

is determined to have an average G_{max} value exceeding 200. ASTM adopted the maximum impact level of 200 average G_{max} for use because this value was accepted by the U.S. Consumer Product Safety Commission for similar test methods.

References

ASTM. 1999. Standard specification for shock-absorbing properties of North American football field playing systems as measured in the field. Designation: F 1936-98.

Rogers, J.N., D.V. Waddington, and J.C. Harper. 1988. Relationships between athletic field hardness and traction, vegetation, soil properties, and maintenance practices. Pa. Agric. Exp. Stn. Prog. Rep. 393. ♦

*based on photos and a site visit by the SFMANJ Award Committee
*feel free to have sports groups in your photo

AWARDS:

Winners will be honored with a plaque at New Jersey Turf Grass Expo in December 2005 and be interviewed for a feature article in SFMANJ "UPDATE" (Also receive a two-night stay at Taj Mahl, Atlantic City and three days of education)

NOTE:

*photos will not be returned and may be used on SFMANJ website and promotional settings. ♦

Question and Answer

Question: How do I calculate the amount of topdressing needed for my athletic field?

Answer: To calculate the amount of topdressing needed for your athletic field multiply the length in feet x width in feet x depth in inches x .0031.

Example: Calculate the amount of topdressing needed to topdress a soccer field measuring 360' x 210' with 1/4" topdressing.

$$210' \times 360' \times .25" \times .0031 = 58.59 \text{ cubic yards of material} \quad \blacklozenge$$

Sports Field of The Year

(F.O.Y.)

Proud of Your Field?

Want to Show Off
Your Hard Work?

SFMANJ is inaugurating an annual New Jersey "field of the year" contest. Individual awards will be presented to the school, "F.O.Y." and parks/recreation "F.O.Y."

ENTERING is easy, send to:
SFMANJ Contest, Po Box 370,
Annandale, NJ 08801
Entries must be received by
September 30, 2005

ELIGIBILITY:

- *two categories; School or Parks/ Recreation fields only
- *current member of SFMANJ
- *natural grass fields

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



TUCKAHOE TURF FARMS, INC.
"Instant Lawns" www.ttfarms.com

401 Mrytle Ave.
PO Box 148
Hammonton, NJ
08037

- **HIGH QUALITY New Jersey Certified Bluegrass & Fescue Sod**
- **GROWN ON HAMMONTON sandy, loam-type soil (89-92% sand)**
- **700-acre farm allows deliveries to the Northeastern states or wherever sand sod is needed for specialized modern athletic fields**
- **LABOR-SAVING BIG ROLLS, please call for custom installation prices**
- **THICK CUT SOD with as much as 1 3/4" soil for repair job**



609-561-7184 **800-222-0591** Fax 609-561-0296



fisher & son company, inc.

The "Green Industry" Supplier
SUPERIOR PRODUCTS FOR THE
TURF & HORTICULTURAL PROFESSIONAL

RANDY RIDER
302-242-6848
rrider@fisherandson.com

TriCure
EarthWorks
Natural Organic Products
GRIGG BROS.
Simply Put, Their Knowledge Has The Edge!

**YOUR "ONE-STOP SOURCE"
FOR AMERICA'S LEADING
BASEBALL SURFACES & SUPPLIES**



THE PROFESSIONAL'S CHOICE
... SINCE 1922

USED BY OVER 100 PRO TEAMS,
OVER 700 COLLEGES, PLUS THOUSANDS
OF TOWNS & SCHOOLS WORLDWIDE.
SPECIAL MIXES FOR INFIELDS,
PITCHER'S MOUNDS & HOME PLATE AREAS.

**REGIONAL INFIELD MIXES
AND RED WARNING TRACKS
FOR EVERY STATE & CLIMATE!**

PLUS INFIELD CONDITIONERS
TO IMPROVE EXISTING INFIELDS:

IF TOO HARD AND POORLY DRAINING!

Pro's Choice

THE REDDER, LESS DUSTY, MORE UNIFORM
INFIELD CONDITIONER & DRYING AGENT
"RED" OR "GREY" FOR INFIELDS
"GREEN" FOR TURF
FOR CONSISTENT INFIELD CUSHION
IN WET OR DRY WEATHER!

IF TOO SOFT & DUSTY!

STABILIZER

FOR FIRM, YET RESILIENT, PLAYING SURFACES

TO QUICKLY DRY INFIELDS!

The Original & Most Absorbent is Now

NEW & IMPROVED GRANULAR

DIAMOND-DRY.



WHAT!
We Came 100 Miles
And You STILL Don't Use
DIAMOND DRY!



OVER 200 OTHER INFIELD PRODUCTS!

Now in 6 Colors!

FENCEGUARD

Protective Safety Covers
for Chain Link Fence

WALL PADDING • WINDSCREEN • RAIL PADDING
TAMPERS • DRAG MATS • RAKES
HOLLYWOOD® BASES • FIELD MARKING MACHINES
BATTING PRACTICE COVERS • RAIN COVERS
PERMA-MOUND™ PADS • MOUND BRICKS
SAFE "T" MATT™ BATTER'S BOX PADS
TYPAR® & TERRA-BOND® GEOTEXTILES
ON-DECK CIRCLES WITH TEAM LOGOS
PERMANENT FOUL LINES & MUCH MORE!

**FREE INSTRUCTIONAL BROCHURES
DISTRIBUTION CENTERS NATIONWIDE!**

800-247-BEAM

908-637-4191 / FAX 908-637-8421

PARTAC PEAT CORPORATION

KELSEY PARK, GREAT MEADOWS, NJ 07838

*"The best infield mix I've ever used."
— GEORGE TOMA*

Feed the Soil or Feed the Turf?

**Don Savard*

Is your soil testing laboratory telling you to feed the soil, or feed the turf? If you don't know, you could be buying products that you don't really need. Now before you accuse me of suggesting that reputable soil testing laboratories don't know what they are talking about, let me explain that I learned something recently, and that is there are differences in the approach or philosophy that soil testing labs use when making recommendations. Whether the laboratory is part of a Land Grant University, a commercial lab or a Government agency, it will follow a philosophy that guides their interpretation of what they will recommend that you do. Let's look at three of the most common philosophical concepts.

The **Sustainable Level of Available Nutrient** (SLAN) concept refers to the approach of testing the soil for certain nutrients needed to sustain growth, and if a nutrient is lacking, you just add the nutrient. SLAN works pretty well for specific crops (yes, turfgrass is a crop) because the recommendations come from years of research of what worked best in the field for that crop on different soils in varying weather conditions. Most Land Grant University soil testing labs follow the SLAN concept because of their agricultural research mission.

Another approach is the **Basic Cation Saturation** (BCS) concept which suggests that the "balance" of exchangeable Calcium, Magnesium, Potassium, Sodium, and Hydrogen cations in the soil, within a specific percentage range, or, in specific ratios to each other, will promote maximum crop response. By adding additional amounts of the aforementioned basic cations, the balance can be manipulated. BCS is frequently used by commercial laboratories that do not have an extensive database for a specific crop response on a broad range of soils.

The third approach is the **Maintenance Fertility** (MF) concept of replacing the nutrients that have been removed or lost. MF might be helpful in instances when grass clipping are always collected, or nutrients are leached out of the soil. Sometimes the

MF concept is combined with the other two.

As you can see, these different philosophies are based on different assumptions about what the turf needs. The confusion can begin when you receive conflicting soil test reports for the same field from different soil testing laboratories (assuming, of course, that both labs received identical samples). Soil testing labs use different test extractants and methodology on different soils in different parts of the country because the extractants and methodologies are most effective within certain pH ranges and soil types. Another reason is that laboratories compare test results to research data from years of field trials of the crop in different soil conditions to help make recommendations. So, a laboratory in another part of the country (or the world) could make a different recommendation to you than a local laboratory based on their own research data. Commercial testing laboratories and Land Grant University laboratories often differ based on their research data base, or soil testing philosophy.

Which approach is best? Research done by the University of Kentucky beginning in 1977 on corn, and later on corn, soybeans and wheat indicated that crop yields were excellent for all philosophy concepts (including combinations of two) tested when the weather conditions were favorable, however, there were large differences in the amounts and kinds of fertilizers. This resulted in large differences in the costs, with high fertilizer costs giving no advantage in higher yields. Soil tests taken a few years later following the use of the various recommendations indicated that surplus fertilizer was being stored in the soil. Fertilizer rates based on SLAN cost the least and produced equivalent yields compared to the more costly recommendations based on the other philosophy concepts tested (Murdock, 1997).

Fertilizer supply companies frequently recommend soil testing laboratories whose testing philosophy and recommendations help to sell their products. There is nothing wrong with that, but beware of claims that certain soil amendments and nutrients will

perform miracles. Often these claims are anecdotal. Ask to see who did the research, when and where. The growth of any plant is limited most by the essential plant nutrient present in the least relative amount (Liebig's "Law of the Minimum").

Should you "fertilize the turf" or fertilize the soil? In today's economic and environmental climate, turf managers need to verify the philosophy behind the fertilizer recommendations given by the testing laboratories, and then develop an economically feasible and defendable fertility management program.

**Don Savard is the Athletic Facilities & Grounds Manager for Salesianum School, Wilmington, DE and Vice President of SFMANJ. donsavard@msn.com*

Reference:

- Plank, C. Owen, Soil Testing-Turf, Univ of Georgia Cooperative Exten Service Pub

- Murdock, Lloyd, Evaluating Fertilizer Recommendations, 1997, Univ of Kentucky Coop Exten. Pub

- Focus on Soil Testing and Nutrient Recommendations, 1994, Maryland Coop Exten, vol. 1, issue 2

- Oldham, Larry, Nutrient and Soil Management, Mississippi State Univ Exten Service, Nov. 8, 2000

- Gardiner, Duane T., Raymond W. Miller, Soils In Our Environment, 10th Ed, Pearson Prentice Hall. ♦

Continued from page 9

only mandatory measurements. All other measurements are "recommended" distances

9. Be graded so as not to allow standing water to accumulate either on the infield or in adjacent turf areas be it fair or foul territory

a. Sand slit drainage should be utilized in turf areas adjacent to skinned areas to eliminate the potential for standing water where existing slope is ineffective

10. Include dugout areas as a criteria for evaluating safety and playability

11. Include backstops and fencing as a criteria for evaluating safety and playability

12. Employ a proactive management plan designed to maintain safety and playability ♦

Field Tip

Certification Practice Test Questions To Go On Line

Do you know the answer to the following question?

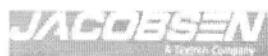
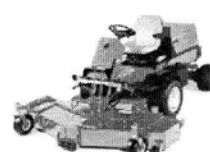
Perennial ryegrass plants do not produce:

- roots*
- stillers*
- stolons*
- shoots*

By the end of December, you will be able to "practice" taking the certification exam to help you prepare for the actual exam. Look for the announcement on the home page to access the questions and the answer key. To be eligible to take the test, you must have at a minimum, a high school diploma or equivalent, and achieve a minimum of 40 points earned through a combination of education and experience. To receive a full packet outlining the application process, contact lcraig@sportsturfmanager.com or call 800-323-3875. *(The answer is C = stolons) ♦*

THE GREATEST TEAM ON TURF!!

Wilfred MacDonald is your team when it comes to athletic field equipment. We offer a wide variety of equipment from striping reel and rotary mowers to athletic field conditioners, line strippers, groomers, top dressers, aerifiers and more! Our comprehensive line of Jacobsen, Smithco, Turfco, National and Vertidrain gives you the largest variety of turf equipment to choose from! Contact your sales representative today for a demonstration!



Wilfred MacDonald, inc
19 Central Boulevard
South Hackensack, NJ 07606
888-831-0891
www.wilfredmacdonald.com

Sales Representatives:
Bernie White
Mike Clifford
Tim Kerwin
Mike Pelrine



2005 Proud Sponsor Directory

TOTAL CONTROL, INC.

Athletic Field Management & Consulting
Jim Hermann, **CSFM**
P.O. Box 422, Lebanon, NJ 08833
Ph/Fax: 908-236-9118 jimtc@att.net

US ATHLETIC FIELDS, INC.

Sports Field Maintenance, Renovation & Construction
John McKnight and Jim Gilligan
P.O. Box 38 – Skillman, NJ 08558
609-466-2846 Fax: 609-466-1808
jim@usathleticfields.com

STORR TRACTOR COMPANY

Turf, Irrigation and Ballfield Equipment
3191 Highway 22
Somerville, NJ 08876
908-722-9830 Fax: 908-722-9847

DEBUCK'S SOD FARM OF NY, INC.

Growers of Premium Quality Turfgrass Sod
Leonard M. DeBuck, President
120 DeBuck's Drive, Pine Island, NY 10969
(845) 258-4131, Fax (845) 258-7637
lmdebuck@warwick.net

GSI CONSULTANTS – TURFCON DIV.

Dr. Henry Indyk, Sports Field Consultant
732-247-8026

WILFRED MAC DONALD, INC

Turf Equipment Specialists
Sales-Bernie White, Mike Clifford, Tim Kerwin
19 Central Blvd., S. Hackensack, NJ 07606
888-831-0891 ex 114 Fax: 201-931-1730
sales@wilfredmacdonald.com

MENDHAM GARDEN CENTER

Turf Products
Mendham – 908-543-4178
Chester – 908-879-5020
Annandale – 908-730-9008

MODERN HANDLING EQUIPMENT OF NJ

Material Handling Equipment Sales & Rentals
Paul Richardson
75 New Street, Edison, NJ 08837
(732) 738-9200 (800) 846-5840 F(732) 738-6173
Email: www.moderngroup.com

PARTAC/BEAM CLAY

Your "One-Stop Source" For
Baseball and Sports Turf Surfaces & Supplies!
Kelsey Park, Great Meadows, NJ 07838
(800) 247-BEAM, (908) 637-4191
Fax (908) 637-8421, partac@goes.com

**PUT YOUR AD HERE: To become a Proud Sponsor
Call 908-730-7770 \$150 FOR ONE YEAR**



Storr Tractor Company

Distributors of Commercial Turf Equipment & Irrigation
New Jersey State Contract Vendor



The Groundsmaster 4100-D is the most powerful mower
in its class with high quality cutting performance.



Count on it.

3191 Route 22
Somerville, NJ 08876
908-722-9830

Serving the Industry
Since 1945