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#### On the cover:

From L to R: Brian Harnen; Anne Beckingham; Jonas Navarro; Bazyl; and Josh Wyatt, who together are responsible for Vassar College's 2012 STMA College Soccer Field of the Year. We only have one cover but two Soccer Field of the Year winners' stories in this issue so congratulations also to Noel Brusius of the Waukegan (IL) Park District for leading the effort in his Schools/Parks Soccer win.

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### **From the Sidelines**



Eric Schroder Editorial Director

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## Promoting yourself is not a sin

**CROSS THE PAGE** Dr. Goatley writes about increasing the awareness of STMA members' (and therefore of all sports turf managers) good works. He mentions how the Golf Course Superintendents Association of America has improved their members' profiles by advertising and working with broadcasters to highlight superintendents' professionalism at the courses being shown on television. As the good doctor points out, sports turf managers at every level could get similar, commensurate recognition if they are willing to either work with a communications staff at their facilities or go outside their comfort zones and promote themselves.

Knowing as many sports turf managers as I do, I would say that last idea might be a tough sell. Readers of this magazine, with few exceptions (you know who you are!), may make up the least self-promoting profession in the country. If only bankers and lawyers were so humble.

I understand and appreciate the position that if no one is talking about your fields, that's a good thing and you are fine with that. Like umpires and referees you prefer not to make yourself "part of the story." But remember how many hours you put into your fields! Think of the little things you do to improve the playing experience that no one ever sees, the improvements only you are responsible for despite limited resources. Players, administrators, fans, boosters—everyone should know! A higher profile just might mean a better raise come your next review, too. See the media advisory template on www.stma.org that you can use as a guide.

#### **STMA EDITORIAL COMMITTEE**

We are always searching for new ideas for articles and just as importantly, experts with the necessary knowledge to write those articles. Often we can kill two birds with one stone by turning to the STMA's Editorial Committee, a group of volunteer members to whom I turn frequently for advice (and articles, natch).

This year's committee is led by Chairman Phil McQuade, a Board member and turf manager for the Colorado Rapids. The members include: Brad Park, sports turf research & education coordinator, Rutgers University; Jim Cornelius, CSFM, Fisher & Sons, Inc., from here in PA; Jason Henderson, PhD, University of Connecticut assistant professor, turfgrass and soil sciences; Gwen Stahnke, PhD, from the Puyallup Research and Extension Center, Washington State University; Cale Bigelow, PhD, Purdue University associate professor of agronomy-turfgrass science; Jamie Mehringer, president of J&D Turf, Fishers, IN; David Schwandt, Green Concepts, Libertyville, IL (birthplace of yours truly!); Mark Frever, CSFM, Albion College (MI); and Joey Fitzgerald, Chattanooga Lookouts. They deserve recognition for the time they devote to the magazine and educating turf managers across the country. Thank you!

#### **AWARD TIME**

Deadline for several STMA award programs is October 15, which will be here faster than a kickoff return for six. Programs include Innovative Awards, Field of the Year Awards, and SAFE Scholarship and Founders Awards. See the STMA's website for more information.

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The Official Publication Of The Sports Turf Managers Association



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SportsTurf (ISSN 1061-687X) (USPS 000-292) (Reg. U.S. Pat. & T.M. Off.) is published monthly by Specialty Information Media at 1030 W. Higgins Road, Suite 230, Park Ridge, IL 60068. POSTMASTER: Send address changes to Sportsturf, PO Box 4290, Port Jervis, NY 12771. For subscription information and requests, call Subscription Services at (845) 856-2229. Subscription rates: 1 year, \$40 US & Poss.; 2 years, \$65 US & Poss.; 1 year, \$65 Canada/Foreign Surface, 1 year, \$130 Airmail. All subscriptions are payable in advance in US funds. Send payments to Sportsturf, PO Box 4290, Port Jervis, NY 12771. Phone: (845) 856-2229. Fax: (845) 856-5822. Single copies or back issues, \$8 each US/Canada; \$12 Foreign. Periodicals postage paid at Park Ridge, IL and additional mailing offices. COPYRIGHT 2013, SportsTurf. Material may not be reproduced or photocopied in any form without the written permission of the publisher.

### **President's Message**

**Dr. Mike Goatley** 

Goatley@vt.edu



## Get the recognition you deserve

**TMA CEO KIM HECK** delivered an excellent professional development exercise at our summer Board meeting. She asked us to identify what the Board wanted most for our membership. On this particular day, the answer was "recognition." We want appropriate recognition for you from your clientele, your employers, the public, etc., for your expertise and professionalism in sports turf management. The exercise included an "in your wildest dreams, what could you visualize?" segment. One suggestion was a weekly sports turf management show on ESPN, followed by having our own network. Then we discussed a more realistic target. How about a screen shot describing the field, the playing surface, AND the sports turf manager; similar to that seen almost every week on televised golf events? The Golf Course Superintendents Association of America has done a wonderful job of gaining recognition for its superintendents. The public's perception of the value of golf course superintendents has never been higher.

Most successful sports turf managers are very much like an umpire or referee at the top of their profession: if you do your job well, you typically are not noticed and it is only when mistakes occur that "recognition" follows. This is not a profession dominated by outgoing personalities eager to talk about themselves or their jobs.

Another challenge is that far too often the "recognition" we get occurs due to elements beyond our control (weather extremes, overzealous event scheduling, vandalism, etc.). Your Board continues to explore ways that STMA can refine its steps to more quickly and efficiently respond on behalf of its membership regarding crises and unforeseen problems that arise on sports fields.

As a member, YOU must be ready to educate others about our profession as well. If you work at a facility that regularly hosts televised or radio-broadcast events, develop (and deliver to your Sports Information Director or similar contact) a brief information sheet describing the field, its maintenance, and most importantly, include background information on YOU (experience, education, staff, CSFM?, etc.). Even if you don't have a SID to work with, it is likely that your fields will host tournaments or events that will be featured in local or regional print media. I regularly see articles in our local paper touting the economic impact of hosting a regional baseball tournament, and you can bet that out-of-town teams won't (at least not for long) come to play on sub-standard sports fields. Your efforts should be recognized and appreciated! STMA has a media advisory template on its website that you can use as a guide to provide this important information to media outlets.

What else can we do? Consider contacting local sports stations and news shows. I reached out to hosts of local sports-themed radio shows, suggesting interviews with the sports field managers at Virginia Tech and the University of Virginia on how they get their fields game-ready for the football season. Within 4 days both had responded positively asking for the contact information for Emerson Pulliam (VT) and Jesse Pritchard, CSFM (UVa). If we all take small steps such as these, significant positive recognition could be generated for our profession.

Mul South

SportsTurf 7

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#### **Facility&Operations**

## **30+ year STMA members' influence spreads far and wide**

We asked some men who have been members of the Sports Turf Managers Association for 30 or more years to respond to two questions: What is your general philosophy on the art and science of turf management? Who are the most memorable turf managers you have mentored and why are they so memorable?



#### STEVE WIGHTMAN

I do believe that turfgrass management involves both, art and science. Having been in the business of managing

Steve Wightman

sports fields at many levels over the past 39 years, I found that to be a successful field manager one must have a comprehensive knowledge of the scientific aspects of plant growth in order to meet the demands of today's professional sports business. With that being said, I have also found that a great deal of sports field acumen is necessary, as well. Making intelligent decisions by quickly and accurately deciphering and filtering through all of the variables that a field manager faces on a daily basis is truly an art form.

Possessing the expertise and knowledge of how turfgrass grows is essential. As everyone knows, there are numerous variables that come into play when dealing with turfgrass management (climatic conditions, soil conditions, turfgrass types, irrigation systems, stadium and field orientation, financial resources, team and management expectations and field activity, to name a few). Understanding the potential consequences of drought, heavy rain, heat, cold, frost, snow, shade, high temperatures, clay soils, high salts, low/high soil organic matter, mowing, aerification, topdressing, fertilization, pesticide applications, field use, tarping, resources and expectations are critical in making quick sound decisions on sports fields, especially high-profile game fields.

Having the basic tools and a dedicated staff to properly and efficiently manage the field is as essential to turfgrass management as one's expertise and knowledge. And, there is a myriad of scientific tools and equipment that can assist the field manager in making decisions that may help diagnose conditions and/or problems.

One must also have the willingness to seek out detailed information from others in the industry for verification, tips, ideas and experiences with similar situations so all options in solving problems can be comprehensively examined. Networking with academia and other field managers in the industry can be a big help in determining one's best course of action in providing an optimal playing surface in many challenging situations.

In addition to the scientific aspects of growing turfgrass, I believe there is another important part of being a successful field manager. That is what to do and when to do it in certain situations. Experience plays a big part in this and is a great teacher. I do believe that experience teaches the art of managing turfgrass.

One example of applying the art of sports field management would be how much water to apply on a football field during the days of game week or a practice field during the early season practices sessions. From the scientific side of turfgrass management the grass prefers to be irrigated to field capacity and then allowed to dry down before irrigating again. However, irrigating to field capacity a day or two before heavy field activity most likely would be disastrous to the grass, the soil, field playability and player safety. In my opinion, knowing how much water to apply during game week throughout the season to prevent grass decline yet provide optimal playability and soil strength is definitely an art form.

I think the art of turf management is based on knowledge gained from education and experience along with predicted information for the future of field conditions (weather and field use). Art is calculating and formulating at least three contingency plans to overcome changes that may occur with future predictions.

I've often thought that the art of turfgrass management could be defined in scientific terms by correlating all of the variables in turfgrass growth and field use to come up with the lowest common denominator that could be expressed scientifically in every situation. However, because turfgrass management involves manipulating so many variables that constantly change day by day and even within any given day I'm not sure if this would ever be possible. Managing various situations, I feel, is the art of managing the turfgrass.

I'm not sure that I've ever mentored anyone and I don't consider myself a mentor (maybe that notion just comes with old age and hanging around so long).

I have always willingly shared my experiences, both successes and failures, with other industry professionals for three reasons: 1) to learn from others so that I might be better at what I do; 2) to help those that reach out to me to, hopefully, make them better; and 3) to help make the industry (STMA) become better, stronger and more professional.

I'm sincerely proud of where STMA and the sports turf industry are today! The quality and professionalism of the people involved today has elevated sports turf management to a new level.

The leadership of STMA over the past many years has guided STMA the pinnacle of support and opportunity for the membership and continues to do so. And the membership, with their involvement and support, are keeping it there. I'm proud to have been a part of that growth and will continue my involvement and support.

I'm sincerely proud of where STMA and the sports turf industry are today!

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**LONG-TIME** Baltimore Oriole head groundskeeper Pat Santarone, left, hands over his rake to his successor, Paul Zwaska.

Education, the vehicle of change...

In my 34 years in the industry and 31 years with the STMA, the one driving force that has

changed the industry to what it is today is education. The number of college educated groundskeepers in sports turf has

skyrocketed in the past three decades. When I entered the industry in 1979, there were few in the sports field end of the turf industry with any significant formal education in turf. They often relied on what had been passed on to them from previous sports field managers or what worked for them. Back then they weren't always willing to share their secrets or methods of management. But during the 80's, the tide turned.

As I maneuvered my way through turf school at the University of Wisconsin in the early 80's, my advisor, Dr. Jim Love, alerted me to a new organization called the Sports Turf Managers Association, which peaked my interest since my desire was to get into that end of the business upon graduation. Information was slow to flow in the early years from the organization but luckily, due to my close proximity to the Milwaukee Brewers' ballpark, County Stadium, I was able to meet with Harry Gill and arrange an internship with him in my last summer before my senior year. As one of the founding fathers of the STMA, his willingness to take on an intern (something that was hardly ever done in MLB back then) was admirable. While my time there was brief, the experience was invaluable.

You see, it was actually Harry who got me my job with the Baltimore Orioles. In August 1984, I had sent resumes out to several ball clubs including the Orioles. Their head groundskeeper, Pat Santarone, was looking to hire someone to train to take his position upon retirement. Thanks to Harry's recommendation to Pat, I was interviewed and quickly hired onto the Orioles as the assistant. Pat had said he had wanted someone with a degree in turf to take his place. He could see changes that were occurring in the industry and how much

more technical it had become since his glory days. And so it began.

While I was one of the earlier turf graduates in the sports turf industry back then, I was the "drip before the deluge." As the 90's came along, so did a building wave of turf graduates vying for jobs in sports field management. And it wasn't just men coming from the college campuses; female graduates were breaking the barrier of the once male-dominated profession. And soon, we would see them at all levels of the profession. Along the way, the STMA was rapidly growing and offering an ever-expanding variety of educational opportunities from their annual conference in January, to regional and state chapter events, a monthly magazine and other printed educational materials. The educated sports turf managers were riding the wave into the 21st century.

With the advent of the younger, more tech savvy sports turf managers came their demand to academia for more sports turf specific research. They required better and more diverse equipment, better performing field drainage systems, improved turfgrass varieties, and more eco-friendly and effective turf chemicals and fertilizers. Where education initiated the wave, science would build the intensity. The sports turf industry had come of age. Tasks that seemed impossible just two decades before would become common practice in some cases by the turn of the century.

I left my post with the Orioles at the start of the new millennium. In my final 2 years with the club I had been spending more and more of my off seasons teaching and speaking about field maintenance. It was something I loved doing because I remembered how I was in the early years, hungry for any information about sports field management. And I knew there were plenty of groundskeepers out there with lots of questions. One of the reasons I left the Orioles for Beacon Athletics (then called Beacon Ballfields) was because of Beacon's desire to have someone like me to help educate their customers. It was an opportunity I was anxious to embrace and move forward. Thirteen years later, after a couple hundred seminars and now a new online groundskeeper training program, I still get the thrill each time I get to gush my knowledge and experience to those interested in learning. It is a thrill for me to help those struggling with their field maintenance to understand why something is happening and how to solve the problem. It is a great way to give back to the profession and keep it moving forward. For me, it is a tip of the hat to those

who taught me, Dr. Jim Love, Harry Gill, Pat Santarone and so many others in the profession that it would be impossible to name them.

One could say I've helped mentor many people in the industry, I would probably laugh at that. I was merely helping them understand their problems either through science or common sense. It doesn't always take a college education to figure out a problem and its solution. But like the inquisitive groundskeepers that come to me looking for answers, I still continue to learn new things every time I step on to someone else's field or attend educational conferences. As groundskeepers, we need, no, we have a duty to continue to talk to each other, network and seize every opportunity to further our own education. Education pushed the science, and both pushed the change in our industry. The "art of groundskeeping" has become the "science of groundskeeping." It is our education that will continue to move this industry forward for better performing, safer and more aesthetically pleasing fields.



#### SCHILLER, CSFM, left, with Harry Gill

#### MIKE SCHILLER, **CSFM, STMA PAST PRESIDENT**

I really have been blessed to be part of STMA since nearly the inception of the organization. Eric asked for my "philosophy on the art and science of turf management"; my whole career I tried to provide the safest playing surfaces possible within the constraints of our budget. Whether I was working on the fields during my Air Force career, or for one of the Park Districts or schools I have had the privilege to work at, my goal was to provide a safe, aesthetically pleasing playing facility.

This goal was because I felt a recreational player or student athlete deserved to be playing on the best surface we could provide. I always felt each participant deserved to feel like a pro, and we tried to provide a safe consistent surface for them to showcase their talent as this may be the highest level of competition they may play at.

And I tried to instill these thoughts in each of the talented people I had the opportunity to work with. I felt we were in the business to

keep our facilities safe whether it was our swimming pools, playgrounds, or all our playing fields; our users needed to know we were doing our best to keep things safe for them.

I always tried to be more of a teacher which I guess is also a mentor. With all the wonderful people I had the opportunity to work with over my career, I always tried to pass along the things that had been passed along to me by the wonderful mentors I had in my life.

Because these people helped push me along I was able to pursue my passion of athletic field maintenance. Of course I had a few other responsibilities as well, but my passion was always caring for the facilities where baseball players could get a hit or make a stunning defensive play, or where a football team could do everything correctly and score a touchdown, or a lacrosse, soccer or field hockey player could score a goal.

I left the Air Force and got into the Park and Recreation profession at just the right time, when soccer was growing at an insane rate. I have seen the same now with lacrosse and field hockey as well, each required some education and cultural practice tweaks to make these fields as safe a possible.

At the start of my career I lucky enough to attend an educational conference hosted by Eric Madisen and the *Park and Grounds* magazine staff, and I also attended the Midwest Turfgrass Conference at Purdue University. At these two sessions I had the opportunity to meet Dr. William Daniel and a gentleman known as Harry C. Gill, aka "Pops or Gramps." Harry had been a golf course superintendent when Bud Selig, then the owner of the Milwaukee Brewers, talked Harry into taking over the care of the old County Stadium turf and infield. Harry knew turf, but not infield management. So he started making phone calls.

Doc Daniel was a Turf and Agronomy professor at Purdue and was the man who came up with the idea that became the Prescription Athletic Turf System (PAT) system. I was very lucky that these two men took me under their wing and truly helped me grow professionally and in my knowledge of turf maintenance.

As Harry's quest for athletic field management knowledge grew, a gentleman from Minnesota contacted Harry and became a friend and mentor. Dick Ericson had been the head groundskeeper at Old Metropolitan Stadium in Minneapolis and then he moved over to the Humphrey Dome and managed that until his retirement. And one other gentlemen from down in Kansas City shared information with Harry his name was George Toma.

As the four of these men shared information and questions they thought an avenue was needed to share athletic field information. The first real sports turf session was held at Doc's Midwest Clinic, which had always been golf-oriented. That first session had more than 100 people attend and Doc knew his program did not have enough room to allow this group to grow.

Harry and Eric Madisen worked up an agreement to host the sessions at Eric's annual educational seminars for parks and schools employees and a new session dealing with Sports Field maintenance was born. The numbers grew and the four men's sharing of ideas grew to become what is now known as the Sports Turf Managers Association.

These four men took me in, shared information and ideas and helped challenge me; Harry was known to my kids as "Gramps" and they loved him and I did as well, he was a good friend and one of my mentors. So was Doc Daniels, who often times when in Chicago would just drop in and see how I was doing. I could always call Dick or George if I had a problem and they would give me their ideas on how to solve the issue;

Continued on page 44



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logged Zon

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## "Ad" dollars to your bottom line

**ROFESSIONAL SPORTS** turf managers don't have to look far to understand the importance of advertising on their team's and facility's revenue streams. Public and private facilities not affiliated with professional sports may have more difficulty getting a piece of this very large pie. Let's take a brief look at the history of advertising in sports facilities. Then we can consider some opportunities to tap the advertising market. I'll provide some tips on how to close deals. Finally, I'll show how to calculate competitive rates.

Professional sports turf managers don't have to look far to understand the importance of advertising on their team's and facility's revenue streams. Public and private facilities not affiliated with professional sports may have more difficulty getting a piece of this very large pie. Let's take a brief look at the history of advertising in sports facilities. Then we can consider some opportunities to tap the advertising market. I'll provide some tips on how to close deals. Finally, I'll show how to calculate competitive rates.

Advertisers have long understood the value of associating with athletics. Some athletic venues, however, have been reluc-

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tant to "spoil" their pristine parks, pools, rinks, and other venues with advertising. Public schools are among the last holdouts, an interesting phenomenon considering the pressure on school budgets. Many schools have cut athletic programs at the same time they have refused to allow advertising that would have supported them. The simple answer to selling school boards is a slow introduction of advertising. Start with a new scoreboard. Next consider the back of the press box. If your Little League Field has signs on their fence, ask to put them on your school's outfield fences.

For many, the first advertising we saw at a sports venue may have been those signs on the fence of the Little League Park for the local bakery. Most of us didn't look at it as advertising. Rather we thought it was more an acknowledgement of the \$100 contribution the baker made because his son was the first baseman. Reality is, the only difference between that sign and the huge sign for a national food product at a professional baseball stadium is... "zero." Actually, the difference is several zeros. The Little League sign may be seen by hundreds. The Major League sign will be seen by millions. Not surprisingly, the Little League sign cost hundreds while the Major League sign may cost hundreds of thousands (or even millions depending on terms). Sponsors of Major League Park advertising have large and expensive advertising agencies that analyze every ad purchase. If these experts consider this a sound advertising investment, it should be clear that advertising at your athletic facility will also be a sound investment by simply changing the number of zeros.

Advertising value is determined based on three primary considerations:

**Target Audience**. While some businesses want to reach "everybody," most would prefer to target their dollars to reach their best prospects without wasting money giving exposure to people who are not good prospects. If a business is advertising on TV While some businesses want to reach "everybody," most would prefer to target their dollars to reach their best prospects without wasting money giving exposure to people who are not good prospects.

to reach children, they'll buy time on Saturday morning children's programs. Similarly, you should develop your sales presentation to show how different options reach different target audiences.

**Cost per exposure**. Businesses want to know how much it will cost to reach a given number of people. The simplest form of this is calculated as Cost Per Thousand. If a newspaper ad will be seen by 10,000 people and the ad costs \$500, the cost per thousand is \$20. The trick, when competing with newspapers, is to recognize that only a small percentage of newspaper readers will even notice any given advertisement. Of those, a smaller percentage will read the ad. An even smaller percentage will be within the advertiser's primary target group. Here's a test. Name five advertisers you noticed in the last newspaper you read. Of the five you noticed, how many did you read? Now think about being on the sidelines of a football game. You can't help but notice the advertisement on the scoreboard or on the front of the bleachers.

**Retention**. Retention of an advertisement is difficult to measure. We know, and common sense would confirm, that people retain information better when they see it repeatedly over an extended period of time. Consider, therefore, the re-



Spectators per varsity game x number of games	2,000 x 8	16,000
Spectators per junior varsity game x number of games	750 x 8	6,000
Spectators per freshman game x number of games	500 x 6	3,000
Number of athletes x practices and games	100 x30	3,000
Number of team officials and support staff x practices, games, and prep	50 x 50	2,500
Practice spectators and casual stadium users		3,000
Total impression		33,500
Cost per thousand for a \$500 sign		\$14.92

Are your games broadcast or rebroadcast on Local Access TV? Will the sign be visible in the background? If so, don't forget to add these numbers. How about the background of newspaper game photos?

tention of a single 30-second TV ad versus looking at that well placed sign for the local bakery every time your kid's team gets past midfield.

The advertising opportunities at a sports venue are vast. Don't look only at scoreboards and fence lines. Consider the front of the snack bar. While the inside of the fence is great for the spectators, how many people drive by and could see the outside of the fence? Could you place banners on parking lot poles? Don't forget the rise of each step on your bleachers. Have you ever seen a Zamboni at an ice rink without an advertisement on it? How about the roof of your service vehicles? You've seen them in restaurants so why



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not have ads on the wall in front of your urinals? Is there a track surrounding your field? Tracks are easy to paint (but not easy to erase). Don't forget the Public Address announcer. If Joe the Plumber has an ad on the fence and is then mentioned during a game, all his buddies will be sure to make a comment to him and he'll feel better about his investment. [It would be a good idea to check local ordinances to be sure there are no restriction regards signs that might apply.]

Developing a sale presentation to offer and solicit advertisers does not have to be difficult. Is this the job of the turf manager? Of course not! In smaller venues, however, it might be the turf manager or nobody. The better scenario is for the turf manager to lead the effort to have advertising allowed then work to convince general management how easy it can be for them to sell it. A good start may be to give this article to your facility manager.

Every sales presentation, whether it's selling an ad or convincing someone should go on a date with you, has four elements:

Attention. First, determine who makes the buying decisions and then consider how to best get his or her attention. It might be something as simple as a printed piece that says "REACH MORE CUSTOMERS". Or, it could be a personal visit that leads off with: "I'd like to speak to you about a new way to successfully reach new potential customers at the lowest possible cost while helping your community."

**Interest**. You must interest them and keep them interested through the sales presentation. This is best done by doing prior research to understand the business's target audience, the buyer's motivation, and what they are currently doing for advertising. You will keep the customer engaged by asking leading questions that will later become sales points. The answer to the question: "Are more of your customers high, middle, or low income", will come back when you tell the customer how your ad will reach people in that income group.

**Description**. Your written piece or oral presentation will briefly describe a number of advertising options. As they are presented you'll ask leading questions such as: "If you were going to place an ad at our stadium would you be more interested in placement that is seen mostly by the local fans, the visiting fans, or both?"

Action. Close the sale. Remember the question about who the business would most like to reach? Now you'll say, "You told me

you were most interested in reaching the visiting fans. I agree that would be best for your business. We have one space available right [here] that would do a great job with that. Another very good option is this other space. I like the first one better. Which would you prefer?" Never give them a chance to say yes or no. Always give them a choice of which to say yes to.

Selling isn't magical or mystical; it is methodical. If you believe your spectators are good people who spend money, you are doing local businesses a favor by giving them the opportunity to spend money at your facility to reach these fine folks. If there is no one in your organization capable or comfortable with selling, consider suggesting you hire someone to do the work on a commission basis.

The final element is pricing the advertising. The easiest way to do this is to compare what the competition is doing. Here are the simple steps:

Look at advertising rates of local newspaper, radio, and TV. Calculate the cost per thousand being careful to not simply use the numbers they give you. For example, if a TV commercial reaches an audience in three states but your customers only care about three towns, you have to consider the cost for that TV commercial to reach only the number of viewers in the targeted coverage area. Don't look only at viewers. Be sure to make a deduction for bathroom breaks and fast forwarding with the DVR.

Count the number of people that visit your stadium (ballpark or other venue). Try to break it down by local spectators, regional spectators, and total spectators. This can be easily done by looking at the game schedule and considering where teams come from. You can make some assumptions on the number of repeat spectators to show the total number of different people reached. Don't forget to count athletes, team staff, and practices. You'll be amazed at how these numbers add up even at the local public school level.

The table included here shows how to calculate Cost Per Thousand for a very small facility with very limited use. It is interesting to compare this to the earlier calculation of the \$500 newspaper advertisement with a cost per thousand of \$20. A market with 10,000 people who will actually see a newspaper advertisement should be large enough to draw at least five times more people to their stadium field than what we are using in the example below. If that were to be the case, the annual amount you could expect to ask for the Stadium Ad would be \$2,500. At that cost, your advertiser's Cost Per Thousand is still 33% lower than the newspaper... AND... they are helping the community.

David Kimel is the Director at Collins Perley Sports and Fitness Center in Saint Albans, VT and is a member of the Vermont Association of Broadcasters' Hall of Fame. He has owned and operated radio stations, an advertising agency, and a business consulting company with offices in seven states. Over 15 years he has led the facility to major improvements in community relations, use, renovation, and financial strength.

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## **Golf to sports turf management:** not always smooth transition

*Editor's note:* Hal Phillips, a writer for Mandarin Media, wrote this article for his client, Lohmann Sports Fields.

**ERRY KERSHASKY** left Westmoor Country Club in 2011, after decades as a golf course superintendent, to assume stewardship of all the sports fields at the University of Wisconsin-Madison. It was a natural hire, as part of his job involves overseeing the maintenance of University Ridge Golf Club, the 18-hole course owned, operated and maintained by the state's largest university.

Not long after he arrived in Madison, Kershasky presided over a renovation of the UW football practice field. It was then he got a healthy taste of the differences between work in the golf world vs. work in the sports field world.

"I was called in after the whole thing was let out to bid," Kershasky recalls. "But I could see right away the sand particle size wasn't going to work. The specs were all wrong. The contractor was a landscape guy who didn't understand theses things"—specifically, the field wouldn't drain properly if the sand materials specified for the renovation don't match the GREEN, unadorned open space is the soccer field at UWisconsin.

sand in the existing subsoil, so far as particle size is concerned."

The way Kershasky tells it, the contractor who had secured the bid was none too pleased, and part of his distaste stemmed from the idea that some former golf course superintendent was lecturing him, condescending to him, actually, on the "basics" of turf drainage.

"We get a bit of that, but generally we see acceptance of new practices when the desired results are achieved, which is how it should be," says Jim Lohmann of Lohmann Sports Fields (LSF), a division of the Illinois-based Lohmann Companies, which includes both a course architecture division (Lohmann Golf Designs) and a course construction division (Golf Creations).

While golf business has bottomed out and looks to have begun a slow recovery, the 20year course-building boom that started in 1985 created a glut of course superintendents and course contractors. The golf industry declined when the national economy declined, circa 2008, and many of those superintendents and contractors have migrated into the sports turf management and construction industries.

"We got into the sports field business in 2003, when it was already catching up to golf in terms of agronomic sophistication, technology and professionalism—and by that I mean the prequalification of contractors and such," Lohmann says. "There's still a gap, but the more firms with golf backgrounds get into sports turf, and the more those techniques are adopted and/or adapted, the more that gap is closing."

Most agree that golf industry training is a plus with its emphasis on promoting subsurface drainage and overall plant health, and that sports turf management is generally better for this injection of agronomic and drainage expertise.

"I never think it's a bad thing to see a well educated group descend on another area of the turfgrass industry," says Sports Turf Managers Association President Michael Goatley, PhD, a professor and extension turfgrass specialist at Virginia Tech University. "There are

## JOHN MASCARO'S PHOTO QUIZ

John Mascaro is President of Turf-Tec International

Can you identify this sports turf problem?

Problem: Blue/gray area on turf Turfgrass area: Professional stadium field Location: Denver, CO Grass Variety: Perennial ryegrass

#### Answer to John Mascaro's Photo Quiz on Page 33





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#### **Facility&Operations**



▲ Top: THE STRATEGY PLAN for the Lakes Community HS football field. Bottom: INSTALLED DRAINAGE at Fifth Third Stadium, home of the West Michigan Whitecaps.

several former golf superintendents that I work with, here in Virginia, who switched careers into sports turf management long before the economic downturn. They are all very successful sports turf managers."

But there are tensions and sport-specific nuances to be managed, as sports turf managers and sports turf contractors deal with what many golf-educated superintendents and contractors see as a new, higher standard of expertise.

Amy Fouty, the sports turf manager at Michigan State University since 2003, spent 17 years in the golf business before moving over to sports turf. (In fact, she's married to a course superintendent.) "When I started on this side of the business, I thought 'This is gonna be really easy' having come from a golf background. But it's not been that way at all. It's different. Different conditions, different challenges."

Fouty noted that over the past 20 years, golf courses have moved strongly toward

drainage systems that rely largely on sand. "And we went kind of crazy-overboard with drainage on athletic fields for a while," she said. "But you can't play football on a beach. You're not going to maintain a good football field in 100 percent sand."

Dr. Goatley concurred: "I think that many of the golf turf managers have probably been a little more in tune with spoonfeeding fertilization programs and attention to detail in irrigation management," he said. "However, they will have to gain experience in the different types of traffic between the different types of players and equipment on the turf, as there is great disparity between the traffic imparted on a golf green vs. that of a heavily trafficked athletic field. And probably the biggest edge trained sports turf managers will have is skin-area management, for baseball and softball fields. There are equal parts art and science in this area of sports turf management, and the 'art' must be gained by ex-

perience and by training with a skilled dirt manager.

"Many of the principles in construction are the same... some of the soil mediums change due to the necessity for varying soil strengths, drainage, etc., but I think contractors who know their business will apply their knowledge equally well in both areas. It's no surprise that a constant theme for success in both areas is drainage, drainage, and drainage."

#### **RESOURCES ARE KEY**

Jim Lohmann would add three more key words: resources, resources, resources.

Lohmann Sports Fields cut its teeth in the sports turf business by handling high school

and park district projects. It has grown to the point where it works with large universities, including a renovation of the new varsity soccer field at Wisconsin-Madison, for Kershasky, and resodding the famed gridiron at Notre Dame Stadium. LSF has also built minor league baseball diamonds across the Midwest.

But the firm still handles school and park district projects, and it's here that Lohmann feels the golf background is even more applicable because it often brings with it cost efficiencies, and ongoing agronomic consultation.

"These schools don't have a lot of resources, so if the job isn't done properly, it ends up costing them a fortune," he says. "People will call me and say, 'We have 3year-old field and it's not draining.' First thing I'll say is, 'Are you aerifying?'"

A good example is Lakes Community High School in Lake Villa, IL where the school, through a local contractor, built a brand new football field that experienced serious drainage and settling issues before its first season had even finished. It had a huge crown on it, which, according to Lohmann, is usually a good sign that whoever built it was relying on surface drainage—which means the contractor probably didn't equip it with enough subsurface drainage.

"We came in and stripped between hash marks and incorporated 500 tons of sand, rototilled it in and herringbone-drained the middle of the field," he says. "We mellowed out the crown and it's been great. They love it but they spent money with us they didn't need to spend, if the build had been done properly the first time. A big university might be able to take a hit like that, but high schools can't."

LSF revisits Lakes Community every year to aerify and topdress the field, a mainstay of every golf maintenance regimen. "You can effectively enhance drainage in a topsoil field but if you don't aerify, it will get hard and create a layer that water won't get through," Lohmann says. "You've got to break up that

You can run into all sorts of problems if you're dealing with a landscape company that hasn't properly built a field before material and fill in the holes with sand to maintain a porous soil profile.

"But that costs money, too, and school districts may not have the money, equipment or manpower to do this sort of thing. We've encouraged quite a few to share [aerification] equipment. Park districts, too. It's also pretty common for us to help school and park district clients with ongoing fertilization programs. Without huge resources, you've got to get creative sometimes."

Kershasky is an unabashed proponent of using golf contractors in sports field construction. LSF rebuilt the new soccer field in Madison and Nebraska-based Landscapes Unlimited, another course builder that has expanded into sports fields, rebuilt Wisconsin's new softball field. Kershasky is confident his staff of turf managers can manage "finished" turf just fine going forward. But contractors? He wants someone with golf expertise involved, and the earlier the better.

"Having a Lohmann or Landscapes there merely to help write the specs is a big advantage from the get-go. They know and understand what they're bidding on," Kershasky says. "You can run into all sorts of problems if you're dealing with a landscape company that hasn't properly built a field before. That's what happened on our football practice field.

"Basically, people who've been trained in golf course management, if they've gone to Penn State or an ag school, for example, they understand all those basics, even if they're working in construction. Contractors like Lohmann push all those things. They understand it. They understand all sands and soils are not created equals. They understand if you just spec 'sand,' for example, you can really screw the thing up."

Kershasky returned to the sand issue: What if you can't get the right sand locally? "Well, it changes the price. As a state system, we have many hoops to jump through in the bidding process. It just emphasizes why you have to do it properly."

This sort of attitude surely stirs resentment in those contractors who don't bring golf cred to the table.

"Some of them are resentful," Kershasky says. "But if you can prove a

method is better, that what you say is true, they come around. If you go and take a core and you see the roots are all in the top quarter inch, and you squeeze it and the water is just dripping out rather than passing through the profile, then they get it. But yeah, initially, they say 'What the heck! They're just talking big'."

Fouty agrees with Kershasky that the biggest gap persists in the area of construction: Your typical golf contractors continue to bring more to the table when compared to your typical sports field contractors, many of whom have landscape backgrounds. However, she thinks the difference between sports field managers and golf course superintendents is overplayed and is fading away due to an uptick in sports turf education.

"Time management, organization and communication skills-those are the big things that I brought with me from golf to this job. A better working knowledge of chemicals, types of fertilizer... you just deal with more products in golf," she says.

"But today, sports turf management kids are far better educated at the college level. You used to be considered a sort of outdoor janitor at a stadium. Of course, a long time ago, you just mowed the grass and you were considered a superintendent. Things evolve."

Dr. Goatley said that collegiate golfturf programs were, for a very long time, far more popular and prevalent. So it's no surprise there has been a migration of personnel from golf to sports turf.

"But student interest has changed over my career as an educator, with golf still attracting the larger number of students, but with an increasing interest in sports turf management training," he said. "And for those who are moving from golf turf into sports turf, getting involved in their local STMA chapters and getting to know their fellow sports turf managers will benefit everyone. Both groups have expertise that will benefit their peers. But one group needs to reach out and another needs to be receptive."



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## The first "pitch" at Busch Stadium

**NEVER IMAGINED** that in my lifetime I would have the privilege of doing the first pitch at Busch Stadium in St. Louis for a crowd of more than 48,000 fans. But that is exactly what happened last May.

Busch Stadium hosted two of the most storied teams in English premier league soc-

cer, Chelsea and Manchester City. It was a sellout crowd for the first non-baseball sporting events held at Busch Stadium since the venue opened in 2006. There were 48,263 fans in attendance, which is the largest crowd to ever attend a sporting event at Busch Stadium.

Bush Sports Turf was chosen to collabo-





▲ Top: THE FINISHED PRODUCT. Photo by Taka Yanagimoto. Above Left: REMOVING THE INFIELD with a Terraplane rotor. Photo by Taka Yanagimoto. Above Right: REMOVING THE PITCHING MOUND. Photo by Taka Yanagimoto/St. Louis Cardinals.

rate with Busch Stadium head groundskeeper Billy Findley and vice president of stadium operations Joe Abernathy to convert the stadium from baseball field to soccer pitch—and then back to baseball field—in a 6-day timeframe. Our mission was to squeeze a 100 meter by 65 meter soccer field into Busch Stadium. It would require removing the pitcher's mound and infield clay, and sodding these areas along with the four corners of the field, which would be on the warning track, and then quickly turning the pitch back to a baseball field.

There was a forecast for scattered thunderstorms forecast on every day leading up to the match, so immediately after the Cardinals played an afternoon game May 19, Findley and his crew removed all of the conditioner from the infield dirt and covered the infield with the tarp. Without any extra time to work with, it was critical that the dirt not get saturated. With 48,000 fans attending the Thursday game, the field simply had to be ready. To throw us a curveball, they added an exhibition practice to Wednesday night, meaning the field would essentially need to be done a day earlier that the original plan called for.

#### **PRE-GAME**

We had been planning this conversion for months, and had decided to use thickcut, 1.25-inch, sand-based sod from Heath Sod Farm in Wisconsin. We chose Heath in part because they were a regional supplier, which would save time and cost related to transportation. We also wanted a turf similar in color and density to the rest of the field, and that was grown on a sand-based root zone. We were concerned that using a native-soil sod could give us problems if it rained. As another measure for avoiding problems, we put a 6-mil, fiber-reinforced plastic under the sod to keep the infield dirt underneath from getting wet. This would also allow any excess water to reach the edges, where it could get into the sand rootzone.

Our crew moved in first thing Monday morning and started removing the infield dirt. Findley and I were determined to provide a smooth playing surface without any noticeable transitions. We decided to take 1.25 inches of infield material out in order to match the thickness of the sod. This would allow for an easier installation and a level finished surface. To do this, we used a Koro Field TopMaker 1200 with the new Terraplane Rotor, which is similar to a wood planer: it has cutting blades that leave a clean, even surface. This is one of the first two machines in the US to have this rotor. The machine arrived from Holland a week before the project. It's actually the same machine used to level the clay courts at Wimbledon.

We mounted a laser receiver on the machine so we could monitor the depth of the cut and make sure we removed the exact amount of clay. The clay was hauled out of the stadium using a fleet of workmen. We removed less material in the middle of the infield skin, creating a slight crown in order to help any excess water that hit move toward the edges of the field and into the rootzone. The base lines were then cut and removed using a sod cutter set at 1.25 inches.

All of this work was being done under the watchful eye of Chelsea Football Club head groundsman Jason Griffin, who was quite impressed with the method we were using to remove the clay and prepare the field.

"This isn't new to us," he said of playing soccer in baseball stadiums. "But the process that they're using out here is a new way of doing it. It's very good. It is going to be nice and flat, which is what both teams want."

The pitcher's mound, which had been in place since the field was built in 2006, was being removed at the same time as the infield. It took the power of an excavator to get the tightly packed clay broken up so the mound could be hauled out. Like the base lines, the mound area was taken down 1.25 inches below grade as well. The mound clay was kept in one pile, and the infield clay was kept in another. Both piles were watered to try and keep the clays hydrated. We did not want them to get too dry, as this would make it hard to get them compacted and firm when we reapplied them to the field.



▲ Top: JASON GRIFFIN, Chelsea's head groundskeeper, and Steve Bush confirming dimensions on an iPad. Photo by Taka Yanagimoto. Bottom: BASELINE with clay removed. Photo by Steve Bush.

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When the sod arrived, we did everything we could to keep the rolls cool and in the shade, so we took advantage of Busch Stadium's gigantic ice machines. We filled Gators with ice and hauled it outside to the staging area. We then used a special scoop we built to pack ice into each of the tubes in the sod. This lowered the temperature in the middle of the rolls of sod, where they usually are prone to overheat and burn out.

By the end of the first day, we had all of the clay removed and had installed sod at home plate, the baselines and the pitcher's mound. The 1.25-inch thick sod lined up perfectly with the existing grass. The 6 mil plastic was installed under all of the sod, and the seams were sealed with tape. We had to make sure the clay beneath the sod did not get wet, as this might make the areas unstable, and make it difficult to reassemble the field after the game. With heavy rain predicted, we covered the entire infield with tarp at the end of the day.

Everything was going smoothly, and we were on schedule.

#### WHEN IT RAINS...

That night, severe thunderstorms tore through the St. Louis area. I was awake in the middle of the night, listening to the thunder and watching as it poured outside. I was glued to the weather radar on my iPad while the storm dumped 1.5 inches of rain on the field.

At that point, I wasn't terribly concerned, since we had covered the field with the infield tarp.

But when we showed up Tuesday morning, the situation was a little damper than my outlook. The strong winds that accompanied the storm had ripped the field tarp, and the first base side of the skin was full of water.

Without wasting a minute, the Cardinals' grounds crew started doing everything they could to get rid of the water and wet clay. They used pumps, squeegees, rakes, brooms, shovels and conditioner. Some of the clay had to be completely removed, as it was totally saturated, and we did not have time to wait for it to dry. Simultaneously, our crew began working on the portions of the skin that were still dry enough to work with. A pass with a laser box blade was made on everything to confirm the grade and smooth out any minor imperfections. The plastic was then laid down and taped, and sod was installed.

By afternoon, the first base side had dried enough that it could be graded and sodded as well. To ensure tight, unnoticeable seams, the thick-cut sod was pushed into place using our Sod Slider. The Slider is a hydraulic, tractormounted device that pushes or pulls sod into position. We developed the Slider in 2011 when we were installing more than six acres of sod at Halas Hall for the Bears. Tight seams are critical, especially in soccer, as a bad seam can have a dramatic impact on the ball roll. The sod was rolled with a 2-ton vibratory roller, and we were pleased with the smooth, even surface we had achieved.

Once the infield was completed, the entire field was

mowed and turf paint applied to help blend the old sod with the new. They were nearly identical in color, but some of the new sod was stressed and had yellowed very slightly. Normally, it would grow out of it, but we only had one day to work with. All of the newly installed sod was hand-watered, so as not to get too much water on top of the plastic. Once the paint dried, the infield was covered with the tarp for the night.

First thing Wednesday morning, we sodded the corners on the warning track. We left this for very last to avoid cutting off access to the field. Once the corners were installed, the field literally extended from wall-to-wall at Busch Stadium.

The warning track material was removed and tapered away from the field. Plastic was put down, mostly to keep the sand from contaminating the warning track material. It was starting to get really hectic as they were setting up for the practice game; the band was moving in with their equipment for the post-practice concert, and there were people everywhere. The field was mowed to establish the pattern and the signature arch.

Shortly after noon, the field still needed to be stripped. It was a group effort to get this done. Findley and his crew, our crew and Griffin (from Chelsea) set up the string lines around the perimeter of the field. Using several tape measures and triangulation, we established the goal boxes, penalty boxes and the other markings. After some minor paint machine problems the field was finally painted and the goals were installed. Once a little more field paint was applied to the sod on the warning track, the pitch was ready.

More than 10,000 fans attended the practice game that night. Despite all of the cutting and turning during the practice, the sod stayed in place and played remarkably well. The practice was as much (if not more of) a test of the field's endurance as the main game would be, as the drills concentrated the activity in the areas we had sodded. But the field withstood it all, and the night ended with the turf unscathed.

And the next day, soccer left its mark on Busch Stadium.

The final score was Manchester City - 3, Chelsea - 4, in front of a record-setting crowd. And on top of that, the teams, coaches and players were all pleased with how the field looked and played.

#### **BACK TO BASEBALL**

Friday morning, we started the whole process in reverse as we began literally "throwing out" the first pitch. The beautiful, thickcut sod was quickly removed, hauled out of the stadium, loaded on semis, and hauled off-site to be composted. The plastic had done a nice job of keeping the clay dry under the sod, as well as keeping it clean.

Next, the challenge was to rebuild the baseball infield so that it was firm and had smooth transitions. Once the sod was removed, the entire infield clay was lightly tilled with a Rotodairon to help the clay bond, rather than form a shear plane. As the infield material was brought in, moisture was added, it was rolled and laser graded. One thing we learned was that we should have added more moisture to the clay when taking it out.

Next, the base lines and home plate circle were filled in and leveled off. A form was set for the mound plateau, and the old clay was brought up in lifts and compacted around it. The mound was finished off with new clay on the plateau in the landing area. By the middle of the day Saturday, the field was put back together, and the warning track was cleaned up and ready for baseball.

It was an intense week, but an unmatchable experience. Working with world class groundskeepers (Billy Findley and Jason Griffin) was an incredible honor, and building the first world-class soccer pitch at Busch Stadium is a project I will always remember with great pride. It was hard work, and had its challenges. But someday, I'll be telling my grandchildren I got to do the first pitch at Busch Stadium, and that is priceless.

Steve Bush, CSFM, CFB (Certified Field Builder) is an agronomist and president of Bush Sports Turf.



▲ Top: **REMOVING** the thick cut sod. Photo by Steve Bush. Above Left: LASER GRADING and leveling the baselines. Photo by Steve Bush. Above Right: A soccer pitch in a baseball cathedral, Busch Stadium in St. Louis. Photo by Steve Bush.

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## **SPORTS AND SCIENCE** – Sixth-Graders, Marbles and Potato Chips



N AN AFTERNOON last April, 45 sixth-graders who are keen on athletics but maybe not so much keen on science arrived on the Auburn University campus as participants in the first-ever "Sports and Science" program, produced by the Auburn University Athletics Department and the academic departments of Agronomy and Soils and Kinesiology. This after-school outreach event was designed to introduce youngsters to the possibilities of careers in which they could combine their love of sports with science. From all indications, it achieved its purpose.

Sports and Science was held on a day when Auburn Athletics' indoor football practice facility was available and when a number of Auburn student-athletes would be around to help with the event as part of National Student-Athlete Day, one in which high school and college student-athletes nationwide are celebrated for achieving excellence in the classroom, on the field and in their schools and communities. For the 2-hour event, faculty and graduate students in the agronomy and soils department's turfgrass program and in kinesiology and members of Athletics' Sports Medicine staff developed three educational activities designed to show youngsters some of the possible scientific careers related to sports.

• Kinesiology faculty used their stateof-the-art imaging systems to let students analyze and track their athletic motion, using that as a starting point to talk about careers in injury rehabilitation, sports medicine and exercise science.

• Auburn Athletics' Sports Medicine staff showed youngsters how to wrap pre-

tend injuries and how to wrap to prevent sports injuries and in the process introduced participants to careers in nutrition, physical therapy and athletic training.

• Our turfgrass team, stationed on the outdoor practice field, packed several activities into each 20-minute lesson. We talked about field construction; used potato chips and marbles to illustrate the concepts of soil compaction; helped students take horizontal slices of soil and turf from the field to see the layering of sand and root development in the field; and showed them how to use

Every participant received a special Sports and Science T-Shirt that sported the Sports and Science logo and the Auburn Athletics Department's sponsorship.

turfgrass measurement devices such as Clegg Hammers and torque meters. Students then got a special treat as a member of Auburn's athletic field maintenance staff, an Auburn agronomy alumnus, fired up the core aerator and made a pass across the practice field. Students then found the aerator holes and inserted dowel rods into them to measure the depth of the aeration.

The activities began at 4 pm as parents dropped students off at the Athletic Complex. Auburn Director of Athletics Jay Jacobs and a couple of Auburn student-athletes welcomed the group, and then the students were separated into three groups of 15. From 4:15 to 5:15, the groups rotated among the three different 20-minute activities. Student-athletes spent the next 15 minutes running relays with the youngsters, and at 5:30 pm, organizers served the kids pizza and handed out goodie bags. Every participant received a special Sports and Science T-Shirt that sported the Sports and Science logo and the Auburn Athletics Department's sponsorship.

The day was a success. The students were interested and active, and they asked a ton of great questions. Since the participating sixth-graders were all selected from our local middle school, we got excellent feedback in the days after the event, and many teachers at the school said their students talked about the fun they had and how they learned about new careers in sports science.

#### **THE HOW-TOS**

So how do you put together an event like this at your school?

• Get everyone on board. This event never would have been a success without the combined and creative efforts of faculty, the staff of the Auburn Athletics Department and a great number of both student-athletes and graduate students in the respective disciplines.

• Have small numbers and lots of things to do. Sixth-graders do not want a lecture; they want to run and pound big things into small things. When we told them to compact the potato chips (our field soil), those potato chips were *compacted*. We recommend one college student to every two to three sixth-graders. This keeps it personal, fun and the students engaged.

Use your students. Our student-athletes helped us move the groups from place to place, and they organized and ran all the games at the end of the education sessions. The graduate students helped to teach each education session, and they made sure each student was actively involved and not wandering around.

• If in doubt, *run*. Any time things got slow, we just told the students to run to the other side of the field and then come back. The chance to run on a pristine, immaculate and green athletic field (or the indoor practice facility) is such an event for a kid. It's just really fun!

• Pizza and a T-shirt seal the deal—especially when that T-shirt is clearly special, was made specifically for this event and advertises that the student attended an event at a major university athletic facility.

#### THE NITTY GRITTY

Based on our experience, following are some important details to consider when planning such an event:

• Have the legal experts craft the safety forms that parents must sign for liability issues.

• Work with your schools to get the right kids. We focused on students who were interested in athletics but perhaps didn't show that 'science spark' in the classroom. Teachers helped to identify the right kids, and three teachers came along for the afternoon.

• Get everything organized, and have a detailed timeline. Use a boat safety horn to signal when it is time to change groups. Always keep things moving along.

• Make sure the parents have all the correct information, including drop-off and pickup locations and times. Be sure, too, that parents leave emergency contact information



Thanks to the generosity of the Auburn Athletics Department, the entire event cost \$2,200. This included pizza, water bottles and sports drinks and T-shirts for all.

For more information contact Elizabeth Guertal, guertea@auburn.edu. Dr. Guertal is a professor in the College of Agriculture at Auburn University.



FieldScience | By Jerad Minnick & Allen Reed



## **Concept to active practice:** fraze mowing bermudagrass makes debut

**Challenge**: Thatch/organic build-up on bermudagrass athletic fields.

**Issues challenge is causing**: Reduced durability, including plants growing vertical up through the thatch instead of laterally so it is not as strong and healthy as needed; and thatch breaking down into organic material is full of fines, creating surface compaction and slickness.

• Isolated dry spots due to inconsistent rooting

• Increased water requirement for ryegrass overseeding (seed is growing in thatch instead of in the soil)

• Decreasing ryegrass overseeding durability (seed is growing in thatch instead of soil)

**Concept solution**: Fraze mow to clean out thatch completely. Thatch management on bermudagrass is an on-going challenge for sports field managers. Advancements in breeding to create more aggressive bermudagrass varieties create a solution for high traffic fields. But conversely, vigorous growth compounds the challenge of maintaining thatch and organic material build up.

Verticutting, core aeration, and topdressing are the accepted maintenance practices with which sports field managers address thatch and organic material build up on all grass fields (cool or warm season). According to data from the International Sports Turf Research Center, a verticutting machine with 3mm blades on 1" centers removes 11.81% of the surface area. Core aeration with 5/8" hollow tines on 2"x 2" spacing removes 7.67%. Thus ultimately verticutting and core aeration can not keep with maintaining the current thatch levels, let alone reduce the amount of thatch and organic build up taking place on top of a bermudagrass athletic field.

#### INTRODUCTION TO FRAZE MOWING

In 1996, Ko Rodenburg decided that the practices of verticutting, core aeration, and topdressing for thatch and organic management on his Kentucky bluegrass and rye fields needed another option. As

With overseeding and feeding the fields, the grass could regenerate quickly, nearly thatch and organic free.



▲ Left: Fraze mowing process Middle: Rhizomes exposed after rye, thatch, and organic removal Right Top: First mowing, 2 weeks after fraze mowing Right Bottom: Field 6 weeks after fraze mowing

the parks superintendent for Rotterdam, Netherlands, Rodenburg created a machine that could remove 100% of the thatch and organic build up that accumulated each season. At the same time, the machine removed the poa annua plants and seed accumulation while leaving the crown of the Kentucky bluegrass and rye grass for regeneration. With overseeding and feeding the fields, the grass could regenerate quickly, nearly thatch and organic free. Rodenburg's fields immediately became stronger and more durable as the re-growth of the stand was much hardier than the original sword of grass. Additionally, the compaction potential at the surface was reduced because the fines from the organic build up were cleaned out and the disease pressure was nearly eliminated with the thatch removal of the thatch. Thus in 1997, fraze mowing with the KORO Field Topmaker was born.

The adaptation of fraze mowing to bermudagrass is more an introduction of the entire concept to the United States. A practice common on fields across Europe to improve field durability and reduce poa annua, fraze mowing fits naturally into bermudagrass thatch and organic management. That adaptation became even more natural this year with the introduction of the Universe rotor for the KORO Field Topmaker. The Universe, designed by Imants (makers of KORO) and Campey Turf Care (of Manchester, UK), is for fraze mowing Desso sand-based natural grass fields. The 3/8" blades, aligned on four spirals, allow for Desso fields to be fraze mowed without damaging or pulling out the synthetic fibers in the sand. The small teeth do the same for bermudagrass plants, cleaning off the stolons, thatch, organic build up, and leaving the rhizomes of the bermuda exposed in order to regenerate quickly.

Allen Reid and Miles Studhalter at FC Dallas Park became the first Americans to commit to fraze mowing entire fields (fraze when referencing bermudagrass) to clean out ryegrass overseeding, thatch, and organic build up on three fields. In mid-March, Simon Gumbril from Campey Turf Care was on hand in Dallas to oversee the process. Also, Joe Pemberton, head groundsman at Manchester United's Carrington Training Ground stopped in to FC Dallas Park to observe while in the USA on a vacation.

The 419 bermudagrass was still 95% dormant in March, but a few of the rhizomes were showing some green in the fields as they were cleaned off. See photo 1-6 for the results.

The highlight field, the FC Dallas training field, was out of play for 8 weeks, though the field was ready for play in 7 weeks. The unseasonably cold spring in the Dallas area hampered the re-growth by slowing the 419 bermuda's exit from dormancy, extending the re-generation period by approximately 2 weeks. But still, the process succeeded. According to Reed, "The first day Coach walked back on the pitch he said, 'the field feels strong.' Now after 2 months of daily training, the field has been



#### •••

1.THATCH/ORGANIC build-up, June 2012 2.THATCH/ORGANIC build-up, July 2013 (reduced by 1 inch)

**3.FRAZE MOWING** Patriot bermudagrass **4.GREEN RHIZOMES** prepared to re-generate from Celebration bermuda

5.GREEN RHIZOMES exposed from fraze mowing

6.THATCH BUILD-UP removed from Celebration bermudagrass

7.EXPOSED RHIZOMES following clean out via fraze mowing

lightly verticut one time to stay ahead of the thatch, and is showing little to no wear."

Fraze mowing next used when Maryland SoccerPlex Grounds staff cleaned off three fields of Patriot bermudagrass in early June. Because the fields were sprigged only 18 months ago, the processes was intended to transition out the ryegrass and promote a quicker transition to full bermudagrass instead of cleaning out years of thatch and organic build up. The Patriot bermudagrass was 30% out of dormancy when cleaned off, but within 10 days all of the exposed rhizomes were green and responding. A lack of warm weather was again an obstacle for the SoccerPlex fields, but not to the extent of Dallas. See photos 7-9 for results.

The three SoccerPlex fields that were cleaned off were 100% bermudagrass immediately. The non-fraze mowed bermudagrass fields still were only 80% bermuda (rye being the other 25%) on July 1. Additionally, the removal of only a thin layer of organic build up on top of the native soil fields now allows water to be absorbed into the soil faster. Following heavy rains, the fraze mowed fields now soaking in rain much faster than before, allow the fields to be used more.

Also in June, a golf course fairway of Celebration bermudagrass in North Carolina was fraze mowed to demonstrate the process on active, fully growing bermudagrass. The Celebration had begun to build up a thick thatch layer that needed cleaned out (see photos 10-12).

Fraze mowing is a new process to the United States turfgrass market. Yet many intuitive sports turf managers have always ▶ FIELD 12 following fraze mowing compared to 5 weeks later

used similar techniques such as scalping, shallow sod cutting, and even burning off to remove thatch build-ups. Now those are brought into one practice. The process is a vastly different approach to thatch management. It is a practice is not for the faint of heart and can leave a sports turf manager questioning whether they should have done it or not for the 1st week. But ultimately, the strong grass will prevail.

Albert Einstein said it best: "If you always do what you have always done, you will always get what you have always got." Can fraze mowing bermudagrass become an accepted practice in a regular maintenance program to advance the durability of fields for them to sustain more traffic? That is now up to the industry to decide. For more on fraze mowing bermudagrass, see Jerad Minnick's blog, http://GrowingGreenGrass.Net.

Jerad Minnick is sports turf manager of the Maryland SoccerPlex at the Maryland Soccer Foundation, Boyds, MD. Allen Reed is stadium groundsman for FC Dallas.





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## Dealing with grubs: latest recommendations

**Editor's note:** We asked two noted academicians, Dr. David Shetlar, professor of entomology at Ohio State, and Dr. Benjamin McGraw, associate professor, golf & plant sciences at the State University of New York-Delhi, to update us on treating grub problems:

### **SportsTurf**: How will turf managers first recognize they have a grub problem?

**Dr. Shetlar**: Most professional managers will notice that the turf under their care is not performing well or is showing signs of drought stress at times when soil moistures are okay. However, inexperienced managers miss grub populations until the birds or digging animals "show" where the grubs are! Unfortunately, by this time, the grubs are often third instars and pretty difficult to control with inexpensive products. At this time, one may have to use Dylox or Arena and ensure that immediate irrigation follows the application.

**Dr. McGraw**: Probably more often then not, most turf managers recognize they have a problem once they have some serious damage signs. Vertebrates like skunks poking around, raccoons rolling back the turf or birds pecking at the turf are all good signs of grub activity. This is more likely to be late in the fall and when grubs are fairly large and capable of causing some damage on their own (i.e., feeding on the roots of the plant).

Astute turf managers would probably cue into a general wilty-or yellowing appearance to the turf in earlier in the fall, and follow this observation up with some sort of soil probing (taking a golf course cup cutter to a section of turf and looking for the actual culprits is in my opinion a easy way to confirm grub presence). Given the workload of sports turf managers, especially those that have many schedule games and activities on fields in late summer to early fall, proactively sampling large areas with a cup cutter is probably not feasible. Restricting sampling to where grubs have been a problem in the past and in high-valued areas is a more realistic approach.

### **ST**: What steps do you recommend to eradicate the problem?

Dr. McGraw: Preventive insecticides are still the number one go to method of control. When neonicotinoids like imidacloprid (Merit) came on the market it revolutionized how we treat for grubs. Before, turf managers had to applied harsher chemicals curatively or after the infestation had been realized. With products like imidacloprid and newer classes like the anthranilic diamides (Acelepryn), applying preventively before egg hatch leads to greater levels of control, since you are delivering a toxin to a much smaller insect (1st instar larva vs. a 3rd instar). That being said, eradication is not really possible even with chemical controls. Adult beetles are capable of travelling great distances to find your adequately watered soils to lay their eggs in. Even with great control in Year 1, some adult beetles will wander in Year 2 from neighboring sites.

**Dr. Shetlar**: Late season grub issues fall into what I call "rescue treatments." This is an extreme form of curative treatment because the large grubs can be 30 to 40 times the body weight of the grub that hatched out of the egg! Another issue is that the grubs often stop feeding once they have achieved their maximum size for the season.

I often talk to Dan Potter in Kentucky in September and he points out that his Japanese beetle and masked chafer grubs have turned a yellow white color which in-

I think that, especially on sports fields, we can minimize the effects of white grub damage substantially by developing a healthy turf stand

— Dr. McGraw







dicates that they have made all the fat that they are going to make for the season and they've stopped feeding. During this same time, the grubs in Central Ohio are still very white and still feeding! Why is this important? While many insecticides have contact activity (absorbed through the exoskeletons), the primary mode of getting insecticides into the insects is by ingestion! In short, the closer you get to the transition zones, the earlier that annual white grubs may stop feeding for the summer/fall season.

At present, products containing trichlorfon (=Dylox) or clothianidin (=Arena and Aloft) seem to have the best chance of killing large, third-instar grubs—if they are feeding! Both products tend to kill the grubs within 3 to 5 days which will also stop any animal digging. In our field tests, the other neonicotinoids, imidacloprid (=Merit) and thiamethoxam (=Meridian) will kill third instar grubs, but they often take 10 to 14 days. I also commonly recommend spreading Milorganite fertilizer (made from human sewage sludge which no longer contains any heavy metal contaminations) over the area where animals are digging as this will chase them away for a week or so while the insecticide is doing its thing.

### **ST**: What are your recommendations for preventing a future reoccurrence of grubs in the same turf?

**Dr. Shetlar**: Most of the registered grub control products (other than Duocide which contains carbaryl and bifenthrin) can be used as preventives. This generally means to apply them before egg hatch of the annual white grubs. In most of the cool-season zones, this would be applied by mid-July. In my grub efficacy chart, imidacloprid, thiamethoxam, clothianidin (the neonics) all give 90% or better control if applied in June, July into mid-August. If you move into May, imidacloprid and thiamethoxam seem to run out of effective residuals.

Of course, the new insecticide is chlorantraniliprole (=Acelepryn) which can be applied in April through early August and get excellent grub control! For sport field managers, this should be a product of choice as it also has the most benign environmental footprint. It is also the "least toxic" of the insecticides to mammals which is a plus in sport field situations!

Whether to treat or not can often be answered by the research that was done by Mike Villani when he was at Cornell (unfortunately he passed away while still a relatively young turfgrass entomologist). He surveyed lots of golf courses and lawns in New York over several years. He found out that if an area of turf had a damaging population of grubs, it was in the 80% risk level of repeating a damaging population the following year. In short, treat areas where grub damage has been previously noted. **Dr. McGraw:** I think that, especially on sports fields, we can minimize the effects of white grub damage substantially by developing a healthy turf stand: all the things you learn in Turf 101: adequate (not excessive) nutrients and water, minimize compaction, improve drainage as much as possible, and most importantly, develop a deep and extensive root system.

A healthy stand will definitely tolerate more white grubs without showing signs of damage than a stressed stand. Also, spend a day or two scouting out and mapping infestations. Take a golf course cup cutter, regularly sample (in certain grid like patterns), break apart the core in 1/4s and visually assess whether grubs are present. Try to identify what species of grub it is by looking at the raster pattern (row of spines on their butts). But most of all: keep good records. Grubs tend to appear in the same areas year after year. Find out what it is about that area that causes them to return: adult food sources, under-watered, over-watered, shaded, full sun, turf species?

**ST**: Do you recommend using nematodes to combat grubs? Why or why not?

**Dr. McGraw**: Nematodes may provide both short and long term suppression of white grubs and definitely have a place in grub management. You need to become educated in their proper use and application though. These are living organisms and need to be handled with care. There are some major hurdles in their adoption in many areas, namely their price and the product supply chain. However, as is the case in many states like NY where we have a ban of chemical pesticides on primary school grounds and daycares, this may be one of the handful of options that a sports field manager has in controlling white grubs. I hope that their adoption is greater in the future because it is an environmentally responsible approach. However, it is a case of economics right now. There needs to be a greater interest or demand from turf managers before the market can respond to the supply issues. Only then will the price come down.

**Dr. Shetlar**: I only recommend the insect parasitic nematodes for organic lawn care and for homeowners who wish to use non-pesticide techniques. They are still relatively expensive to use and you need to arrange with the supplier to ship the nematodes at the time you are going to apply them. In short, you have to use fresh nematodes! And, when you get them, they have to be applied quickly, with lots of pre-irrigation and post-irrigation. Even with the best of applications, it has been my experience that they will fail about 25 to 40% of the time. However, when they work, they often work very well! Bottom line, they are expensive, difficult to use and the risk of failure is relatively high.



## Waukegan (IL) SportsPark Field #2

- Level of Submission: Schools/Parks
- Category of Submission: Soccer
- Head Sports Turf Manager: Noel T. Brusius

• Title: Parks Maintenance Worker III - Athletic Fields

• Education: Bachelor's degree, GIS & Sports Turf Management, University of Wisconsin-Oshkosh

• Experience: 1999-2004: Oshkosh Area School District: Athletic Field Maintenance Worker. 2005: St. Paul Saints, Ground Crew Intern. 2006-2007: Detroit Tigers, Ground Crew. 2008-2010: Peoria Chiefs/Bradley University, Head Groundskeeper. November 2010-Present:Waukegan Park District SportsPark Sports Turf Manager.

• Full-time staff: Noel Brusius, Tony Diaz

• Other crew to recognize: Steve Ems, Carlos Aguayo, Joe Ayala, Ted Holisky, Lance Moon, Billy Biang, Stan Cielesz, and Taylor Carlile • Original construction: 2010

• Turfgrass variety: 70% Kentucky bluegrass: NuChicago, Rush, Everest, Award, Beyond; 30% perennial ryegrass: CSI, Reverge GLX, Accent

• Overseed: Entire field in Spring/Fall using a Seed-a-vator set at 2 lbs/1000 - 70/30 mix. Goal mouths overseeded weekly during use: in-play months: 100% Perennial Ryegrass with 50% CSI (Rhizomatic); out of play months: 70/30 Kentucky Blue Mix. Centers, sidelines, etc. overseeded as necessary; routinely after tournaments. 2012 Totals through 10/1 - (fall seeding not yet started): Seeda-vator: 4 times (3/27, 5/21, 8/21, 9/14) = 300 lbs. Goal mouths: 18 times = 54 lbs. Other areas (centers, sidelines, etc): 19 lbs. Total overseed (through 10/1) = 373 lbs.

• **Drainage:** Fields 2&3 were graded in pairs, in a uniform plane diagonally at a consistent 1.25% slope. The slope is from the NW corner to the SE corner.

#### **CHALLENGES**

The overwhelming challenge in maintaining adequate turfgrass on this field is related to two very common issues that occur when a field is constructed using native soils: 1, the soil was aggressively compacted by the contractor in order to meet grading



## **JOHN MASCARO'S PHOTO QUIZ**

#### **Answers from page 17**

AS YOU CAN SEE by the pile of flooring in the photo, there has been a concert on this field or in this case an ongoing construction project as the blue and grey area is in the shape of a ladder. The obvious guess would be that a summer concert caused heat burn stress on the Ryegrass turf; however this actually happened in early April in Denver. There was an ongoing construction project installing new, larger video boards with two cranes. The construction company left the small aluminum ladder on the grass just outside of where the field covers reach on what would be a record cold night with a single digit low of 6 degrees F. The ladder imprint is the result of direct low temperature injury to the young ryegrass turf. The extra cold transferred by the ladder from the air to the turf put this grass over the cold temperature injury threshold. Luckily, the marks were turf canopy damage only and the area was allowed to grow and the damage was simply mowed off. ■



Photo submitted by Ross Kurcab, CSFM, Denver Broncos Football Club, Sports Authority Field at Mile High Stadium.

If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to John Mascaro, 1471 Capital Circle NW, Ste # 13, Tallahassee, FL 32303 call (850) 580-4026 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted will become property of *SportsTurf* magazine and the Sports Turf Managers Association.

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requirements; and 2, less than desirable native topsoil was used. Soil testing has shown our soil structure is low in organic matter and high in clay content. The bottom line is ongoing compaction issues have made it extremely difficult to grow grass.

Field #2 was one of the last of the 17 SportsPark athletic fields to be grown in, yet it was expected to perform at the same level as all the other fields. Through field rotation and aggressive cultural practices, the turf conditions have been drastically improved and Field #2 is comparable to the other fields at the site.

In 2012, the district hosted three National Soccer Tournaments in addition to a variety of regional tournaments and normal league play. Some of the best amateur soccer players in the nation played on our fields. One tournament hosted 275 teams, playing from 8am-8pm daily for 7 days. To meet this rigorous tournament schedule, we had to adjust our daily maintenance to complete routine tasks. The high usage along with extreme weather conditions definitely took its toll on the turf. This summer was the warmest and third driest summer on record in Illinois. To make matters worse, not only was Field #2 challenged by the extreme drought and heat; the irrigation system was underperforming. The irrigation system manufacturer's representative was brought on site to address the problems.

Like most agencies, we face over-use and budget constraints. Our strategy is to actively and aggressively address each maintenance issue as it arises. Through networking with STMA members, both local and national, we found an abundance of resources made available to us. We turned to other members who have had previous similar experiences to help us with our problematic situations. To address our soil structure issues we have consulted with some of the industry's elite and are now planning a compost topdressing program, and have been very aggressive in our cultivation practices. The use and budget issues will always be there, but through weekly meetings with our recreation department, we work together to help balance everyone's (including the field's) needs. This team approach sets us apart from the rest.

**SportsTurf**: What channels of communication do you use to reach coaches, administrators and users of your facility? Any tips on communicating well?

**Brusius**: Generally my communication to users goes through our Recreation Department (responsible for field scheduling and user groups). However this can be tricky at times because I am the only person on site for all inquiries. We schedule weekly meetings with Recreation Dept. staff, but with everyone so busy these are often cancelled or postponed. Phone calls, text messages, and emails have become our main source of communication. When we know we will be hosting tournaments or other major events, we set up conference calls with the individual user groups so we can work together to balance everyone's (including the fields') needs. **ST**: What are your specific job responsibilities? What do find most enjoyable? What task is your least favorite and why?

**Brusius**: I oversee/manage the maintenance and day to day operations of the 90-acre Sports Complex. This includes all turf maintenance (mowing, irrigating, fertilizing, spraying, field painting, aerating, etc), staffing, ball diamond preps, restroom cleaning/maintenance, trash/recycle duties, and all other miscellaneous tasks. In addition our SportsPark staff, led by Tony Diaz, is responsible for the 12 athletic fields located in various parks throughout the city.

I enjoy making a career out of something I really have a passion for. I enjoy working outdoors and being an integral, but mostly unnoticed, aspect to the sporting events we all take pleasure in. It is also gratifying at the end of a long week to look out at the fields and seeing the direct results of everybody's hard work. Also, I find satisfaction watching former employees and coworkers further and grow their own careers within this industry.

The SportsPark is a first-class facility and is a source of community pride. The SportsPark/athletic field maintenance staff view ourselves as leaders within the industry and we strive to be the best.

I thoroughly enjoy my job and the challenges it provides. However with multiple overlapping agendas and vastly different levels of expectations it becomes difficult to satisfy everyone at all times. My point of view is that we all have to give and take; it simply comes down to finding a happy medium.

Seasonal staffing is also challenging. Many of the guys are college age and maybe only work 3 to 4 months, then return to school in the fall. The reality is that I need a consistent seasonal staff from April through November. We are rehiring and retraining a new



group of staff members almost twice a year. This requires a time commitment to train on mowing, painting and field preps, as well as instilling an understanding of cultural practices.

**ST**: How did you get started in turf management?

**Brusius**: While going through college I worked summers for the Oshkosh (WI) Area School District, doing ball diamond preps and general athletic field maintenance. Upon graduation I realized I really enjoyed this type of work and wanted to make a career out of it. I then went back to school to receive a turf degree. Working for and with people like Connie Rudolph, Heather Nabozny, Mike Trigg, and so many others I truly feel blessed and look ahead to "paying it forward."

**ST**: How do you balance your work and personal time? **Brusius**: It can be tough at times. It is probably one of the main reasons I am in my current position now working for a Park District. Having worked 6 years at the MLB and MiLB levels, I know all too well what kind of hours and stress you have to endure. Surround yourself with reliable and knowledgeable staff and take advantage of the off-season with family and friends.

**ST**: What changes are you planning to make or have you made to your maintenance plan for 2013, if any?

**Brusius**: We've tweaked our fertilizer schedule and increased our overseed practices to help keep up with the increased use the fields are seeing. Through field rotation and aggressive cultural practices, the turf conditions have improved throughout the entire site. I am hopeful to address our topdressing/soil amendment needs by fall. My strategy has always been to actively and aggressively address each maintenance issue as it arises.

**ST**: Are you yet involved in "sustainable" management practices? If so, what are you doing?

**Brusius**: Environmental sustainability was taken into consideration at every opportunity during the planning process of the SportsPark. To manage storm water, bioswales were incorporated into the parking areas. Water from the retention pond is recycled for use in the irrigation system. A rain garden catches storm water from the maintenance facility. An additional green initiative was planting of the 16-acre perimeter of the park with native prairie plantings and seed mix creating a no-mow zone. We also have instituted a co-mingled recycling collection throughout the season. I run the irrigation system using ET rates and we will budget for soil sensors to further enhance water usage when they become compatible with our central controller.

**ST**: How do you see your job changing in the future? **Brusius**: I believe Jerad Minnick from the Maryland Soccer-Plex said it best: "No longer are we just the people that mow the grass. This is the time that Sports Turf Managers illustrate their wide range of skills: as soil scientists, plant physiologists, and chemists working with grass and fertilizers; as personnel managers, team builders, and teachers working with their staffs; as a uniting leader, a communicator, and a member of the team on the field empowering coaches, athletes, and administrators." ■



## **Gordon Field,** Vassar College, Poughkeepsie, NY

VASSAR

VASSAR V COLLEGE

GUEST

▼ Anne Beckingham's chocolate lab, Bazyl, is part of the staff, chasing geese off the fields and serving Vassar in many ways, Anne says.



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- Level of Submission: College
- Category of Submission: Soccer
- Head Sports Turf Manager: Anne R. Beckingham
- Title: Athletic Fields Supervisor
- Education: Bachelor's degree in Business/Golf Course Supt.
- **Experience:** Buffalo Bisons internship, 2006; Altoona Curve internship, 2007; Vassar College, 2008 to present

• Other crew to recognize: Brian Harnen, Josh Wyatt & Jonas Narvarro

• Original construction: 2006

Turfgrass variety: Tuckahoe Kentucky bluegrass with Lofts Supreme Sportsmix/Matrix Fairway Mix in the goal mouths and bench area.
 Overseed: We overseed CONSTANTLY in the fall. We use a Loft's sports turf mix - KBG and PR in the goals and bench areas. We do this approx 5-7 times per soccer season - usually before a men's game. We solid time these areas, overseed and then topdress with USGA sand. We also overseed the entire field after core aeration in late October. This year we are going to solid time (3/4") two directions and then slit seed with our Landpride.

• **Rootzone:** 100% sand, with soil amendments including Bolster, Keyplex, Respond III wetting agent, Holganix 38 Special.

• **Drainage:** Multiflow Flatpipe which drains into an 8" trunkline around the perimeter of the field and drains into a cistern located next to the field.



### **CHALLENGES**

**SportsTurf**: What channels of communication do you use to reach coaches, administrators and users of your facility? Any tips on communicating well?

**Beckingham**: Our channels of communication are casual. Normally our coaches either e-mail or give a call to my office or cell phone. If I see them on their fields (and they aren't busy) I like to just say a quick hello and make sure they're set for games or practices. We have a great working relationship with our assistant athletic director as well as our facilities director. They are always in contact about field use, weather, schedules etc. They understand my concerns about all of our fields and are so helpful in decision making—always trying to do what's best for our facility. We've come a long way as far as getting on the same page regarding field guidelines and

### F.O.Y. | Gordon Field

I trust their judgments as far as making good decisions for field use.

**ST**: What are your specific job responsibilities? What do find most enjoyable? What task is your least favorite and why?

**Beckingham**: I'm the Athletic Fields Supervisor. I'm responsible for organizing the maintenance of all aspects of our fields and tennis courts. I manage fertilization, pesticide applications, mowing, trimming—all things that have to do with field maintenance on a daily basis. We are also responsible for three areas on campus that house students and faculty, what we call "outside properties." We are responsible for mowing and maintaining these areas as well. I'm also considered a working supervisor. In my initial job interview I really stressed that I wanted to be able to work right along with my staff and so that's what I do! We make a good team that's for sure.

**ST**: How did you get started in turf management? What was your first sports turf-related job?

**Beckingham**: My "real" home is in the Adirondack Mountains—Old Forge, NY. Strictly a tourist area, there wasn't much in the way in employment that didn't have to do with tourism. I was a greenskeeper at our local 18-hole golf course for 14 years. I realized that there would be no advancement for me at this course so I decided to apply to the State University of NY-Delhi. My degree is a bachelor's in business/golf course superintendent. Summer semester requirements were to work as an intern in the turfgrass industry. I was so fortunate to be able to work for two minor league baseball teams for two of my internships and then I was hooked on sports turf management!

**ST**: How do you balance your work and personal time? **Beckingham**: My husband, Pete, and I will be married 35 years this September. He is the most forward thinking, accepting man I know. And, he's my best friend. He lets me live my life and has always encouraged me to reach any goal that I've set for myself. We live a little over 3 hours away from each other. We try to see each other about every other weekend or so (depending on what season it is) and really look forward to wintertime when the fields are put away. We've learned to appreciate each other so much more, mostly because of distance and time restraints. We just make time and try to figure it out! While it has been good for both of us to be independent, it has also strengthened our relationship. And, I've gotten to see Pete grow in his independence and I know he has definitely seen me grow in mine. I must say, though, that I do miss him.

**ST**: What changes are you planning to make or have you made to your maintenance plan for 2013, if any?

**Beckingham**: In the immortal words of Brian Harnan (best bud, co-worker, staff member, and person from whom I have deleted a LOT of files from his head), "Anne, if it's not broken, then don't fix it."Yes, we may tweak our program, experiment with new products etc., but for the most part we're happy with our results. Our aim is to make the best fields for our athletes and coaches. When we get good reviews from them, it means a lot to us and that we've done our job.

**ST**: Are you yet involved in "sustainable" management practices? If so, what are you doing?

Beckingham: I really like to experiment with new products especially ones that might reduce chemical inputs into the soil. This past year I had the opportunity to work with Dr. Rossi, Dr, Fefer and Brady Nash. We tried different application rates of a product called Civitas (mainly a golf course product and not registered for sports field usage yet in New York State). I kept in touch with a few of my golf course supers to see how they were using it and how it performed on their courses. It turned out to be a wonderful product as far as water use-it cut irrigation use almost in half on one of the fields. I also tried different fungicide and fertilizer applications rates throughout the summer and saw some good results with product reduction too. We are willing to try any product that will encourage sustainability, and like to be able to share information with our schools in NYS through seminars. Since there is a "no pesticide law" in effect for our schools, any product that would be helpful to them through our experimentation is a bonus.

ST: How do you see your job changing in the future? Beckingham: I would like to have things remain the same. My staff does a great job and we take great pride in our fields. We would love to have an NCAA game on ANY of our fields. Our men's soccer team had a great year last year so we're pretty hopeful for all of our teams. However, if there was an MLB groundskeeper looking for a good assistant . . . : D ■



## **Membership Application**



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\*There must already be a national sports turf manager from your facility or commercial member from your company before you may sign up in the Associate category.

Fax to: (785) 843-2977

Or mail with payment to: Sports Turf Managers Association P.O. Box 414029 Kansas City, MO 64141

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— Bob Campbell, CSFM Higher Education Membership Segment

## www.STMA.org

## **ETHANOL 101:** TIPS FOR GOOD ENGINE HEALTH

**ORE THAN 90%** of the fuel pumped in the US is now an ethanol blend, so there's a good chance that your outdoor power equipment might be suffering from the negative effects of ethanol-blended gas. Fuel with more than 10% ethanol, such as E15 is dangerous and in fact, illegal to use in small gasoline engines.

OPE users must equip themselves with a better understanding of how ethanol impacts the engine in order to take steps toward prevention. And then, owners need to understand the best products on the market to help them maintain good engine, and equipment, health.

Ethanol-blended fuel begins degrading 30 days after its pumped. This means, if fuel sits in a portable gas can for a few months, or even an entire season, the gas should be replaced with fresh fuel. If not, equipment owners can face real challenges, especially inside the engine, where the real issues unfold:

• Ethanol-based fuels attract moisture, which eventually separates from the fuel

• A layer of ethanol-enriched water forms at the bottom of the tank, which is highly corrosive for engine parts

• Gum and varnish forms as the fuel breaks down, resulting in stuck intake valves, clogged fuel lines and carburetor jets

The engine can experience issues such as poor starting, rough running, rust and corrosion, and in many cases, failure. And for equipment owners, repairs can be costly, especially since many warranties do not cover damage from fuel that isn't considered fresh.

> Outdoor power equipment dealers are certainly on the frontlines in understanding the engine damage

caused by ethanol-blended fuel. Over the past 3 years, we have heard our own Briggs & Stratton dealers speak more and more about the negative effects of ethanolblended gasoline. In fact, according to an independent power equipment dealer survey, 93% of dealers said ethanol was a primary cause of engine problems in 2012.

If using fresh fuel is the first step to good engine health, the second is using a fuel stabilizer and treatment that combats the negative effects of ethanol.

Fuel treatments and stabilizers are a cost-effective, successful means for extending the life of equipment, and the equipment's engine.

However, equipment owners need to be careful when choosing the right fuel treatment and stabilizer. It's critical to look for products developed by companies that truly know engines, and that have the engineering expertise to understand how best to protect them. Additionally, owners should feel confident that the product they choose has been thoroughly tested, offers maximum protection, and stabilizes fuel for more than a year after opening.

The best options include several ingredients, including triple antioxidant formulas that protect the entire fuel system. Additional ingredients to look for include:

• Corrosion inhibitors that form a protective barrier on metal parts, to help prevent rust and corrosion

• Metal de-activators, to stop aggressive chemical reactions caused by dissolved metal ions in the fuel

• Detergent ingredients that help prevent gum and varnish build-up

• Water inhibitors, to protect against the harmful effects of water in fuel due to ethanol

And for equipment owners who want complete confidence that ethanol will not cause damage to their engines, they can use 100% ethanol-free canned fuel, now available at many outdoor power equipment dealers and repair centers, as well as major home improvement retailers.

Making proactive choices to protect your equipment from ethanol will protect the life of your equipment and save you time and money by eliminating the need for repair, returns and replacements-by Carissa Gingras, marketing director, consumer engine & service with Briggs & Stratton.

## TempLine removable synthetic turf paint

TempLine water-based paints are easy to apply and remove, with outstanding brightness, opacity, play durability and weather resistance in between. TempLine paint is available in three grades, depending on your needs for extended durability versus short-term utility and ease of removal. All three grades come ready to use in a broad range of colors formulated to dry fast and stay flexible without binding together turf fibers or infill granules. TempLine paints are also valued for the brightness and durability they provide without creating heavy build-up.

TempLine Turf Paints and Removers are formulated to work together as a highly efficient marking and removal system, especially when used with the TempLine Mantis Extractor. **Eco Chemical** 

## John Deere Dense Turf rotary turf brush & 14 blade reel

John Deere Golf has launched the Dense Turf (DT) Rotary Brush and 14 Blade Reel. The new 14 Blade Reel lowers the frequency of clip by reducing the distance traveled between consecutive cuts of reel blades. The 14 Blade Reel is available now for Quick Adjust 5 (QA5) cutting units, and the 180SL and 220SL Walk Greens Mowers. The DT Rotary Turf Brush has an exclusive helix design for mounting the bristles that is similar to the blades of a reel. This design assures more consistent turf engagement and enables the brush to more effectively stand up more grass—without having to increase brush depth. The DT brush is ideal for dense-turf varieties of warm season turf grasses, and can also be used with cool-season varieties.

John Deere Golf

## Netafim Techline CV dripline for slopes

With built-in check valves in each emitter to prevent low head drainage, Netafim Techline CV dripline offers a water-saving solution for irrigating landscapes with elevation changes, such as slopes and low lying areas. Techline CV check valves hold back up to 4.6' of water, which means water stays in the tubing when the irrigation is turned off and does not flow down to lower elevations. With check valves, Techline CV emitters turn on and off at the same time, balancing the irrigation coverage. Dripline systems without check valves can lose up to 1.3 gallons of water per 100 feet, resulting in plant damage or slippery surfaces. With advanced features that ensure reliable performance, Techline CV includes built-in physical root barriers in each emitter to prevent root intrusion. All emitters also have an anti-siphon design that inhibits dirt and debris from entering the tubing.

Netafim

## New Rain Bird valve boxes

In today's price-sensitive marketplace, it can be challenging to provide top-quality irrigation systems that also fit within tight budgets. As a result, irrigation professionals often have to choose system components like valve boxes based upon tight project budgets. Now, Rain Bird has launched a line of durable, versatile valve boxes that fit into almost any budget without sacrificing quality—PVB Professional Series Valve Boxes. Featuring light but durable construction, the PVB Professional Series Valve Boxes and lids come in a wide variety of sizes and configurations to meet any irrigation site's needs. Round, mini, standard and jumbo options are available in green and black, as well as tan for more arid landscapes and purple for reclaimed water applications. Standard and jumbo valve box extensions are also available. **Rain Bird** 

## Four new ETQ fungicides from SipcamAdvan

SipcamAdvan expands its ETQ fungicide portfolio for season-long use with the addition of four new products. Echo Dyad ETQ, E-Scape ETQ, Eclipse ETQ and Sipcam Clearscape ETQ combine proven active ingredients with SipcamAdvan's exclusive ETQ technology. Echo Dyad ETQ contains chlorothalonil, E-Scape ETQ contains chlorothalonil and tebuconazole, Eclipse ETQ contains iprodione and Sipcam Clearscape ETQ contains tebuconazole. All incorporate SipcamAdvan ETQ technology to optimize turfgrass color, strength, density and consistency by protecting turf from UVA and UVB rays, heat and other stress factors. SipcamAdvan

#### . Teachnomad's all inclusive outdoor

**Technomad's all-inclusive, outdoor audio solution** Houston-area systems design and integration firm Covenant Communications has gradually transformed sports audio for the Alvin School District in southern Texas in recent years, installing Technomad advanced audio loudspeakers across baseball and softball fields, a large football stadium and other athletic venues to improve quality and coverage. Covenant Communications extended those audio benefits to the new batting cages at Manvel High School this spring, injecting fresh energy into the arduous drill of batting practice. The Technomad solution here covers all the bases, bringing together two full-range loudspeakers, an outdoor amplifier and a flexible audio control system. All components are completely weatherproof for protection against the heat, humidity and moisture of the harsh coastal-area climate. **Technomad LLC** 

## AirDrain synthetic turf drainage

AirField Systems AirDrain synthetic turf drainage doubles as a 100% vertical drainage layer and shock pad. The company says it provides a 14.7% reduction in Gmax over a cement/asphalt sub-base, and an 18.9% reduction in GMAX over compacted gravel sub-base. Whether installed on an aggregate sub-base, concrete or asphalt the AirDrain for Synthetic Turf drainage helps provide you with consistent Gmax and shock attenuation properties which are a major contributor to the reduction of concussions and the safety of your players. Some factors that might influence a change in GMAX would be an inconsistency of the infill or wear of the synthetic turf fibers. Unlike traditional shock pads or e-layers the AirDrain is 1" high, has a 92% air void and a vertical and lateral drainage rate which cannot be matched by any other product in the industry.

**AirField Systems** 

www.stma.org











## **STMA in action**

## Resources to help you manage your fields

STMA IS COMMITTED to strengthening the sports turf industry and enhancing members' competence by providing applicable information on how to manage athletic surfaces. The STMA Information Outreach Committee works hard to produce educational bulletins that provide tips and advice for how to best manage your natural turfgrass athletic surfaces. Topics range from health and safety to cultural practices to construction and renovation—all aim to assist in promoting and maintaining the health and playability of natural turfgrass surfaces.

Check out the Members-Only side of the STMA.org to access any of the following resources:

## Seasonal field maintenance calendars that detail management practices throughout the year:

• Annual Athletic Field Maintenance Calendar for Cool Season Turfgrasses

• Annual Athletic Field Maintenance Calendar for Warm Season Turfgrasses

• Annual Athletic Field Maintenance Calendar for the Transition Zone

#### Resources on cool and warm season turfgrass species commonly used for athletic turf:

- Kentucky bluegrass
- Annual bluegrass
- Perennial ryegrass
- Tall Fescue
- Bermudagrass

## Cultural practices that keep your field in good health:

#### Fertilization:

- Understanding Soil Tests
- Plant and Environmental Responses to the Essential Nutrients
- Quick Release Nitrogen
  - Slow Release Nitrogen
  - Irrigation:
  - Rootzone Construction
  - Water Availability
  - Water Tables
  - Amount and Frequency for Irrigation
  - Application
  - Irrigation Systems
  - Effective Water Use

#### Drainage:

Drainage Solutions

Best Management Practices to Reduce
Stormwater Runoff and Pollution at your
Sports Facility

• Flooding on Sports Fields

• Drainage - A Crucial Component for Athletic Field Performance

- Part One: Surface Drainage
- Part Two: Internal Drainage

- Part Three: Subsurface Installed

Drainage Systems

#### Guidelines for general field management that will help in maintaining healthy, safe athletic surfaces:

• Sports Field Management Practices - Athletic Field Management in the Spring

• Sports Field Management Practices -Preparing a Field for Winter

• Field Management During a Drought

• 2012 Heat and Drought Stress Effects on Sports Turf Management

• Football Practice Techniques that Help

## Our Founders—add to the history

STMA'S FOUR FOUNDERS—Dick Ericson, George Toma, William Daniels, PhD, and Harry Gill—]took an indistinct profession and formalized it. They were at the forefront of STMA's journey from an unorganized industry to a profession of significance. Many factors have influenced and strengthened the association along its way, but one constant remains: the culture of STMA that was created by these early leaders.

Nominate someone for a Founder's Award. Each Founder has brought something unique to the profession:

• Dick Ericson - a leader who continues to raise the professionalism in the industry

• George Toma - a mentor who continues to inspire individuals to be the best that they can

• William Daniel, PhD - an academic who established the industry's important partnership between educators/researchers and practitioners

• Harry Gill - a dedicated professional who made a tremendous impact on the success of STMA.

To nominate someone who embodies these characteristics, go to www.STMA.org, click on the Professionalism tab, and then on the Founders' link. The deadline to nominate someone is Oct. 15. Minimize Field Wear

- Strategies for Managing Heavily-Used Fields
   Thatch Management
- Sprigging Bermudagrass
- Sports Field Painting Tips
- Snow Removal

• How to Control Moles and Reduce Turfgrass Damage

## Resources that give tips and advice for new construction and renovation of fields:

• 8 Steps to an Easy Field Facelift

• A Guide to Synthetic and Natural Turfgrass for Sports Fields - Selection, Construction and Maintenance Considerations

 Natural Grass Athletic Fields for High Schools

• Natural Grass Athletic Fields for High Schools PowerPoint

#### Suggestions for implementing environmental stewardship at sports facilities:

- Reduce, Reuse, Recycle
- Water Efficiency
- Stormwater Management
- Renewable Energy
- Carbon Credits, Renewable Energy Credits,

and Carbon Offsets

- Transportation
- Lighting
- Heat Islands
- Brownfields
- LEED

#### Suggestions for implementing environmental stewardship on athletic fields:

- Soil Issues
- Species Selection
- Cultural Practices
- Traffic Management
- Natural Pesticides
- Pesticides
- Compost Applications to Sports Fields

• Best Management Practices to Reduce Stormwater Runoff and Pollution at your Sports Facilit

#### Resources that focus on keeping fans, athletes, coaches, and other users safe

• Sports Field Safety Football/Soccer Safety and Maintenance Checklist

Baseball/Softball Safety and Maintenance
Checklist

 The STMA Collection of ASTM Standards for Athletic Fields

Take advantage of all that STMA has to offer! In addition to the resources STMA has provided, links to university websites and STMA conference presentations are also available to assist you in taking your athletic field and professionalism to the next level.

# One Word Describes the 2014 Conference Education Program: EXPANSIVE!

#### THE 2014 STMA CONFERENCE EDUCATION

**PROGRAM** has been set! This year the tracks are: agronomics, pest control, safety, facility management, water, professional development, synthetic fields, industry developments, and construction and renovation. STMA is focused on providing conference attendees the most current, unbiased information in all aspects of sports field management to help you succeed.

The STMA Academy is back on Tuesday, January 21. Higher level learning opportunities will feature industry professionals speaking about high wear athletic fields, playability and safety of fields, weed control, and understanding weather and climate. These sessions are included in your conference registration, so make sure to plan your trip to attend.

The General Session kicks off a day filled with educational opportunities on Wednesday, January 22. Take advantage of the pest control track throughout the day and earn pesticide recertification credits. The pest control sessions will focus on improving plant performance with plant protection products, establishing pest thresholds, insect control for the upcoming year, and turfgrass disease management.

Valuable education continues into Thursday morning on January 23. Don't miss sessions focused on new technology to manage athletic fields, organic management, field renovation, infield maintenance, player safety, stormwater best management practices, and more. Students also have education tailored specifically to their needs on Thursday. Sessions that give advice on the correct career path, mentors, and internships are provided to help students succeed upon entering the industry.

Friday morning, January 24 features five different workshops led by some of the top turfgrass educators. These interactive sessions will focus on soil, water, pest control, and field management to help attendees improve their skills and knowledge. The Innovative Sessions will then take place on the trade show floor. This year focuses on some of the most recent improvements and technologies that have been introduced to the sports turf management industry.

Don't miss this opportunity to connect with university professors, researchers, and other sports turf professionals to learn about what is happening in the industry and improve upon current practices. For a full description of all the education taking place at the conference this year, check out the conference brochure, available next month.

STMA is focused on providing conference attendees the most current, unbiased information in all aspects of sports field management to help you succeed.

## STMA Affiliated Chapters Contact Information

Sports Turf Managers Association of Arizona: www.azstma.org

Colorado Sports Turf Managers Association: www.cstma.org

Florida #1 Chapter (South): 305-235-5101 (Bruce Bates) or Tom Curran CTomSell@aol.com

Florida #2 Chapter (North): 850-580-4026, John Mascaro, john@turf-tec.com

Florida #3 Chapter (Central): 407-518-2347, Scott Grace, scott@sundome.org

Gateway Chapter Sports Turf Managers Association: www.gatewaystma.org.

Georgia Sports Turf Managers Association: www.gstma.org.

Greater L.A. Basin Chapter of the Sports Turf Managers Association:

Illinois Chapter STMA: www.ILSTMA.org.

Intermountain Chapter of the Sports Turf Managers Association: http://imstma.blogspot.com/

Indiana -FORMING - Contact Clayton Dame, Claytondame@hotmail.com or Brian Bornino, bornino@purdue.edu

**Iowa Sports Turf Managers Association:** www.iowaturfgrass.org.

Kentucky Sports Turf Managers Association: www.kystma.org.

Keystone Athletic Field Managers Org. (KAFMO/STMA): www.kafmo.org.

Michigan Sports Turf Managers Association (MISTMA): www.mistma.org.

Minnesota Park and Sports Turf Managers Association: www.mpstma.org

MO-KAN Sports Turf Managers Association: www.mokanstma.com.

Nebraska Sports Turf Managers Association: sphillips4@unlnotes.unl.edu

New England STMA (NESTMA): www.nestma.org.

Sports Field Managers Association of New Jersey: www.sfmanj.org.

**Sports Turf Managers of New York:** www.stmony.org.

North Carolina Chapter of STMA: www.ncsportsturf.org.

Northern California STMA: www.norcalstma.org.

Ohio Sports Turf Managers Association (OSTMA): www.ostma.org.

Oklahoma Chapter STMA: 405-744-5729; Contact: Dr. Justin Moss okstma@gmail.com **Oregon STMA Chapter:** 

www.oregonsportsturfmanagers.org oregonstma@gmail.com

Ozarks STMA: www.ozarksstma.org.

Pacific Northwest Sports Turf Managers Association: www.pnwstma.org.

Southern California Chapter: www.socalstma.com.

South Carolina Chapter of STMA: www.sc-stma.org.

Tennessee Valley Sports Turf Managers Association (TVSTMA): www.tvstma.com.

Texas Sports Turf Managers Association: www.txstma.org

Virginia Sports Turf Managers Association: www.vstma.org.

Wisconsin Sports Turf Managers Association: www.wstma.org.

### Chapter Sponsors



JOHN DEERE

## Marketplace



#### Continued from page 11

they never said how to do it, but suggested what might work.

Another man who has been very important to my career is Roger Bossard, the 3rd generation groundskeeper who has been with the Chicago White Sox as long as I can remember. His

granddad, uncles, father and cousin were all involved with athletic field management. When I just got out of the Air Force and had a problem, I called him, and Roger returned my call and has had a great influence on me and my career in turf management.

I guess for the last 40+ years I have tried to pay it forward and share all the information I gained from these men and many others and tried to help whoever would call and ask me a question, I think that is the call to all of us in STMA help each other, whether you share a success or a failure if your information helps save someone time or money, that is what this group is about and what Harry and our founding fathers wanted it to be.

#### PAY IT FORWARD

There are four men whom perhaps I had a little bit to do with their success and growth:

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Save time and money! These specially formulated red polyurethane pads bury 2" below the surface and eliminate deep holes!

Reduces 95% of the maintenance needed in these high-wear areas, while providing the safety and feel of properly maintained clay.

Tougher and longer lasting than granulated rubber or artificial turf pads. Great for recreation departments with several high-use fields or for ballfields where coaches or parents repair these areas. Simply drag infield mix back over pads!

PARTAC<sup>®</sup>/BEAM CLAY<sup>®</sup> 800-247-BEAM (2326) www.BEAMCLAY.com

Mike McBride, who came to me early in my career and had been in sales and wanted to do something outside and was willing to work hard, ask questions and learn. Mike was creative, a quick study and did a great job on athletic field grooming and lining and helped grow the sand blasted sign-making in the Chicagoland Parks Systems. His talent created signage still seen all over the area. Mike moved on and became the Superintendent of Parks in Lombard, IL and has since retired and is now helping turf mangers as a consultant for a local turf equipment supplier.

Rick Bold and I have formed a rather unique relationship; we have known each other for more than 30 years, but over the past 15 we have kind of mentored each other. We shared ideas and issues and helped each other solve problems; we also helped each other out in sharing equipment. Rick became a CSFM and has been the Superintendent of Parks for the Glencoe Park District for many, many years and does a great job serving the Glencoe Community.

Eric Fasbender, now at Louisiana State, came to the Schaumburg Flyers as an intern and then became their head groundskeeper. Eric and I struck up a great friendship and I am sure I have learned more from him than he



from me. I am proud of him as he is a true leader in the industry; he did a great job for the Oregon Ducks and is carrying on his hard work at LSU. He loves what he does and it shows. He also gives back, especially with the hard work he does on the Student Challenge Committee of STMA.

And someone I apparently have mentored without even knowing it is my son Matthew. Matt used to come with me on weekends for special event set up, or ball field set ups, and he observed and as he got older he helped work. Even though I have tried to encourage Matt to enter another career field, he has dedicated himself to the grounds industry and is currently helping manage the athletic fields for the Vernon Hills Park District. With Matt's inquisitiveness and always wanting to learn more about turf and infield management, he is now becoming my mentor.

I hope in some way that I have touched the lives of these four men, and increased their love of working on athletic fields. I am proud of each of them and proud to call them all my friends. I do hope that Harry and Doc look down from heaven and smile at me and the efforts I have made to keep the dream alive.

I do know that I have loved every minute I

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August 2013 - Expires January 2014 - RS1308	Greens Groomer	9	www.greensgroomer.com
1         What is your company's primary business? (check ONLY ONE)           F □ Sports Complex         G □ Athletic Field and/or Park Architect/Designer           T □ School, College or University         P □ Park           H □ Other (please specify)         H □ Other (please specify)	Hydraway Drainage Systems	17	www.hydraway.net
2 Which of the following best describes your title? ( <i>check ONLY ONE</i> ) A □ EXECUTIVE/ADMINISTRATOR — President, Owner, Partner, Director, General Man-	Jacobsen	47	www.jacobsen.com
<ul> <li>ager, Chairman of the Board, Purchasing Agent, Athletic Director</li> <li>MANAGER/SUPERINTENDENT — Superintendent, Landscape/Ground Maintenance Manager, Foreman, Supervisor</li> </ul>	PBI Gordon	11	www.pbigordon.com/speedzone
C GOVERNMENT OFFICIAL — Government Commissioner, Agent, Other Government Official	Sod Solutions	13	www.sodsolutions.com
<ul> <li>D SPECIALIST — Architect, Designer, Consultant, Agronomist, Horticulturist, Certified Specialist</li> <li>F COACH E Other (please specify)</li></ul>	SportsTurf Managers Association	n 39	www.stma.org
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Name            Name            Name	World Class Athletic Surfaces	23	www.worldclasspaints.com

have been involved with STMA, I have made so many wonderful friends over the years and I have gotten so much more out of being a member than I could ever have imagined. I was blessed to have so very many wonderful people help me in my career and I hope that I have made them proud.

Today's Sports Turf

ing of art, science, cre-

ativity and technical

competency to provide

a safe and aesthetically

appealing sports sur-

face. Television

and the internet



▲ John A. Fik, CSFM/CGM

have had a big influence on the sports turf industry as well as the golf course industry. With this has brought a greater effort to keep the client/customer educated and to manage their expectations. Safety of the athletes has become a primary concern of all sports turf managers and learning from industry peers on how to improve safety keeps you one step ahead any litigious actions.

Chris Metcalf CSFM/CGM started with our company in December 2000 as Grounds, Landscape and Sports Fields Manager at Aurora University and received his CSFM designation on July 1, 2012. Chris has always been someone who has wanted to learn more and constantly pushes himself and his crew in providing a more safe and attractive campus. When he called and told me he was applying to become a CSFM it was just another example of how staying at the status quo was not for him.

Darrel Maier is a former golf course superintendent that started with our company on June 1, 2010 and is currently the Grounds, Landscape and Sports Field Manager at St. Luke's School (a private day school) in western Connecticut. The state of Connecticut, as well as many other states in the Northeast, is under a strict "no spray" policy for all public and private K-12 schools. Darrell is constantly researching information through university studies, on line resources through STMA and talking with other sports turf managers to get the latest BMP information. He is looking at converting one of his Kentucky bluegrass fields to a lower impact improved Tall Fescue variety as a test case. He has come up with imaginative ways to control some of the diseases that occur on Kentucky bluegrasses. 📕





BY DR. DAVID MINNER

Professor, Iowa State University

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Or, send your question to Grady Miller at North Carolina State University, Box 7620, Raleigh, NC 27695-7620, or email grady\_miller@ncsu.edu.



## **Turfgrass poker** —are you feeling lucky?

The drought from 2012 combined with our fall football schedule left our field with less than 25% cover through the center high traffic area, so we dormant-seeded an 80/20 mix of Kentucky bluegrass/perennial ryegrass in early November, along with aggressive aerifying. We saw a little perennial ryegrass germination in the spring but by summer we were still thin and now we are faced with weeds and weak grass to start the fall season. Our other soccer/football fields and some multiple use football/baseball fields that are not as worn out but still need overseeding to fill in bare areas. We do not want to use the bluegrass/ryegrass mix again and have been considering turf type tall fescue. Do you think it's a good choice and what about perennial ryegrass?

Lafayette, IN

My answer to this question has changed over the years since tall fescue first came on the scene as a suitable grass for home lawns. In the past because tall fescue is a bunch grass we would caution users to not overseed existing stands of Kentucky bluegrass or perennial ryegrass with tall fescue because the resulting sward of grass could potentially have clumps of undesirable tall fescue sparsely spread throughout the turf area. In home lawns this would be unattractive and in some sports like soccer and baseball it could affect ball roll. In fact, that risk of tall fescue clumping does still exist in theory and occasionally it may happen.

However, after several years of watching how many sports turf managers use tall fescue as an overseeding strategy and after watching their many successes I have completely changed my mind on overseeding with tall fescue to improve sparsely turfed fields where bluegrass and ryegrass have not performed well. This has been especially true on fields where irrigation is inadequate or substantially reduced during drought regulations.

I am a big fan of Kentucky bluegrass for moderate traffic situations where the grass has sufficient time to recover and fill back in to 100% cover. But since bluegrass is so slow to germinate it has left me very unhappy unless I allow nearly a full growing season to let the seedlings mature, tiller and put on rhizome growth. With perennial ryegrass and tall fescue you can expect the bare soil areas to cover twice as fast as Kentucky bluegrass and this is a much better fit for our world of sports turf that needs grass yesterday.

For many sporting fields where you are simply trying to maintain cover the canopy compatibility of Kentucky bluegrass, perennial ryegrass, and tall fescue is not an issue and players and coaches never question the type of grass, but they do notice when bare soil is showing. We also know that continued overseeding with perennial ryegrass will maintain better turf cover but it can, in just a few seasons, shift the turfgrass stand so that it is mostly ryegrass. If you are constantly fighting drought or disease then the ryegrass suffers.

Tall fescue will germinate and mature much faster than Kentucky bluegrass but slightly slower than perennial ryegrass so it fits nicely into the category of a relatively speedy grass that at least shows some type of pay back in turf cover for your time and dollar investment. I seed a lot of my chronically thin fields with a 50/50 mix of perennial ryegrass and tall fescue for the simple reason that it gives more cover the following year. If I see the tall fescue starting to take hold after a year or two then I may switch to overseeding just with tall fescue. Once I start with the tall fescue I like to give it about 3 years of overseeding as needed to give it a chance to prove itself.

## If you are constantly fighting drought or disease then the ryegrass suffers.

The take home message here is that if you are happy with the turf cover on your field, then don't switch to tall fescue just because someone tells you it is a more drought tolerant grass. On the other hand if bluegrass is not performing the way you want, and dry conditions are part of your turf decline problem, then repeated overseeding with tall fescue may leave you with more grass cover on the field throughout the playing season and a better window of opportunity to establish grass because of faster germination.

In my world turf cover that results in better playability always trumps any potential problem I may have with clumpy turf. In regions where tall fescue grows well the odds are good that tall fescue can help some of your problem fields. It's just not that much of a gamble any more with tall fescue once you start to see more green each year.

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