

UPDATE

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SPRING FIELD DAY 2006:

Sports Fields & Monmouth Park Turf Course

Brad Park*

What would April be like if it were not for SFMANJ's annual Spring Field Day? We won't know this year, as a day has been planned similar to last year's format in which education at two facilities is incorporated into one day.

Sports Field Managers Association of NJ is inviting everyone to attend its Spring Field Day on Thursday, April 13, 2006. The day will begin with a 7:30 registration at the front lobby of Shore Regional High School, West Long Branch, NJ. Coffee and donuts are sponsored by Northern Nurseries and Storr Tractor.

As part of indoor morning education, Marco Oliveira, Facilities Manager, ARAMARK Corporation, will describe his role in maintaining the sports fields at Shore Regional. The session will continue with a panel discussion on synthetic fields as well as pesticide education.

The program will move outside where Scott Bills, Northern Nurseries, will show proper techniques to construct a pitcher's mound and home plate areas. This is a hands-on demonstration where attendees are encouraged to participate in the construction process. Northern Nurseries is graciously acknowledged for donating materials for this demonstration. Infield skin surface grooming education and demonstrations will follow.

The day will then move down the street to what has been called, "The Shore's Greatest Stretch" – Monmouth Park Racetrack, Oceanport, NJ.

Lunch will be provided at Monmouth Park, sponsored by Storr Tractor Co. and Northern Nurseries.

In anticipation for the 2007 Breeders Cup, Monmouth Park embarked on a goal to fully reconstruct its turf course which had been plagued by poor drainage, inconsistent turfgrass cover, and poor traffic tolerance. Situated inside a dirt oval (editor's note: "dirt", as opposed to "soil", is a perfectly acceptable term in reference to thoroughbred tracks ...), the Monmouth Park turf course is a 7/8th mile natural turfgrass racing surface which annually hosts in excess of 100 races from late May through September each year.

A team of agronomists, engineers, irrigation specialists, and a world-renowned turf track specialist was assembled by Rutgers University to provide design parameters, consulting, and construction supervision of the project. In its final stages of completion, the project entailed removal of the topsoil, installation of drainage, importation of subgrade material, replacement of the topsoil, installation of a new irrigation system, and sod installation. Additionally, a second interior racing chute was constructed and existing turf course banking was increased to facilitate better surface drainage. Afternoon education at Monmouth Park will be provided by Dr. James Murphy, Rutgers University and the Monmouth Park staff. For more information contact SFMANJ at 908-730-7770.

You do not want to miss this opportunity to gain practical sports field education and get a behind-the-scenes tour-of-the-turf at one of the Northeast's premier thoroughbred racing facilities!

*Brad Park is Sports Turf Res. and Ed. Coord., Rutgers Univ.; SFMANJ Board member; and Editor, SFMANJ Update



The "Clubhouse Turn" at Monmouth Park Racetrack (August 2005)



The "Clubhouse Turn" at Monmouth Park Racetrack following turfgrass and hedge removal (September 2005)

Additional photos on page 17

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This newsletter is the official bi-monthly publication of the Sports Field Managers Association of New Jersey.

**For information regarding this newsletter, contact Brad Park:
 SFMANJ at (908) 730-7770 or Brad Park at (732) 932-9711, x127**

Editor
 Brad Park, Rutgers University
 Email: park@aesop.rutgers.edu

SFMANJ does not necessarily support the opinions of those reflected in the following articles.

SPORTS TURF EXTRAVAGANZA IN ORLANDO

Rich Watson*

The 17th annual STMA Conference and Exhibition was held this year at Disney's Coronado Springs Resort and Conference Center. A record crowd of 1016 attendees celebrated STMA's 25th Anniversary with 38 educational sessions, hands-on workshops, tours of sports venues, the SAFE scholarship golf tournament, and a vast trade show. This was the second national conference that I have attended and it exceeded my expectations. The facility was first rate and the knowledge gained from the educational sessions and my peers was priceless. Where else can you have access to that many experts in one field?

As the grounds supervisor for the Pine Hill Public Schools I deal with a large number of school specific issues, so I kicked off my conference with a sports turf networking session for K-12 schools. SFMANJ vice-president Don Savard, CSFM gave a good talk about his experience with outsourcing and we had a chance to discuss topics we all have to deal with as sports turf managers. It was great to talk to people from all over the country that are going through the same things that you are. One of the topics discussed was providing professionally maintained fields on a school's budget. The common denominator seemed to be that expectations were higher than manpower and budget restraints would allow. I know we can change this. Through hard work, networking, and education of our administrators we can put forward a professional product and not break the bank.

One of the great things about the conference is the amount of choices you have in the educational sessions. I had a very difficult time deciding which ones to pick. Looking back I tried to cover a lot of bases. IPM is a hot button topic in our state right now, so I checked out Implementing IPM Strategies for Athletic Fields. Roch Gaussoin from the University of Nebraska was the speaker. He touched on most of the things that we are doing here in the Garden State such as proper seed selection, appropriate nitrogen usage, compaction relief, and proper use of pesticides. He was surprised by how strict our notification laws are (a topic for another time.) IPM is here to stay. We as sports turf managers are going to have to learn how to make it part of our program.

Infield maintenance is one of my favorite topics. I enjoy picking the brains of people who do it on the professional level. The panel discussion about infield mixes with Luke Yoder of the San Diego Padres, and Craig Potts from Texas A&M University was good stuff. They talked about the importance of water management in your infield and how mixes are different from one part of the country to the other. The other topic they both touched on was infield conditioner. The use of conditioner on our infields has made them much safer and gives the fielder a true bounce every time. If you are spending money on infield mix every year, you could get a lot more for your money if you topped off your infield with conditioner.

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SPORTS TURF EXTRAVAGANZA IN ORLANDO

Rich Watson*

(continued from page 4)

Becoming a Certified Sports Field Manager is my ultimate goal. I have just qualified to take the exam with enough experience points and hope to take it at next year's conference. The Preparing for the CSFM Exam Workshop with Mary Owen of UMass and George Trivett CSFM was a good study guide. They went over the different sections of the exam and ended the workshop with a sample test. I have a better idea of what the exam is about and look forward to taking it next year.

This year's Awards Banquet was very special for me because the STMA honored one of their founding fathers. Henry Indyk was a friend and mentor to many of us. Since his passing I think of him often, especially at turf conferences (go figure). Henry was always there with advice and support. His knowledge was only surpassed by his caring for other people. Greg Petry spoke about his relationship with Henry and brought a lot of fond memories back for all of us there.

If you didn't make it to Orlando this year, you missed out. However, next year's conference is in San Antonio, TX (Jan. 17-21, 2007). Start making plans now to find a way to get there. It will take some salesmanship on your part, but it is well worth the extra effort. My school district supports me in my quest for continuing education. Our budget is small, but that is why going to these conferences is so important. The things I learn and bring back with me are invaluable. I can't always afford to do things the way they are explained but I can get ideas that will fit into our program. Education gives you the tools to do a better job. In addition to education you will meet people that will share information and their experiences with you. The networking system within the STMA is amazing. If you have questions or need help, always remember there is someone out there just like you.

*Rich Watson is Grounds Supervisor, Pine Hill Public Schools; 856-767-8000 ext. 3036; e-mail: rwatson@pinehill.k12.nj.us



New Jersey was well represented at the STMA National Conference in Orlando, FL from January 18-22, 2006. Top row (l-r): Don Savard, CSFM and SFMANJ Vice President; Jim Hermann, CSFM; Fred Castenschield; Jim Gates, SFMANJ Treasurer; Rich Watson; Karl "Chuckie" Singer. Bottom row (l-r) Ken Mathis, SFMANJ President; El Hermann, SFMANJ Past President; Brad Park, Editor, SFMANJ Update.

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Mowing Height

Turfgrass species and variety, mowing frequency, environmental conditions, and available management resources are factors that govern the lowest mowing height possible for a turf. Tall fescue is best mowed at height of 2 inches or more. At lower heights, tall fescue will steadily thin out and become infested with weeds. Perennial ryegrass can be mowed as low as ½ inch under intensive management including routine mowing, irrigation and pesticides; however, mowing heights of 2- to 3-inches are necessary under less intensive management. Certain varieties of Kentucky bluegrass can tolerate mowing as low as ¾ inch; however, annual bluegrass will eventually invade and dominate under such low mowing. A 1.5- to 2.5 inch mowing height is more acceptable for Kentucky bluegrass grown under moderate levels of management.

The budget and labor constraints placed on the field managers at many school and municipal operations typically do not allow mowing heights lower than 2 to 2 ½ inches for a majority of fields. In some cases, more intensive mowing management is feasible on limited basis for high priority playing fields.

Mowing towards the lower end of a species tolerance range will stimulate shoot growth, increase tillering/shoot density, and encourage a finer leaf texture, and ultimately improve playing surface conditions. Mowing below the height tolerated by a species will increase leaf succulence, decrease wear tolerance, reduce carbohydrate (food) reserves, and decrease root, stolon, and rhizome growth.

Mowing Frequency

Increasing the mowing frequency without lowering the mowing height is one immediate adjustment in a mowing program that can quickly improve turf and playing surface quality. Mowing more often so that less than 1/3rd the length of the leaves is removed will be less stressful to the turf than lowering the mowing height to achieve better playing surface quality. More frequent mowing results in less leaf tissue being removed in a single mowing and allows the turf to better adapt to the height of cut compared to a less frequent mowing program.

The proper minimum mowing frequency is determined by the 1/3rd rule, which refers to the concept that no more than 1/3rd of the height of the leaves (turf canopy) is cut in a single mowing. For example, a turf mowed at 2 inches should be no more than 3 inches high when it is mowed (1 inch is cut off the 3 inch high turf, 1/3rd). Turf should be mowed at 2.5 inches when the leaves are 3¾ inches high. And when the turf reaches 4½ inches it should be mowed no lower than a 3-inch height.

A lower mowing height requires more frequent mowing because shoot growth of the turf plants is stimulated as the mowing height is lowered. Thus, more frequent mowing is needed to keep up with the greater shoot growth and avoid scalping of the turf. Some examples of minimum mowing frequencies include mowing three to four times per week at 1½ inches or less, two times per week at 2 inches, and once a week at 3 inches. Infrequent mowing at low heights will scalp the turf and result in long-term decline of turf and playing surface quality.

(continued on page 7)

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RUTGERS CORNER *(continued from page 6)*


Spring Mowing Strategies


As spring temperatures become more favorable for growth, winter dormancy in turf begins to break and green-up develops as new shoots emerge. Rapid shoot growth and minimal environmental stresses at this time of year can lull turf managers into a false sense of security that problems will be minimal. In reality, it is a critical time to use a proper mowing frequency and cutting height along with no more than modest levels of nitrogen fertilization to develop and maintain a good root system.

Peak shoot growth will occur at air temperatures of 60 to 75 °F during the spring and the roots are extending deeper into the soil profile. The carbohydrate supply in the plant is depleted rapidly during this period of peak growth, thus timely mowing is critical to avoid removing no more than 1/3rd of the leaf tissue, otherwise a further strain the carbohydrate supply of the turfgrass plants would result. This negative physiological response to excessive defoliation (scalping) will cause root growth to cease and possibly dieback. Furthermore, recovery from scalping in the spring will be slower than a turf manager might expect due to the low carbohydrate supply. And turf with low vigor and density in the spring will be readily invaded by weeds such as crabgrass and goosegrass.

An unfortunate scenario that can occur in the spring involves wet (rainy) weather that interrupts the mowing schedule. Shoot growth becomes excessive and it is difficult to maintain the turf at the desired height. Under these circumstances, it is best to return to desired mowing height in a series of mowings, decreasing the cutting height with each successive mowing. For example, if conditions result in a 5 inch turf height and the desired mowing height is 2 inches, the next mowing should be at 3.5 inches followed by a mowing at 2.5 inches and finally mowing at the desired 2 inches. If feasible, it is also helpful to increase the mowing frequency during this time that the mowing height is being reduced.

* Dr. James A. Murphy is Extension Specialist in Turfgrass Management for Rutgers University and SFMANJ Advisor

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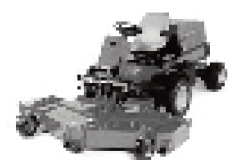
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The Yankees start the 2006 Season on the West Coast in a series against Oakland beginning on Monday, April 3rd at 10:05 pm; the Mets begin their season at home in Queens on April 3rd against the Nationals at 1:10 pm; and the Phillies open-up playing the Cards in Philly on April 3rd at 3:05 pm.



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A WAKE-UP CALL FOR YOUR IRRIGATION SYSTEM

Matt O'Neal, CID, CIC*

As we all know the spring season will soon be upon us. With that come many of the chores that go along with it. Those of you lucky enough to have an irrigation system know that along with the luxury comes a certain amount of maintenance. To keep the life blood of your fields running in tip-top condition requires starting up your system properly.

Before we even begin to talk about spring start-up, we first need to look at the fall winterization of the system. It doesn't matter how careful you are starting your irrigation in the spring, you can't make up for a poor winterization. What constitutes a poor winterization? Not completely blowing the system out or doing it too late after freezing has occurred is common scenarios. Particular attention must be paid to the point of connection. Backflow preventers can be very expensive to replace or repair especially large ones. Therefore it is imperative that they be winterized properly.

The first step to starting an irrigation system is to inspect the entire point of connection for any visual problems. You should check the meter, valves, service line and backflow preventer. If the backflow preventer was not fully winterized, there may be cracks or damage evident. Once a visual check has been performed, the water can be turned on to the system. When opening a valve, you should always open the valve slowly so to meter the amount of water entering the irrigation pipes. Opening a valve all the way immediately can cause water surge and can ultimately shorten the life of your irrigation system if not causing a sudden break in the pipe. After the water has filled the irrigation lines you will notice that the sound of the water will diminish. The valve can now be turned to its fully open position.

Once you are confident that the system is fully charged and does not leak, the attention can be directed towards the sprinklers and electric valves. As a rule of thumb, you should always start at the controller and go through the zones one by one walking the site observing any unusual conditions. This works especially well with a remote control where you can walk around without having to return to the controller to change zones each time. Things that should be noted are: sprinklers not popping up, sprinklers not rotating, whole zones not operating, and any water appearing where it should not. You should also identify all irrigation control boxes, exposing them if they are covered and opening them to inspect the valves for leaks or weeping.

An electrical inspection should also be performed now to help ensure that the control system is ready for operation. Each zone should be checked for resistance with a multimeter to indicate any problems with electric valves that may show up during the season. Especially low or high readings point to a short in the zone's electrical circuit. The short may be found in the wiring or in the solenoid by checking the resistance of the solenoid at the valve you can isolate the problem. You can obtain proper resistance readings for each valve from the manufacturer. Other checks for the electrical system would be incoming voltage into the controller and voltage out to the zone valves through the terminals.

A good practice throughout the season should be to perform inspections periodically to catch minor problems before they become major ones. Typically, the irrigation would run at night when no one is around to see the sprinklers operate. Running through all of the zones while you are on-site would be a great way to see if sprinklers are not turning or even operating. Valves boxes should be kept clean so that maintenance can be performed readily and to avoid having valves become buried over time. Extra time spent now analyzing potential problems is only going to help prevent downtime during the season.

*Matt O'Neal is a Certified Irrigation Contractor and Certified Irrigation Designer; and Technical Support Specialist, Storr Tractor Company

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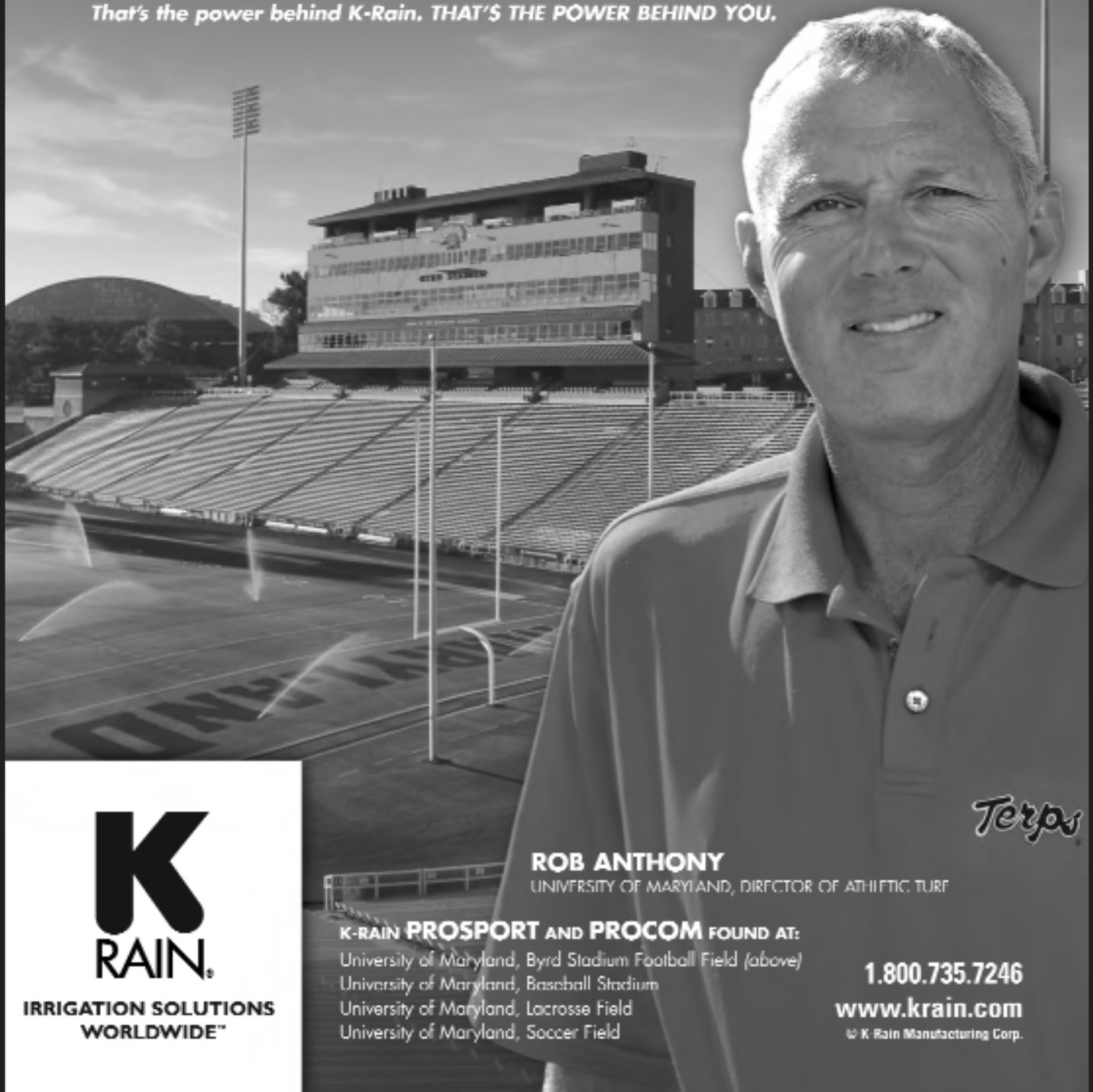
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CONSTRUCTING AN ATHLETIC FIELD

Sean Connell*

As an athletic field construction contractor, I am frequently asked by sports turf managers and owners, "How much will a renovation cost?" Unfortunately, this is not always an easy question to answer. The amount a customer will spend on a renovation can vary widely. From my experience, the greatest differences in price usually are dependent upon several key factors: earthmoving, drainage, sod versus seed and irrigation.

Typically, a customer will ask for an estimate based on one item such as laser grading. Other key components such as grassing, irrigation, fencing, and earthmoving never get addressed. To make an accurate estimate, quantify all areas that need to be addressed before construction starts. Information that is organized makes accurate and competitive estimates for the customer and straight-forward directions for the contractor. Limited information does not complete projects; nor does it allow projects to achieve full potential.

So how does the sports turf manager or owner decide how much they need? The easiest way to do this is to obtain the services of a design engineer local to your area. The engineer will survey the area and have a topography map made of your potential site or existing field. From there, they use a program such as Land Cad (or an equivalent program) to design your field. The program can be used to show how much area will be disturbed, how much soil will need to be cut and filled, and how much grading and drainage will be required. From this design, all

other components including sod, irrigation design, fencing etc. can be incorporated into the design.

Once a basic plan is determined, agronomic decisions usually come into play. Frequently, the design engineer has little or no experience in the athletic field industry. Therefore, it is crucial that the turf manager participate in this part of the design process. After some decision making and some estimating from your information, the project can go to bid. As a contractor, a bid organized in chronological order is easiest to price accurately. Bids listing actual quantities of units already estimated for the project are the easiest to quote as well as interpret for the customer. All contractors bidding the project are bidding apples to apples versus multiple contractors interpreting blueprints that can vary greatly. This can make bid evaluation confusing. Using unit prices gives the customer lateral movement as the project is in progress to make decisions onsite without renegotiating the contract. Additions and deletions can be made easily from the inception of the contract.

If you provide your contractor with all of the information he needs, you will get the most accurate price for the work. You will also be more likely to address issues before construction starts instead of in the middle of the project. An ill-prepared plan is more likely to sabotage the project even before construction. No construction project is perfect, but it can be a great experience to work-through with the right planning and tools.

* Sean Connell is President, Georgia Golf Construction, Inc. and a member of the SFMANJ Board of Directors



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Lip Service

Nicole Sherry*

Usually, when I am called to look at fields in our area I notice the same thing over and over again: huge lips. I am talking about lips you could step-off and break a neck. So what causes this problem? I believe it all depends on maintenance practices. The first problem entails too much material on the infield. After it rains and you notice a pool of water in spots on your infield skin, the first cure is to add more material, right? Wrong. Yes, add material to soak up extra water and dry out the puddle, but afterwards remove all that extra stuff you added. Have you ever been to a rainy ballgame and the grounds crew comes out inning after inning with drying agent to help the teams get through the game? Well, what you don't know is that the next day we are scooping all of that extra material off the infield. Why? If we did not, those players would soon be playing on a beach. I went to visit one field last week and the lips on the field were two feet high and five feet wide. They thought they would need to strip all of the grass and

add more root zone to get the grass even with the lips. I asked them to look at the field from a side view. "Look at your infield," I said. "See how it is raised almost two feet compared to the rest of the field? Imagine a giant knife slicing through the point at which the existing grass meets the lip and continuing all the way through to the backstop." I noted that it appeared as though loads of material just kept building-up so that it made almost a two-foot difference between the outfield grass and the infield skin.

The second problem for lips is wind. Wind will take hold-of that topdressing and blow it everywhere. A lot of it ends up in the grass edge. Can you ever stop lips from forming? No. You can, however, help control them by putting in a little extra effort about once per week. After each home stand, I have my crew use street sweeping brooms with really stiff bristles and broom from six to eight inches in the grass back towards the skin all the way around the field including inside edges, base paths, and the mound and plate grass edges. This will damage your grass a little bit. Try to make sure you only broom the same spot a couple times and move on. Also, if it's a hot sunny day, your grass may yellow a little. Cloudy days are per-

fect. Once a month I sharpen all the grading rakes (iron rakes) and stand on the dirt. I place the rake in the grass edge about six inches back and rip through the hump in the grass pulling towards the dirt at an angle then go back over in a different direction and angle. It will rip the grass. Don't worry; it will also loosen up all the compacted lip areas. When done, broom all of your edges again to clean them out and then you can roll the edges and use an edger to even it out again. In extreme cases like the one mentioned above, you might have to use a sod cutter to rip out those lips, find a level grade, re-sod, and take out some of your infield material.

Lets face it, I know we all have different things going on in our lives; however, if we try to spend a couple of hours on the lips of our fields and our finished product is correct (level) the first time, it's easy to maintain. Let's give our players a field that is safe. There is nothing worse than someone trying to field a ball, and cannot focus because he or she is worried about tripping on the field and getting hurt.

* Nicole Sherry is Head Groundskeeper, Trenton Thunder, Double-A affiliate of the New York Yankees



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Building a Better Toolbox- Tools You Can Use! - Part 3

Don Savard, CSFM*

The Information Toolset- Identify Your Resources!

Even the best grounds managers don't know all the answers to their questions, but here is how to find them! We live in the information age, where we can quickly find out almost everything about anything. We look to our resources to find the answers. Anyplace that you can find information is a potential resource.

I believe that my most important informational resources are the people. It began with the instructors that I had in school and the bosses and coworkers who taught me the fundamentals of my job. Trusted colleagues helped me figure out what to do- and sometimes what not to do, and continue to do so. My vendors partner with me and help me find solutions to problems. I network with my industry peers constantly. I try to surround myself with people who know more than me and I listen, ask questions and learn from them.

My next choice is information that I can find in print. I have textbooks and reference books on my bookshelf. Some of these books are like a "groundskeeper's bible", they contain the fundamental facts about what I need to know and what I need to do. I read and reference them often. There are also a number of trade magazines that I read monthly. Publications such as Sports Turf, Grounds Maintenance, Landscape Management and others offer timely information for the reader as most issues have a monthly theme. The articles are usually well written and concise and have useful content. Most subscriptions are free, thanks to an abundance of advertisers.

Another great place for information is the Internet. There are a number of good e-magazines out there for groundskeepers and sports field managers. Some are weekly newsletters with links to other websites, others are monthly. If you are looking for something specific, search engines such as Google, Yahoo and others can find tens if not hundreds of search results about whatever topic you choose.

Continuing Professional Education courses that Rutgers or your local community college offers are a good way to become trained and many offer credits and a certification of completion. Among the formats in which courses are offered are seminar, traditional classroom and online or distance learning classes. I took a soils course online last year and it was just as rigorous as any that I had in college. The advantage was that I could fit it around my busy schedule.

Some of the best clearinghouses of information are professional organizations such as the Sports Field Managers Association of New Jersey, the New Jersey Turfgrass Association, and others. These organizations publish newsletters by and for their membership, sponsor field days and demonstrations.

Lastly, if you need to know about a control product, ALWAYS read the label. A label is a tremendous resource. The label will tell you many things including what pests it will and won't control, what things you can safely apply it to, when, how and the amounts much to use.

*Don Savard is a Certified Sports Field Manager; Director, Athletic Facilities and Grounds, Salesianum School; and SFMANJ Vice-President



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Management of infield skinned surfaces is always a popular topic at SFMANJ's annual Spring Field Day. Here, Frank LoSasso, Hammonton Board of Education and SFMANJ member, describes the techniques he employs during the SFMANJ 2005 Spring Field Day.



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Thursday, April 13, 2006

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Education: 8:00 am

Members: \$25.00

Non-members: \$40

The 11th Annual

Rutgers Turfgrass Research Golf Classic

Monday, May 8, 2006

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www.njturfgrass.org

SFMANJ Summer Field Day

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Wednesday, June 28, 2006

County College of Morris

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Rutgers Lawn & Landscape Turf Research Field Day

Wednesday, August 2, 2006

Plant Science Research & Extension Farm

Adelphia, NJ

9:00 am – 3:00 pm

Rutgers Golf and Fine Turf Research Field Day

Thursday, August 3, 2006

Hort Farm II

North Brunswick, NJ

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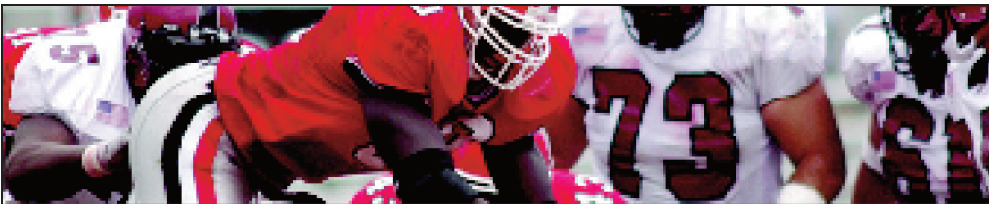
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