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TORO Count on it.

Sports Field Managers Association of New Jersey
This year’s weather did a number on all of us! But we’d like to see how you handled it!

There is still time to enter the 2011 Field of the Year contest!

ELIGIBILITY:
• Must be a current member of SFMANJ
• Only school and parks/recreation natural grass fields are eligible

AWARD WILL BE BASED ON:
• Playability and appearance of the playing surfaces
• Description of your maintenance program and what you did to improve your field
• Description of your yearly budget for this field

AWARDS:
The winner will be honored with a plaque at the New Jersey Turfgrass and Landscape Conference and Expo in December 2011 and will be featured in an article in SFMANJ’s Update newsletter.

SUBMITTING YOUR ENTRY:
• All entries are to be submitted by mail or e-mail and must be received by September 30, 2011.
• Entries are limited to 10 color photos. Please include the name, location and owner of the facility, along with your name, position, and contact number.

MAIL ENTRIES TO:
SFMANJ 2011 F.O.Y. Contest • P.O. Box 205, Pennsville, NJ 08070
OR E-mail to: mail@sfmanj.org

Photos will not be returned and may be used on SFMANJ website and promotional settings.
Q: Is there a recommendation for a slow growing or “no growing” turf for business campuses converting lush full sun lawns to solar arrays with a need for turf cover underneath?

A: The best adapted grass seed would be one that includes fine fescues - 100%, by weight. Fine fescues will have the lowest mowing requirement. Hard fescue and sheep fescue will be the lowest growing and have the least need for mowing (once a year). The down side to these is sensitivity to vehicle traffic in the summer. Mowing these grasses in September or October is usually what is done in naturalized areas on golf courses. If there is an need to mow sooner, you need to wait for seedhead initiation and elongation of the flowering culm (April through May) but get the mowing done before summer stresses begin.

There are various names used to market these seed mixes such as “ecology mixes” and “naturalized mixes” and these all contain a lot of (if not only) fine fescues. I would emphasize hard fescue (30% or more) in the seed mix. Sheep fescue is another good component followed by Chewings fescue. Strong and slender creeping red fescues would be okay but I would keep these as minor components in a seed mix (25% combined).

Tall fescue will have good tolerance to shade under solar arrays but this species will require more mowing. So, you may want to avoid in a seed mix if mowing needs to be minimal. If you use tall fescue, you must avoid forage types and buy turf-type tall fescue.

Other grasses could be included but these will also add to mowing requirements and won’t be as shade tolerant, so keep these as minor components: Perennial ryegrass (10% or less); Kentucky bluegrass (10% or less).

Q: Does the grass grow faster if you mow high or mow low?

A: If you mow too low, that stresses the grass, which makes it grow slower essentially because it is not healthy. Long term, mowing at too low a cutting height ends up encouraging a lot of weeds to invade and overtake the grass. Conversely, mowing higher keeps the grass healthier, which allows it to grow (which I would call normal not “faster” growth) and keeps the weeds from invading. Therefore, low mowing to “slow down” the growth of the grass is NOT a beneficial practice; it is a counterproductive practice that damages the grass.

Q: Does bark mulch use nitrogen when it is in the process of decomposing?

A: Yes. Bark mulch does result in reduced nitrogen availability to plants. Microbes are very active at decomposing the carbon in the bark mulch; in the process, the microbes have a high demand for nitrogen and scavenge it from the soil much faster than plants can acquire it. This is one reason why mulch is so effective at controlling weeds; there is a reduced nitrogen availability to the weeds, so those plants do not grow as vigorously.
A Message from The President

By Don Savard, CSFM, CGM

"In preparing for battle I have always found that plans are useless, but planning is indispensable."

Dwight D. Eisenhower

When I look at my sports fields after a hot summer and an intense fall sports preseason, I think about what I did right and what I would like to do different next year. Late summer tells the story of how well my turf plan worked. Good plan or bad plan, it is the time to find out why and learn from the outcomes.

For many of us, fall is the time when we prepare our budgets for the next fiscal year. A budget is nothing more than a strategic plan expressed in dollars and cents. Careful planning now will help us formulate the ways and means of getting the job done on time and on budget. Safe playing fields don’t just happen; they come about as a result of a well thought out program and smart utilization of precious resources.

Speaking of planning ahead, we are planning a Fall Field Day on November 9, 2011 at the Middlesex Vocational Technical High School in East Brunswick, New Jersey. This afternoon event is FREE for SFMANJ members and will be hosted by our own resident infield expert, Ray Cipperly. We will feature a demonstration of a new infield dirt renovation amendment product and process and have a Q&A discussion of infield improvements that you can make this fall, before winter and the next baseball/softball season begins. Brad Park will also be on hand with updates of the new Nutrient Management laws that will soon be in effect. Stay tuned for more information on this.

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

EXPO 2011

will be delivered on pest management for school grounds, synthetic field maintenance, practical solutions to failed sports fields, Rutgers research update, and a panel on doing more with less.

Highlight the trade show and cite suppliers and equipment manufacturers you plan to meet.

Discuss the networking opportunities you will have with peers who share challenges similar to the ones you have.

Note that NJ DEP pesticide recertification credits will be applied for, including tough to acquire Category 13 Credits.

Explain how innovations in products, new research, and cutting edge management techniques continually change, and why it is important to stay abreast of those changes.

Reinforce how the success of your sports fields ultimately depends upon the continued professional development of you and your staff.

KNOW THE COST

Make a case for efficient and effective use of your facility's training dollars. By attending Expo 2011, you will be exposed to the most relevant education and technology in one place, making it the most effective use of training dollars.

Research travel times and hotel costs. While Atlantic City is feasible day trip from almost anywhere in New Jersey, the New Jersey Turfgrass Association does its part to negotiate reasonable room rates at the Trump Taj Mahal to make staying a night reasonable. Expo 2011 will feature online registration at www.njturfgrass.org

HAVE AN ACTION PLAN

Develop a plan for how operations will continue in your absence. Make sure you are accessible by phone (please turn off or set on vibrate during sessions!!!) to address any concerns that might arise in your absence.

Consider preparing and presenting a report on the information you learned and how you plan to put it into practice at your facility.

Demonstrate how you will share the technical information learned with your staff for their continuing educational development.

SEE YOU IN ATLANTIC CITY IN DECEMBER!

Brad Park is Sports Turf Res. and Ed. Coor., Rutgers Univ., SFMANJ Board Member, and Editor, SFMANJ Update
Baseball is a unique sport in grounds management. It’s the only major sport that is played on a field that has both turf and exposed soil for a playing surface. Ballplayers scrutinize the playability of your skinned areas more closely than your turf areas. Your reputation as a groundskeeper will depend on the skin you keep.

This is not to say that the turf areas on a baseball field are unimportant. But if you think about it, 75% or more of the game occurs on the skinned areas of the field. Unfortunately, this crucial subject is avoided by the academic institutions that teach many of today’s up and coming athletic field managers.

With no written guidance, new groundskeepers must resort to trial and error if they haven’t been lucky enough to learn from another groundskeeper in the business.

**GOALS FOR A QUALITY INFIELD SKIN**

**Traction:** Most players desire the same quality in an infield skin: traction. That’s the reason for the spikes in their shoes.

Nothing makes a player happier than a firm infield skin that is moist and cork-like, not hard and baked dry. The cleat should penetrate the skin and leave a perfect imprint. Very little soil should be disturbed or displaced. When players plant their feet to throw, field the ball, or run, the soil should not give way under them. The traction in your infield skin comes from its base soil. Choose your mix carefully. Many companies that sell infield skin mixes know nothing about their proper function.

Many mixes are too sandy. Soils that don’t firm up (high sand content of 75% or higher) are more mobile. This creates low spots in high-traffic areas (around bases and fielders’ positions) more quickly, especially as the field dries out. The loosened material is more likely to be carried to other portions of the field to create high spots and huge lips at the infield skin/turf interface.

These sandy infield mixes increase infield skin maintenance problems. The loose soil also causes unstable footing for ballplayers, increasing the risk of foot, ankle, and hamstring injuries.

**Drainage:** The proper drainage on your infield skin dictates how quickly you will resume play after a rainfall. About 95% of the water that falls on the skin should run off the surface.

Good surface grade and proper maintenance techniques will give you the best results. Your infield skin should have a minimum 1-1/2-inch fall from the front of the skinned area to the back. Percolation rates on a good, firm infield skin should be 0.03 to 0.05 inches of rain.

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provides a nice, cheap way of checking percentages of sand, silt, and clay are in your base mix. This experiment of the percentages of sand, silt, and clay percentages. It can give you a ballpark figure of your home version of the test is also available. It performs particle size analysis or soil texture analysis work. These labs will give you the composition percentages, and they'll show you where your soil fits into the soil texture triangle. A simplified and increases risk of injury to feet, ankles, and hamstrings. You may think you'll gain drainage if your base mix has high sand content. In fact, it creates more maintenance headaches. The mobile soil rapidly develops high and low spots in the skin, and lips at the skin/turf interface. Those low spots and high lips interfere with the surface flow of rainwater draining off the skin, and large puddles develop.

In base mixes with higher sand content (>75%), there is not enough binder (clay and silt) to hold the soil firmly together. As a game progresses, the skin becomes more loose in the high-traffic areas. This reduces traction and increases risk of injury to feet, ankles, and hamstrings.

You want to keep the sand fraction of your base soil between 50% and 75% (normal base mix). Soils with higher sand content normally become too loose and mobile. The soil becomes loose with play and is transported to other areas of the skin by the dragging process or by play.

You may think you'll gain drainage if your base mix is in the shallow outfield. Here it will capture water that runs off of the skinned areas.

Amending infield soils with various miracle materials to enhance drainage throughout the skinned area usually proves unsuccessful. At best, these amendments provide a very short-lived remedy.

Topdressing: Choose the proper topdressing to work with your base mix. Think of your skin as a two-tier profile: the top 1/4- to 1/2-inch consists of your topdressing, and the remainder consists of your base infield mix.

The topdressing on the skin provides a cushion for the players. It creates a buffer zone between the players' cleats and the moist base soil mix, and prevents the soil from sticking. The topdressing layer also helps you endure light rain showers during games.

Don't go any thicker than a 1/2-inch layer of topdressing on the surface of the skin. A deeper layer will cause the ball to skid under infielders' gloves instead of taking the proper hop. It can also drastically influence a ballplayer's traction.

**INFIELD BASE SOILS**

**Testing:** If you don't know the percent breakdown of sand, silt, and clay in your skin base mix, have it tested to give you a reference point for comparisons. Send a sample of your soil to a private testing lab or county extension office that performs particle size analysis or soil texture analysis work. These labs will give you the composition percentages, and they'll show you where your soil fits into the soil texture triangle. A simplified home version of the test is also available.

It can give you a ballpark figure of your percentages.

There is a simple way to get an estimate of the percentages of sand, silt, and clay that are in your base mix. This experiment provides a nice, cheap way of checking soils if you are looking around and can't afford to do a lot of testing.

**DETERMINING SOIL TEXTURE**

**Step 1.** Obtain a quart mason jar with a lid, like the ones used for canning. Fill it a little more than half way with the soil you wish to test. Fill the rest of the jar with water, and attach the lid tightly.

**Step 2.** Shake the jar vigorously for a couple of minutes to fully separate and wet the soil. There should be absolutely no lumps of soil left when you're finished agitating it.

**Step 3.** When you feel that the soil is fully dispersed in the solution, set the jar down and begin timing. After 45 seconds, mark a line on the side of the jar with a grease pencil or White-Out where the top of the layer of sand has settled out in the jar. Next, put a mark at the top of the next layer after three hours have passed; this is your silt layer. After 24 hours, your clay will have settled out as well.

**Step 4.** Measure the total depth of soil in the mason jar. Then measure the thickness of each of the three layers using your marks on the jar.

**Step 5.** Calculate the percent of sand, silt, and clay in your soil sample with the following procedure:

1. Divide the thickness of the sand layer by the total depth of the soil in the jar.
2. Follow the same instructions for both the silt and clay layers.
3. Multiply each of the three figures by 100, and you will have the percentages of sand, silt, and clay in your sample.

**Step 6.** You can now check the soil texture triangle to see where the intersection of the three values places you on the triangle (see Figure 1). Remember that this is an estimate. If you need a more precise test, it is worth your while to have a professional test done by a private lab or a county extension office.

Soil testing labs use a couple of different quantitative methods to determine relative amounts of soil separates. Once the relative amount of sand, silt, and clay are known, you can determine the soil's textural class using the soil texture triangle provided. Each side of the triangle represents the relative content or percent of one of the three soil particle size classes.

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Increase your field's drainage and playability.
The New Jersey Fertilizer Law was conceived to protect all New Jersey surface and ground waters from impairment by minimizing nitrogen and phosphorus loading that may be derived from lawn fertilizer. Generally, excess nitrogen is a threat to coastal water (estuaries) quality while excess phosphorus is a greater concern for fresh water quality. Both nutrients are also important for plant growth and health.

This law:
• Establishes statewide fertilizer standards, pre-empting the multitude of local municipal ordinances.
• Requires professional fertilizer applicators to undergo training and become certified.
• Limits the time that fertilizer can be used: fertilizer may not be applied during the “blackout dates” of November 15th – March 1st for consumers, and December 1st – March 1st for professionals.
• Prohibits fertilizer application during or just before heavy rainfall, onto an impervious surface, or onto frozen ground.
• Restricts the amount of nitrogen used per application as well as the total for the year:
  • Professionals: can apply no more than 0.7 pound of water-soluble-nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 1 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 4.25 pounds nitrogen per 1,000 sq. ft.
  • Consumers: fertilizer products, when applied according to label directions, will apply no more than 0.7 pound water-soluble-nitrogen per 1000 sq. ft. per application, and the total nitrogen applied cannot exceed 0.9 pound of nitrogen per 1,000 sq. ft. per application. The annual total for all applications should not exceed 3.2 pounds of nitrogen per 1,000 sq. ft.
• Restricts fertilizer content:
  • Fertilizer sold as consumer/retail products must have at least 20% of its nitrogen-content in slow-release form.
  • Fertilizers that contain phosphorus can not be applied to turf except when:
    1. A soil test, no more than three years old, indicates the need for phosphorus;
    2. Establishing turf and vegetation for the first time;
    3. Repairing or re-establishing turf;
    4. Applying liquid or granular fertilizer under the soil surface, directly to roots; or

Quick Facts:

2011 New Jersey Fertilizer Law

Dr. James A. Murphy and Dr. Stephanie L. Murphy
5. The fertilizer consists of manipulated animal or vegetable manure sources. In this case, phosphorus can be included if no more than 0.25 pound of phosphorus per 1,000 sq. ft. is applied, when used according to instructions on the container.

- Stipulates that fertilizer bag label language follows AAPCO standard for turf fertilizer label to avoid the issue of a NJ only turf fertilizer label.
- Establishes buffers. Fertilizer containing nitrogen or phosphorus can not be applied to turf within 25 feet of any waterbody, except where a drop spreader, rotary spreader with a deflector, or targeted spray liquid is used, then the buffer may be reduced to 10 feet. A professional applicator may apply one “rescue treatment” annually to turf in a buffer as per rules above.
- Sets fines for noncompliance: $500 fine for the 1st offense and up to $1000 for the 2nd and each subsequent offense for professional applicators. Municipalities may set fines for noncompliance by residents (homeowners).
- Exempts commercial farms and golf courses, except that no person, other than a certified professional fertilizer applicator or a person trained and supervised by the certified fertilizer applicator, may apply fertilizer to a golf course.

When will specific parts of the law go into effect?
- Effective Immediately: Sections 1: Definitions; Section 2: Prohibited fertilizer applications when: raining, on impervious surfaces, before March 1st or after December 1st or any time ground is frozen, and Section 9: Authorization for DEP in consultation with Department of Agriculture to adopt rules.
- Effective January 5, 2012 -One (1) year from date of signing, the bill will go into effect requiring: All professionals to be certified; Setting limits of nitrogen content to be used by consumers and professionals and banning the use of phosphorous without soil test.
- January 5, 2013 –Section 11 (label and content requirements) shall take effect two (2) years after the date of signing outlawing fertilizer products that do not meet the new content standards set by the law.

When will the certification program be available?
- A model for the certification program has been selected and stakeholder meetings are underway to finalize the details of the program by the end of June 2011.
- The proposed program will be an online auto-tutorial format for training. The certification test will also be available online with an automated registry into the publicly available online list of certified fertilizer applicators (as required by the law).
- The plan is to have a functional online certification program by fall 2011. Stay tuned - more news to follow.

Questions or Comments about this topic?
Visit the NJAES Soil Testing Lab at http://njaes.rutgers.edu/soiltestinglab/ or Frequently Asked Questions at the FAQ website http://snyderfarm.rutgers.edu/fertilizerlawFAQ.html

Dr. James Murphy is Extension Specialist in Turfgrass Management, Rutgers University and SFMANJ Advisor
Dr. Stephanie L. Murphy is Director, Rutgers Soil Testing Laboratory
Photo Recap of SFMANJ-Sponsored