the old saying, 'You never know' that will keep me coming back."

When asked about our chapter's Vendor Day, Drew Williams with Redexim Turf Products said, "It is unique because it is like a local trade show that is free to commercial members and we get the opportunity to demo our equipment and show off products to a large audience of sports field managers."

Another way we are attempting to reach a larger contingent of our membership is by improved communication about upcoming events. For 2010, we lined up our events early in the year and were able to get that information out so people could mark it on their calendars. We use a three-prong approach as far as communicating with our members: One, we send a mailer out early in the year with our membership applications to let them know when the events are and to also let them know what they are getting for their membership dues. Second, we email a reminder a couple of weeks before each event just to confirm how many attendees to expect, and third, we put all of our events and sponsors on our chapter website. Keeping our website up to

date on chapter events is very important. If a member goes to the site and the information is outdated and there isn't any new content, they won't be back to the site.

Getting together with other green industry organizations has also been a benefit for our chapter. One of our most successful events over the past 2 years has been a collaboration project with the Missouri Turf and Ornamental Council and the Gateway Irrigation Association to put on the Missouri Green Industry Conference. This year's conference included 1 full day of educational classes with a vendor trade show/expo. On the following day we have our ornamental and turf (Category 3) pesticide applicator recertification program.

But probably the most effective way to have a successful local event is to ask the members what they want. Email them, send out surveys, make phone calls but however you need to do it, make sure you are getting feedback and in turn giving the membership information on topics that they want to learn about. Our members told us that while they like the classroom setting and the information they were getting, many wanted to have some "hands on" events too. This past year we were fortunate enough to have a Field Day that combined the two. We teamed up with experts from Beacon Athletics, Toro, and Diamond Pro to create a comprehensive learning session that combined hands-on and classroom on field maintenance knowledge.

Each chapter is going to be different as to what is pertinent to their membership, but the key is to get chapter members involved. Share the information you gained by attending the National STMA. Use local universities, extension agents, and vendors to help educate. Use emails, phone calls, mailers, Facebook, Twitter or whatever means you can to communicate the information to your members. Network and use your membership to its potential. We all deal with the same issues, so why not use a great resource like your local STMA chapter to help solve those issues.

Brian Winka, CSFM is parks maintenance supervisor for Chesterfield, MO and president of the Gateway Chapter of STMA, www.gate waystma.org.



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### Want to be an environmental steward? *Here's how*



>> A RAIN GARDEN designed to handle run-off from tennis courts, instead of directly into the river. An example of an Albion College's projects initiated and built to demonstrate future parking lot designs.

**T SOME POINT,** you may make the choice to become an environmental steward. It is a personal decision greater than trying to achieve "sustainability." Sustainability, in my opinion, is a media buzzword and is an overused dust pan in which to sweep up every process and then declare victory. It is an appropriate buzzword for your communications department and doesn't put any dirt under your fingernails.

We have a job to do and that is to provide safe athletic fields. Environmental stewardship is more in line with our jobs as sports turf managers as "keepers of the earth." It takes a high level of self-organizing to embrace the mystery of the earth and understanding that Mother Nature is the victor. Self-organizing is like cleaning up the desk in your brain. The challenge is, "How to do it?"

Let's assume you are a leader on your campus and have accepted the seriousness of taking Environmental Stewardship from your institute's agenda. Be prepared because once you begin to inquire about environmental issues it will be magnified and you have to be able to wrap your mind around this worthy topic.

*"What we focus on becomes our reality."* Begin with gathering all the loose papers in your brain that document what your campus has accomplished successfully on environmental stewardship. Communicate with everyone involved with past practices, across the campus, that you have identified their accomplishments, how they were done, and that more of the same accomplishments are in the future of our campus.

In every society, organization, or group, something works. "This step will do two things for self-organizing. One is that it will put success stories on the tip of your tongue when you need motivation and two, you will realize that you're not alone. A team will start to form if you focus on how successful individual projects contributed to the campus's Environmental Stewardship. How you function as a team is up to you. It is my experience that face-to-face meetings are best with the goal being an agreed upon collaborative document.

Now that you're not alone and a team is built, start to create questions that can explore environmental stewardship. Here are some sample questions to ask the team: Describe a time when you feel the campus performed really well with environmental issues? What were the circumstances during that time? Describe a time when you were proud

### Here are some sample questions to ask the team:

Describe a time when you feel the campus performed really well with environmental issues?

What were the circumstances during that time?

Describe a time when you were proud to be a member of the organization's environmental movement. Why were you proud?

What do you value most about being a member of this team? Why?

to be a member of the organization's environmental movement. Why were you proud? What do you value most about being a member of this team? Why?

Take these exploratory questions to your team and facilitate interviews and/or surveys. For interviews, separate team members into pairs and have each person interview the other with these questions. *"The act of asking questions of an organization or group influences the group in some way.*" Make sure notes are taken by the interviewer because the questions will turn into conversation. Notes will be shared soon.

Regroup as a team and start asking for small tidbits of information from the interviews. As the facilitator make sure to write the nuggets of information on a white board or large paper pad. What will happen is a common thread will emerge about environmental issues that will be visible for all of the team. *"People have more confidence and comfort to journey to the future (the Unknown) when they carry forward parts of the past (The Known)."* 

On our campus, for example, we discovered that we had about 80% of the Michigan Turfgrass Environmental Stewardship Program (MTESP) portfolio of modules completed, just by identifying our past success stories. We also discovered that with some administrative work with the state we qualified for participation in the Michigan Business Pollution Prevention Partnership (MBP3). It was easy to attach a process to our commitment to environmental stewardship half way into the discovery of our successes. Of course, this opened up invitations to invite authors, consultants and administrators of these statewide programs onto our team. The partners helped with the next step of "How to do it."

Combining the campus team and state partners emphasizes the focus on the positive. With the positive in mind, ask the team to start dreaming. Much like facilitating the information from the interviews, with a white board, asks the group, "What if we could do more of what works and what could we accomplish?" "If we carry parts of the past forward, they should be what are best about the past." On our campus, we decided to finish the other 20% of the MTESP modules with the help of the students and enroll in the MBP3 partnership. We had another success story to build upon.

The team believed that we made strides in environmental stewardship fairly early in the process. The dream became a daily reality in other best management practices outside of the athletic fields. Purchasing started to consider Michigan-based companies and evaluated the company's environmental awareness and visions. Technology Services engaged Consumers Energy to take advantage of re-lamping rebates to re-lamp buildings with energy efficient fluorescent bulbs. Students started to gain momentum reducing the solid waste landfill stream with student organizations willing to run a recycling contest. When extraordinary developments grow on campus as a result of just asking questions, as the leader, it is time to capitalize and display that everyone on the team made all this happen and there is still work to celebrate. "It is important to value differences."

On our campus, we continue to see environmental stewardship action and innovation from faculty, staff, and students. We completed the MTESP and organized a multi-media press conference, bringing attention to the success of adopting an Environmental Stewardship Program. In the process, I explored some poetic explanation to my motivation:

A river is to the earth, as a vein is to the heart. The Kalamazoo cradles our acres of athletic fields, in the fold of a southern curve of least resistance.

On a quiet day the river can be heard in the distance. If something spills on campus, its fate is the river, the vein to the earth. A quiet campus is the result from the awareness of this relationship.

(Our campus is a postage stamp of property in the Kalamazoo Watershed. The Kalamazoo River Watershed encompasses approximately 2,020 square miles and includes parts of eight counties in the southwest area of the Lower Peninsula in Michigan. The watershed stretches 162 miles and varies 11 to 29 miles in width.)

In summary, to start an environmental steward process and complete a successful program, start with self-organization and focus on what works. Success is found only if you're looking for it and once it is found create the future around it. In this case, I choose to focus on Environmental Stewardship and in general much of this language can be applied daily. "The language we use creates our reality."



Mark Frever, CSFM, is director of grounds for Albion College, Albion, MI.



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Photo 3

Photo 4

Photo 5

Top Photo courtesy of Clinton Bailey, Engineer–City of San Angelo. Photo 1: Irrigation problems—could have been avoided. Photo 2: Know and analyze your existing soils. Photo 3: Sample and analyze soils. Photo 4: Verify your grades. Photo 5: Specify weed control throughout construction period.

## Factors to consider before building a new sports field complex

**AVE YOU EVER** gazed upon a sports field, either your own or someone else's, and wondered why there are so many problematic conditions on that site? It could be issues dealing with soils, drainage, compaction, salinity, or any number of other problems. Who is responsible for these issues? How could they have been avoided? Could something have been done differently during its construction that would have made a difference? Ultimately, the design and construction of a sports field/ complex plays a major role in determining the maximum level of overall performance from your turfgrass for that site.

Anyone who has ever been a part of building a new sports complex knows that it can be one of the most satisfying experiences in their career. Walking onto a new sports field where you and your staff played some role in its completion can be a very proud moment. But, as most turfgrass managers know, the path to this proud moment isn't easy. It takes a tremendous amount of time, hard work, and determination.

Throughout the entire process, you will likely work with many fantastic people within the turfgrass industry and some outside of our industry. You will have days where everything goes your way. Then, unfortunately, you will face some days that are not pleasurable. Trials and tribulations with your project can be expected, but you CAN minimize the varying degree of these problems.

There are many factors to consider when building a new sports field complex that will assist in maximizing the performance of your site and minimizing the unnecessary problems. As a turfgrass manager, you should create your own list and outline the issues that you feel are important. Here are a few helpful tips:

#### **PLANNING AND DESIGN**

• Choose an architect who knows and understands the complexity of sports field construction (i.e. turfgrass management, soils, irrigation, drainage, fencing, buildings, electrical, plumbing, etc.).

• Always check the references of the architect for performance of past projects.

• Work directly with the architect on the design and specifications of the contract.

• Make sure the architect understands his or her role before, during, and at the completion of the project.

#### **CONTRACT SPECIFICATIONS**

• Review and make the necessary changes in the contract before going out for bid.

• Use resources you know and trust for advice (i.e., turfgrass specialists, soil lab personnel, other turf managers, books, articles, etc.).

• Make sure the owner is well informed and accepts the contents/specifications of the contract.

• Add more specifications to cover ALL aspects of the project. Do not assume that the contractor will know and understand the complexities of sports field construction (i.e., over-compaction, drainage, soil types and depths, soil quality, weed management, irrigation installation procedures, laser grading, fencing, buildings/structures, etc.). • Remember, you can always negotiate what you have in the specifications of the contract, but you cannot add to the specifications once you have hired the contractor and started the project—unless you want to pay extra!

• Know and understand your construction plans as well as the contract specifications. You will use these extensively throughout the project.

#### CONTRACTOR SELECTION

• Contractor shall list all sports field construction (or related) projects currently in progress: name, contact person, schedule or percent completion, and value/amount of project.

• Contractor shall provide list and credentials of all sub-contractors for approval before the awarding of the bid.

• Contractor shall list all projects that were awarded to them but failed to complete within the past 7 years.

• Contractor shall list all defaults of bids and/or performance bonds.

• Contractor shall list all judgments, claims, arbitration, proceedings, or lawsuits pending or outstanding either against them or from them for the past 7 years.

• Contractor shall provide the name, credentials, and job responsibility of the **turfgrass superintendent** the contractor intends to use during the sports field construction before bid.

• Contractor shall provide information or a list of past completed jobs relating to sports field complex construction as a reference.

• Specify that the bid will go to the lowest, **qualified** bidder for the project and then define "qualified."

#### **CONTRACTOR/OWNER ISSUES**

• Have the contractor develop a timeline for the start date and completion date of all aspects of the project in the appropriate order.

• Contractor should meet with his/her architect, sub-contractors, and owner representatives at least once per week. Communication is the key!

• Contractor should make periodic changes on the timeline and approved by the owner.

• Liquidated damages should be applied to the contractor if he/she fails to meet the timeline. Make sure the amount is appropriate (i.e., \$100 per day for being late will likely not get the attention of a contractor on a \$10 million project).

• Change orders need to be made in a timely manner with approval by the owner and the contractor.

• Documentation is critical for change orders and specifications of the contract.

• Payments to the contractor should be made if he/she adheres to the contract and shows adequate and acceptable progress.

• Payments should be withheld if the contractor fails to adhere to the specifications or does not show adequate and acceptable progress.

#### SOIL SELECTION

• Use a reputable soil testing lab for



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analysis and advice before and during the project.

• Sample, analyze, and understand your existing soils at the site.

• Know and understand the drainage issues, sub-grade, topsoil, and infield mix that you plan to use.

• Keep the ranges of the specifications tight for all types of soils used in the project.

• Specify the type of analysis (i.e. texture, EC, pH, fertility, plasticity, organic content, etc.)

• Specify the soil sampling technique.

• Specify what, when, and how many samples will be taken (i.e., before delivery and at delivery for verification before installation, for example, every 2,000 tons, every quadrant, etc.).

• Remember, you can always negotiate a wider range if you choose to do so later, but you cannot make the specification tighter after hiring the contractor unless you want to pay extra!

• Take soil samples of blends, existing

soil, etc. to verify your specifications.

• If you specify a certain depth of topsoil over the sub-grade, spend the time verifying that you have it.

• Specify that the sub-grade and topsoil over the entire site be free of rock, debris, glass, etc.

• Specify that two different soils cannot be used on the same field, area, etc.

• Verify compaction issues in the subgrade and topsoil. If appropriate, specify scarification to eliminate/minimize compaction issues.

• For proper turfgrass growth, proctor densities should range from 83% to 88%. Anything greater may lead to management issues due to over-compaction.

• Define the expectations for weed control during construction throughout the entire project site.

#### INFIELD MIXES AND CONDITIONERS

• Make sure the contractor understands the specifications for the texture, color,

plasticity, organic content, etc. of the infield clay and conditioners (i.e. 60% sand, 20% clay, and 20% silt for the infield clay with +/- 5% tolerance).

• Define the depth of the infield clay and conditioners, mound installation process, etc.

• Keep the ranges of the specifications tight for the infield clay and conditioners used in the project.

• Specify what, when, and how many infield clay samples will be taken (i.e., before delivery and at delivery for verification before installation, for example, every 1,000 tons, every field, etc.).

• Specify that the infield clay will be free of rocks, glass, debris, etc.

• Understand the differences in sand particle size.

#### LASER GRADING

• Specify laser grading with tight but appropriate tolerance levels (i.e. +/- 0.5 inch).

• Specify the appropriate type and size of equipment that can be used.



• Verify sub-grade and final topsoil grade elevations to confirm slope, topsoil depth, proper drainage, etc. by having the contractor use a 3rd party, licensed surveyor with an appropriate grid pattern.

• Fine grade the topsoil to eliminate uneven areas and low spots. Maintain profiles and contour of sub-grade.

• Finish grade shall be a smooth, clodfree, non-compacted seedbed ready for planting.

• Throughout the project, it is the contractor's responsibility to maintain the topsoil in place at specified grades. Topsoil losses due to erosion will be replaced by the contractor until acceptance is achieved from the owner.

• Protect existing plant growth and features remaining as final landscaping.

#### **IRRIGATION**

• Check the architect's irrigation system design for flaws, equipment type and compatibility, layout design, manufacturer specifications, application rates, distribution uniformity (head to head coverage), etc.

• Make sure you have enough irrigation water from the source to meet the demands.

• Specify the method of installing the irrigation system (i.e., ditch and pipe into sub-grade, add topsoil, and then place heads to avoid topsoil contamination issues.

• Specify irrigation audits on all zones for approval by owner.

• Strategically place isolation valves throughout the project site.

#### **TURFGRASS SELECTION**

• Specify exactly what you want—variety/type, sod vs. sprigs vs. seed, planting rate, appropriate dates of planting, preplant and grow-in fertilizer, herbicide applications, tillage, rolling, irrigation, etc.

• Have a backup plan if the contractor cannot meet the dates for planting.

• Specify a finished product free of weeds (i.e., common bermudagrass as a weed in a hybrid bermudagrass site).

• Specify that the owner must approve the turfgrass before installation. Travel to

the sod farms for sod/sprig approval.

• Specify the guarantee maintenance period after planting for the contractor.

#### **FINAL THOUGHTS**

• Be observant and verify the work of the contractor.

• Don't expect to always be the most liked person at the site.

• Take digital photos and document everything.

• Stay focused, sustain professional mannerisms, but maintain resolve!

Roger D. Havlak is a private turfgrass consultant who also serves as the Parks Superintendent for the San Angelo, Texas community. The City of San Angelo completed the construction of a sports field complex in 2009 that included 15 baseball/softball/flag football fields, concession and restroom facilities, playground site, four sand volleyball courts, and 55 acres of Tifway 419 bermudagrass turf. He can be reached at rdh@zipnet.us.



## Assignments and grounds crew work plan for the Seattle Mariners

**AS PART OF THE SPORTS TURF MANAGERS ASSOCIATION'S REGIONAL CONFERENCE** last July in Seattle, the group toured Safeco Field, home of the Mariners and groundskeeper Bob Christofferson, the 2005 Harry C. Gill Memorial Award winner. During the tour Bob shared that day's grounds crew assignment and game plan schedules. We reprint them here with his permission.

INTERICAN LEAGUE	GROUNDSCREW GAME PLAN
<u> </u>	GAIVIE PLAN
Date:	Wednesday July 21
Game Time	
	ASSIGNMENTS
Show up:	9am-Tim Leo Billy Jackson 11am - Dave Kevin Sean
Water Flowers:	10am - Billy Jackson
Blow Track:	9am - Billy Jackson
Paint Lines:	NO
Faint Lines.	NO
Bullpens:	11am - Dave Billy Jackson Sean
Dunponor	Thin bave biny backeon bean
Homeplate:	12pm - Dave Billy Sean
Main Mound:	1:30pm - Billy Tim Sean
Mow Infield:	11:15am - Tim
Mow Sides:	11:15am - Kevin
Mow Outfield:	
wow Outfield:	11:45am - Leo BC
Mow Bullnen:	12pm - Jackson
mon bunpen.	
Mow Sod Farm:	aftewr bullpens
Water Rhodys:	YES - Jackson with a hose
Water Sod Farm:	NO
Track Prep:	1pm - Billy
14-1	
Water Infield:	12:30pm - BC Tim Leo Sean
NOTES	2:45 - Chicago infield work - ground balls 3rd base
	2:45 - Chicago Infield work - ground balls 3rd base M's PFP 3:15pm - 3:50pm
	ווואס דרד ט. זטאוווי ט. טטאווו

Continued on page 32



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