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Cultivation in conjunction with topdressing should be accomplished during the times of the year when there is adequate moisture available and when the turf is actively growing and in a position to repair itself. Topdressing materials with high organic matter content such as straight compost materials should not be applied when there are inadequate moisture levels or when there is the potential for drought stress. These materials have the ability to rob the turf of available moisture when moisture is in limited supply.

Core aerification is generally the recommended means of cultivation. Multiple passes done in different directions are typically recommended. Again, the intensity of the aeration procedure is governed by factors such as the extent of texture modification or turf renovation isthe intent of a topdressing application. If a more rapid change in the surface conditions is desired, the soil cores can be removed after aerification; in this case it would be appropriate to topdress after soil cores are removed.

Where severe soil structure damage has occurred such as in goal mouths, it is sometimes necessary to till the area in an effort to blend the topdressing material with the damaged soil and create an adequate seedbed. Bewary of over-cultivating with the rototiller style of equipment, especially if the soil is dry. Rototiller style cultivators can destroy existing soil structure by pulverizing the soil into a fine grany (dusty) material if over used. As with most soil cultivation procedures, the soil should be moist enough to hold its shape after being clutched in your fist but dry enough to crumble if rubbed between your thumb and forefinger.

Topdressing is used properly, it can provide beneficial results, which in certain situations could not otherwise be achieved as effectively. The cost of these benefits must be justified when compared to all other available options.

2006 SFMANJ Board of Directors

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MISSION STATEMENT:
Committed to enhancing the professionalism of athletic field managers by improving the safety, playability and appearance of athletic fields at all levels through seminars, field days, publications and networking with those in the sports turf industry.

Contact us at: PO Box 370 • Annandale, NJ 08801
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National Organization
Sports Turf Managers Association
www.sportsturfmanager.org
Email: sma@ sportsturfmanger.org
Phone: 800-322-3875

WELCOME NEW & RENEWED SFMANJ MEMBERS

Currently we have 321 new & renewed members. In the beginning of November 2005, SFMANJ mailed invoices for 2006 membership dues to all current members. If you did not receive an invoice, please contact us at 908-730-7770 or download the 2006 membership form available at www.sfmanj.org. Remember to mail your renewal/payment direct to SFMANJ, PO Box 370, Annandale, NJ 08801.

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Northvale Borough
Brick American Little League

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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: 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 article.

In the following articles.
How to Convince Your Employer to Send You to Expo 2006
Brad Park*

(Editor’s note: This article was adapted from materials provided by Sports Turf Managers Association)

It’s time to begin planning your trip to Expo 2006. The New Jersey Turf & Landscape Conference and Expo 2006 will be held at the Trump Taj Mahal in Atlantic City, NJ December 5-7, 2006. How can you convince your employer to send you?

Continuing education and industry connections are crucial to your success and the success of your sports fields. Here are some suggestions to help your employer understand how your attendance at Expo 2006 can add value to the overall operation of your facility.

Educate yourself on the Conference and Exhibition

• Provide an overview of the size and scope of Expo 2006. It may be helpful to give your employer a copy of the brochure. This edition of SFMANJ Update provides the Sports Field Managers Program for Expo 2006.

• Pinpoint specific sessions you plan to attend, and tie their relevance to your sports facility. As part of the Sports Field Managers Program, School IPM will be featured on the afternoon of Tuesday, December 5. A representative from the New Jersey Department of Environmental Protection (NJ DEP) will be speaking and taking questions on the specifics of the current NJ School IPM Law followed by a panel of NJ school field managers who have implemented school IPM programs at their facilities.

• 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 available.

• 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 2006, 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 a feasible day trip from almost anywhere in New Jersey, the New Jersey Turfgrass Association does its part to negotiate reasonable rates at the Trump Taj Mahal to make staying a night reasonable. Expo 2006 will feature online registration at www.nj turfgrass.org

Have an Action Plan

• Develop a plan for how operations will continue in your absence. Make sure you are accessible by phone or by page to address any concerns that might arise in your absence.

• Consider providing 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 use the technical information learned with your staff for their continuing educational development.

Brad Park is Turf Sport Res. and Ed. Coord., Rutgers Univ.; SFMANJ Board Member; and Editor, SFMANJ Update

In order to have a successful topdressing program, it is essential to choose the right topdressing material for the job. Soils can vary from very heavy, heavy textured clayey soils to very coarse, light textured sandy soils, depending on the location. Therefore, the same topdressing material may have different results on different locations.

It is important to know the texture of the soil in your root zone. A physical, NJ on your soil will give you this information. Most soil testing laboratories provide this service. In addition to the proportions of sand, silt and clay in a soil, the coarseness or fineness of the sand portion, has an effect on the physical properties of a specific classification of soil. Medium size sand with a relatively consistent particle size usually has a higher rate of hydraulic conductivity than a material containing a more diverse blend of coarse, medium and fine particles. A principle to remember; soil will move from a coarser textured soil to a finer textured soil more readily than the other way around, providing there is adequate pore space between the particles.

When using any material to modify an existing root zone, adequate cultivation is necessary to insure proper incorporation of the material. The more a topdressing material resembles the existing root zone in relation to its texture classification and physical properties, the more cultivation is typically needed. Without adequate cultivation there remains a void in the root zone, the soil layer which is necessary for a plant to grow on. When incorporated, or mixed in the soil, the interface between the layers will have the potential to negatively affect hydraulic conductivity, root penetration and even air and gas exchange characteristics of the soil.

Before you can determine the proper topdressing material to use, it is important to determine why you are topdressing. A few reasons for topdressing are: Modification of existing root zone (increase water conductivity; Increase organic matter content; Increase pH; Increase Cation Exchange Capacity (CEC)); 2) Increase rate of renovation. This is not only improved soil surface levels but also the ability to retain moisture and nutrient addition, than increase in CEC.

The addition of organic matter can decrease the compactive tendencies of a soil and over time help to improve the soil structure (thith) of a heavy textured soil. Thith can be associated with the soft, fluffy texture of a well maintained garden soil. A lack of thith can be associated with the hard clumpy soil of a goal mouth. The benefits of organic matter can be realized in all areas of an athletic field but more noticeably in high traffic areas where existing soil structure has been destroyed.

Once soil structure is destroyed the ability of the soil to drain and main- tain turf cover is severely compromised. The result is a wetted-in area of high compaction. A major cause of this destruction is poor drainage games in wet waterlogged conditions where the soil is actually smeared under the stress of heavy foot traffic.

Similar materials to leaf compost are biosolids such as sewage sludge and spent mushroom compost. These materials are much the same as leaf compost in that they have high organic content but many have the added benefit of higher nutrient availability and therefore the potential for a greater increase in thith.

As with any topdressing material, care must be taken when acquiring and applying compost. A quality compost material should be adequate- ly prior to purchase and be prepared to completely eliminate all twigs and debris. It should show no resemblance to its original components and have a clean earthy odor.

The results of a compost analysis report should be requested prior to purchase. These results should supply a minimum of pH, organic matter, total nitrogen and the Cation Exchange Capacity (C:N) ratio. Included with these test results, should also be a reference made to acceptable levels of soluble salts and heavy metals. If the compost is a blended material it should also carry a physical (sand, silt, clay) analysis and have a texture classification such as loamy sand, sandy loam etc. A chemical analysis is also useful in determining the potential “fertilizer effect” of a topdressing material.

The C:N ratio is used as a barometer to measure the level of decompo- sition and should be less than 30:1. Higher C:N ratios can cause nitro- gen supplies in the soil to become temporarily unavailable to the plant until the C:N ratio is reduced through further decomposition. This can have a negative effect on turf quality.

With compost materials as with any other topdressing material, care must be taken to provide adequate aeration in conjunction with the topdressing procedure. The more a topdressing material differs from the existing root zone, the more cultivation is necessary to blend the material into the existing soil structure. Applying highly organic compost to a mineral based soil brings with it the risk of leaching. If adequate aeration is not provided, this risk can become greater with each subsequent application. In this particular sit- uation more is not necessarily better. An anaerobic organic layer (black layer) in the soil is a potentially degrading problem on athletic fields.

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

SELECTION OF TOPDRESSING MATERIALS
Jim Hermann, CSFM*

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(continued page 18)
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NITA will feature online registration for Expo 2006. For more information visit www.njturfgrass.org or call: (215) 757-6582

New Jersey Turfgrass Industry Unites in an Historical Joint Venture

New Jersey Turfgrass Association Press Release

Calendar of Events

**NJ State League of Municipalities Conference**
November 14-17, 2006
Atlantic City Convention Center
Atlantic City, NJ
(609) 695-3481

**NJ Turf & Landscape Conference and Expo 2006**
December 5-7, 2006
Trump Taj Mahal Casino-Resort
(215) 757-6582

Expo 2006 will feature online registration at: www.njturfgrass.org

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## Expo 2006:
New Jersey Turfgrass Industry Unites in an Historical Joint Venture

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A $500 SFMANJ Student Scholarship will be awarded at Expo 2006 in Atlantic City (December 5-7, 2006). To apply, email or send via US Mail a 500-word essay on “Why you deserve this scholarship.” The student must be a member of SFMANJ in good standing. Applications are due by Friday, October 27, 2006. Please include:

1. Name, address, email
2. Your declared major and grade point average
3. Classes, seminars or field days you have attended concerning sports field management
4. Accomplishments concerning the turf industry
5. Internships
6. Plan for the future

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US Mail:
2006 SFMANJ Student Scholarship
PO Box 370
Annandale, NJ 08801

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**SFMANJ Field of the Year Contest 2006**

ENTERING is easy, send to:
SFMANJ Contest, PO Box 370
Annandale, NJ 08801

Entries must be received by September 30, 2006

ELIGIBILITY:
- Two categories: School or Parks/Recreation fields only
- Current member of SFMANJ
- Natural grass fields only

SEND:
- Color photos of your natural grass field (10 maximum)
- Name of facility and location
- Name of owner
- Your name, position, and contact number

CRITERIA for awards:
- Playability and appearance of the playing surfaces
- Based on photos and a site visit by the SFMANJ Awards Committee
- Feel free to have sports groups in your photo

AWARDS:
Winners will be honored with a plaque at New Jersey Turfgrass Expo 2006 (December 5-7, 2006) and be interviewed for a feature article in SFMANJ Update newsletter (also receive a two-night stay at Taj Mahal, Atlantic City and three days of education).
They're off! A seven horse field breaks from the starting gate on the turf course at Monmouth Park Racetrack on August 23, 2006 in a race named in Memory of Dr. Henry W. Indyk.
Rutgers Corner -
Broadleaf Weed Control in Cool Season Turfgrass
Dr. Steve Hart*

Editor’s Note: This article, along with information related to the effectiveness of herbicide active ingredients on specific broadleaf weeds, can be accessed at a Rutgers Cooperative Research and Extension Fact Sheet (FS385) at www.rce.rutgers.edu/pubs

The presence of broadleaf weeds not only reduces the aesthetic quality of the turf, but more importantly they compete with the desired turf grass for water, nutrients, and light. Failure to control these weeds often results in a deterioration of the turf grass stand over time. Broadleaf weed infestations are often symptomatic of a more basic cultural or soil problem in many cases. If these problems persist, weeds also will be a continuous problem. Thus, a sound weed management strategy not only includes removal of existing weeds, but also using corrective management measures for the factors causing poor quality turf grass.

Cultural Control of Broadleaf Weeds

The numbers and types of broadleaf weeds found in turf grass are greatly influenced by management and cultural practices. For example, close mowing and too little nitrogen favor white clover. Close mowing also favors weeds such as carpetweed, spurge, plantains, and dandelion. Poorly drained areas favor weeds such as ground ivy, while compacted sites favor knotweed and plantains.

Correcting improper management practices to maintain a dense, vigorous turf is the best and most lasting method for broadleaf weed control. Of particular importance are proper fertilization, mowing, and watering.

Several broadleaf weed species cannot be satisfactorily controlled with proper use of herbicides, further increasing the importance of proper cultural management to reduce the opportunity for their establishment and spread. Herbicides should be considered an aid, but not a cure, for broadleaf weed problems in landscaped turf.

Chemical Control of Broadleaf Weeds

In turf where broadleaf weeds have become a problem, application of an effective herbicide may be necessary for their removal so that the turf can be improved through better management and cultural practices. Several herbicides are available for broadleaf weed control, but weeds vary in response to different products. Thus, proper identification of the weeds is essential before the most economical and effective herbicide is selected.

Suggested resources for weed identification include “Weeds of the Northeast” by Richard H. Uva, Joseph C. Neal, and Joseph M. Ditomaso available through Comstock Publishing Associates (a division of Cornell University Press). Also, two web sites can be accessed at www.rce.rutgers.edu/weeds and www.cook.rutgers.edu/~turf, then click on turfgrass weeds.

(continued on page 9)
Two or more different herbicides are frequently sold as prepackaged mixtures. Most of the materials discussed are sold by several manufacturers, often under different trade names differing in formulation and concentration. Therefore, no rates are presented here. READ and FOLLOW carefully the label directions on the herbicide container. Applying rates too low may result in inadequate control, while applying rates too high may cause turfgrass injury. The following herbicides are available for the selective removal of broadleaf weeds from cool season turfgrasses.

2,4-D is the oldest and most widely used herbicide and provides broad spectrum weed control in turfgrass. This chemical is particularly effective for control of weeds with taproots such as dandelion, broadleaf plantain, mustard, and shepherd’s purse. Amine formulations are most commonly used. However, the low volatile ester form of 2,4-D is often recommended for control of wild garlic and wild onion. Some weeds not controlled well by 2,4-D are white clover, chickweed, purslane, and ground ivy.

MCPA is chemically-related to 2,4-D and may be used as a substitute for 2,4-D in prepackaged mixtures. MCPA is not a broad spectrum herbicide as is 2,4-D and its use alone (i.e., not mixed with another herbicide) is not usually recommended.

MCPP is more effective in the control of several perennial or winter annual weeds such as chickweed and clovers.

Dicamba controls many different weeds, several of them are not easily controlled by 2,4-D or MCPP. Of particular importance are the summer annual weeds that have a prostrate growth habit, including knotweed, purslane, and spurge. Dicamba however, does not control plantains.

Dichlobenil (2,4-DP) and Triclopyr are sold in prepackaged mixtures with 2,4-D and provide broad spectrum weed control.

Triclopyr + Clopyralid is a non-phenoxyl prepackaged mixture sold only under the trade name of Controll. This mix also provides broad spectrum control of many common broadleaf weeds including melaleuca. Clopyralid is now available alone under the trade name of Lontrel. Recently, several companies have started to sell herbicide combinations containing triclopyr and/or clopyralid.

Quinclorac is sold only under the trade name of Gallery, and is used primarily in the early fall for preemergence control of numerous winter annuals (especially herbist and common chickweed) and some perennial broadleaf weeds. It has no postemergence activity on emerged broadleaf weeds. Delay over-seeding for at least 60 days following application.

Quinclorac is sold only under the trade name of Drift. It effectively controls a few broadleaf weed species including white clover and corn speedwell, but the primary use of quinclorac will be for postemergence crabgrass control.

Chlorfluren and Metsulfuron are sold under the trade names of Corisil and Manor, respectively. Both herbicides are labeled for use (in some cases as a spot treatment only) on a limited number of cool season turf species (primarily Kentucky bluegrass). Both herbicides will kill perennial ryegrass and chlorfluren will kill fall fescue.

Carfentrazone is a quick acting herbicide that will cause rapid desiccation of the foliage of many broadleaf weed species. It will only be sold in combination with other herbicides such as 2,4-D, MCPP and dicamba.

DID YOU KNOW?

Mat is a tightly intermingled layer, composed of living and partially decomposed plant material and soil and topdressing or other sources, that develops between the zone of green vegetation and the soil surface.

Celebrity Status - Nicole Sherry, Head Groundskeeper of the Trenton Thunder and SFMANJ Update contributor signs autographs as part of Nicole Sherry Bobblehead Night at Waterfront Park, Trenton, NJ on August 23, 2006.
Herbicide Mixtures

The use of mixtures of the above-mentioned herbicides is very common. Combination products result in the control of a broader range of weeds than single herbicides. Some herbicide mixtures may effectively control certain weeds that cannot be easily controlled by the individual herbicides used alone. Some commonly used herbicide mixtures are: 2,4-D + MCPP; 2,4-D + dicamba; 2,4-D (or MCPA) + MCPP + dicamba; 2,4-D + dichlo- prop; 2,4-D + triclopyr and clopyralid + triclopyr. These herbicides will successfully control many broadleaf weeds found in cool season turf. The best times of year to control most broadleaf weeds are fall (especially September) or spring (especially May).

To use these herbicides effectively for broadleaf weed control in turf, remember several points:

1. READ and FOLLOW the label directions CAREFULLY.
2. Spray when the temperature is above 70°F and the weeds are actively growing. Do not spray when the temperature is over 85°F because turfgrass injury may result and some of these products (i.e., low volatile esters) are prone to volatilization causing injury to nearby ornamental plants.
3. Treat only when soil is moist and plants are growing vigorously. Do not apply herbicides during drought periods or when soil is dry.
4. Do not mow one day prior to and after spraying.
5. Spray formulations (i.e. liquids) are generally more effective than granular forms of broadleaf herbicides, but granular products are easier to handle and apply, especially for homeowners.
6. Apply granular formulations when the foliage is moist, during early morning hours when there is a heavy dew.

Precautions for Using Broadleaf Herbicides

1. Ornamental plants, trees, shrubs, and vegetables can be susceptible to these chemicals. Do not spray around homes and gardens when there is a wind. Even a slight breeze is likely to carry spray droplets to susceptible ornamental and garden plants. Ester formulations (even low-volatile types) are volatile and are therefore more likely to injure nearby ornamentals and vegetables when sprayed at high temperatures.
2. Dicamba is included in many herbicide combination products and also in some weed and feed (fertilizer-herbicide) combinations. This chemical and other broadleaf herbicides move readily in some soil types and can be absorbed by plant roots. Therefore, products containing dicamba in particular should not be used near the drip-line of trees or near ornamentals where it can be absorbed by roots.
3. Do not use any of these herbicides on newly-seeded turf. Wait until the new lawn has been mowed at least three times before treating (usually about 6 to 8 weeks after seedling emergence).
4. The herbicides listed in this publication are safe to use on established tall fescue, Kentucky bluegrass, perennial ryegrass, and fine fescue cures (i.e., strong creeping red, hard, Chewings, blue and sheep). All herbicides have the potential to cause some foliar yellowing. Do not use 2,4-D on turf where bentgrasses or roughstalk bluegrasses are considered desirable species.
5. Thoroughly clean the sprayer tank, hose, and boom after using herbicides. One sprayer should be used for turf and another for spraying ornamentals. Do not allow spray mixtures to splatter or leak onto areas where they can be taken up by foliage, roots of trees, or ornamentals.
6. Keep herbicide containers closed, properly labeled, and safely stored.
7. Always store a pesticide in its original container.*

* Dr. Steve Hart is Extension Specialist in Weed Science, Rutgers University.