land such as cell towers, solar power arrays, and wind power. Such endeavors typically involve long term leases which encumber a significant area of land or rooftop; however, they can be very lucrative for both parties. Of these funding opportunities, solar power sites currently appear to be the most heavily sought after. In some instances, the solar power developer will actually procure/build the athletic facility as part of their installation project and then turn the resultant facility over to the public owner.

VENDOR FINANCING

Although many recreation product vendors (turf, lighting, surfacing, etc.) offer financing programs; in our opinion, they have not proven to be effective to the municipality. This type of funding may only be effective as a last resort, or to complete the last portion of funding required for a significant project. The typical financial terms vary and may not be more advantageous than conventional financing from a lending institution. Additionally, such vendor financing arrangements can put the municipality in a situation where they are locked into doing business with a particular vendor and the price could reflect the proprietary nature of the procurement. Also, many states have very specific rules prohibiting proprietary specifications for public projects. If vendor financing is relied upon to complete project financing, it will be advantageous and probably necessary for the Booster group to obtain this type of financing in lieu of the public owner.

PROFESSIONAL FUNDRAISING

A professional fundraiser can assist a community with identifying potential corporate and individual sponsors, and developing an approach that is more successful than what the typical layperson could accomplish. A professional can manage “pledged giving” more effectively than most community fundraisers. They are also usually able to organize the grassroots fundraising in a more cost-effective fashion. Keep in mind that their success does depend on having the right materials (feasibility studies, colored renderings, and realistic budgets).

There are two types of professional fundraisers: those that work for a percentage of the funds raised and those that work for a set fee. The Association of Fundraising Professionals strongly encourages professional fundraisers be paid set fees for their services instead of a percentage.

Many athletic facilities constructed in the past decade have been funded to some extent by non-conventional means. Multiple funding sources for one project are common. To get the most out of your efforts, it’s important that your fundraising group is organized and everyone has a function, eg, one person is responsible for approaching businesses, one to research grants, etc. It’s also imperative that you start off on the right foot with excellent collateral materials. Engaging a design professional to provide realistic budgets, feasibility plans, and color renderings will help to facilitate your community to reach its fundraising goals.

William J. Seymour, PE, is the Director of the Civil Engineering Division for Gale Associates, Inc., Weymouth, MA and a member of the Sports Turf Managers Association.
Managing and maintaining your equipment fleet

Now that the turf growing season has ended for most of the country and winter is here, many turf and equipment managers turn their attention to servicing and repairing equipment for the rigorous spring schedule that will soon be here. Whether you have one unit or several units, preparations and planning this winter can help ensure a productive, successful equipment season in the spring.

Winter preventative maintenance programs can be scheduled to cover many of the larger recommended maintenance schedule items that are required. Because these services can include draining of fuel and hydraulic tanks and replacing many of the hoses, scheduling these services with a local equipment distributor can save time, money, and potential down time in the spring. Once spring arrives and the equipment is back out and being put through its paces, many of the common issues that are faced in the field can be prevented by following a regularly scheduled maintenance plan. The minimum maintenance standards that are outlined in the owner’s manual for each piece of equipment are essential to ensure the units in your fleet are operating to their maximum level of expected performance.

Changing the oil and filter regularly, checking tire pressure, replacing belts and hoses, changing the fuel filter, and if the unit is diesel draining the moisture from the fuel tank are some simple but important measures aiding in the performance of your equipment. While many of these tasks are performed on a regular or interval basis, there are other requirements that each operator should follow before using any piece of equipment. Doing a walk around inspection of the unit to visually check for issues is something that is often overlooked. Seeing an operator walk up to a unit and get on and ride away without looking on the ground to see if there are any leaks is a common occurrence in a race to be productive. This simple check could identify a potential issue and prevent environmental contamination or damage to playing surfaces.

Training your team in proper pre and post inspections when using equipment is a key element in the maintenance regimen. Checking fuel levels to ensure you start each shift with a full tank of gas is the start of any pre-operation process. If you plan to refuel your equipment during the day, make sure the unit is moved to a flat, concrete surface, turn the engine off and allow the engine to cool. Checking safety devices to ensure they are working properly and have not been tampered with is also a critical step. Manufacturers have continued to improve safety features that include automatic shutoffs, ROPS systems, vibration and noise reduction components, and seat belts to help prevent many of the injuries that occur. Tampering with these safety devices or using equipment for tasks not designed for can put the equipment at risk of serious damage. More importantly your operator or even bystanders can be at peril of serious injury or death.

Fleet management system

ONE OF THE KEY ELEMENTS of a maintenance operation is the ability to efficiently and accurately track imperative equipment data to ensure preventative maintenance is performed on schedule. One solution, myTurf, is The Toro Company’s fleet management system that offers a unique combination of tools that increase the efficiency of a turf equipment maintenance operation by reducing unnecessary steps and automating others. myTurf has you covered whether it is being able to locate and order parts online, automatically load service schedules, or view purchase and repair histories, whether for Toro equipment or any of the other brands in a fleet. The goal of a good online fleet management tool is to make sure the preventative maintenance gets done on time efficiently, automatically and simply.
The slightly uneven turf is not the result of a mole playing hide and seek; it is actually a water bubble. A couple years ago, this sports turf manager experienced almost perfect weather all winter long with adequate rainfall. Because of this, he did not have to irrigate all winter. In the springtime, the irrigation was needed and the first time he turned the system on, he noticed this rising bubble in the baseball outfield. The turf mat had become so thick during the winter that it had grown over several sprinkler heads and the irrigation head couldn’t punch through it. The solution was simple; they got a pocketknife out and cut a slit in the top of the bubble. Care and luck also come into play as you are always hoping the nozzle is not pointing at you. The field was aerated heavily as well as dethatched and the problem has not appeared again.

Photo submitted by Patrick Jonas, CSFM, Parks Maintenance Director at St. Andrews Parks & Playground in Charleston, SC.
When a piece of equipment does break down, the clock to get equipment back up and running starts ticking! Whether you have an on-site service technician or you call to have a service technician come out, your goal is to be productive and keep the plans and tasks for your operation running efficiently while keeping the highest standards of proper equipment repair and safety paramount to your team’s success.

There can be several techniques used to properly diagnose the source and extent of equipment issues. Today’s technicians are highly trained and skilled professionals. They are able to diagnose issues that may be due to electrical, fuel, hydraulic or mechanical failures. Through planning and staging standard or highly used parts in inventory, this strategy can more often than not make repairs quick and alleviate precious time needed to accomplish daily or weekly tasks.

Having the right equipment to properly diagnose any issue quickly and getting the unit back up and running is another important key to properly keeping your equipment up to par. As many equipment managers have discovered, equipment has become more advanced to meet the challenges and demands of the industry. Making sure that a technician has all the right tools and equipment can be costly and with budgets getting tighter this is becoming more challenging. However, the upfront investment can save you thousands of dollars via proper daily, weekly, monthly and annual costs in equipment and downtime—furthermore, how do you quantify sleepless nights wondering how you will get tomorrow’s tasks completed when broken equipment didn’t allow for completion of the previous day’s agenda?

In addition, the cost of environmental contamination and disposal of used fluids generated at equipment maintenance facilities is becoming more regulated through state agencies. Examples of disposable fluids include; oil, anti-freeze, brake fluid and cleaner, solvents, batteries and fuels. Appropriate, safe disposal has prompted many to upgrade their facilities in order to meet or exceed regulated guidelines. In some cases operations have or will decide to leave a portion or all their service and/or repair to someone else.

With the many daily activities that equipment and turf managers have to be concerned with, trying to remember when you last did a service or what parts you needed to complete the recommend service can be a challenging task. In some cases, technicians have a dry erase board or a hand written note book somewhere in the shop that they use to track all the equipment services. What if someone accidentally erases something from the board or in case of an accident that destroys those records, what does one resort to as a back up?

Maintaining proper records of equipment maintenance is another large component of keeping your equipment in shape for many years. As technology continues to emerge...
some technicians have created elaborate spreadsheets on their computers that they use as part of their documentation process for maintaining equipment as a transition from handwritten notes in a book or record keeping on a board.

With the dawn of information technology and Cloud-based software, new fleet management software solutions are attempting to take fleet maintenance to a new level. Fleet management tools are gaining adoption in the market by simplifying the process of tracking preventative maintenance and the inventory management and ordering of necessary parts. Logging and wireless update and reporting of operating hours, for easier tracking of maintenance intervals, is an added benefit of these solutions. When preventative maintenance alerts appear in the software, the system will provide information you need on the unit via a “work order” that includes the service required and what parts are needed to complete this service. Once this information is provided, a technician can simply order the parts online and have them shipped right to their facility the next day.

You can also use solutions like The Toro Company’s fleet management system, myTurf, to get a total cost of ownership information to help drive equipment upgrade decisions. And, since many of these solutions are now web-based, instead of residing on a desktop computer like prior generations, data is backed up daily for security and work order processing or parts ordering can be accomplished from any web-connected computer with a simple log in and password.

Working equipment is vital to any organization. No matter how big or small the piece of equipment is in size or importance, keeping it running at peak performance is critical. The window of opportunity to complete tasks can sometimes be a huge difference maker and in some cases when things go awry; they become an equipment or turf manager's worst nightmare! Tracking and following proper preventative maintenance practices, ordering appropriate parts per manufacturer’s guidelines, including a full winter service plan can help alleviate many of the challenges that are faced in the field every day.

Having the appropriate equipment maintenance practices in place for each unit is essential to every operation whether it’s a small one to two acre property or a larger one hundred acre facility. It’s all about your users’ expectations and your vision and passion to meet or pursue something greater. While equipment is being serviced for the winter this is also a good time to review safety procedures and pre-operation equipment checklist with employees. This includes going over the operator’s and safety manual or watching associated video’s for the different units that you have. Covering routine maintenance schedules and safety tips with employees can give you an additional set of eyes in the field. Following these suggested guidelines can drastically decrease down time and improve overall team productivity so moral and general operations help keep employees and the environment safe, including better playing surfaces and turf in 2013 and beyond.

Jason Kopp has been a sports turf and grounds manager for more than 20 years and is currently territory manager for Turf Equipment and Supply, Jessup, MD.
WE ASKED SOME EDUCATORS at three community colleges and one 4-year institution about the status of their turfgrass programs. The questions were:

• 1. What is the trend in your turf program enrollment numbers—up, down or steady?
• 2. What are some of the reasons your students give for wanting to study turf management?
• 3. Have you made recently, or are you anticipating making in the near future, any changes to your program? If so, what and why?
• 4. What is your opinion on how turf management will be taught 10 years in the future?

CHAD FOLLIS,
Mineral Area College
Park Hills, MO
Follis is a horticulture instructor, greenhouse supervisor and baseball field manager.

1. Overall enrollment in horticulture is up. Those students wanting turf specific is steady this year.

2. Many of the anticipated answers are love of sports, love of outdoors, working with hands and equipment. In our rural area of southeast Missouri, turf management is still growing and new so there is some aspect of novelty also in the mix.

3. We have increased our end of program testing to assure employers and 4-year colleges our students are meeting necessary competencies. We also put in a NTEP-style variety trial over the past 2 school years. We now have 50 bermudagrasses, 13 zoysia and eight buffalo, two St. Augustine, and two paspalum. We also installed 100+ cool-season grasses. All the basics, KYB, PRG, TTF, FF, Bent and a few outside the norm like faults alkali, poa triv, poa supina, micro clover. The students got behind this project. It allowed us to teach establishment of the various grasses and gave the students some hands on experience using equipment such as vertislicers, aeration, etc. Thanks to all the folks that helped us with samples of live warm seasons and seed, too many to mention in this space. We are also trying to work out articulation with a couple 4-year institutions to smooth the transition process.

4. More and more online distance delivery of education. Students don’t want to come to campus or at least want to limit the amount of trips per week. We have to determine how to deliver a hands-on outside careers driven education via a computer screen. How do we engage students fully, not just pass along PowerPoint slides? I also see STMA becoming more involved in how and what we teach in the classroom much in the model of the GCSAA. I think this will allow for increased matching competencies across the industry, which strengthens the knowledge base and gives employers the assurance they are getting individuals that can make a difference in their facilities immediately.

TROY MCQUILLEN,
Kirkwood Community College
Cedar Rapids, IA
McQuillen is a turf instructor.

1. Numbers are remaining steady, but something that is changing is the number of students that are expressing interest in sports turf management. Currently I have 55 students in the program and I could say that 70% express interested in golf course maintenance and the other 30% are pursuing a sports turf career. This percentage is up from past years. I attribute this to increased sports turf opportunities in our area, having student participate in the STMA Conference, and shifting more curriculum and course competencies toward the sports turf experience.

2. Usually I ask the same question when a potential student enters my office for the first time. I would say the most common response is that the student likes the “hands on” portion of the career and the applied education. Students also comment on wanting to work outside, having a passion for the sport, or in some cases have worked a summer job involving a sports turf experience. They come to Kirkwood wanting more knowledge.

3. Every year the Kirkwood sports turf program hosts area sports turf managers for a 1-day advisory committee meeting. These members provide both curriculum and lab experience suggestions to our program so that the education and staying competitive with the industry. Besides the Athletic Field Maintenance class, students in our programs also take Irrigation Installation and Design, Intro to Turfgrass, Horticulture Math, Advanced Turfgrass, and Plant Material Maintenance among other classes that make up the 68-credit curriculum. Recently we have made changes to our internship where students are now required to complete an internship packet, followed by a presentation that identifies internship competencies they need to complete while on the internship, and then share that information with the incoming freshmen. We are also adding more transfer level coursework for those students that have an interest in pursuing 2 more years after
Kirkwood. These classes include Chem 2, Organic chem, Comp 2, etc.

The advisory committee and I also have been discussing the potential of an Advanced Soil Fertility and Chemical Reaction class. What I really like about the community college curriculum is that changes are not difficult to make and the advisory committee keeps up on the same track as the industry.

4. Good question. I see a lot more online training for either current credit students, or as a refresher course for existing industry professionals. The difficult aspect of online education is the “hands-on” factor. For me I always find it difficult to teach an objective without the hands-on lab activity.

I see 2-year institutions working closer with universities to make sure our students have the best transfer route. (We have made great progress already with this). In the near future for Iowa there will be a student shortage. In the state of Iowa the next largest senior classes are now in kindergarten! There will be a competition for students. I think that high schools need to provide more horticulture courses for students that also include sports turf topics to let students know that these [offer] realistic careers.

I also see our curriculum having to make some adjustment with not only teaching students about sports turf, but also more coursework on facilities management, engineering, and lots of MATH. Sports turf managers are expected to perform it all, and we need to back it up with qualified training.

BRIAN SCOTT,
Mt. San Antonio College
Walnut, CA

Scott is a professor of horticulture.

1. It is difficult to get accurate figures for the number of students specifically in the turf program due to the way majors are reported on. Our typical student usually comes in with an unrelated declared major, or as a declared Horticulture Science major. It is quite a process for them to change their declared major and sometimes changing the declared major impacts their financial aid. So, with that said, I will give you some information based on Certificates, Degrees and general observations. It is also important to understand that our typical student is around 30 years old, has a family and works either part or full time and attends school part time. I have students ranging in age from 18 to 70 years old, multi-racial, male and female. A quite eclectic bunch!

I have been at Mt. SAC going on 12 years. When I started we did not have a degree in Sports Turf Management. I implemented the Park and Sports Turf Management degree in 2003. Since that time we have awarded seven degrees. The certificate in Sports Turf Management, in the same time frame, has been awarded to 33 individuals. This certificate encompasses the core courses minus the general education requirements.

In just looking at ‘completers’, there is a steady trend. I can’t say numbers are up or down. The most certificates we awarded in one year were eight in 2008-2009. The least
Facility & Operations

was one in 2004-2005. Degrees have been fairly consistent with 1 per year.

My general observations are that the program is gaining interest and enthusiasm to a higher degree every year. We have been taking eight students to compete in the STMA Student Challenge every year since 2009. Last year we had 12 students participate. When we first started, I had trouble getting four students to compete. Now we have tryouts and give them qualifying exams. I don’t require that they are majoring in Sports Turf Management. In fact, I use the competition as more of a way to promote the sports turf industry. Many of the students have decided to seek employment in the sports turf industry after they go to the national conference and see what it is all about. By this measure, I would say that our program is growing and will continue to do so in the future. Our local industry is consistently seeking people who have knowledge of athletic field management.

2. This past spring (2012), we conducted some student focus groups to answer this type of question as well as several others. While the students who participated were from various disciplines within the Agricultural Sciences Department, I think the answers accurately reflect how students in every discipline within our department feel.

Participants described several attributes about the program that are working well and should be maintained:

• Hands on/practical experiences
• Ample industry contacts, networking opportunities, information about trends and job opportunities
• Teachers who are caring, down-to-earth, knowledgeable, and who convey their love for what they do
• Pride in the program among students and faculty
• Variety of classes/new computer-aided drafting course
• Good use of limited resources
• Everything!

Participants also stated what aspects of the program are less successful, offering program personnel opportunities to improve by:

• Incorporating technology in courses/program
• Developing more design/drawing curricula, as well as more advanced curricula
• Using industry trends to drive offerings
• Addressing class scheduling/availability
• Increasing program’s limited resources
• Having more voice-of-the-student opportunities

This is all fairly general information. The students who specifically go into turf management typically like the environment of being around sports and like being outside. Also, it gives them an opportunity to take pride in their accomplishments.

3. We have recently changed our certificate program to be much more specialized. For instance, our sports turf certificate used to require 30 units of courses. Now it is 18. Our previous philosophy in our certificate programs was that we wanted to
make sure students had a very broad knowledge base for all certificates. Now we feel that it is more important to provide certificates for very specialized subject matters. We also provide more certificates now (was 9, now 12) and have included a general Horticulture Science certificate for those who want to go wide but not as deep. We hope this will allow students to achieve certificates in a shorter time frame.

4. I see turf management, just like many other subjects, being taught from more of a “soft skills” and thinking on your feet mentality. When I first started teaching, I put so much emphasis on the details of the trade (for example, disease, insect and weed identification; fertilizer programs, etc.). As I have traveled and had discussions with many turf managers in different regions, it seems like all of the details change from site to site, region to region. It is impossible to consider all of the scenarios. Now, I do recognize the importance of the details, especially to universities who are training researchers. At the community college level, however, I don’t see this as being one of my missions. I sure what them to understand the basics, and even the details when I think it will be extremely relevant. But I keep asking myself what details I remember from my college education. It was that I was taught how to think like a diagnostician, how to be a professional on all levels, and how to be resourceful. This sounds pretty basic, but the challenge for the future for me is developing curriculum that incorporates these concepts with the technical knowledge that students need to have when beginning their careers in sports turf management.

DOUG LINDE, PHD, Delaware Valley College
Doylestown, PA

Linde is professor of turf management at this 4-year college in southeastern PA.

1. We are staying steady around 30 total students. That number has been around 30 for the past 5 years. Most of our students are 19-22 years of age.

2. Like playing golf and want to work outdoors. Like sports and want to work outdoors on a sports field [are the major reasons].

3. I’m sensing in the near future we will have students take more basic sciences and less specialty classes. This will result in a more broad-based science education that would give them more flexibility in case of a career change. New graduates have no problem getting jobs upon graduation as long as they have work experience; however advancement to head field manager and head superintendent is much more difficult. So some graduates are switching careers. We also will be redesigning our required internship program to increase the academic rigor.

4. Professors will need to continue to adapt to the learning styles and preferences of the students. 18-22 year-old students’ learning preferences will likely change due to technology, their habits, and teaching techniques they witness in high school. Also, students need professors less and less for the information about a subject. They need professors to evaluate information and use it to solve problems.
GREEN MEDIA, a division of M2MEDIA360 — publisher of Landscape and Irrigation, Arbor Age, Outdoor Power Equipment and SportsTurf — is proud to present the 2012 selections for “Most Influential People in the Green Industry.”

Green Media’s “Most Influential People in the Green Industry” were nominated by their peers for their ongoing contributions to the Green Industry. The professionals selected for this honor were chosen from throughout the Green Industry, and exemplify a commitment to the industry and a widespread influence on their peers.

Green Media congratulates all of those selected to this year’s list of “Most Influential People in the Green Industry.”

Tom Nielsen
Head Groundskeeper, Louisville Bats

Tom Nielsen, Head Groundskeeper at Louisville Slugger Field for the Louisville Bats AAA franchise, was nominated by another groundskeeper. Nielsen, recipient of the prestigious SportsTurf Managers Association George Toma Golden Rake Award for 2011, is known for his mentorship of many in the industry, but in particular students that pass through his outstanding internship program. Several of his assistants, crew members, and interns have gone on to notable careers of their own, including Jake Tyler, head groundskeeper for the Toledo Mud Hens; Chad Laurie, head groundskeeper for the Buffalo Bisons; Thomas Trotter, head groundskeeper for the Nashville Sounds; Steve Ruckman, head groundskeeper for the Richmond Flying Squirrels; Dan Blank, head groundskeeper for TD Ameritrade Park, home of the College World Series; and Ray Sayre, head groundskeeper for the Pensacola Wahoos, just to name a few.

The nomination continued, “However, his ‘teaching heart’ doesn’t stop with his staff and interns. He works tirelessly to convey the importance of sound maintenance practices to the administration, players, and fans in Louisville. The Toma award recognizes a member for a dedicated and enthusiastic attitude to achieve their highest goals. The award acknowledges a strong spirit of commitment to the industry. Nielsen has also won STMA’s Field of the Year in 2002 & 2004 and was named the International League Sports Turf Manager of the Year 2009.

Green Media: You were nominated by your peers as one of the most influential people in the green industry. How do you feel you influence other industry professionals? 

Nielsen: I influence other industry professionals’ everyday when I go to work because I love what I do. Both my words (enthusiasm) and actions (mentoring) influence others as I teach upcoming groundkeepers best practices. When you love what you do, it shows.

Green Media: What do you feel has been your biggest contribution to the green industry so far? And what do you see as your role in the future of the industry? 

Nielsen: My biggest contribution has been helping upcoming groundkeepers reach their professional goals. In the past 12 years, I have mentored 30+ employees who went on to continue working in the Green Industry as either head groundkeepers or assistants in professional baseball, universities, high school athletics and landscape companies. I am willing to help anyone interested in helping anyone interested in the green industry. I speak with several school and private groups every year.

I plan to continue doing the same work mentoring and promoting the green industry in the future.

Green Media: Who has influenced you both personally and professionally? 

Nielsen: My biggest personal influence is my parents, Ted and Gloria Nielsen, who instilled in me a great work ethic and desire to succeed. Professionally, it is George Toma. He taught me professionalism and the “and then some” attitude, which is doing your job as best you can plus some. Don’t settle for average. Another big influence was the late Gary Vanden Berg, former head groundskeeper with the Milwaukee Brewers, for giving me my start in sports turf management and being a positive role model.

Green Media: Tell us something about yourself outside of work (hobby, sport or personal interest) that influences your approach in your professional career.

Nielsen: My hobbies are Civil War re-enacting, camping, mountain biking, running and swimming. These hobbies influence my approach in my professional career in many ways. The Civil War re-enacting makes me appreciate modern conveniences and the things I have. Camping helps me clear my head from work and gives me time with my family without having to run to the stadium to check on the field. My athletic pursuits help me stay in shape so that my job is easier to perform and [because I] appreciate my health. I urge my employees to find a balance between fitness, family and work in order to be at their best in all aspects of their lives.

Green Media: What dreams do you have for the industry? What change(s) are necessary to make those dreams a reality?

Nielsen: My dream for the industry is to help bring up the standards of groundkeepers, which will in turn bring us more respect and higher wages. This is accomplished by increasing expectations both in physical appearance and communications skills. We are all not a bunch of Bill Murrays from “CaddyShack”! This is the stereotype that the general population thinks of when they think of the green industry and we need to work hard to overcome it. There are a lot of very intelligent, experienced professionals in our industry and we all deserve respect.

Green Media: What advice do you have for green industry professionals who want to become influential leaders themselves?

Nielsen: My advice is to work hard, stay enthusiastic, be open-minded to new ideas, techniques and [listening to] new young minds.

Green Media: If you could nominate another person as the green industry’s most influential, who would that be, and why?

Nielsen: Eric Fastbender at LSU and