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Grasshopper's True ZeroTurn™ mid-mount mowers feature straightaway ground speeds of up to 10.5 mph and 5.5-in. deep DuraMax™ decks.

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The company says you'll stay comfortably in control with Grasshopper's Ultimate Operation Station. Air- and liquid-cooled, gas or diesel models have 20-28 hp OHV horizontal crankshaft engines, 10-gal. fuel tank with single-fill spout, plus Grasshopper's engineered serviceability, comfort, and durability. Power-Vac™ 8 cu. ft. collection system available for 52- and 61-inch decks.

Optional 15- or 30-gallon, 52" shielded sprayer attachment.

GRASSHOPPER

For more information, circle 156



NEW GROUNDSMASTER MODEL AVAILABLE

The Toro Company has begun shipping the new Groundsmaster® 228-D, another model in the Groundsmaster 200 series known for maneuverability, this one with a new engine and more horsepower. You can choose from five full floatation cutting units, the 52-in. Rear Discharge, the 52-, 62-, and 72-in. Side Discharge units, and the Guardian® 62-in. Recycler®.

"The Groundsmaster 228-D has the ability to maneuver smoothly around obstacles," says Tim Koch from Toro. "The unique tire tread design and a counterbalance system provide the necessary traction to help the engine deliver its full power without scuffing." The new unit is powered by a Kubota 28-hp diesel engine, and features steering brakes and 4-lever steering linkage for making tighter turns. Power steering and power brakes allow for great handling. The 228-D has optional attachments so you can use it year-round: Rotary Broom, Snowthrower, 15-cu. ft. Hi-Lift Collection System, Debris Blower, V-Plow, and Cab with ROPS.

TORO

For more information, circle 151

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Circle 120 on Inquiry Card.

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Circle 121 on Inquiry Card.

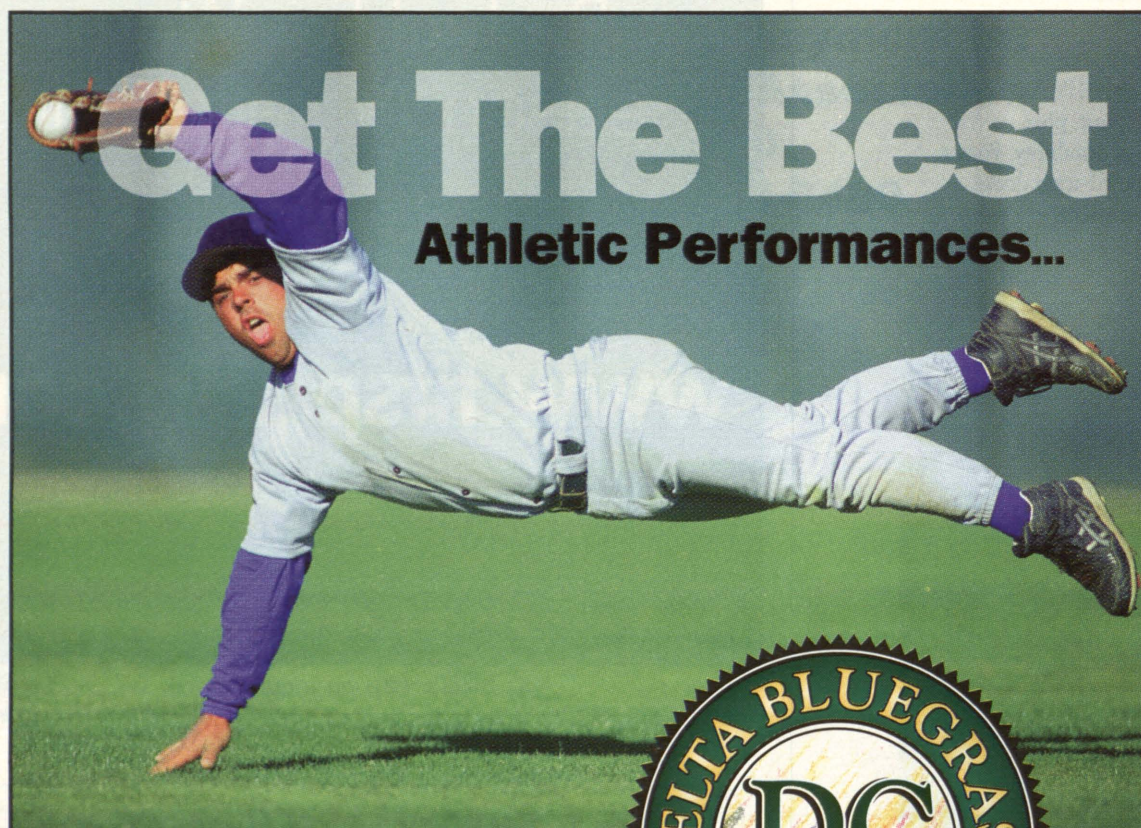
Maintaining the Grounds

COMPACT WALKER MEETS BIG DECK

Walker Manufacturing Co., producers of compact riding mowers, has introduced the industry's first 74-in. side discharge deck, the largest cutting deck for a mid-size tractor. Although it is Walker's first four-bladed design, this larger deck has many of the same features used on Walker's gear-driven decks. The narrow, tunnel design of the in-line, timed blades offers a finish cut, aids in scalp resistance, and gives the clean discharge pattern that Walker products are known for. The combination of Walker's full-floating deck suspension and castering gauge wheels at the back of the deck help hold terrain contours and prevent scalping. Like its brothers, the DSD74 tilts up to 90 degrees for maintenance.

WALKER MANUFACTURING

For more information, circle 154



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"WIDER IS BETTER"

Featuring nine models, Husqvarna's lineup of large-frame Generation II XP zero-turn radius mowers just got bigger with the introduction of the new ZTH7226. This large frame mower offers a wider 72-in. cutting deck and a 26-hp Kohler electronic fuel injected engine.

The ZTH7226 offers the same features as other Generation II XP commercial mowers including a uni-body frame, which provides a low center of gravity and wide wheel stance for stability. The longer wheel-base provides a smoother ride, while the solid welded frame design provides extended life.

In addition, a ground speed up to 11 mph, a fuel capacity of 11.4 gallons, coupled with the new 72-in. cutting deck significantly can increase your productivity with these added features, the new ZTH7226 zero-turn mower can tackle up to 12 hours of mowing between refills, and cut up to 7.5 acres per hour, says Husqvarna.

Isolating the engine from the frame coupled with the patent pending seat isolation design results in a significant vibration reduction for the operator, providing less fatigue as well as wear on the machine. In addition the foot assist deck lift system is a standard feature on the ZTH7226.

HUSQVARNA

For more information, circle 153

Circle 122 on Inquiry Card.

Athletic Field Fencing 101

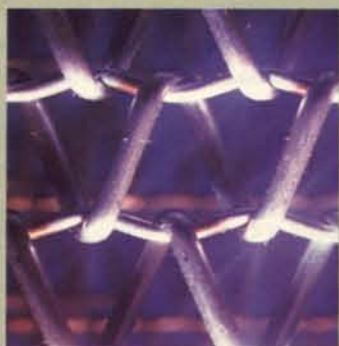
Though many readers may be familiar with safety regulations for athletic field fences, others may not. Here we present some standards for those readers to consider when putting together a new field or renovating an existing facility. Failure to keep pace with standards changes could ultimately put you in a no-win situation in event of accidents and litigation.

The entire field must be fenced. Fence height ranges from 4 ft. for youth fields to 8 ft. for scholastic and adult fields to prevent those leaping for balls from going headfirst over the fence. Six-foot fences are acceptable but not ideal.

Fences should be sturdy enough to withstand an athlete's weight as well as serve as a windscreen. For baseball fields, the fence should start at 8 ft. as it leaves the backstop and goes around the circumference of the field, including in front of the dugouts.

The top of the fence should be covered with a colorful vinyl tube to protect players from injury and to serve as a reference point. The fencing should be attached on the field side of the poles, with all attachments and prongs on the outside of the fence.

The fence should be stretched down from the top to the tension rail on the bottom. It should be no closer than 25 feet to the sidelines or foul lines, but preferably 50-75 feet. The fence is there to protect both players and spectators.



Baseball specifics

If chain link is used both the top and bottom of the mesh must be knuckled (and preferably covered). If plastic fabric with bendable vertical supports is used, must not have any protrusions. No solid wood or metal signs or plates should be fastened to the inside.

If the fence is a solid material, mount a pad on it!

The overhang should be big enough to contain foul balls that would impact surrounding areas in use. If an overhang will not be effective, use netting. The backstop must be constructed of 1-in. mesh to prevent climbing. The sideline fence must extend from the backstop at least 20 feet beyond first and third bases. **ST**

This material provided by Dr. Arthur H. Mittelstaedt, Jr., and the Recreation Safety Institute, Ronkonkoma, NY.



CHAIN LINK FENCE GUARDS

Fence Guard™ protective covers for chain link fencing from Partac Peat Corp. are now available in six colors—safety yellow, dark green, red, white, blue, and orange—as well as two grades—premium and standard. These UV-resistant, polyethylene covers protect players from injuries and provide a distinctive look to your fencing.

Fence Guard comes in cartons of ten 8-ft. sections with fifty 8-in. UV-resistant ties for securing every 2 feet to fence. A 5-year manufacturer's limited warranty is offered.

For safety and uniform appearance, you should remove crowns from the tops of fence posts so that the entire fence top is covered; ends can be butted or overlapped, and the product is easy to cut, says the manufacturer.

Bottom Guard™, which serves the same safety and appearance purpose, also reduces erosion and eases weed cutting.

PARTAC/BEAM CLAY

For more information, circle 172



COLOR BARRICADES

Barco Products' durable, polypropylene Color-Cades are suitable for sporting events and other crowd control applications. Weighing less than 30 lbs. each, they nest for easy storage. Color-Cades are available in 6 colors—red, orange, yellow, green, blue and white—and are 78" L x 39" H x 19.5" W. Prices start at \$148.85 and decrease per unit in bulk.

BARCO PRODUCTS

For more information, circle 171

DOT COM TAKE A LOOK

- The J.R. Simplot Co.'s Turf & Horticulture group has launched the APEX® website at www.apexfertilizer.com. Visit for product information as well as reference information such as conversion tables and area measurement instructions, and a list of distributors. Beyond tech bulletins and MSDS sheets for each product, the site includes release rates of each specific formulation with four different temperature variables, says the company.
- Visitors to www.seedsolutions.com can find complete product information from the company that is comprised of five regional suppliers of forage, turfgrass, native grass and garden seed, erosion control products, and other seed-related products. Seed Solutions was created last year to provide each individual operation the chance to share marketing costs, inventory, and expertise.
- Agrotain International has launched www.stabilizednitrogen.com, devoted to UMAXX™ and UFLEXX™ stabilized-nitrogen technology, which the company says offer an environmentally friendly and economical alternative to slow-release nitrogen fertilizers. "Our landing page leads to separate paths tailored to golf, turf, or specialized applications, whatever your interest," says Alan Nees, vice president of turf and ornamental sales. "Stabilized-nitrogen fertilizers do not depend on seasonal microbial activity and can be applied year-round."

TURF SPEAKERS BUREAU GROWS

Chipco has expanded the offerings of its Speakers Bureau, which provides technical expertise for continuing education of turfgrass professionals. Nine Chipco field and technical development managers are now available to deliver presentations on the following topics: Replacing Organophosphates; Poa Annua Control; Summer Stress & Turf Quality; Fungicide Resistance Management; and Fire Ant Safety.

"We provide this service as a courtesy to organizations as a symbol of our commitment to the needs and concerns of turfgrass professionals," says Jim Fetter, Chipco Professional Products' marketing director.

For more information, see www.aventischipco.com or call 1-800-438-5837.

DEERE IN TRANSAXLE BIZ

Deere & Company, Yanmar Diesel Engines and Kanzaki Kogyokoki Mfg. will form Transaxle Manufacturing of America Corp. to build tractor and utility vehicle transaxles. The new company will build its headquarters and manufacturing facility on 40 acres in the Waterford Business Industrial Park in Rock Hill, SC, with production scheduled to begin in September 2003.

A transaxle is a unit that consists of a combination transmission and axles used in small tractors and UVs; the new plant will provide these for Deere's Gator® UV and compact utility tractors.



Seed Research of Oregon honored longtime educator W.R. "Bob" Kneebone with its Lifetime Research Excellence award at the Seed Research of Oregon Summer Field Days in Phoenix, Ariz. SRO president Mike Robinson, left, presents the award. From 1971-1976, Dr. Kneebone collected 93 germplasm from old golf greens in the southern half of the United States. By 1982, only five clones survived the intense testing and became the parental clones of SR 1020, the first new and improved creeping bentgrass of its time.

HOW CAT STUFF WORKS

HowStuffWorks.com has added four sections with the help of Caterpillar, Inc.: How Caterpillar Skid Steer Loaders Work; How Caterpillar Backhoe Loaders Work; How Caterpillar Makes Challenger® Agricultural Tractors; and How NASCAR Race Cars Work. No word yet when the site will answer "Why does it rain on my day off?"

FIELDS OF EXCELLENCE® CONTEST

Pioneer Manufacturing's fifth national Fields of Excellence contest to recognize outstanding athletic fields and those who create and maintain them has begun. Any institution or organization that regularly maintains an outdoor athletic field is eligible.

Designed to foster community and school pride, the contest awards winners a four-color banner and framed certificate proclaiming their achievements, and some randomly selected winners will receive scholarships. Entries must be postmarked by December 31, 2001, and include a completed application, essay, and non-returnable photography. For more information or an entry form, see www.pioneer-mfg.com or call 800-877-1500.

exhaust emissions regulations has imposed a tremendous financial burden on manufacturers. With enhanced ability in hand held product issues, OPEI will now be able to speak with one, stronger and more effective voice for the entire outdoor power equipment industry."

The association began in 1956 as the Power Saw Manufacturers Association.

WASTE WATER STUDY

This fall, Delaware Valley College begins a 3-year study investigating the subsurface application of waste water to an athletic field. Waste water generated from the campus will be applied to an athletic field through a subsurface drip irrigation system. Turf quality and field playability will be the main variables assessed. Three rates of wear will be applied to the field using a wear machine.

The study is funded by the Pennsylvania state Dept. of Environmental Protection and is part of a larger study focusing on the on-site disposal of sewage effluent. For more information please contact Larry Hepner or Dr. Doug Linde, Department of Agronomy, Delaware Valley College, 215-489-2260.

TURF SHOWS

The New York State Turfgrass Association (NYSTA) will hold its 26th annual Turf and Grounds Exposition, in cooperation with Cornell University, November 13-15 at the Convention Center at Oncenter in Syracuse. Call 800-873-8873 or email nysta@nysta.org for information.

The Maryland Turfgrass Council will hold its 25th annual Conference and Trade Show January 29-30 at the Baltimore Convention Center. Call 301-345-4199 or email jk77@umail.umd.edu.

PPEMA TO CLOSE DOORS

The Portable Power Equipment Manufacturers Association will discontinue operations at the end of this year. "Many of our members are also members of the Outdoor Power Equipment Institute. These companies bring a great deal of talent and experience in hand held issues to that organization," says Joseph V. Rund, board chairman. "The cost of complying with increasingly stringent

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- Remove crowns from post so entire top of fence is covered and level. Attach sections end-to-end or overlap.

Bottom Guard™

- Size: 1-1/4" W x 3-1/4" H x 8' Long
- Twelve 8-foot sections per carton with 60 - 8" UV-resistant ties for securing every 2' to fence.
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Circle 126 on Inquiry Card.

Second Annual Regional Chapter Workshop A Success



Brian Gimbel, head sports turf manager for Ohio State University, explains the features of Ohio Stadium (football) during the OSTMA and STMA 2nd Annual Regional Chapter Workshop.

The Second Annual Regional Chapter Workshop was presented jointly by the Ohio Sports Turf Managers Association and the national Sports Turf Managers Association. Attendees from across the region gathered on July 18 at Ohio State University to share in a day of education, touring and networking.

Attendees met at the University's Bill Davis Baseball Stadium to pick up their registration information and exchange greetings while enjoying coffee, juice and donuts. Darian Daily, OSTMA president and head sports turf manager for the Columbus Crew Soccer Stadium opened the morning events with a welcome.

Brian Gimbel, head sports turf manager for the Ohio State University Athletic Fields and his staff then conducted "show and tell" tours of the Bill Davis Stadium, the Jesse Owens Track and Soccer Complex, and the OSU Softball Field.

The group then boarded a bus for the trip to the OSU Football Stadium. Upon arrival, attendees moved in the Stadium's Recruitment Room. STMA executive director Steve Trusty gave a presentation on "Professionalism and Certification," and updated the group about STMA activities and programs. Murray Cook, STMA president-elect, and then president of Global Stadium Services (now president of Brickman Sportsturf Services) gave a presentation on "Baseball Worldwide," sharing his experiences in baseball field preparation for global events, including the Olympics. He compared the differences in the overseas and US programs in terms of equipment

and materials availability. He also pointed to the similarities in dedication to field quality and player safety, making the best possible outcome with the resources at hand.

Following a box lunch and networking session, the group moved to the OSU Football Stadium. Gimbel explained the extensive system developed to restrain the waters from the high water table and adjacent river made even more critical with the lowering of the level of the playing field and expansion of seating capacity. A key feature of these tours is that, at each site, attendees have the opportunity to view the field and maintenance facilities and ask questions.

Next, it was back to the bus for the trip to the Ohio Turfgrass Foundation Research Center. Here the group moved first into the research building and then out to the fields as each of the researchers explained the details and status of their ongoing projects.

The group again traveled by bus, this time to Cooper Stadium where head sports turf manager Jeff Limburg guided the tour of the facility.

The final site of the day was the Crew Stadium and a facilities tour conducted by Darian Daily and his staff. Daily had made arrangements for attendees to have dinner at the Crew Hospitality Tent and stay for the evening's game, schedules permitting. The group that remained had a great time munching, networking, watching pro level soccer, and laughing at the "Bobbing for Brats" halftime entertainment.

ST

STMA Chapter News

Iowa Sports Turf Managers Association: The Iowa Chapter will hold a Baseball/Soccer Workshop and Vendor Show at Upper Iowa University in Fayette on October 9. Topics include: "Putting Your Field To Bed for the Season," presented by Dr. Dave Minner of ISU; "Fertility and Soil Sampling," by Gary Peterson; "Field Painting," by Kevin Vos of the Muscatine Soccer Complex; "Aerification & Topdressing," by Bryan Wood of Commercial Turf & Tractor; and "Homemade Tools," by Ken Hanawalt of Rockwell-Swaledale Schools. For information on the Iowa Chapter, or upcoming activities, contact Lori Westrum of The Turf Office at tel. 515-232-8222, or fax 515-232-8228, or e-mail: Lori@iowaturfgrass.org.

Wisconsin Sports Turf Managers Association: Wisconsin Chapter members will participate in the Wisconsin Turfgrass Association (WTA) Scholarship Fundraiser Golf Tourney

at the Grand Geneva Resort in Lake Geneva on October 10. For more information on the Wisconsin Chapter, or other pending events, call Richard Miller at 608-756-1150.

Florida Chapter #1: The Florida Chapter is planning an Irrigation Seminar in at Holiday Park in Ft. Lauderdale on October 16. The Chapter will again take part in the annual Turf Rodeo. This year's event will be held at Deerfield Beach on November 7. A meeting in the Village of Pinecrest is scheduled for December 5. For information on the Florida Chapter, or pending activities, call John Mascaro at 954-341-3115.

MO-KAN Sports Turf Managers Association: The MO-KAN Chapter is planning a Sports Facilities Tour for October 24. Details will be announced soon. For information on the MO-KAN STMA Chapter, or upcoming events, call Trevor Vance at 816-

STMA Chapter News

504-4271; Gary Custis at 816-460-6215; or Jody Gill at 913-239-4121.

Mid-Atlantic Athletic Field Managers Organization (MAFMO Chapter STMA): The MAFMO Chapter Design and Construction Seminar, originally planned for August 24, will now be held on October 25 at the Radisson Hotel in Annapolis, MD. For information on the MAFMO Chapter, or pending activities, call the Hotline at 410-290-5652.

Nebraska Sports Turf Managers Association: The Nebraska Chapter is planning an October meeting at Haymarket Park in Lincoln, Nebraska, the new home of the University of Nebraska Huskers Baseball Team and Northern League Saltdogs. For information on the Nebraska Chapter, or upcoming events, call Gregg Bostelman, City of Grand Island, at 308-385-5426.

Ohio Sports Turf Managers Association (OSTMA): OSTMA is accepting scholarship and Field of the Year nominations until October 1, 2001. OSTMA will participate in the Ohio Turfgrass Foundation Conference held at the Columbus Convention Center from December 3-6, 2001. Featured will be a special Sports Turf Track and vendor displays with products for the sports turf manager. For information on the OSTMA Chapter, or upcoming events, call Joe Zelinko at 800-

897-9714 or Boyd Montgomery at 419-885-1982, ext. 50; or visit the chapter's website at www.glstma.org.

Colorado Sports Turf Managers Association: The Colorado Chapter is planning a Fall Turf Day at the new Invesco Field at Mile High. More details will be announced soon. For information on the Colorado Chapter, or upcoming activities, visit the Chapter's website—www.CSTMA.org—or call the CSTMA Chapter Hotline at 303-346-8954.

Midwest Chapter STMA: Upcoming events for the Midwest Chapter include a Fall workshop at the Lincolnshire Sports Complex in October, and the annual North Central Turf Expo at Pheasant Run Resort in December in conjunction with the Illinois Turf Foundation and the Illinois Landscape Contractors Association. For information on the Midwest Chapter, or pending activities, call The Chapter Hotline at 847-622-3517.

Tennessee Valley Sports Turf Managers Association (TVSTMA): The Tennessee Valley Chapter is planning a fall workshop in Jackson and a November meeting in Bowling Green, Kentucky. More details on these events will be announced soon. For information on the TVSTMA Chapter, or upcoming events, call Bill Marbet, Southern Athletic Fields, Inc., at 931-380-0023 or 800-837-8062.

Sports Turf Managers Association of Arizona: For information on the chapter, or other upcoming events, contact Bill Murphy, Recreation and Facilities Manager, City of Scottsdale Park, at e-mail: bmurphy@ci.scottsdale.az.us or tel. 480-312-7954.

Northern California Chapter of the Sports Turf Managers Association: For information on the Nor-Cal Chapter, or pending events, call Janet Gift at 530-758-4200.

Southern California Chapter: For information on the Southern California Chapter, or pending activities, call Ron Kirkpatrick at 858-453-1755.

Gateway Chapter Sports Turf Managers Association: For information on the Gateway Chapter, or upcoming events, call Mark Jennings at 314-983-5345; or Jim Anthony, Saint Louis University, St. Louis, MO, at 314-977-2956.

Indiana Chapter: For information on the Indiana Chapter, or pending activities, call Terry Updike, B & B Fertilizer, at 219-356-8424.

Keystone Athletic Field Managers Organization (KAFMO/STMA): For information on the KAFMO/STMA Chapter, or other upcoming events, contact Dan Douglas, Reading Phillies Baseball Club, at tel. 610-375-8469, ext. 212; or e-mail to: kafmo@aol.com.

Michigan Sports Turf Managers Association (MiSTMA): For information on the Chapter or other pending events, call Rick Jurries, West Ottawa Public Schools, at 616-738-6974, or go to www.mistma.org to visit the chapter's new website.

Minnesota Chapter STMA: For information on the

Minnesota Chapter, or upcoming events, contact Ron Unger, Director of Parks & Recreation, City of Kasson, at tel. 507-634-4165 or e-mail: ParkNRec@CityofKasson.com.

Sports Field Managers Association of New Jersey: For information on the New Jersey Chapter, or upcoming events, call Jim Gavigan, Lesco, at 732-248-8979; or call Eleanora Murfitt, Director, Township of Clinton Parks & Recreation Department, at 908-735-5999.

North Texas Sports Turf Managers Association: For information on the North Texas Chapter, or pending activities, call Kayla McAfee at 972-234-6584 or Rene Aspiron at 972-647-3393, or visit the website at www.ntstma.org.

South Texas Sports Turf Managers Association: The South Texas Chapter is planning an event for early October. More details will be announced soon. For information on the chapter, or upcoming events, call Tom McAfee, Nelson Wolff Municipal Stadium, San Antonio, at 210-207-3754.

Virginia Sports Turf Managers Association: For information on the Virginia Chapter, or upcoming events, contact: Chapter Vice President, Randy Buchanan, County of Henrico Recreation and Parks, via e-mail: buc06@co.henrico.va.us or at tel. 804-261-8213.

Mid-South Chapter STMA: For information on the Mid-South Chapter, or upcoming events, contact Robert Bodi at e-mail: TURF419@aol.com or Jim Calhoun at tel. 901-755-1305.

Chapters On The Grow

Las Vegas: With the STMA Annual Conference & Exhibition headed for Las Vegas January 16-20, 2002, plans for the formation of a Las Vegas Chapter also are moving forward. For more information on the developing chapter, please contact Rod Smith, Grounds Manager/Cashman Center at e-mail: rms@lvca.com or at tel. 702-386-7140.

New York: The forming Central New York Chapter is participating in the Winning Fields Seminar to be held on September 19 at the National Soccer Hall of Fame in Oneonta, NY. The New York State Turfgrass Association is sponsor of this event. Registration and the Trade Show begin at 7:00 AM; educational sessions at 7:30 AM. Meeting events end at 3:30 PM, followed by an optional tour of The National Soccer Hall of Fame.

Sessions include: "Challenges at The National Soccer Hall of Fame," presented by Kevin Meredith; "The Value of Soil Testing and Understanding Fertilization Basics," by Joann Gruttadaurio of Cornell University; "A game of Inches (and Ounces) – Rotary Spreader Calibration," by Dominic Morales of SUNY Delhi; "Turfgrass Selection for Sports Fields," by Dr. Frank Rossi of Cornell University; "Become a Sports Field Sherlock Homes," by Dr. Rossi; "Irrigation and Water Management," by Ted Kamath of S. V. Moffett Co., Inc. and Dominic Morales; "Sports Field Details," by Brian Wimble of SUNY Albany and Kevin Meredith; and "Sports Turf Soil Management," by Dr. Rossi. For information on this program, contact: NYSTA at 800-873-8873 or e-mail: nysta@nysta.org. For more information on the forming chapter, contact Kevin Meredith, National Soccer Hall of Fame, at e-mail: Kevin@wpe.com or at tel. 607-432-2953.

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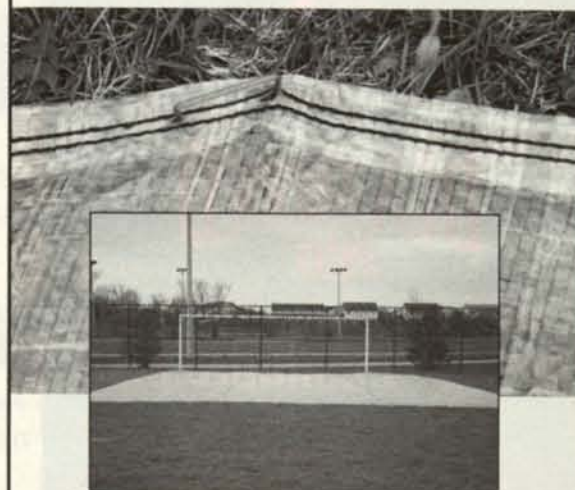
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Q&A

By DR. GRADY MILLER, ENVIRONMENTAL HORTICULTURE DEPT., UNIVERSITY OF FLORIDA

Using Athletic Fields

I have fiscal responsibility for our county athletic facilities. We recently completed a review of existing activities on our soccer fields and vehicle parking capacities. The data on field use is presented based on the actual hours of usage for each field as compared to the total number of available hours. Fields without lights are available 10 to 12 hours per day depending on daylight, whereas fields with lights are available approximately 13.5 hours per day year-round. The intent was to determine the potential for additional field lighting to allow for nighttime activities. What is an acceptable percentage of utilization of athletic fields to ensure turfgrass coverage and health?

How much play a field can take is certainly the million dollar question for people managing high demand, high use athletic fields. Your study on field use was the first one that I have seen that actually used percent utilization for field scheduling. Percentage utilization seems to be as effective as counting events in terms of utilization, but like other methods it ignores field conditions and recovery time.

For me it is probably easier to relay to a field manager when the field should be taken out of use than to a director who is trying to answer to all the user groups demanding a field. I believe, as I am sure you do, that every effort should be made to accommodate all groups that participate in field activities, but not at the expense of the fields. If the fields are overused, then the likelihood of a player becoming injured due to poor field conditions increases.

Number of events

Rather than percent utilization, I typically relate field use to number of events. I ask coaches and/or field managers how many games or matches have been played and the duration of these events and use a rule-of-thumb conversion. I equate soccer matches on a 2-hour per event basis. For instance, our school's intramural soccer matches last 1 hour, so two intramural soccer matches equal one event. The varsity soccer matches last 2 hours, so one varsity soccer

match equals one event. In my experience, lacrosse is extremely damaging in an area radiating out from the goal, but in other areas of the field it seems to be similar to soccer, so I use the same 2-hour conversion.

I treat football differently since it typically causes more injury than soccer and the games are variable in length. Because I relate events to damage, I usually figure 3 hours for high school football and 4 hours for college football, per event. Practices can also cause appreciable damage due to their repetitive nature in particular areas of a field, so they should also be put into the equation. Baseball and softball should be evaluated differently since so much of the game is played on a clay infield.

Keep in mind that the number of events a field can handle will ultimately depend upon weather conditions during the season (especially just before and during games), maintenance practices, recuperative periods, and the time of the year. To maximize field conditions, 1) make every effort to begin the sporting season with 100 percent turf coverage; 2) adjust maintenance practices to address the condition of the fields; 3) schedule recuperative times during the season, realizing that non-overseeded bermudagrass fields will not recuperate very quickly in the late fall or winter months; and 4) overseed if you expect excessive wear during cooler months that are not conducive for bermudagrass growth.

It has been my experience that these numbers are a good estimate for our non-overseeded bermudagrass fields in the fall, winter, and early spring months. Due to the rapid growth of bermudagrass in the late spring and summer in the southeast, I believe that a well-maintained bermudagrass field can tolerate about 50% more than the estimates above, if the "season" includes these months. If the bermudagrass field is overseeded, I also believe it can handle 50% more play.

Your summary table indicated that your soccer field C (with lights and overseeded) was rented for 870 hours between the months of October and April, slightly below your original target of 1,100 hours. This works out to be about 435 events for the season. If you could move some of the play to another field, field C

would certainly be in better shape by season's end. Unfortunately, your data indicates that most of your other fields are probably also exceeding their use capacity (based on my criteria). While adding lights to another field may reduce the need to use Field C, it will probably only encourage over-scheduling of another field. **ST**

Have Questions?

Send them to Grady Miller at the University of Florida, PO Box 110670, Gainesville, FL 32611, or email gmler@mail.ifas.ufl.edu. Or, send them to Dave Minner at Iowa State University, 106 Horticulture Hall, Ames, IA 50011, or email dminner@iastate.edu.



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