

HOT TOPICS

Are answers needed to sports field questions?

Little data exists to justify or support a cost/benefit rationale for reconstruction or renovation.

OLATHE, Kan.—According to Stephen McWilliams, president and CEO of Turf Diagnostics & Design here, numerous questions remain about defining athletic field costs, benefits and performance. In a letter to *LANDSCAPE MANAGEMENT*, McWilliams writes:

"Dr. (Henry) Indyk didn't reveal the most critical piece of information that begs the question in his article ('Renovation or reconstruction?') in the April issue of *LANDSCAPE MANAGEMENT*: How much stress is too much stress for a native field?"

"Native soil athletic field research data on the ability of sports fields to handle the day-to-day levels of stress is relatively non-existent. Until we determine this information, 'renovation or reconstruction?' is guesswork.

"Dr. Indyk cites drainage as the single most important factor in the failure of a sports field. I couldn't agree more.

"Unfortunately, the cost of installing effective types of drainage systems in a native soil athletic field is approximately \$50,000 to \$70,000. The cost of sodding an athletic field is approximately \$10,000 to \$20,000, depending on sod quality. The price could approach \$100,000 to renovate one sports field with no realistic idea of what the long-term performance characteristics will be, or the cost to operate the field.

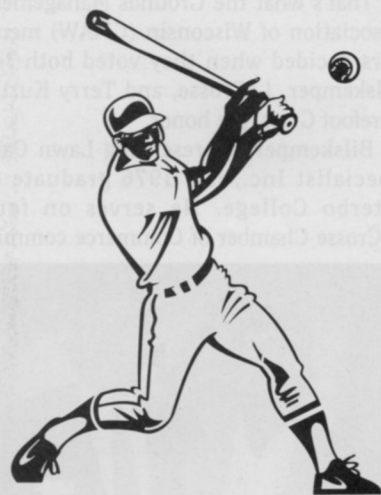
"The industry needs to know the performance expectations of a variety of

sports fields under different stress conditions. What are the internal drainage characteristics of a good native soil field with good performance? What is the percolation rate for different types of native soils, compacted and uncompacted?"

"The percolation rate for a compacted native soil field can be as low as 0.01 inches per hour. Is a \$50,000 to \$70,000 drainage system an effective solution to a soggy sports field, when it could take 12 days for the water to reach the system?"

"What is the relationship between field grade and soil matrix performance, with or without supplemental drainage systems? What are the moisture retention properties of native soils? How do we determine the impact of stress at various soil moisture levels? How much maintenance expenditure is needed to protect the facility's investment in the field?"

"We have very little data to justify or support a cost/benefit/performance rationale for reconstruction or renovation. We continue to put bandages on a problem which is rapidly heading toward resolution



in the courtroom.

"Of one thing I am certain: the legal community would be happy to hold our collective hands at about \$100-\$200 an hour for sports field injury litigation.

"With the various associations—Sports Turf Managers Association, National Youth Sports Foundation for the Prevention of Athletic Injuries, National Youth Sports Coaches Association, National Federation of High School Athletic Associations—there is no lack of talented people available to solve the problem and move toward meeting the common goal: making sports fields as safe as possible."

OSU working on turfgrass that withstands drought

COLUMBUS, Ohio—In dry years, it takes more than 4,500 gallons of water each week to keep an average home lawn green and growing.

That's only an inch of water over a 50-by-150-foot lawn. But it's still too much, water conservationists say, especially during drought years.

So researchers at Ohio State University are teaming up to develop drought-toler-

ant turfgrass using the most current biotechnology.

"Everybody's looking for a high-quality turfgrass that requires less maintenance," says OSU's Dr. Karl Danneberger. "Especially water—there are some areas of the nation that can only use non-potable water on their grass. This project is really opening doors to allow us to reduce inputs

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on turf."

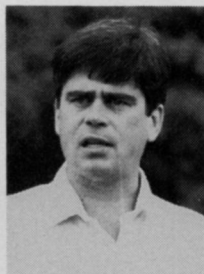
Danneberger is cooperating with OSU's Biotechnology Center, which has isolated a gene that helps plants jumpstart the production of proline, a common amino acid associated with drought tolerance in many plants.

"Proline helps to hold a lot of water," says Dr. Desh Pal Verma, a professor of molecular genetics. "It prevents damage in the cell, so the cell remains alive during drought."

Biotechnologist John Finer is ready to bombard creeping bentgrass tissue with the drought-tolerance gene, and will soon begin work with several varieties of bluegrass.

The Ohio Turfgrass Foundation, Sam Stimmel president, has granted OSU \$100,000 to fund the drought tolerance project, which was to begin April 1st.

**Danneberger:
Turfgrass that's
low-maintenance
is the
goal.**



"The technology that comes out of this," notes Stimmel, "could lead to other things (like) developing pest-resistant varieties, and helping the plant make better use of nitrogen so we need less fertilizer."

Already, researchers who make up OSU's newly-formed Turfgrass Biotechnology Consortium—12 researchers from five departments—are looking at other possibilities.

"This is leading-edge technology," Stimmel says. "There's not another group doing this in the country, on turfgrass."

'We need the tools,' House, EPA are told

WASHINGTON—"Pesticides involve risk. Life itself involves risk," said U.S. Rep. Robert F. Smith (R-Ore.). "It's not pesticides that present the risk but improper use of those pesticides."

Rep. Smith's observation capped a "Specialty Pesticide Federal Symposium" here April 29. Rep. Smith is the ranking Republican on the House Agriculture Subcommittee on Department Operations and Nutrition. More than 30 U.S. congressional aides, members of the U.S. Environmental Protection Agency and Department of Agriculture, attended.

Dr. Joseph Neal of Cornell University pointed out that:

- Gardening is America's No. 1 leisure activity.
- 20 million acres are in home lawns and landscapes.
- 56 million Americans maintain their own lawns.

● 500,000 people make their living from turf care.

● Ornamental crops, including sod, nursery and greenhouse products, represented 10 percent of farmgate wholesale value in 1987.

"Cultural practices, such as mowing, cultivars, fertilization and irrigation are essential parts of the equation," said Neal, "but we also need the tools, the pesticides to get rid of the pests."

Others speaking on behalf of the green industry and its need for specialty chemicals: Tom Tri, environmental project manager for St. Louis, Minn.; Dr. Maxwell McCormack, Jr., U. of Maine Cooperative Forestry Research Unit; Bob Andrews, president of The Greenskeeper Inc., Carmel, Ind.; and Dr. Kirk Hurto, director of technical services for TruGreen-ChemLawn.

EXPECTED CHANGE, 1992 to 1993

Region	Overall	New Res.	New Comm.	Res. Ren.	Comm. Ren.	Res. Maint.	Comm. Maint.
Northeast	+14.6%	+13.7%	+4.9%	+12.5%	+4.4%	+12.0%	+15.0%
Southeast	+9.4%	+8.8%	+6.8%	+2.9%	+3.3%	+5.0%	+4.8%
Great Lakes	+9.3%	+10.9%	+0.6%	+0.9%	-1.7%	+6.5%	+8.3%
Great Plains	+10.3%	+10.1%	+5.6%	+6.0%	+2.9%	+3.8%	+5.0%
Survey Avg.	+11.6%	+11.5%	+2.9%	+8.9%	+1.4%	+6.7%	+8.8%

ACTUAL CHANGE, 1991 to 1992

Region	Overall	New Res.	New Comm.	Res. Ren.	Comm. Ren.	Res. Maint.	Comm. Maint.
Northeast	+5.6%	-11.7%	-19.3%	+5.2%	-5.3%	+13.1%	+13.6%
Southeast	+4.4%	-10.2%	-2.4%	-5.0%	+1.7%	-3.3%	+5.0%
Great Lakes	+6.0%	+5.8%	-7.7%	+6.1%	-4.0%	-1.1%	-3.7%
Great Plains	+16.1%	+12.4%	+9.0%	+15.0%	+2.8%	+7.0%	+6.2%
Survey Avg.	+7.0%	0.0%	-5.6%	+6.6%	-1.8%	+2.2%	+3.2%

Source: National Landscape Association

New residential business expected to grow by 11.5%

WASHINGTON—New residential installation is the hot ticket in the landscape maintenance market, according to members of the National Landscape Association.

NLA members, in this spring's annual survey, predicted a sales increase of 11.5% this year. Residential renovations are pre-

dicted to be up 8.9% and commercial maintenance up 8.8%.

The toughest market this year, NLA members believe, will be commercial renovation, predicted to grow just 1.4%.

Overall, NLA members expect sales in their industry to grow 11.6% over 1992 figures. Last year, they predicted an

increase of 8% over 1991, but business actually grew just 7%.

The recently-depressed Northeast predicted the largest overall increases this year, 14%, followed by the Great Plains (10.3%), the Southeast (9.4%) and the Great Lakes (9.3%).

(Complete chart above.)

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AFMS seeking new members

SILVER SPRING, Md.—The American Floral Meadow Society is a new professional society formed for the development and improvement of wildflower-grass groundcover plantings for ornamental and low-maintenance uses.

Members of the organization conduct research into selection of wildflower and grass species, formulation of mixes, establishment methods and maintenance.

For a limited time, memberships are \$10 for individuals and \$25 for organizations. For more information contact: AFMS, c/o John Krouse, University of Maryland Dept. of Agronomy, Turf Research and Education Facility, 3120 Gracefield Rd., Silver Spring, MD 20904.

USGA considers 'Record' reprint

CHELSEA, Mich.—Would you like to see the past 15 volumes of the United States Golf Association's "Green Section Record" reprinted in a 7-volume hardcover format?

The USGA, in cooperation with Lewis Publishers here, is examining the interest in such a project. The set will contain all articles exactly as they appeared previously, including a cumulative index released by the USGA at the end of 1991.

The set, if there is enough demand, will be available for approximately \$350. It will have more than 2,000 pages.

If interested in purchasing this item, please contact Kathy Paparelli at the USGA: P.O. Box 708, Far Hills, NJ 07931; (908) 234-2300.

JUNE

11: Iowa Sports Turf Workshop, Loras College, Dubuque, Iowa. Contact: Gary Peterson, (515) 791-0765.

15: Nebraska Turfgrass Field Day and Equipment Show, John Seaton Anderson Turfgrass Research Facility, Lincoln, Neb. Contact: Dr. Roch Gaussoin, (402) 472-8619.

16: Lofts Seed Annual Field Day, Lofts Seed Research Farm, Martinsville, N.J. Contact: Cindy Kinnette, (908) 560-1590; outside N.J., (800) 526-3890.

16: Chesapeake Chapter/Sports Turf Managers Association "Softball Field Renovations," Meadows Park, Chevy Chase, Md. Contact: Tim Moore, (301) 650-2631, or Art Downing, (410) 313-7254.

17-18: Park & Recreation Design Symposium, Little Rock, Ark. Contact: National Institute on Park and Grounds Maintenance, (414) 733-2301.

22: "Diagnosing Landscape Disorders," Riverside, Calif. Contact: HEOF, UC Seminar

INFO CENTER

Useful literature and videos for LM readers

ENVIRO-FIBBERS...Global warming an invention? Ozone depletion untrue? Is the spotted owl in reality far from extinction? The answers to these and other questions about the environment are found in Dixy Lee Ray's new book, "Environmental Overkill; Whatever Happened to Common Sense?" Cost is \$19.95. Contact: Regnery Gateway, 1130 17th St. NW, Suite 600, Washington, D.C. 20036; (202) 457-0978.

CONCRETE PAVERS...The Concrete Paver Institute publishes a basic guide to interlocking concrete pavements. The three-ring guide is in four sections: Basic Skills; Managing a Job and Job Site; Advanced Job Situations; Advanced Product Knowledge. Contact: Concrete Paver Institute, 2302 Horse Pen Rd., Herndon, VA 22071-3406; (703) 713-1900.

MOUNTAIN PLANTS..."Flora of West Virginia" presents descriptions, illustrations, geographical data and other information on about 2,200 species found growing without cultivation in West Virginia and throughout the Appalachian and surrounding region. The book costs \$40. Contact: Seneca Books, Rt. 6, Box 81-B, Morgantown, WV, 26505; (304) 594-1324.

MEMBER DIRECTORY...A directory of the nation's leading grounds professionals is available from the Professional Grounds

Management Society. It is free to members, \$38 for non-members. Contact or send check or money order to the Professional Grounds Management Society, 120 Cockeysville Rd., Suite 104, Hunt Valley, MD 21031; (410) 584-9754.

CITY SLICKERS..."Urban Trees: A Guide for Selection, Maintenance, and Master Planning" by Leonard E. Phillips, Jr., presents detailed guidelines on everything from cataloging and maintaining existing trees to selecting the right trees for future planting. How to use new computerization methods to take a street tree inventory; how to choose trees to fit a specific climate and site; how to implement a high-power, cost-saving maintenance program; and how to work within the scope of the policies, laws and regulations that govern city streets and parks. Contact: McGraw-Hill, (800) 262-4729.

TOOLIN' AROUND...Retailers of Husqvarna equipment might like the company's new video series on product set-up to sales training. The nine videos cover a variety of subjects and benefits relative to Husqvarna equipment. They include information on safety, dealer support programs, customer service training, and business advice. Contact: Husqvarna Forest & Garden Co., 9006 J Perimeter Woods Dr. Charlotte, NC 28216; (704) 597-5000.

GREEN INDUSTRY EVENTS

Coordinator, (602) 684-7308.

22: "Estimating & Managing Principles," Phoenix, Ariz., with Charles vander Kooi. Contact: Arizona Landscape Contractors' Association, (602) 956-4252.

26: Park Seed Flower Day, Greenwood, S.C. Contact: Karen Jennings, (800) 845-3369.

30: National Midwest Regional Sports Turf Institute Trade Show, Wheaton (Ill.) College. Contact: Mike Trigg, (708) 360-4750.

JULY

13-14: "Bulbs for All Seasons" Short Course, Pittsburgh Civic Garden Center. Contact: Michael Masiuk, (412) 392-8540.

14-16: American Sod Producer's Association Summer Convention and Field

Days, Nashville, Tenn. Contact the ASPA at 1855-A Hicks Rd., Rolling Meadows, IL 60008; (708) 705-9898.

14: VPI-SU Nursery Field Day, Hampton Roads Agricultural Experiment Station, Virginia Beach, Va. Contact: Hampton Roads Station, (804) 363-3900.

14-15: MAPPA-PGMS Grounds Management Conference, Oxford, Ohio. Contact: George Persinger, Miami University, (513) 529-6786.

15: Southern Illinois Nurseryman's Association Field Day and Trade Show, Dintelmänn Nursery, Belleville, Ill. Contact: Dintelmänn Nursery, (618) 233-4638.

15-16: ASPA Summer Convention and Field Days, Opryland Hotel, Nashville, Tenn. Contact: American Sod Producers Association, (708) 705-9898.

18-20: Mid-Atlantic Nurserymen's Trade Show, Baltimore Convention Center. Send \$8 pre-registration to MANTS, P.O. Box 314, Perry Hall, MD 21128.