YOU HAVE A GREAT TEAM.



Of course you want the most playable field. A field that is perfectly smooth, with just the right firmness, without infield ridges or compaction, that plays great and looks great. With conditions applauded by your players, their coaches, officials - and spectators, as well. Maybe it's time for you to team up with Smithco to make your field one of the best in your league.

NOW HAVE A GREAT FIELD.

Our Super Star AFC Field Conditioner. The latest addition to our family of great sports field maintenance equipment. It is hydraulically controlled all the way power system, braking, all of its implements. Choose from two-wheel or three-wheel drive. Its high performance, quiet, air-cooled gasoline engine requires little maintenance and our "step-through" chassis design is an exclusive feature. Only from Smithco.



SUPER RAKE AFC

Our Topliner Field Marker. Here is the field liner with smooth-performance hydrostatic drive, precise control and low maintenance. It features both front and side mounted spray boxes, for painting all types of lines and designs.

A double-tip nozzle system paints from opposite directions to give you especially heavy, durable markings. Only from Smithco.

Our Super Rake AFC Field Conditioner.

TOPLINER Field Marker

One of the most popular conditioners of all for sports field maintenance. It is available in four different models, offering either two-wheel or three-wheel drive and air-cooled gasoline or water-cooled diesel engines - all with hydraulic power for smooth, reliable performance.

Only from Smithco.

Look At These Special Features. Our

patented "Speed Boss" system that controls conditioning speed to your selective level • center-mounted infield scarifier • automotive-type power steering • tilt steering wheel

- high-backed, adjustable seats for operator safety and comfort
- and the biggest variety of optional implements for conditioning and maintaining every type of sports field

Your Smithco distributor knows what it takes to make your field a winner. Ask for a demo. Seeing is believing.





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A Great Success

STMA IN ACTION

by Tim Moore

n May 5, nearly 100 people gathered at Montgomery Blair Senior High School in Silver Spring, MD, for the Back to Basics Field Day held by the Mid-Atlantic Field Managers Organization (MAFMO) Chapter of STMA.

Bob Curry of Covermaster, Inc., started the meeting with a discussion of the how, why, and when of field covers.

Next. Follett of the Don Washington Redskins gave a presentation on the basics of turf care. Topics covered included mowing, fertilization, aeration, seeding, and pesticide applications. Don fielded questions about Redskin Park, and gave attendees an overview of what happens behind the scenes.

Paint demonstrations led by Chris Pluta of the Sherwin Williams Paint Company were next on the agenda. Attendees looked at the latest liner from Titan, took part in a line painting session, and watched Joe Dick of Howard County Public Schools demonstrate stenciling techniques.

Jeff Martin of Diamond Pro coordinated the afternoon session. Attendees gathered for a show and tell demonstration of pitcher's mound and home plate clay installation, and one on topdressing basics.

The day ended with a dinner meeting at Fred & Harry's sponsored by Novartis and Newsom Seed. Attendees shared great food and networking, and participated in a raffle that raised enough funds to provide a MAFMO Chapter member free registration to

STMA's Annual Conference in St. Louis Jan. 12-16, 2000.

Chapter news

Colorado Chapter: The Colorado Web Chapter's new site. www.cstma.org, is up and running.

The Chapter's 4th annual golf tournament, the Lawnmower-Man Open, begins with an 8 am shotgun start Jul. 20 at West Woods Golf Club in Arvada, CO. Proceeds benefit the CSTMA Scholarship Fund.

An August event in Grand Junction and a Sept. 15 event at Jackie Robinson Field of Lawry Air Force Base are in the planning stages.

For information, call the chapter hotline: (303) 346-8954, or check out the Web site: www.cstma.org.

Great Lakes Chapter: GLSTMA will hold a general meeting for the membership along with the Jul. 27 Board Meeting.

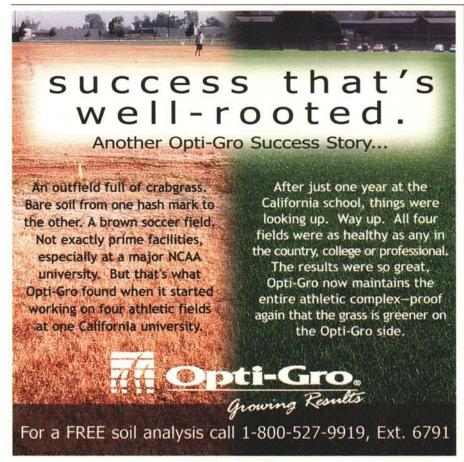
A Fall Field Day at Sylvania Pacesetter Park, 9 am-3 pm, Sept. 14, will feature equipment manufacturers, turf product manufacturers, and speakers.

GLSTMA has introduced a \$250 scholarship program for students pursuing a career in turf. For application materials, contact: (419) 885-1982.

with cooperation Products, GLSTMA will again sponsor Field of the Year awards. Members can obtain application materials at the Web site, or by calling (419) 885-1982.

For general information, contact Joe Zelinko: (800) 897-9714, or Boyd Montgomery: (419) 885-1982, or visit http://members.tripod.com/~glstma.

Iowa Chapter: ISTMA will participate in the Iowa Turfgrass Field Day Jul. 29 at the Horticulture Research Station north of Ames. Registration opens at 8 am, and events run from 9 am-3:30 pm. Morning sessions will include a sports turf research tour. Topics will include: poa supina for sports, Sportgrass, tarp color demonstration, Primo plant growth regulation, and traffic studies (bluegrass varieties, overseeding with bermudagrass, and cool-season species).



Afternoon events will include educational sessions, demonstrations, and a continuing education course.

The Iowa/Minnesota Chapter Clash will be held Jul. 30-31 at the University of Minnesota. For details on this event, see the Minnesota Chapter section or contact the Turf Office.

For general information, contact Lori Westrum at the Turf Office: (515) 232-8222, or fax (515) 232-8228.

Minnesota Chapter: The Iowa/Minnesota Chapter Clash will be held Jul. 30-31 at the University of Minnesota. Events Jul. 30 begin with golf at the University of Minnesota course at 11 am. There's a tailgate party at 4:30 pm, and a St. Paul Saints game at 7 pm. Jul. 31 events start at 10 am with a softball game at the University of Minnesota baseball field. Afternoon events include a program by Dr. Dave Minner of Iowa State University and a tour of the University of Minnesota Athletic Facility.

The Chapter's annual Seminar on Wheels tour will be held Aug. 4.

For information, contact Connie Rudolph: (651) 646-

Michigan Chapter: MiSTMA is planning a July seminar in Lansing, MI.

For information, contact Rick Jurries, West Ottawa Public Schools: (616) 395-2364.

Indiana Chapter: In late July, the Indiana Chapter will hold a meeting at Victory Field, home of AAA baseball in Indianapolis.

For information, contact Terry Updike, B & B Fertilizer: (219) 356-8424, or Pat Hickner: (800) 672-4273.

Wisconsin Chapter: The Wisconsin Chapter's Summer Meeting will be held Aug. 10, during the Wisconsin



Turfgrass Association's Summer Field Day at the O. J. Noer Facility Highlights Verona. will include research, demonstrations. equipment, and products designed specifically for athletic field

Sept. 14. WSTMA will meet at the Courtesy: Tim Moore University of Wisconsin-



La Crosse. Field Supervisor Pete Bemis will conduct a tour of his facility.

For more information, contact Rich Riggs, R. H. Rettler & Associates, Inc.: (715) 341-2633.

KAFMO Chapter: KAFMO will hold its Summer Field Day at Brandywine Picnic Park in Pocopson, PA (Chester County), 9 am-3 pm, Aug. 11. The meeting will focus on maintenance of all-purpose fields, and it will include equipment demonstrations, topdressing, irrigation, seeding, and soil preparation plots. Pesticide credits will be offered.

For information, contact Dan Douglas, Reading Phillies

Baseball Club: (610) 375-8469, ext. 212.

Florida Chapter #1: An Aug. 17 meeting at Rodger Dean Stadium in Palm Beach is in the planning stages.

For information, contact John Mascaro: (954) 341-3115. MAFMO Chapter: MAFMO will hold a Design and Spec Workshop in Annapolis, MD, in late September. Featured speakers will include Don Campbell of French & Assoc., Columbus, GA; and Paul Zwaska, head groundskeeper for the Baltimore Orioles at Camden Yards.

For information, contact the hotline: (410) 290-5652. North Texas Chapter: The new Web

www.nstma.org, is up and running.

For information, contact Rene Asprion, Diamond Pro: (800) 228-2987; Tom Welch, CSM, Central Garden and Pet: (800) 788-9581; or visit the Web site: www.nstma.org.

Midwest Chapter: Call the chapter hotline: (847) 622-3517.

Mid-South Chapter: Contact Jim Calhoun: (901) 755-1305, or Robert Bodi: (901) 383-2414.

Nor-Cal Chapter: Contact Janet Gift: (530) 758-4200. **So-Cal Chapter:** Contact the chapter hotline: (888) 578-STMA.

Tennessee Valley Chapter: Contact Tom McAfee. Nashville Sounds: (615) 242-4371, or Bob Hogan: (888) 224-

Chapters on the grow

New Chapter: A new chapter is taking shape in the Kansas City MO/KS area. For information, contact Trevor Vance: (816) 504-4271, John Cundiff: (816) 525-7600, Bill Tritt: (816) 941-4424, Jody Gill: (913) 681-4121, Gary Custis: (816) 468-6215, or Jay Sutton: (816) 795-8873.

Arizona Chapter: Contact Bill Murphy, City of Scottsdale Parks & Recreation Department: (602) 312-7954; or Kris Kircher, City of Chandler Parks & Recreation Department: (602) 786-2728.

Nevada Chapter: Contact Ibsen Dow: (702) 649-1551; or Alan Paulson, Clark County School District: (702) 799-8724.



PRODUCT SHOWCASE

Bio-Turf[™]Soil Supplement Aids in Healthy, Colorful Turf



(June 17, 1999) Irving, Texas — Bio-Turf Soil Supplement from Opti-Gro® keeps turf, shrubs and ornamentals green all year. Bio-Turf is an effective soil supplement when used in conjunction with a fertilization program, produces healthier soil conditions while enhancing the

growth of turf and shrubs. Bio-Turf can be applied with the use of a compressed air sprayer, hose-end sprayer, boom sprayer or through chemigation.

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BEFORE

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"Temp-Stripe" is specifically designed for multipurpose fields where immediate changeover is needed. Used by stadiums throughout the MLB, NFL, NCAA and World Cup Soccer. Available in white and team colors. Also available: "Pro-Stripe" (permanent marking paint), stencils, aerosol paints and marking equipment. Made in the U.S.A. For more information, contact:

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Grasshopper AERA-vatorTM

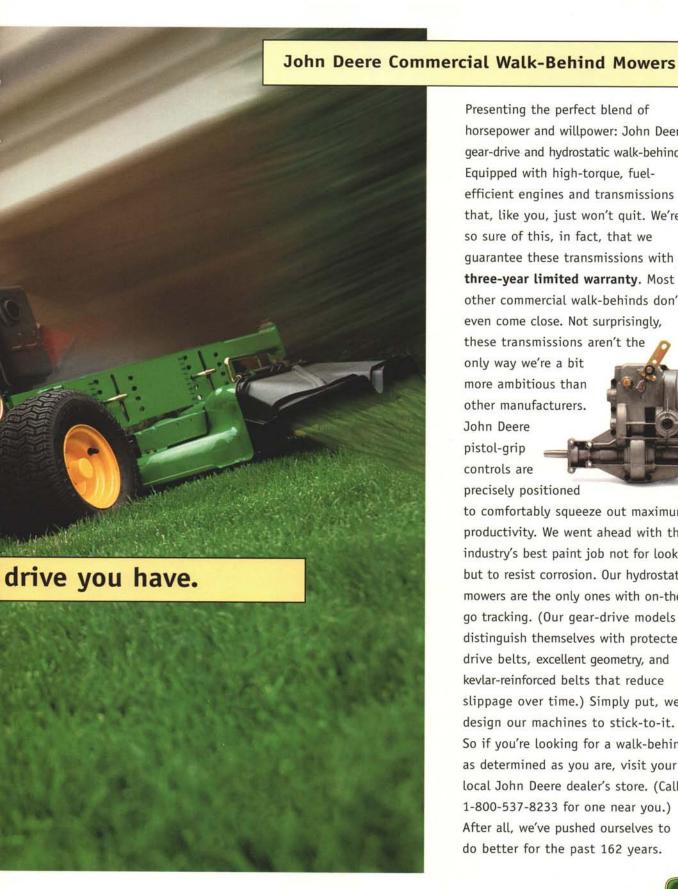


Designed for 700 and 900 Series power units, Grasshopper's 40- and 60-inch AERA-vator™ attachments aerate turf and relieve surface compaction without irrigation, leaving no cores to clean up. Turf is available immediately after treatment. Oscillating, forged-steel tines penetrate and fracture hard, dry soils, encouraging root development and providing a resilient surface for playing fields.

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Presenting the perfect blend of horsepower and willpower: John Deere gear-drive and hydrostatic walk-behinds. Equipped with high-torque, fuelefficient engines and transmissions that, like you, just won't quit. We're so sure of this, in fact, that we guarantee these transmissions with a three-year limited warranty. Most other commercial walk-behinds don't even come close. Not surprisingly, these transmissions aren't the only way we're a bit more ambitious than other manufacturers. John Deere

to comfortably squeeze out maximum productivity. We went ahead with the industry's best paint job not for looks, but to resist corrosion. Our hydrostatic mowers are the only ones with on-thego tracking. (Our gear-drive models distinguish themselves with protected drive belts, excellent geometry, and kevlar-reinforced belts that reduce slippage over time.) Simply put, we design our machines to stick-to-it. So if you're looking for a walk-behind as determined as you are, visit your local John Deere dealer's store. (Call 1-800-537-8233 for one near you.) After all, we've pushed ourselves to do better for the past 162 years.

pistol-grip controls are

precisely positioned



by Kevin Hattori

he ultimate goal of any successful turfgrass management program is to have great-looking, green grass above the ground with a structurally correct, well-anchored root system below. Effective biostimulants help achieve these standards by addressing many facets of turf health.

Biostimulants improve root mass and length. They increase fertilizer efficiency and allow you to reduce nitrogen application rates. Biostimulants also provide plants with higher resistance to certain types of stress.

What are biostimulants?

Biostimulants fall into the category of hormones and growth regulators (PGRs). The materials trigger a physiological plant response, such as cell division. Results can include improved root growth or increased nodulation.

Some substances found in nature that have biostimulant properties include humic acid, amino acids, enzymes, and vitamins. Others have been synthesized into forms like indolbutyric acid (IBA).

In an ideal world, turfgrass would synthesize the hormones needed to sustain optimal growth and development. Every plant contains cytokinins and cytokinin-like properties as part of its metabolic activity. However, under stress, plants usually don't produce amounts substantial enough to sustain growth.

In high-stress situations, plants are often unable to synthesize what they need. This is where biostimulants come into play.

Kelp

Kelp is probably the best-known and most universally recognized natural source of biostimulants. It's the most widely used biostimulant in agriculture and turfgrass management.

Kelp contains many important PGRs, like cytokinins, gibberellins, and indoles. Its micronutrients play a major role in a plant's ability to resist attacks by pests and disease.

All kelp is not equally suitable for use as biostimulant material. Many species have been studied to determine their respective strengths.

One species that has been studied to great lengths is Ascophyllum nodosum (cold-water kelp).1 It has long been considered a source of important PGRs, and it contains a large number of amino acids.

Microorganisms

Soil microorganisms can be likened to chemical factories. They help produce

Continued on pg. 32

1999 Ohio State University Turfgrass Research Field Day

Wednesday, August 18, 1999 • 8:30 am - 3:00 pm Ohio State University Turfgrass Research Center Columbus, Ohio

Grounds and Athletic Field Managers, Lawn Care Professionals, Sod Producers, Golf Course Personnel...

don't miss this chance to view results and learn about on-going research on active turfgrass and ornamental studies conducted by OSU researchers.

> \$20.00 per person Call 888-683-3445 for more information.

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