gain new skills and knowledge. I have been blessed in my career to have great people to work with and my experience at LSU has been no different. When my assistant, Mike Watson, and I began to evaluate the grounds staff we quickly found out who worked well together, who enjoyed what they were doing, what type of special skills they possessed and what type of additional skills they needed for us to accomplish our goals to be successful. We were fortunate to have a group of individuals that worked well together as a team and had a wide variety of trade skills. To that, we added two former interns from the University of Oregon. Their arrival along with the skills of our existing crew marked a turning point this spring. We were very successful with our fields and achieved our number one goal, which was to earn the trust of our coaches, players and administrators. We hope that the initial success of 2009 will lead to greater triumphs in 2010!

I have been very fortunate to have worked in some pretty incredible places and have had the privilege to work with some very talented people. The thing that I have learned by working in these two organizations is that what you need to have successful in this industry is the drive and determination to do your best and have a willingness to learn new skills and apply them. Some of the obstacles in our way might be weather, increased traffic or staff knowledge but, ultimately, what we as Sports Turf



THERE ARE CHARACTERS in every crew; could anything be more true?

Managers are trying to accomplish, is the best playing surface for our athletes.

Eric Fasbender, CSFM is sports turf manager for Louisiana State University Athletics.



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Replacing a synthetic turf field

one manager's experience

EAST DELTA SPORTS COMPLEX in Portland, OR is the home of one of FieldTurf's first outdoor installations of a synthetic infill system in the world. The field was installed in October 1997 and after 11 years of use was removed and recycled in August of 2008. It was replaced with a new generation, synthetic infill system sport field, in early November 2008.

The original installation was a first generation 2 inch, 28 ounce slit film, or honeycomb fiber, with an infill of cryogenic rubber and sieved local sand. This slit film fiber was designed to break apart through maintenance to mimic the finer texture of a natural grass blade. The fiber continued to breakdown past the

intended fine texture, however, and the field's surface hardness was attributed in part to the fines and angular properties to the sieved local sand.

This field received extensive use with 650 permitted games a year, primarily soccer and both men's and women's lacrosse. The field is an unlocked facility and is open to the public year round. Multiple practices, clinics, and play occur without permits.

The first several years after installation a variety of maintenance tools were used to keep the surface hardness minimized and to address the playability of the field. A Clegg Hammer was used to measure surface hardness and was converted to a Gmax rating. After the fifth year, the fiber was breaking apart so fine that it would actually break off, and the surface hardness, Gmax results, were at a level of concern. After 8 years the field no longer performed as originally intended. After 11 years the field was worn to a level of minimal pile height of fiber above the infill. This resulted in a field surface that allowed very fast ball travel and slippery footing. It was time to replace the field.

Replacement funding is a key consideration that all synthetic sports field owners should be aware of. Ideally it should be established at the onset of a new installation so that funds are in place at the projected longevity of the field. Portland Parks and Recreation was able to develop a replacement trust fund that accumulated revenue generated by permit fees and light usage fees. Additional funding sources included a State Parks land

and water conservation grant, user group contributions matched by levy dollars, and concession/gate fees.



Replacement funding is a key consideration of which all synthetic sports field owners should be aware.

Replacing a synthetic turf field

Upon the securing of funds to replace the field, the selection of a new field was based on the improved technology and advancements within the synthetic field industry. The new carpet is a 2 ½-inch, 36-ounce lead-free monofilament fiber. monofilament fiber is a single strand that is designed to not break apart. The infill advancements include rounded silica sand, washed of fine materials, and cryo-

Selecting a contractor and purchasing a field were the final aspects to allow the project to begin. Within the options of the purchasing process, the contract was developed so that the replacement process could begin. A sole source contract was used because of the agreement with Players Turf USA and Nike, that the Nike Grind (ground up, recycled shoes) would be a part of the infill.

genic rubber.

The replacement process began with the removal of the existing field. The installer was fortunate to find a plastics recycling company, Agri-Plas Inc., Brooks, OR that was interested in receiving the old carpet fibers and backing to melt down, with the intention to create nursery container pots. The recycling company preferred that the sand and rubber infill was completely removed. Initially, an air compressor was used to blow the infill to the surface and a heavy street broom swept the infill to the sides. About 140 yards of collected infill was used to topdress eight surrounding natural turf

fields. This infill was tested for metals and lead, to alleviate the concern of health and environmental risks. The topdressing was a thin layer that quickly worked its way into the soil profile.

The removal of the infill was challenged by a late August rain that basically cemented the remaining sand and rubber infill into the fibers but fortunately the recycling company was still interested in receiving the carpet even with the remaining infill. The field was then cut into sections, and backhoes were used to fill containers that were trucked to the recycling company.

Options to dispose of the original field include recycling the carpet with a plastics recycling company, such as Agri-Plas, and using the infill as a topdress, or to reuse the carpet and infill in batting cages, driving ranges, or warm up areas. Landfill costs can be high with the weight of an aged field being approximately 8 pounds per square foot.

Once the original field had been removed we had an excellent opportunity to make additional upgrades and improvements such as base drainage, additional electrical connections, and improvements to irrigation for cleaning and cooling. It was also a good opportunity to address users' desired amenities such as a permanent corner kick flag holders, and improved fencing and netting to trap balls and protect the scoreboard.

The base repair was a significant priority once the entire field was removed. During the removal process, there was a lot of heavy vehicle traffic disrupting the original base. It was necessary to add more rock to raise the field level to its original grade. It was then laser graded, watered in, and rolled for adequate compaction. The field was graded with a 0.5% crown.

The carpet consisted of two varying blades of polyethylene monofilament fiber. It was installed with sewn seams that were precisely stitched so that when each 15-foot wide roll was connected, it would not show any gaps at the seams. The base was constantly raked and rolled to ensure the integrity of the laser grading upon completion of installation. The field was designed to have three primary sports laid out permanently, soccer in white, men's

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lacrosse in blue, and women's lacrosse in yellow. The lines were installed by sheep shearing the green fibers to expose the backing and then gluing the 4-inch colored line to the backing. If future construction is anticipated around your field, however, and you might have to temporarily move the turf, it is better not to install permanent lines.

The final phase of the project was to topdress the fibers with the infill of cryogenic crumb rubber, washed round silica sand, and Nike Grind. A driving street broom was used to raise the fibers upright, as well as a walk behind sweeper to raise the fibers on the inlaid lines. A small topdresser was loaded to distribute the sand and rubber in a layering technique deemed appropriate by the installer. Weather posed another challenge in this final phase of the project as rain made it difficult to evenly distribute the infill. This problem was solved with a rake implement created by the installer to help distribute the infill through the fibers and level it.

Once the field was completed, the installer said there would be some settling of the infill. After 2 months it was agreed that the infill level was higher than what was preferred. The installer then removed the top layer of infill to reveal more carpet fiber above the infill level. This process was performed again 6 months later when the desired level for playability was reached. The users of this new field have since expressed a high level of satisfaction with the playability and performance of the field.

Lessons are learned in a project of this magnitude. After this field replacement, the involved members learned the importance of evaluating the partnering of labor forces between the contractor and the owner, and to focus more attention and discipline to preserving the surrounding facilities. It would have been beneficial to have the base surveyed after the final grading and compacting, and to survey the field layout for accuracy. Also, it would be helpful to plan the project for periods of ideal weather!

The valued aspects of this replacement process are numerous. The entire field was recycled, including the packing materials of the new surface. The existing entities were intact such as the base, perimeter, and fencing. A new generation of fiber existed in the polyethylene monofilament that was soft, durable, and mimicked the look of natural grass. All of the new materials used were completely lead-free. The use of clean, round, silica sand was an upgrade, and the inlaid lines were installed very precisely.

Debra Kneeshaw has been the on-site sports turf manager at East Delta Sports Complex in Portland, OR, for 11 years. She personally supervised the replacement process of a synthetic sports field in 2008.

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Facility Operations By Michael Buras, CSFM



AS SPORTS TURF MANAGERS

we all have the challenge of communicating what we actually do. Much of our work is done while no one else is around. Players, coaches, spectators and administrators attend a game or practice and don't get to see the work that went into preparing the field. Most people do not have much information about the art and science of being a sports turf manager and may understandably assume your job is mowing the grass once a week.

In my role as grounds superintendent at the Longwood Cricket Club, I run into communication issues all the time. The tennis club has more than 1,000 members and I report to a general manager and a grounds chairman. Giving them all clear and current information on all aspects of the grounds and 44 tennis courts can be a challenge. The best way I have found to improve the situation is to be a better communicator, and it is not easy.

In talking to other sports turf managers, this seems to be a common hurdle. At Longwood, improving communications has included talking to members, writing for the club newsletter and putting notes in club email blasts. I even gave a 2-hour introductory turfgrass seminar for members so they could learn about the hard work and dedication of their grounds staff.

These approaches have worked well, but we needed to convey more information to membership. So we created a blog maintained solely by the Longwood grounds department. It has proven to be quite successful.

Wikipedia says "A blog (a contraction of the term "web log") is a type of website, usually maintained by an individual with regular entries of commentary, descriptions of events, or other material such as graphics or video. Entries are commonly displayed in reverse-chronological order. 'Blog' can also be used as a verb, meaning to maintain or add content to a blog.

"Many blogs provide commentary or news on a particular subject; others function as more personal online diaries. A typical blog combines text, images, and links to other blogs, Web pages, and other media related to its topic. The ability for readers to leave comments in an interactive format is an important part of many blogs."

Creating a blog may sound difficult, cumbersome and time consuming, but it is not. It is professionally satisfying and fun. There are many free websites that let you create a blog quickly. You definitely do not need a lot of computer knowledge to get started (I am proof of that!). Google's Blogger is the website that I use. Just go to Google, type in "blog." The first item to come up is "Blogger: Create your free blog." Just a few more clicks, open a free Google account, and the blog is created and ready to go! No experience necessary. Adding pictures and commentary can begin immediately. On the same Google account, a Google Analytics report can be set up to track how many people have looked at the blog, for how long and where they are from.

Once the blog is established, there are two major challenges: getting people to look at the blog and keeping the blog content fresh and updated so users want to keep coming back. Having the blog address mentioned in emails by you and fellow employees will go a long way in promoting the blog. Mention it to league officials and coaches, and you will be surprised at the amount of people that check it out. If your department has a website, make sure it includes a link to your blog. All of your correspondence should include the blog web



John Mascaro's Photo Quiz

John Mascaro is President of Turf-Tec International

Can you identify this sports turf problem?

Problem: Brown lines on field Turfgrass Area: Football fields

Location: Central US

Grass Variety: Perennial ryegrass

Answer to John Mascaro's Photo Quiz on Page 35

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wrote Johnson Bowie, Associate AD, Drexel University, Philadelphia, PA

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address (mine is LCCgrounds.blogspot. com). Remember that anyone can look at the blog, so it is important to keep this in mind when posting entries. While ideas may come from employees, blog followers, anyone really, you should be the only administrator for the blog because it represents you.

Supplying content to a blog may seem onerous, but the effort is well worth it. Each entry can be brief, so it really is not a burden. Lots of pictures with commentary is a good way to start. It is helpful to have a small camera to record events for the blog. For example, an irrigation pipe breaks and is a major job to repair. Pictures of the broken pipe, repair work, and job complete, along with a short explanation would be an excellent entry showing crew skills and documenting problems corrected. Things that seem ordinary to a sports turf manager are not ordinary to others and make good blog entries. Some ideas to get started are:

- Agronomic work
- Field painting
- Turf equipment
- Irrigation
- Weather
- IPM
- Department goals
- Movies, links to YouTube
- Pertinent links other sites you want your followers to look at
 - Field conditions
- Highlight staff and their accomplish-

There is so much turf management and related information to write about that in the 2 years of managing my blog I have always had something to write about.

In addition to connecting with field users and supervisors, the blog can benefit in other ways:

When fellow members of your

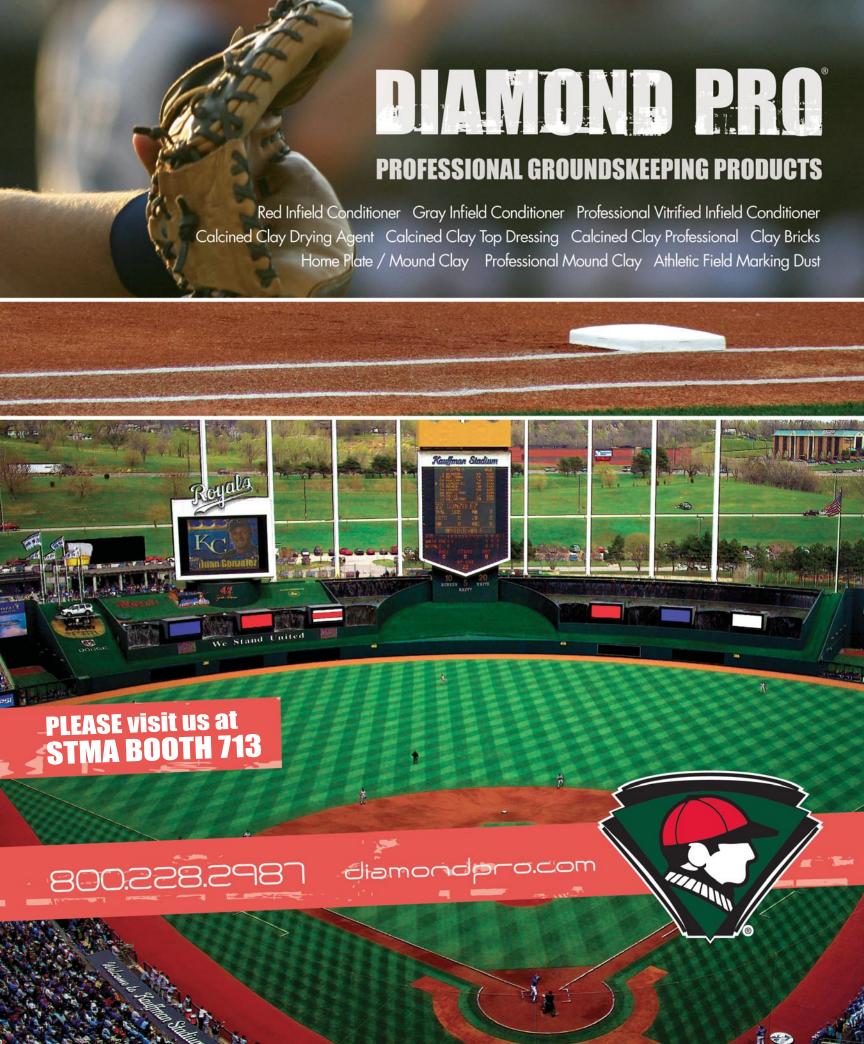
>> MICHAEL BURAS, CSFM, says blogging can help turf managers "communicate what we actually do."

grounds crew see themselves and their work online, it is an acknowledgement of their work and boosts morale.

- The blog can be helpful in hiring new personnel, as prospective employees get a feel of what it's like at your place of work.
- A blog can also help you get better connected with peers. For example, you have a blog entry on painting a logo and someone searches the web for logo painting and is led to your site. They may leave a comment on the blog or contact you to ask for more detailed information. Having a blog will definitely assist sports turf managers with similar problems, and successes unite and make professional networking easier.
- With so many questions about the environment, pesticides, organics and synthetic turf out there, the blog is a great way to articulate the facts about these and many other questions. The sports turf manager is often the best source for answers to these questions, but often the answers don't get to enough people, or are misconstrued. With a blog, the points you want to get across are in black and white for all to see.

With the straightforwardness of a blog at your disposal, a sophisticated web site is not necessary to promote the importance of your department. To obtain a budget increase, to get funds for a capital expenditure, or even to boost your salary, the value of what you do as a sports turf manager needs to be communicated. A blog is one of the tools you can use to educate sports turf novices of the skills, expertise and knowledge required to be a successful sports turf manager.

Michael Buras, CSFM is the grounds superintendent at the Longwood Cricket Club in Chestnut Hill, MA. His blog is LCCgrounds.blogspot.com



Facility&Operations By Sam Williams

Post-storm, Cowboy practice fields back in shape

Editor's note: Sam Williams is president of Sam Williams Advertising, Nacocchee Sautee, GA.

DURING A ROOKIE MINI-CAMP in May of 2009 a violent windstorm ripped into the Dallas Cowboy's practice dome making news headlines around the world. The dome's framework and fabric shell collapsed onto the players, coaches and field staff, while sending a sky-full of debris, trash and glass over their two adjacent outdoor practice fields. Miraculously no one was killed. Not surprisingly, both practice fields were ruined. You can spend the money to clean up and remove most debris, but you can't practice on fields embedded with glass shards from end zone to end zone. The Cowboys had no choice but to pull up the existing sod and get rid of it.

Fortunately Chris Morrow, field supervisor for the Cowboys, had already been talking to Gene Dahlen of King Ranch Turfgrass about re-doing his fields. During a conversation in early October, Morrow recalled, "Actually Gene came out about 2 years ago when we first started kicking around the idea of re-sodding. After the dome collapse we got the go-ahead to get it done full-speed-ahead, so I called Gene, went down to their Poteet, TX farm, picked out my 5-acres of TifSport, and got them to start duplicating the cultural practices I would be using at our facility. I also







- >> Top Two images: KING RANCH TURFGRASS CREW work new TifSport Bermudagrass sod into place.
- >> Bottom image: Turf was installed using 42-inch center-cut big rolls, which go down and transported easier.

got them to initiate a grow-in fertility schedule to gear it up for being installed here."

Cowboy owner Jerry Jones and his family are famous for their hands-on management style, but they left all of the grassing decisions to Chris. He had been thinking about replacing the original Tifway 419 with new 419, but he liked the TifSport at Poteet a little better than the 419 there. "The TifSport was just more mature, by about 10-12 months, and the stolon and rhizome matt was far superior."

With the 2009 season fast approaching, Chris, an army of one, had a lot of work to do. After cleaning up from the storm's