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On the cover:

Action at Kobs Field, McLane Baseball Stadium, Michigan State University, where groundskeeper Jared Knoodle, CSFM, leads the day-to-day operations while being supervised by Amy Fouty, CSFM, head athletic turf manager for Sparty. Their field won the 2013 Sport Turf Managers Association's College Baseball Field of the Year.

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From the Sidelines

Eric Schroder Editorial Director eschroder@specialtyim.com 717-805-4197

Never enough space

hroughout every year we receive many ideas for articles to be published in the magazine. Most of the suggestions have some merit and we often turn to the members of the Sports Turf Managers Association's Editorial Committee to help us determine which topics they think we should pursue. Infrequently we think we have a great topic but can't find anyone who can devote the time to use their expertise in the area and produce a written piece. But most often we have a plethora of material and finding enough space in our pages is problematic. At least we have www.sportsturfonline.com as a vehicle for information that we can't fit in this hard copy.

Sometimes great ideas come from readers and occasionally one of you will just send a terrific article that hits my desk like an unexpected, and welcome, gift. This issue features a good example, on page 8; Dr. Norm Hummel, who runs one of the most respected soil physical testing labs in the country, sent us his thoughts on sand-grown sod.

I would also like to call your attention to the piece on page 20, "How to get the best performance from your crew." It is a good example of another way we produce content—asking questions directly to readers, most often STMA members. I very much appreciate those of you who respond to my asking you to answer questions; I know everyone has a long list of work to accomplish and my requests are just one more item. Please realize how much your experiences can help the next person. The STMA was built on turf managers' sharing ideas and tips, and the articles in which we hear from you readers is a neat addition to that foundation.

Speaking of not enough space for everything, here is some info on recorded education sessions from the STMA Conference. I couldn't fit it in where it belongs in this issue:

Recorded Conference education sessions

Take advantage of recorded conference education sessions. STMA partnered with IQ Media to audio and/or video record all of the education sessions. Recorded sessions will be available through an On-Line Library where users can have access to education at any time throughout the year. Visit the STMA Knowledge Center at stma.org under "Conference Education" for a free demo or to purchase education.

Price for an all access subscription to the online library is \$99 for conference attendees. Hurry and take advantage of this low rate before it increases to \$159 for STMA members. The non-member rate is \$199. Individual sessions will also be available via the online library for \$20 per session. A flash drive will be available for purchase for those interested in a hard copy back up to the online content.

These recordings benefit conference attendees unable to make it to concurrent sessions and sports turf managers unable to make it to the conference. The recordings are also valuable as a refresher throughout the year for sports turf managers to stay current and educated in the industry.

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President's Message

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Reenergized, ready for spring, and many thanks

ow! What a Conference and Trade Show we had in San Antonio. Even another ice storm couldn't detract from the high quality education, great tour sites, full and lively trade show, fantastic keynote speaker and exciting PBS video. Dr. Rick Rigsby challenged each of us to make an impact, not just at our place of work but in our everyday lives. The PBS video highlighted our commitment and professionalism to doing just that. Add to the mix seeing old friends, meeting new friends and sharing our professionalism surely brings energy to ourselves and

what we do. You also could not help being excited seeing the numerous first-time attendees, new members and students who were present. Let's not forget that one of our Founders and STMA's first President, Dick Ericson, also joined us. What an honor. I hope you enjoyed your Conference experience, and you are as energized and excited as I am about the upcoming year. Keeping this energy and focus on the upcoming spring sports season is easier to do during the latest blizzard, which dropped another 12 inches of snow on our athletic fields here in Massachusetts.

As always I am sure there are some things we can do better. Please look for the electronic Conference survey. It was through this survey that some of the positive changes to this year's Conference were made. We do listen! We find your input valuable and will use it to plan the 2015 Conference in Denver. If you did not make it to Conference or want to look back on something you missed, or something you want to use at your facilities, check STMA's educational resources for Conference audio and video availability. Conference is a valuable benefit of membership.

Your Conference committees do a great job in finding that one thing that appeals to each member—whether an educational topic, quality speaker, interesting facility to tour or varied networking opportunities. Please join me in a big THANK YOU to the Conference Committees and Staff for their work to bring you the type of conference you deserve as a member. Also, congratulations to our award winners, new CSFMs and new chapter (Indiana). We will be starting the 2014 committee work very soon. Committees and chapters are the lifeblood of an organization. We have had great committee work last year with strides made in the environmental arena, membership and international outreach to name a few. Thank you to all those who volunteered to serve the profession. The coming year will be even more exciting for committee work.

As I gaze out at our snow-covered athletic fields knowing that more snow is forecasted and knowing that the high school athletes can begin outdoor practice on March 17, I am ready for spring. The planning is done. The crews are ready. Communication and trust in our professionalism will be key to starting the spring season off right. I am reenergized and thankful to be part of a profession and an association that allows me to make an impact.

Del Alimet

SAND-GROWN SOD REVISITED[©]

have been employed in the turfgrass

industry for 40 years this year, and I am now convinced I will go to my grave (or the crematorium) not understanding sod transplant problems or lack thereof. In most cases where the installation and post-installation care are done properly, there are no problems. I wish that was always the case. But before you even talk about maintenance, you must select the sod.

The standard in the industry is that the sod *must* be grown on a sand to be transplanted onto a sand-based mix. When you talk about a standard in the industry there are usually legal ramifications that if you don't follow those standards things don't work out they way they should. I don't deny that using sand-grown sod is the preferred way of sodding a sand-based field, but it often comes at a huge expense to the owners. Let's face it, there really aren't too many sod growers in this country that are growing their product on a sand, much less a sand that is sized similarly to what a field is built with. Therefore, sand-grown sod is sometimes transported hundreds of miles to reach the installation site.

The fact is, I have probably seen at least as many problem fields where the "standard of the industry" is followed as not. In some of those cases the problem could be attributed to post-installation care. A new sand-based field is often a challenge to sports turf managers without experience with this type of field. There is definitely a learning curve. Based on my experience doing the forensic work on these problem fields, over-irrigation is often the suspected cause (**Figure 1**). I would guess that there is some element of fear that the mix will be droughty, that fear leading to excessive irrigation. A properly designed and built sand-based system should not be droughty, but that is a topic for another article.

On the other hand, I have seen installations that should have failed (based on our standard of the indus-



Figure 1.
 Overwatering

can cause issues

even with sand-

grown sod.

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try) that have done extremely well. These were sand-based fields that were sodded with sod grown on fine textured soils; as fine as silt loams. Higher profile examples of these include the Great Lawn in New York's Central Park and two sand-capped soccer fields at Cornell University.

In a recent project I was retained by a design firm to write the rootzone and turfgrass specifications for two sand-based fields for the Rush Henrietta School District in suburban Rochester, NY. The rootzone mix was my standard specification taking into consideration local materials. I specified a sand-grown sod. At the preconstruction meeting the cost of importing a sand-grown sod was discussed, as it was a concern. I explained that the use of a sand-grown sod was the standard of the industry and that using such reduces the risk of soil incompatibility problems. But then I shared my experience of successful projects where soil-grown sod was used on sand-based mixes, making it clear it was not my recommendation. I further explained that if there was a problem, regardless of the cause, that they would have no problem finding an expert to say that sod incompatibility was the problem. The risk was theirs to take.

The school district would realize thousands of dollars in savings if they used a local, soil-grown sod. They decided it was worth the risk. Before construction began we built a mockup of the field profile using the proposed rootzone mix and sod. Since this was done in winter, the study was conducted in a small growth chamber. I applied about 2 lb. $P_2O_5/1000$ square feet from triple superphosphate and a pound of nitrogen from urea to the mix preplant. The fertilizers were mixed into the top 2 inches. The sod was watered lightly to wet the sod twice daily with a deeper watering every 3 days. By week two I backed off on the water to once every 3 days without any problem. In 25 days we had dense rooting to a depth of 6 inches (**Figure 2**). This study provided the school district with some level of comfort in their decision.

The sod was a blend of Kentucky bluegrass cultivars with a small amount of Thermal bluegrass grown on a loam soil (49% sand, 42% silt, 9% clay). The football field was sodded in late July with temperatures well into the 80s. By the time of the first game was played 8 weeks later, roots were deep and dense (**Figure 3**).

I have to note that the sands used to make the root

▼ Figure 2. Left: Rooting of sod 25 days after sodding in growth chamber. Figure 3. Right: Rooting of soilgrown sod on sandbased mix, 7 weeks after installation.



zone mixes in the Rush Henrietta fields as well as the Cornell sand-capped fields were coarser than a USGA greens sand. The fact that these coarser sands may provide better aeration and higher oxygen diffusion rates may have contributed to the massive and deep rooting we observed. I'm not sure I would be as comfortable using a soil-grown sod transplanted onto a sand on the fine end of USGA greens construction guidelines. But then, we aren't talking about greens.

If a soil-grown sod is used on a sand-based field, I think it will be especially important that the sports field manager employ a core cultivation program to include harvesting or sweeping the cores, followed by sand topdressing. In the long term it will be best to remove as much of