshop of 2014 at Waukee Stadium in Waukee, IA. Host Casey Scheidel, CSFM and staff have prepared a full-day of educational topics focused on Sports Field Construction and Management. The day will also feature a traveling tour to new fields in Stuart, IA and fields under construction in Van Meter and Waukee.

The Workshop education will give Turf Managers insight on maintenance practices on synthetic football fields and maintenance practices on non-synthetic football, baseball and softball fields. Ross Huff with D&K products will talk about the extended use nitrogen products and how they benefit the plant and the environment. We will end the day with a Traveling Tour (transportation provided) to local schools and complexes where we will focus on construction. First stop will be in Stuart, IA at West Central Valley High School at the \$7 million Football, Baseball and Softball fields that were recently constructed in 2013. Next stop will be at Van Meter High School in Van Meter, IA where they are currently building a new baseball and softball complex. We will finish out the tour at Waukee Timberline School and Vision Soccer Complex in Waukee, IA where we will view the construction of a seven field soccer complex and a football stadium. Thank you to our Workshop Sponsors Agriland FS, D&K Products, Iowa Cubs Sports Turf Management, Jacklin Seed, MTI Distributing, Van Wall Equipment.

**Join ISTMA for the 2014 Spring Workshop! Registration deadline is May 4, 2014.
Return this brochure or register online at www.iowaturfgrass.org/events.htm**



Iowa Sports Turf Managers Association
 Spring Facility Workshop – May 8th 2014
 Waukee Stadium Waukee, IA
 Host: Casey Scheidel, CSFM



- 8:30 **Registration w/coffee & donuts (Sponsored by Iowa Cubs Sports Turf)**
- 8:50 **Welcome & Overview of Days Activities**
 – Casey Scheidel, CSFM
- 9:00 **Synthetic Field Maintenance**
 – Midwest Field Turf
- 10:00 **Responsible Nitrogen Use**
 – Ross Huff, D&K Products
- 10:45 **Maintenance Practices on Waukee Baseball and Softball Fields**
 – Casey Scheidel, CSFM and Jay Oxenford, Waukee Schools
- 11:15 **Lunch** – Visit with Vendors
- 12:00 **Traveling Tour** – Transportation Provided
 West Central Valley Stuart High School - tour of \$7 million FB/BB/SB facility built in 2013
 Van Meter High School - tour new Baseball and Softball complex currently under construction
 Waukee Timberline School, Vision Soccer Complex - 7 field soccer complex and football stadium under construction

Thank You to our Workshop Sponsors Agriland FS, D&K Products, Iowa Cubs Sports Turf Management, Jackin Seed, MTI Distributing, and Van Wall Equipment

Registration Form

ISTMA Spring Facility Workshop – May 8, 2014

Name: _____

Pre-registration Deadline by May 4, 2014

Company: _____

- Members \$40
- Non - Members \$50
- Students \$20

Address: _____

STUDENTS MUST PRE-REGISTER

City _____ State _____ Zip _____

Phone: _____

On-Site Registration

Email: _____

- Members \$50
- Non - Members \$60

PAYMENT METHODS:

BY MAIL: PLEASE MAKE CHECKS PAYABLE TO: **Iowa Sports Turf Managers Association**
 MAIL REGISTRATION & PAYMENTS TO: Iowa Turfgrass Office, 1605 N Ankeny Blvd Suite 210, Ankeny, IA 50023

BY FAX: Credit card payment OR Purchase Order **ONLY**- Fax 515-635-0307
 Type of Card: AMEX Mastercard VISA Purchase Order# _____

Credit Card # _____ Exp. Date _____

Card Holders Name (Please Print) _____

Phone : 515-635-0306
 jeff@iowaturfgrass.org
 sarah@iowaturfgrass.org

Signature _____

Sports Turf Specific Research/Research Committee

Brent Smith, Floratine Central Turf Products

For those of you that don't know me my name is Brent Smith. I was elected to be one of the Vendor Directors on the ISTMA Board at the Annual Meeting in Des Moines late January. I am honored to serve this great Association, as I have been a member of it for 10 years, been to a ton of great meetings and workshops, and am now glad to give back in ways other than participation in meetings and sponsorships. We have many great companies that support the industry in Iowa, particularly ISTMA. Thanks for allowing me to serve.

The short version of my background is that I started out as a Sales Consultant for Floratine Midwest in 2003 and grew my business for several years, eventually buying out the company in 2008 to become the Floratine Distributor for Iowa, Nebraska, and Southern Wisconsin. My team has added several product lines over the years to better serve our Customer Base, and it has been a pleasure to bring new technology into the Iowa Sports Turf market and support guys at every level of the industry. I have had a great experience getting to know many of you in the field and it has and continues to be a great learning experience working with such a diverse group of Facilities and individuals in our Association.

We had our first board meeting mid February and it was a great meeting that moved quickly and accomplished a lot. There is great energy on the Board and tons of good ideas to move our Association into the future.

Our President T.J. Brewer, CSFM asked me to Chair the Research Committee, which consists of Tim Van Loo, Ryan Adams, Troy McQuillen, and me. The Research Committee is a new Committee this year and our basic mission is to find avenues to raise money for research that will benefit our members. More importantly our goal is to support research specific to Sports Turf Managers when possible. We also established that we should make this Committee and fund raising efforts an ongoing program with separate funds and accounts that will build over time (Similar the Scholarship Program) and can only be used for research. There are still some details to work out in terms of the best

ways to funnel the dollars to individual Institutions, as there are a number of quality Turf Programs in the State of Iowa that deserve support. Ryan Adams from Iowa State University currently has a research proposal (see his article in this issue of the "Sideline Report") in place that our Committee, Board and many ISTMA members are taking an interest in funding as we begin to have dollars available. Ryan's potential research is a very exciting opportunity to get the research program (specific to Sports Turf) off the ground in Iowa! So please take the time to read his Article and Proposal.

Our Committee and the Board have several ideas in motion to start the fund raising efforts. We will have efforts at the ISTMA 'Workshops', and have looked into other ideas like trivia nights, which have had tremendous fundraising success in other Midwest Associations. Here is the catch, WE NEED YOUR SUPPORT!! From a member and vendor standpoint, this program will not succeed without more ideas and great participation at the events in which we host! Our Committee and Board need to know how important Sports Turf specific research is to your Facility, Career and the advancement of our Profession in Iowa. The only way we will know that is through communication and participation of our members in the fund raising events. Just like our Scholarship program (which is a great success), it is only possible through the efforts and participation of our Membership and Vendors.

If you have any ideas that we can implement at the Workshops or additional events that might be fun to get the program rolling, please let one of us on the Research Committee or Board Members know ASAP please!

Thank you to all for allowing me to serve this great Organization!

Best Regards - Brent

Emerald Ash Borer

Chris Jensen, A+ Lawn & Landscape

Emerald Ash Borer (EAB) has become the hot topic for the Des Moines area. EAB has the potential to become the most damaging and lethal insect known to North America's ash trees to date. This pest kills virtually every tree it comes in contact with, and can spread quickly. Since its original 2002 discovery in Michigan, it has spread south to the Carolina's and Georgia westward to most recently, Colorado. There are 17 states currently listed under the Federal quarantine which is meant to slow the spread of the beetle by prohibiting the movement of firewood. Tree losses have been extensive in rural areas as well as urban areas alike, but the greatest economic damage has occurred to cities. Massive amounts of ashes were planted to line streets, shade parks, and in landscapes due to their resilient nature. Without treatment, the loss of these trees will result in property damage, increased air pollution, lower property values, and loss of the green aesthetics of tree lined neighborhoods.

The EAB adult is a bright green, bullet shaped beetle. It bores through the bark to lay eggs and feed on the phloem inside the tree. When the eggs hatch they feed under the bark, leaving a network of serpentine tunnels, eventually shutting down the movement water and nutrients up and down the tree. Eventually the larvae reach adult stage, emerge from the tree, feed and again reproduce. The emergence holes are D shaped, but are very difficult to find. Beetle movement is usually limited to 1-2 miles from their hatch site.

The damage to the ash trees is done almost all internally so only a systemic insecticide can be effective at controlling the EAB. Contact insecticides will do absolutely nothing to stop the EAB, but does kill other beneficial insects in the area. Systemic insecticides applied by injection systems, provide the fastest, safest and most environmentally responsible treatments. Direct injection into the xylem takes away the danger of drift, non-target insect damage, water contamination and human exposure concerns.

Early detection is extremely important to preserve the most of an affected tree. If a tree has lost more than 50 % of its canopy chances of saving the tree are dras-

tically decreased. Dead areas are not likely to regenerate. After 5-6 years untreated trees will most likely be lost.

Signs of infestation

The following symptoms may indicate that an ash tree may be under attack:

- canopy dieback from the top down
- vertical splits in patches of dead bark
- serpentine galleries visible in exposed areas of wood grain
- D-shaped exit holes
- New "sucker" sprouting from the trunk after upper areas die back.

Take care of the tree's needs to help minimize the damage. These things include insecticide injections, watering and fertilizing. If you discover that your tree has an infestation call a professional and get a plan of treatment established.

DESIGN SERVICE
CONSULTING
FIELD CONSTRUCTION
IRRIGATION & DRAINAGE
FIELD RENOVATION

BUSH

SPORTS TURF

877-787-2676

SportsTurf
MANAGERS ASSOCIATION

WWW.BUSHTURF.COM

Skin Cancer Protection

Brad Vermeer, City of Sioux Center

Welcome to Spring. For all of us who are ready for the baseball, softball, soccer and track seasons to start, we will begin an 8 or 9 month time of activities hampered and blessed by the weather. We will have our lockers filled with insulated coveralls as well as shorts and tank tops, and we will have days of freezing as we work, but also days where there is no place to hide from the heat. There will be clouds and rain and maybe snow with windy conditions as well as beautiful calm days, but with them all, the earth still revolves around the sun, which is with us every day in some way. I used to think that cloudy days were non-sunshine days, but according to research, the sun rays still shine through those clouds. God made the sun to give us warmth and light, as well as many other benefits, but I personally have found out that being in the sun every day from morning until night is taking its toll on my skin.

I'm not going to preach at you about this, but I want to give you some facts that you can look over to see if they might have an effect on your possibility of getting skin cancer. Just so you know this is real, sources say that one American dies almost every hour of melanoma skin cancer.

Some Risk factors listed below

- A lighter natural skin color, and having blue or green eyes with blond or red hair.
- Exposure to sun through work and play, and have skin that burns, freckles, and reddens easily.
- If you have a history of sunburns early in life, or a family history of skin cancer.
- Exposure to larger amounts of arsenic in insecticides can increase skin cancer.
- People with weak immune systems and people who smoke are more likely to get skin cancer.
- The risk of skin cancer goes up as we grow older, so check your body for unusual color or crusty spots.
- Using a tanning bed before the age of 35 will significantly increase your chance of skin cancer.

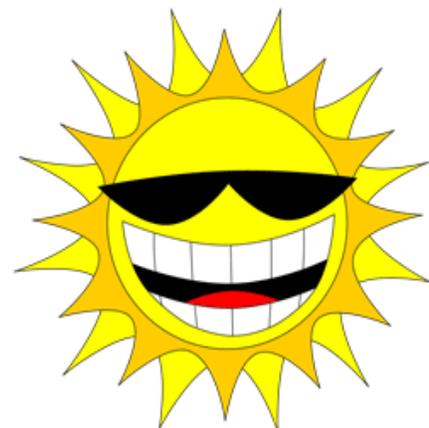
One way to prevent skin cancer is to stay in the shade

from 10 AM to 4 PM, but if any of us did that, would we still have a job? We need to figure out other ways to protect ourselves, so I will list some of the things I have found.

Cover as much skin as possible, knowing they will be hotter but darker colors offer more protection. Wear a wide brim hat to protect the face, head, ears, and neck. Canvas is better than a straw hat. Sun glasses protect eyes and reduce the risk of cataracts, plus protect the soft skin around the eyes. Use sunscreen with SPF of at least 15, but higher numbers give higher protection. Apply several times.

No sunscreen protects completely, so we need to use more than that single application. Sunscreen with SPF of 15 will offer 93% protection, and 50 SPF will give 98% protection, but sweat or water will wash the protection away, so reapply several times each day. The wrap-around sun glasses will give more sun protection as well as protection from wind and dust.

The reason I am writing this is because I go to a dermatologist twice a year, and each time he cuts and burns spots off that are either cancer or pre-cancer. He told me that the damage was done 20 years ago, but being in the sun every day will continue to do more damage unless I abide by the protection listed above. I love working on athletic fields, but there isn't a lot of shade on those fields, and because I know you all have the same situation, I wanted to offer some advice that I never got when I was younger.



TURFACE ATHLETICS™

YOUR HOME FIELD ADVANTAGE

The #1 Conditioner for Safe & Playable Fields

Find a distributor and field maintenance videos
at www.Turface.com or call 800-207-6457.



Find us on
Facebook
facebook.com/Turface

Buy Four Toro® Sprinklers

...Get One **FREE!**

**MORE FLEXIBLE.
MORE ADJUSTABLE.
AND NOW MORE
AFFORDABLE.**

We have arranged a perfect opportunity for you to enhance the precision and efficiency of your irrigation system with advanced Toro golf sprinklers.



From **March 3, 2014 to June 27, 2014**
when you buy four qualifying Toro sprinkler heads, we will give you a fifth one free!

Choose from:

- **Golf Sprinklers:** 800S Series, DT Series and B Series
- **Conversion Assembly:** 800S Series, DT Series and R Series
- **Riserless Bodies:** 800S Series & DT Series

Call your MTI Distributing Sales Representative for full promotion details.



MTI Distributing, Inc.
3841 SE Capitol Circle
Grimes, IA 50111
(515) 661-6800

MTI Distributing, Inc.
6125 Valley Drive
Bettendorf, IA 52722
(563) 449-5470

1-800-362-3665



Count on it.

ISTMA 2014 Board of Directors



TJ Brewer, CSFM
President & Southeast Director
Burlington Bees
2712 Mt. Pleasant St.
Burlington, IA 52601
515-360-8979 (cell)
thusto1@hotmail.com

Tim Van Loo, CSFM
Vice President & Central Director
ISU Athletics
1800 S. 4th St. Jacobson Bldg
Ames, IA 50011
515-509-8035 (cell)
vanlooti@iastate.edu

Jeff Bosworth, CSFM
Northwest Director
Drake University
1422 27th St.
Des Moines, IA 50311
515-202-8847 (work)
jeff.bosworth@drake.edu

Jason Koester, CGCS
Northeast Director
Grinnell College
1917 6th Ave
Grinnell, IA 50112
319-231-9254 (cell)
jkkoeester@yahoo.com

Rick House
Southwest Director
Council Bluffs Sports Complex
2900 Richard Downing Ave
Council Bluffs, IA 51503
402-690-0319 (work)
rhouse@councilbluffs-ia.gov

Casey Scheidel, CSFM
At-Large Director
I-Cubs Sports Turf
1 Line Drive
Des Moines, IA 50309
515-243-6111 (work)
cscheidel@iowacubs.com

Troy McQuillen
At-Large Director
Kirkwood Community College
6301 Kirkwood Blvd SW
Cedar Rapids, IA 52404
319-398-5441 (work)
troy.mcquillen@kirkwood.cc.ia.us

Brent Smith
Exhibitor Director
Floratine Central Turf Products
2738 222nd Street
DeWitt, IA 52742
563-210-1616 (work)
thestrongestturf@hotmail.com

Steve Bush, CSFM
Exhibitor Director
Bush Sports Turf
6800 78th Ave.
W. Milan, IL 61264
309-314-1000 (work)
steve@bushturf.com

Ryan Adams
Ex-Officio Director
Iowa State University
222 Horticulture Hall
Ames, IA 50011
515-294-1957 (work)
rsadams@iastate.edu

Jeff Wendel
Executive Director
Iowa Turfgrass Institute
1605 N Ankeny Blvd Suite 210
Ankeny, IA 50023
515-635-0306(work) 515-635-0607 (fax)
jeff@iowaturfgrass.org

Sarah Hodgson
Newsletter Editor
Iowa Turfgrass Office
1605 N Ankeny Blvd Suite 210
Ankeny, IA 50023
515-635-0306(work) 515-635-0607 (fax)
sarah@iowaturfgrass.org