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 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 during 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 turfgrass 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!
Facility & Operations

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.

Mike 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 as 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
"Ad" dollars to your bottom line

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 reluctant 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 acknowledgment 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 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-

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.
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 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

---

**Calculation of Cost Per Thousand Impressions For A Very Small Facility With Limited Use**

<table>
<thead>
<tr>
<th>Description</th>
<th>Quantity</th>
<th>Impressions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spectators per varsity game x number of games</td>
<td>2,000 x 8</td>
<td>16,000</td>
</tr>
<tr>
<td>Spectators per junior varsity game x number of games</td>
<td>750 x 8</td>
<td>6,000</td>
</tr>
<tr>
<td>Spectators per freshman game x number of games</td>
<td>500 x 6</td>
<td>3,000</td>
</tr>
<tr>
<td>Number of athletes x practices and games</td>
<td>100 x 30</td>
<td>3,000</td>
</tr>
<tr>
<td>Number of team officials and support staff x practices, games, and prep</td>
<td>50 x 50</td>
<td>2,500</td>
</tr>
<tr>
<td>Practice spectators and casual stadium users</td>
<td></td>
<td>3,000</td>
</tr>
<tr>
<td>Total impression</td>
<td></td>
<td>33,500</td>
</tr>
<tr>
<td>Cost per thousand for a $500 sign</td>
<td></td>
<td>$14.92</td>
</tr>
</tbody>
</table>

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?
you were most interested in reaching the visiting fans. I agree
that would be best for your business. We have one space avail-
able 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 be-
lieve your spectators are good people who spend money, you
are doing local businesses a favor by giving them the opportu-
nity 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:

1. 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 tar-
geted coverage area. Don’t look only at viewers. Be sure to
make a deduction for bathroom breaks and fast forwarding
with the DVR.

2. Count the number of people that visit your stadium (ball-
park 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 differ-
ent 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.

3. 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 Thou-
sand is still 33% lower than the newspaper… AND… they are
helping the community.

David Kimel is the Director at Collins Perley Sports and Fit-
ness Center in Saint Albans, VT and is a member of the Vermont
Association of Broadcasters’ Hall of Fame. He has owned and oper-
ated radio stations, an advertising agency, and a business consult-
ing 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.
Jerry 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 these things”—specifically, the field wouldn’t drain properly if the sand materials specified for the renovation don’t match the 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 20-year 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
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 spoon-feeding 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 experience 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 Ker-Shasky, 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 3-year-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 golf-turf 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.”

---

**Make your sideline look as good as the end zone.**

**NEW**

**TuffPrint™**

**CUSTOMIZATION**

**2012 ACC Championship Game used**

**FieldSaver® Sideline Tarps from CoverSports®!**

**FieldSaver® Features:**
- Durable-stands up to cleated football shoes
- Breathable-allow water and air passage
- Grommets at 3” intervals on all sides for stake down

For price quotes, colors, sizes and fabric specifics, visit www.CoverSports.com
sales@coversports.com | 800-445-5668
We make covers for all athletic surfaces: Pain Covers, Growth Covers, EnviroSafe® Stadium Padding

---

www.stma.org
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 soccer, 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 collaborate 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 thick-cut, 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 workers. 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.

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, tractor-mounted 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, thick-cut 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.
SPORTS AND SCIENCE
– Sixth-Graders, Marbles and Potato Chips

On 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 state-of-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 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.
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.
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:

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
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.

JOHN A. FIK
CSFM/CGM

Today’s Sports Turf Management is a blending of art, science, creativity and technical competency to provide a safe and aesthetically appealing sports surface. Television and the internet 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.