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

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# A Weed Management Overview



by Don Savard, CSFM,CGM

Whether it is in turf, a flower bed or even growing as an invasive tree in a forest, weeds are nothing more than unwanted plants growing out of place. Weeds will grow anywhere and everywhere they can when conditions are favorable. Often these opportunistic weeds will out compete the plants that you find desirable.

When I first started my career, the focus was on weed eradication. The problem was, the results were temporary. Since then, I have learned some things about weed management. Now, I have fewer weeds and a healthier landscape and I rarely use chemical herbicides. For the purposes of this article, let's use the word "CROP" to describe what it is we are trying to grow, whether we are talking about a lawn, a sports field, landscape or flower garden.

Weed management takes patience, time and a good plan. Here is what I do:

I Use best management practices to create hospitable growing conditions for the crop you are trying to grow. Many times weeds will thrive in conditions where the crop is suffering. Thus, weeds may sometimes be indicators of what the present soil conditions might be. For example, clover prefers to grow in low fertility conditions, sheep sorrel prefers acidic soil, and silver goosegrass prefers compacted soils. When the environment improves the crop becomes more aggressive and can out compete the weeds. So, begin by learning about your soil. Your crop will have specific requirements for its nutritional needs and soil testing will help you to determine which nutrients are in abundance, which nutrients are needed and whether the soil acidity or alkalinity needs to be adjusted. The soil lab will make recommendations in its report that you can follow to feed the crop. You will soon begin to see a response from the plants once they begin to actively grow. (Personally, I like to feed lightly but more often because nutrients can be lost in the environment before the plant can utilize them.) Some weeds prefer compacted soils or poorly drained soils. Aerating compacted soil or re-grading the soil so that water moves away,



changes the environment. As growing conditions improve, the crop becomes healthier and it is harder for these weeds to compete. The amount of sunlight received is also very important for crop health. If it is possible to make changes to increase (or decrease light depending on your crop), you might see some improvement but the amount of light might become a limiting factor when considering the costs or trouble involved in making changes. (It might be best to reconsider the location of the crop). Lastly, I have found that nurturing the microorganisms in the soil seems to provide me with the best possible benefits and results, whether it is in turf or in a flower bed. By adding organic matter, providing air and water through cultivation and minimizing environmental stresses, the beneficial microorganisms will improve the soil. The crop can become more sustainable, vigorous and can out compete the weeds.

2. Know how to identify your weeds. How can you manage a problem if you don't know what the problem is? Worse yet, by trying to use the wrong solution to a problem, you might be making the problem worse. Weeds are classified as grassy type weeds and broadleaf weeds. Weeds are also grouped by their lifecycle - annual weeds (lifecycle is completed in one year), biennial weeds (lifecycle completed in 2 years) or perennial weeds (lifecycle sustained over many years). Knowing the names of the weeds and understanding these classifications and lifecycles are very important for selecting the appropriate control. Every plant has vulnerabilities that can be exploited and timing is important when you are planning weed control. For example, juvenile weeds are often easiest to control, but other lifecycle milestones such as before or after flowering may also be an ideal time for control depending on the plant or control measure. Chemical herbicide products are also very specific as to what they will control. If your targeted weed is not listed on the herbicide product label, the product will likely not be effective. Always follow the product label. Helpful weed identification guides and apps are available online such as www. weedalert.com and www.tennesseeturfgrassweeds.org.

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Sports Field Managers Association of New Jersey

## Problems facing sports field managers: Refining Cultural Practices To Better Manage High Traffic Sports Fields by Brad Park, Rutgers University

EDITOR'S NOTE: This article first appeared in Sports Turf Manager: Vol. 25, No. 3. Sports Turf Manager (ISSN 1201-3765) is the official publication of the Sports Turf Association, Inc., Guelph, Ontario, Canada

One of the most significant problems facing turf managers responsible for sports fields and grounds at schools and municipalities is maintaining adequate turf cover on high traffic sports fields. Maintaining dense cool-season turfgrass cover on sport fields has numerous benefits beyond aesthetic appeal including improving player safety, stabilizing soil, and reducing summer annual weed encroachment, particularly summer annual weeds like crabgrass, goosegrass and prostrate knotweed that ultimately revert to bare soil in fall.

There are numerous reasons why even highly competent sports field managers may have difficultly maintaining turf cover on highly used – or "abused" –fields. These reasons may extend beyond the sports field manager's control including installation of field lights (i.e. day AND nighttime field use), not having the option to hold events on a synthetic field where natural turf field space is minimal, limited budget and labor resources, and user groups and management unwilling to take fields out-of-play when turf cover and/or weed encroachment justify renovation and time is required to allow new turf to fully establish.

Conversely, many schools and towns struggle with implementing primary turfgrass management cultural practices; the result is a more

rapid decline in turf cover during periods of intense traffic. Primary cultural practices are mowing, fertilization, and irrigation (Turgeon, 1999). Cultivation (i.e. aerification) has traditionally been defined as supplementary cultural practice but can play a primary role in the management of high traffic sport fields. Regular overseeding of field centers and goal creases can often "make or break" the presence of turf cover in these locations; thus, the practice of overseeding is arguably an additional primary cultural practice for high traffic sports fields.

#### Mowing

Unfortunately, there are institutions mowing large, multi-acre sports fields and adjacent grounds locations with rotary mowers equipped with single 5-ft-wide mowing decks. During spring and early summer months when turf growth is most rapid, it can be extremely challenging to mow frequently enough with small mowers at a desired cutting height without scalping. Removing too much turfgrass leaf tissue in one mowing weakens the turf and results in excess clippings left on the surface, which if not physically removed (a labor-intensive process), can lead to severe turf thinning and weed encroachment. Turfgrass that lacks density and is infested with summer annual weeds tends to be less traffic tolerant.

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Whether it is for function or decoration, lines and logos personalize your fields and give your team the home field advantage. Almost all sports and games played on turf or packed clay require some form of lines or markings to help define boundaries and assist the officials in making correct calls. Lines help the participants perform best by bringing order and strategy to the game. These markings are usually painted or marked with a non-caustic pulverized limestone. Here are some things that I have learned from other sports field managers that help me set lines.

Measurements: Sports require accurate measurements. Tape measures are more precise than measuring wheels. Surveying instruments are the most exact and may be required at the higher levels of the sport. "Square" or 90° corners can be made without surveying instruments by using the 3-4-5 method. Where you want to make a corner, make one line perpendicular to another. On one line, measure out from the corner 30 feet. On the adjacent line, starting from the same point, measure out 40 feet. Draw a line from your 30-foot mark to the 40-foot mark. The result should be 50 feet. If not, adjust either line so that there is a 50-foot measurement from the 30- and 40-foot marks.

Dry Line Marking: For human safety, always use a non-burning, non-caustic marking material such as pulverized limestone. Avoid marking turfgrass with a dry marking material as it might injure turf, modify the soil or over time, create a ridge on the playing surface that could become hazardous to players. Dry marking materials work best on bare soil or "infield dirt". Dry line markers are similar to a drop fertilizer spreader. The marking apparatus features a narrow opening that is the width of the line and can be operated by one person. Other types of markers include a trough type that can be several feet long for marking base paths or shorter for marking batter's boxes. These are usually used in the higher levels of baseball or softball and can require 2 people to handle.

Field Marking Paint: Paints consist of liquid (or solvent), color (or pigment), sticker (or binder) and other additives such as a fastdrying agent. Sports field marking paints are usually water based latex acrylics. Petroleum distillate-based paints or volatile organic compounds (VOC paints) can be injurious to plant tissues. Field marking paint is available the forms of aerosol spray paint in inverted cans and bulk paint in I- to 5-gallon pail containers. Bulk paint may be premixed ready to use or it may need to be diluted with water in some ratio.

Painting Equipment: The most basic field paint equipment is the paint brush and roller, simple and effective but time consuming. Many sports field managers with only a few sports fields use the inverted aerosol spray paint can holder machine. This is a tool that no sports field manager should be without. It is helpful for touchups,



for painting contrasting colors quickly and as a backup for when the primary paint machine breaks down. Most sports field managers use some form of a powered paint machine. These include sprayers ranging from a CO2 tank units to gasoline powered compressor or pumps to electric pump models. Push, self propelled and riding paint machines are available. Be sure that your machine is kept clean; in good repair and have spare parts are on hand.

Preparations for painting: For best results, mow the turf (at least where the lines are) before painting. In dry weather, avoid painting right after mowing unless you give the turf some water. This will help prevent a burning effect. Avoid painting wet grass. Paint does not adhere well to wet grass. To remove dew, connect two 100-foot water hoses and with a person on each end, start in the end zone and drag the hose the length of the field.

Paint Can Tips: Before shaking, tap the can with your hand to gently break the marble loose, then shake vigorously to thoroughly mix the paint. If you store aerosol cans upside down, it will make it easier to break the marble loose. Avoid temperature extremes. In cold weather, fill a 5- gallon pail with hot water, and put the aerosol cans in to keep them warm. Some brands of spray paint have adjustable tips on the can that can rotate to make a wide or narrow line.

Mixing Paint: Dilute (if necessary) your paint per the paint or sprayer manufacturers recommendations. Mix paint by pouring bucket to bucket, or, use a drill powered mixing device or use a bulk paint dispenser with agitation mixing. For best results, always strain the product before adding to the paint sprayer.

Paint Application Tips: Always string your lines for the best results. If you are painting lines on dry infield dirt, first moisten the dirt with water. This will prevent the paint beading up in the dust. Remember that when painting lines, your gait will influence not only the quality of the line (straightness, brightness and width) but also how much paint you will use.

Stencils and Logos:Whether painting numbers, letters or your team's logo designs, stencils help you get that crisp, sharp, professional look. Stencils can be hard or soft. Flat number cut out stencils and logo

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## Troubleshooting Electrical Issues in an Irrigation System

Most sports turf managers have the know-how to replace a broken head, and in most cases can repair a ruptured pipe when needed. However, when it comes to electrical troubleshooting of a system, most will elect to call in an experienced irrigation contractor to diagnose and repair the issue. Obviously, there will be a cost associated with this approach. Even if there is plenty of money allocated for irrigation maintenance, there is a good chance that a solid irrigation contractor has a backlog of work and will not be able to get there right away. Therefore, the ability to diagnose and repair electrical issues within a system can be a valuable skill to have in your toolbox. In this article, we will explore basic troubleshooting in an attempt to shed light on the mysteries associated with this topic.

Typically, electrical troubleshooting is very logical. In order to best understand the process, it is very important to understand the electrical anatomy of a system. Of course, all systems are different, but if we can understand what is happening electrically with the system, we can adapt our methods to troubleshoot any system.



As you can see in the diagram above, each valve has 2 wires going into it. The common wire is connected to every valve and is typically (but not always) a white wire. The other wire going into the valve is wired into one of the numbered terminals in the controller.

The basic electrical anatomy of a system involves 3 main components: the controller, the field wiring and the electric solenoid valves. Basically, when the controller sends a 24volt signal through the field wiring to the valve, the 24 volts causes the valve to open, and water to pass through the valve to the heads. Since everything is initiated from the controller, we should begin our diagnostics at that point. The controller is plugged into a traditional 120-volt outlet. First, we need to make sure this is working. The controller's transformer immediately converts the 120 volts to 24 volts before entering the electronics in the controller. When a zone turns on, 24 volts is sent to the solenoid on the valve through the field wiring. Side note: If you were to crack open the solenoid, you would notice that it is wrapped with extremely fine copper wire, similar to the electromagnet you made in 6th grade science class.

When the 24 volts travels through the wiring around the solenoid, it creates an electromagnetic field which pulls up a metal plunger inside of the solenoid. This allows water



past the solenoid and into the chamber below the valve's diaphragm. Once the water pressure above and below the diaphragm equalizes, the diaphragm lifts and water passes through the valve and downstream to the heads.

Now that we better understand the basics of how electricity flows through a system, we can begin the process of troubleshooting. The most important diagnostics tool is a multimeter, which can test the voltage being sent from the controller, and the resistance (measured in ohms) throughout the field wiring. A decent multimeter can be purchased for under \$20 and is critical to the troubleshooting process.

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## Refining Cultural Practices To Better Manage High Traffic Sports Fields contin

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Wide-area, multi-deck rotary mowers with cutting swaths ranging from 11 to 16-ft are available and can greatly improve the efficiency of mowing large expanses of turf. It is unfortunate to observe some institutions ready to invest in new equipment pass on acquiring larger mowing equipment for the reason that "the maintenance department already has a mower", albeit a 5-ft-wide machine. Investment in wide-area mowers can reduce the labor time spent on mowing and allow these resources to be allocated to increasing the frequency of overseeding, fertilization, or other cultural practices.

#### Fertilization

School and municipal sports fields are commonly under-fertilized and subsequently exhibit limited growth and poor recuperative capacity, attributes that do not favor good turf cover under high traffic.

Public agencies often rely on contractors to apply fertilizers to sports fields. Following a public bidding process, landscape and sports field firms are awarded contracts to perform various tasks, including the application of a defined quantity of nitrogen (N) per unit area, typically over multiple applications. In some cases, fields scheduled to receive an ample supply of N display insufficient growth and have an off-color appearance, classic indicators of turfgrass in-need of N. While not all contractors will "short" the school or town on N quantities, many contractors apply N as liquid applications and it is difficult for school and town representatives to fully audit what is in the contractor's spray tank.

Granular-formulated fertilizers can allow for better auditing of contractor-applied fertilizer applications as well as allow for more N to be applied per individual application with lower potential for turfgrass leaf tip burn compared to liquid fertilizers. For example, to apply 0.75 lbs N/1000 ft2 to an 80000 ft2 football field and surrounds using a fertilizer that is 25% N (e.g. 25-0-0), it will require 240 lbs of fertilizer (e.g. five 50-lb bags of 25-0-0). Bags can be counted following the application to ensure that the appropriate quantity of fertilizer has been applied and thus, high traffic sports fields are better able to recuperative from damage.

#### Irrigation

Automatic irrigation systems are an important tool in the management of sports fields and are highly preferable to water reels and certainly non-irrigated sports field and grounds sites.

Too often, however, automatic systems are simply set on a program and then ignored resulting in some fields becoming saturated with water and a subsequent loss in turfgrass traffic tolerance. Watersaturated sports field soils may be a result of irrigation programs being allowed to run immediately following rain events or systems set to deliver a quantity of water that the sports field soil does not have the capacity to accept. In either case, the sports field manager must regularly assess soil moisture (i.e. buy a soil probe!), view weather data, and know the ability of his/her sports field to accept varying quantities of rainfall and irrigation in order to program the automatic irrigation system accordingly.

#### Cultivation

Poor design and construction methods can accelerate turf loss on sports fields. If designed with inadequate surface pitch and/or manipulated when wet, even those soils that may have supported agronomic crops will be prone to poor drainage and compaction, conditions that are not conducive to growing healthy, traffic tolerant turfgrass.

Deep slicing and deep tine cultivation are methods to alleviate compaction at deeper soil depths, often a result of poor construction procedures. Severely compacted soils may not readily allow a tine to penetrate to a soil depth greater than several inches. In these cases, it can be advantageous to first perform deep slicing. These tools are equipped with heavy-duty rotating knives that cut through and fracture the soil.

Cultivation in turfgrass is more routinely performed with machines equipped with tines (hollow or solid) capable of penetrating to a depth of 3 to 4 inches. Use of hollow tines allows for the removal of a core and can be useful to alleviate shallow soil compaction, manage thatch accumulation, and following core re-incorporation, create seedbed at the surface in preparation for overseeding.

Too often tow-behind, drum-type cultivation units are used across dry compacted sports fields with little or no impact on the surface. Albeit more expensive to purchase and maintain, reciprocating tine coring machines powered by a tractor (i.e. attached to the PTO) equipped with 0.75 to 1.0 inch tines positioned on a tight centering pattern are most effective in alleviating compaction and bringing soil to the surface.

#### Overseeding

During the course of a traffic-intensive sports season, turfgrass cover in goal creases, field centers, and penalty kick areas will inevitably thin. As turf cover begins to decline, it is important to initiate an overseeding program to introduce new plants. All too often sports field managers wait for nearly 100% bare soil to appear prior to introducing seed. While overseeding at this point is better than taking no action, the process should be started prior to severe damage becoming apparent.

Choosing the appropriate seed for an overseeding program is critical. Many seed mixtures are marketed as "sports turf mixtures" leading field managers and purchasing agents to buy these products for use in overseeding. These mixtures typically contain Kentucky bluegrass and tall fescue and are better suited for establishment projects where there is ample time to wait for the turf to fully establish before use.

Perennial ryegrass seed blends (i.e. two or more varieties of the same turf species) are the best choice for routine overseeding of high traffic field locations as this species will germinate more readily in cooler soil temperatures compared to Kentucky bluegrass and tall fescue, making it an ideal choice for overseeding during the fall and early spring sports seasons. *Continued on page 18* 

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Sports Field Managers Association of New Jersey

## **A Weed Management Overview**

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**3. Integrated Pest Management (IPM)** (as defined by the EPA) is the coordinated use of pest and environmental information with available pest control methods to prevent unacceptable levels of pest damage by the most economical means and with the least possible hazard to people, property, and the environment.

IPM plan requires a threshold as a line for when a population of weeds (or other pests) reaches an unacceptable level of damage requiring a decision to use a chemical or non-chemical method of control. Crossing the threshold triggers a response where an action must be made to correct a problem. In the green industry, we consider two types of thresholds: injury and aesthetic. Injury threshold refers to the level of damage a crop can tolerate, such as a severe weed infestation. Injury thresholds tend to be precise because the level of damage associated with a specific pest density is known.

Aesthetics are subjective, so what "looks good enough" at one site might not be acceptable elsewhere. The amount of aesthetic quality decline that a crop can tolerate is referred to as the aesthetic threshold. Because aesthetic value is often of primary concern, individual tolerance levels are variable. For example, on a high profile sports field or a golf course, dandelions probably would not be tolerated. On a public use community sports field, dandelions might be completely tolerated. At the high school stadium field, a few dandelions might be tolerated, but when the weed population reaches a certain level, a decision can be made to employ some type of control. Many turfgrass professionals consider annual bluegrass (poa Annua) a weed because of its color differences, propensity to make seedheads and its intolerance of extreme summer weather conditions. Yet some golf courses (and this sports field manager) actually manage the poa Annua and can tolerate it in the turf because it is easier or it is cost effective to live with it than to try to remove/eradicate it. At some point, however a decision could be made to attempt a control.

4. Weed control methods in your tools box can include prevention, mechanical cultivation and chemical herbicides. Prevention techniques include buying quality seeds or plants that are clean or are certified as being weed free. Do you know the source of the sod, top soil or top-dressing that you are purchasing? Weed seeds, sprigs or other plant parts are often introduced through contaminated soil materials. Good sanitation practices in the form of washing grounds maintenance equipment (including your boots) before it is used on your site will help to reduce seeds being spread on your site especially if it travels to and from other sites.

Mechanical cultivation of weed control can also be effective. Grounds crews at professional stadiums often pull or cut out random weeds in the turf that become noticeable. Gardeners physically pull or hoe weeds out of flower and landscape beds when it is most effective to do so. Fraize mowers are very effective grinding out infestations of poa Annua out of sports fields and fairways, allowing for overseeding, re-sodding or resprigging new turf. Chemical herbicides are a useful tool in a grounds manager's toolbox, but certainly should never be the only tool. As tools, they can be used to prevent weeds from emerging (preemergent) as well as controlling them after they appear (postemergent). Selective herbicides control only certain weeds yet do not cause mortality to other plants (when used as directed by the label). Non-selective herbicides kill a broad population of weeds and plants. Chemical herbicides have specific modes of action which work on or within the plant when they are applied. Some chemical herbicide products have more than one active ingredient so that they can control a variety of different weeds. The product label has all the information needed for how to apply the product, where, when and on what.

5. Weed control timing. You will have the greatest success controlling weeds if you can plan ahead. Many weeds emerge at specific times of the year. Your local cooperative extension service can advise you when certain targeted weed emergence is imminent. Applying mechanical and chemical herbicide controls too early or late may result in poor results. Weather extremes such as heat, cold, rain, drought and wind may also limit your effectiveness. People issues can also affect your timing. I always delay chemical applications on my school campus until times when there is no one present. It is partly for safety, but mainly to avoid public relations issues, especially if there is odor and/ or noise.

Weed problems do not have to be forever and they do not go away overnight. Weed management is a process and the severity diminishes over time with good stewardship. I have been managing my site for over 16 years and the weed problems that were there when I started are now just a memory. If you look hard enough for weeds on my campus, you will absolutely find some here and there, but not everywhere. This is sustainability at its best.

Don Savard is a Certified Sports Field Manager (CSFM); Certified Grounds Manager (CGM); Director, Athletic Facilities and Grounds, Salesianum School; and an SFMANJ Past-President



## Troubleshooting Electrical Issues in an Irrigation System Continued from page 7



Typical Multimeter

At the controller we will begin by testing the resistance throughout the wiring in the field and the valves. This will give us a guick snapshot of the overall electrical "health" of the system. We do this by turning our multimeter to the "ohms" setting  $(\Omega)$ . With the controller not running, take one probe and touch the common wire terminal and the other probe to each of the numbered terminals. We should get readings of between 20 and 60 ohms depending on which type of valve we are testing. If we get a very high reading, there may be a nick in the wire, or a poor connection. If we get an infinity reading  $(\infty)$ , we have an open circuit, which may be a break in the wire. These types of issues can be difficult to locate, as they may be buried underground. Checking connections is a good place to start. If the issue is underground, you may be able to employ the use of a wire tracer to locate the issue. If the resistance reading to the valve is very low, the wiring in the solenoid has probably gone bad. The solenoid will need to be replaced, which is a fairly easy repair. First, shut off the water to the valve. Then cut the 2 wires going into the bad solenoid. Unscrew the bad solenoid, and screw in the new one. Then reattach the 2 wires with waterproof wire nuts. Note: It doesn't matter which wire goes to the common wire, and which goes to the valve wire.

The health of the solenoid can also be checked at the valve. Simply detach the 2 wires going into the solenoid and test the resistance (ohms). You should get the same reading here as you did at the controller. If the readings are different, the issue is somewhere in the field wiring.



Next, use the controller to turn on the zone that is having the issue. Set the multimeter to read voltage and touch one probe to the common terminal, and the other to the zone terminal that is running. The controller should be sending out a signal of 24 volts (plus or minus 2). If the controller is sending out less than 22 volts, the issue is with the controller. It the controller is sending out zero volts, first check for a blown fuse. If the controller has a blown fuse, if will appear to be running, but no voltage will be going to the field. You can also check the voltage at the valve by touching one probe to each of the wires going into the valve. You should have the same reading here as you did at the controller. If the readings are different, the issue is somewhere in the field wires.

Electrical troubleshooting can be intimidating due to the fact that it is usually cloaked in mystery. However, the process is very logical. By understanding the basic electrical anatomy of a system and utilizing the simple diagnostic techniques that we have explored, I am hoping this topic becomes less intimidating and more approachable. Please feel free to reach out to me with any questions regarding these techniques at htraver@rainbird.com. I'm always happy to help.

Heath Traver (htraver@rainbird.com), CIC, CLIA is Specification Manager for Rain Bird, Northeast US, and is licensed to practice irrigation in the state of New Jersey.



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Our thanks to the Cíty of Long Branch, Monmouth Park Racetrack, the Vendors and all who attended for helping to make our Fall Field Day a great success again this year!!

## SEPPENNE YOUR 101010

Continued from page 6

stencil tarps with cutouts for "dotting" are both common. Other tools include hash mark sleds and batter's box frames. Some sports field managers use planks as straight edges for painting along wide out of bounds lines or along end zone letters. If number stencils become warped, place on concrete and allow the sun's heat to warm and flatten them in a couple of hours. When dotting stencils, use an aerosol can to do it. This way the paint will dry faster. When painting logos, paint a white base coat first and allow it to dry. Then paint colors on top. Don't go by the rule "If a little paint looks good, a whole lot of paint will look great!" Too much paint can be harmful to turf. On most logos and letters, a border around each will make your work stand out on the field.

Paint Removal: If you a make a mistake, be sure to keep an aerosol can of green paint or some turf colorant handy as an "eraser". I use a long handle, soft bristle truck washing brush and some mild soapy water as well as water hose for paint removal when necessary.

Sports field graphics make the game easier to play on and watch. Sharp looking field graphics draw the eyes away from field imperfections such as wear. It helps to create team pride, brings out the beauty of your field and showcases the talents of you and your crew.

Don Savard is a Certified Sports Field Manager (CSFM); Certified Grounds Manager (CGM); Director, Athletic Facilities and Grounds, Salesianum School; and an SFMANJ Past-President



## Continued from page 3 New and Renewed SFMANJ Members

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Sports Field Managers Association of New Jersey

## A POEM WITH NO NAME

By Bernard Luongo

Looking over seasons past and things seen through completion Imagination soon sets in and the feeling of depletion.

When careers first started and things were new How could one wonder things were a brew?

Equipment never seen before, how do you get it started? Who ever knew brake up on left and handles need to be parted.

Why does it keep going to the left, I can't see, to get it straight? A head shaking from a grounds crew vet, this day is going to be late.

Things that needed to be learned all were not mechanical. The other part of this endeavor had to do with botanical.

What's that you say? The previous line? Would you really like to know? Well, I think when I thunk what I really meant, it could have something to do with grow.

So what is it that we need to know to keep ourselves amused? Side stepping situations so you do not get abused.

Take a deep breath, a few steps back - take a look around. Make sure you have both feet firmly planted on the ground.

Nature won't wait, you have to learn quick to keep this stuff living. Find some folk in a hurry with knowledge worth giving. Maybe go on Twitter, do a little tweeting. Maybe save some time, rest your feet from a beating.

To make your job easier you gotta get information. Gotta make some calls, tap into your turf nation.

It's time to move forward, it's time to move along. Before this poem turns into a pile of dong,

What are some events that plague our profession? All lining up like a graduation procession.

How about a little drought to brighten up your day? Throw in some summer patch to turn your field to hay.

What to do now? Might as well start from scratch. Go rent a machine you're now in the business of thatch.

Other diseases to make your day, Dollar Spot and Red Thread. All the things in a season groundskeeper has grown to dread.

There are things you can do to keep your turf healthy. In the process of these tasks it will keep your mind wealthy.

If you have no compassion for compaction, then a little aeration is needed. To get the best results it should be done before fields are seeded.

With all the seeds to choose from better grab an NTEP Report. How to decipher this info? Get a friendly cohort. Where to find this creature of being in the world of turf nation? Why the best kept secret in New Jersey. Sports Field Managers Association.

Don't forget the fertilization the calibration and certification. It's also nice to have functioning irrigation.

Now that I've tap danced through this poem, again time to switch gears. Let's rhyme our way through the mind of some more groundskeepers' fears.

A freshly cut field – the paint is looking fine. Here comes a herd of Athletes, they all want to run the line.

How about those LAX goal mouths with turf that is all gone? Remove the goal - I'll be damned it looks like an ice cream cone.

How's this for another good idea during the middle of a drought Drive a Ute across a field that will show you who has clout.

Here's another thought from the crowd that might not know. If you don't do the cultural practices it ain't gonna grow.

Trying to end this poem has turned into a quite a mess. One more thing I can mention our jobs seldom have stress.

Yes I know that's a not a statement that's true. And yes we work with understaffed crew.

Out dated equipment in a broken mass. It will be weeks before it ever sees grass. We shake off despair, we grind through a season. Sometimes without any rhyme or reason.

For some of us it's just fun in a game. For most of us there's no fortune or fame.

So hang in there groundskeeper through grit and grime There will be a day when it is your time.

Bernard Luongo is Lead Groundsperson, Northern Burlington County Regional School District, Columbus, NJ; SFMANJ President and Poet Laureate.

### Refining Cultural Practices To Better Manage High Traffic Sports Fields Continued from page 8

West March March Research Blanch Research The Blanch Blanch

Fields badly damaged resulting from summer sports can be core cultivated to a 4-inch depth in late summer. Following core reincorporation using a tow-behind drag, a blend of two-to-five perennial ryegrass varieties can be sown using a slit-seeder operated in two directions at a minimum of 5 lbs seed/1000 ft2 per direction (i.e. total of 10 lbs seed/1000 ft2). Application of a starter fertilizer and maintaining moisture at the soil (i.e. seedbed) surface will increase the probability of successful establishment.

During the sports season, prior to games and practices, perennial ryegrass overseeding can be performed using a rotary spreader and allowing athletes to 'cleat-in' the seed to achieve necessary seed-to-soil contact. In the midst of the sports season, the same rotary spreader can be used to apply seed prior to games and is preferential to repeated use of a slit-seeder as the vertical blades on these machines can potentially injure new seedlings resulting from previous overseeding efforts.

Applying a sufficient quantity of seed is important to achieve overseeding success. A reasonable starting strategy would be to apply 6 lbs seed/1000 ft2 between the hash marks of the football field prior to every home game. This area on a standard Canadian football field is 16830 ft2 ( $330 \times 51$ -ft). To apply 6 lbs seed/1000 ft2 to this area, it will require two 50-lb bags of seed. If after several games, and potentially other events, turf cover is still diminishing and new seedlings are not establishing, the seeding 'rate' can be increased to one or more additional 50-lb bags.

#### Conclusions

At minimum, turfgrass requires mowing, fertilization, and water. Regular mowing with efficient equipment, supplying adequate fertility, and avoiding the temptation to rely simply on the program 'clock' to apply irrigation are basic refinements to primary cultural practices. To maintain turf cover on highly trafficked sports fields, the integration of cultivation and overseeding into existing primary cultural practices will better ensure success.

Reference:

Turgeon, A.J. 1999. Turfgrass management. Prentice Hall, Upper Saddle River, NJ.

Brad Park is Sports Turf Education & Research Coordinator, Rutgers University; member of the SFMANJ Board of Directors since 2003; and Editor, SFMANJ Update newsletter

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