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SportsTurf

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Former Oregon sports turf manager Eric Fasbender, CSFM, left, poses with Steve DiNatale, center, and Kenny Hoffman on Pape Field in Eugene. Fasbender now works at Louisiana State.

39 University of Oregon wins back-to-back titles, this time in College/University Soccer category

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What happened to the traffic trial?

EARLIER THIS YEAR a 3-year, National Turfgrass Evaluation Program (NTEP) research trial on drought and traffic tolerances of cool season turfgrass was cancelled due to lack of number of entries to have a viable trial, which is 20. They only received six total from two companies.

I exchanged emails on the topic with Kevin Morris, NTEP's executive director; his organization has been coordinating evaluation trials and publishing objective data on turfgrass performance since 1981.

Why do you think this proposed study didn't attract more entries?

"I believe the economy and the state of the seed industry, at present, were the two biggest factors. The seed industry has traditionally experienced down cycles, which typically happens every 7-10 years. They are in the midst of a down cycle right now, with high seed inventory that has been difficult to sell due to the economy.

"Unfortunately for us, the down cycle and the economy's decline happened at virtually the same time. I received many comments from companies that they liked the idea of more specialized testing, like the traffic and drought trials we proposed for 2009. The drought trial was established, but it consisted of only 17 paid entries, which meant we had to reduce the number of trial sites. This was not an option with the traffic trial, as we only received six paid entries. In my conversations with seed companies and breeders, they believe that this trial would have attracted enough entries if the timing would have been different."

Is there an option to purchase seeds and do the trial without full cooperation from seed companies?

"Conducting a trial without any funding from seed companies (who sponsor the trial by paying entry fees) means we would need other funding sources. STMA committed an amount equivalent to the funding for one trial location, which was very helpful, but we needed seed company support to fund other locations, as well as pay for the trial administrative costs (organizing the trial, analyzing and publishing the data, etc.)."

What are the next steps being taken to try and resurrect this study?

"We have not decided how to move forward as of yet. The next 6-12 months are a critical time for the seed companies as there may be some attrition in the industry. I believe we will have to wait until after the economy and the seed industry rebounds to see when we reschedule this trial. I think there is enough interest in this trial for it to be resurrected sometime in the future."

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STMA goes global

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STMA has taken a huge step forward in international outreach in the past several months. At the summer board meeting, the Chapter Relations Committee recommended to the board that we approve implementing an International Affiliate Organization status. This status is an adaptation of an STMA chapter that will allow an organization in another country to operate in the spirit of an STMA chapter, but without the legal complexities of affiliating with STMA. I am pleased to announce our inaugural International Affiliate Organization, the Sports Turf Association, headquartered in Guelph, ON, Canada. The STA is similar to STMA including a parallel mission: "The STA is dedicated to the promotion of better, safer sports turf through innovation, education and professional programs." We also believe that a group in Israel will come on board very soon as our second International Affiliate Organization.

Our next efforts took place in October with CEO Kim Heck's attending and presenting at the Institute of Groundsmanship (IOG) 75th anniversary celebration and sports turf conference in London. Two weeks later, I attended and presented at the International Turf Seminar presented by the Centre for Urban Greenery and Ecology (CUGE) in Singapore. While in Singapore, I was able to recognize and install STMA's first international affiliated chapter, the Singapore Chapter of the Sports Turf Managers Association. I also made connections for further collaboration with other sports turf associations, including two in Australia. These efforts support a very important objective in our Strategic Plan: To develop relationships internationally that will benefit the STMA membership. Kim and I found that there is common interest from these groups to cooperate and share information, research, and educational resources. There is also much interest in STMA's certification program internationally. We have much to share and also much to learn from these groups. We have invited them to them to attend our annual conference, and I hope that you will have the chance to welcome their representatives and share your insights and management practices with them.

The New Year is just around the corner, and economic issues still surround us. STMA is committed to providing relevant and robust educational programs with strong value to all our members. For 2010, we will continue to strive to enhance our programs and services and promote the importance of you, the sports turf manager, to fans, athletes, and employers.

Happy New Year!

RAIN, RAIN, GO AWAY.

After all, nobody really wants to put up with inclement weather when there's a game to be played (or watched or coached or refereed) outdoors.

But if that cloudburst does happen, it's absolutely essential that the water be able to move off the field so that play can be maintained (if the weather isn't severe) or resume later (should conditions force the game to be halted or suspended). And for that, good drainage is required.

"Drainage is one of the most important aspects of a successful athletic field installation, both turf and track," says Sam Fisher of Fisher Tracks, Inc. in Boone, IA. "It also seems to be one of the most misunderstood. We do not need a drainage system to drain the worst gulley washer in 30 seconds, but we do need an adequate drainage system so that water is not standing, pooling or going across the performance areas."

Whether a field is natural turf or synthetic, drainage is essential to continued quality of play. Trouble is, it's hard to convince an owner of that. Drainage just isn't fascinating, sexy or even (in most cases) visible. It's something that won't be noticed until it isn't working. The best way to keep it in shape, say builders, designers and installers, is to do regular maintenance. And particularly in an economy where every dollar counts, it's imperative to do the day-to-day (and season-to-season) work that helps preserve an investment as significant as an athletic field.

Natural turf fields

According to Bill Fee of Carducci Landscape Architects in San Francisco, keeping a natural turf field draining well means constant vigilance.

"The owner needs to keep drainage structures free of grass clippings, soil, leaves and debris," says Fee. It's also imperative, he adds, to "repair eroding soils in and around the field, which can contribute sediment to the storm system. No soil or sediment should enter the storm system."

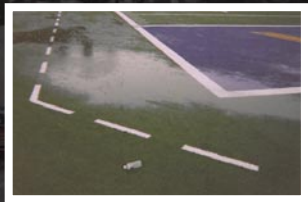
According to James D. Catella of the Clark Companies in Delhi, NY, the planarity of the field will play an enormous role in drainage. "On natural native soil fields, proper grading is the most important factor to sheet drain water to a conveyance mechanism such as a storm inlet, open swale or trench drain," says Catella. "High-end natural grass sand-based fields also drain vertically through a USGA sand rootzone medium. These must be maintained by a professional who constantly monitors the health of the grass plant, amends with nutrients as necessary and provides surface aeration periodically to keep the surface from becoming too compacted to drain as designed. Any field that is surrounded by a track should have positive drainage at the track/field interface at the inside edge of lane one. By providing a trench drain at this area, the most important lane of the track is protected from the effects of standing water."

Fee stresses upon owners to close natural turf fields when the soil is wet because play that tears up existing turf

Field drainage

from builders' perspective

» A successful field starts with a quality drainage system, installed early on in the construction process. Photo courtesy of William E. Fee, Carducci Landscape Architects, San Francisco, CA.



» Left: It's not hard to identify a field that has drainage problems. Water will collect on the surface and not disperse. Photo courtesy of William E. Fee, Carducci Landscape Architects, San Francisco, CA.

» Right: Poor drainage of synthetic turf must be traced back to its source. It may be an easy fix (such as clean-outs that have become clogged with debris) or it may be something requiring extensive work. Photo courtesy of William E. Fee, Carducci Landscape Architects, San Francisco, CA.





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doesn't help anything. Other important points? "Keep the soil healthy and maintain infiltration rates by aeration, top seeding and sand topdressing. Low spots in fields should be repaired with sand topdressing." In addition, he notes, "consider using organic fertilizers and compost tea to build microbiology of healthy soils that are less prone to soil compaction, fertilizer burn and nitrogen runoff."

Builders and installers alike say that more attention needs to be paid to the soil itself. Fee, like Catella, prefers sand-based fields based on the U.S. Golf Association guidelines for sand putting greens. "Sand can be an ideal soil for athletic fields," Fee notes. "USGA sand is excellent for playability and drainage. Unfortunately, it can be resource consumptive to construct and maintain sand fields, so for many situations it is impractical. Sand is the 'gold standard' of soils for sports fields. If the field is sand, it should drain. However, not all sands are alike." (USGA sets forth guidelines for sand content, Fee notes, and these should be followed by those looking to improve the drainage of an athletic field).

Of course, says Fee, then there are other options. "If a sand-based field is the gold standard, then sand trenches in native soil sports fields are the gold-plated approach. Sand filled trenches will drain surface water. In native soil fields, sand-filled trenches are less resource consumptive than sand-based fields and may be practical when fields need to be well drained without interrupting play."

In terms of annual maintenance, Fee recommends sand topdressing to improve the infiltration rate. "Applying 50 tons of sand to a field per year appears to be an effective rate," he notes. "It is possible to apply higher rates of 60-100 tons, especially if the sand is applied in two increments, spring and fall. The sand is either applied alone or in combination with soil or compost. The soil and/or compost typically make up 10-30% of the mix."

Natural turf fields need regular care to help maintain slope, break up overcompaction and keep drainage systems free of obstructions. Convincing an owner of this, and getting him or her to understand that natural turf fields aren't self-maintaining (outside of mowing, watering and weeding)? Not an easy task.

Synthetic fields

Unlike their natural turf counterparts, synthetic turf fields don't require watering. Therefore, the only water that should fall onto a synthetic turf facility is rain. Irrigation systems for nearby landscaping should not cause water to move onto the field. Nor should water run down nearby slopes or off bleachers and onto the playing surface. Proper sloping of such facilities to direct water, correct placement of perimeter drains (and regular care of these drains, such as keeping them free of sediment and debris) should keep problems to a minimum.

Assuming these types of issues (with the exception of maintenance) have been addressed in the design phase of the project, the drainage system beneath the surface of the field should be adequate to move a normal amount of rain off the surface and keep it playable. The owner or manager, however, should be proactive in making sure the system is functioning correctly.

"It is very important that the drainage system of a synthetic field is constructed correctly initially as the drainage facilities are below a new synthetic surface and can be very costly to repair if they fail," notes Catella.

While it might sound self-evident, says Fee, the system should be examined for proper operation prior to the new field being opened for play.

"A new system should be flushed and tested before turning over to owner," Fee notes. "The owner's maintenance personnel should have a fundamental understanding of how the stormwater flows through the field and where it exits the field and where clean-outs are. The owner should also know where pressurized water shut-off valves are in case a pressurized water system breaks because of a storm drainage problem."

Fee recommends grabbing an umbrella and watching the field periodically during a rainstorm. "The field should self-perform because it is a closed system," he remarks. "If it is puddling or showing subsurface bubbles, consult with the manufacturer, field designer and contractor. If the field shows bubbles under the carpet during a rainstorm or puddles on the surface, this will likely subside after the storm; however, during a game, this could be a safety hazard and an investigation into the causes should be made."

This game-in-progress circumstance, Fee adds, unfortunately occurred (on national television, no less) at UC Berkeley in November 2008 during a football game against the University of Oregon. There was significant puddling on the field and the grounds crew had to improvise by pushing the water off the field and inserting drainage holes with pitchforks. (There's a YouTube video of the incident for those who care to Google it).

There are different choices of drainage systems, and several options on the market. All have their advantages and disadvantages, as well as cost differentials to be considered. The choice of which system to use is ultimately that of the owner, who should make the decision in consultation with industry professionals.

"There are many factors that come into play with the choice of a drainage system for synthetic turf facilities that involve the field designer, civil engineer, the geotechnical engineer and the owner," says Bill Fee. "All sites and soils are not equal, so at each site the site conditions require review and assessment by engineers to make the recommendations based on factual site specific information. This should include a geotechnical investigation and recommendations as well as a drainage analysis."

In other words, there is no "right" answer across the board, but there is always a right answer for a particular situation. An owner should talk with industry professionals, as well as with colleagues in the area who have comparable facilities. There is no such thing as too much information, in this case.

In addition, the experts say, it's absolutely essential to make sure that the guidance of a turf industry professional is used. This is not the time to rely on a generalist.

"It is important that an experienced professional is engaged to design the drainage of your field, be it natural or synthetic," says John Schedler of FieldTurf Tarkett in Highlands Ranch, CO. "The