'Dome' grass looks good

HOT

TOPICS

Millions of soccer fans get their first look at efforts to provide a world class turfgrass field inside the Pontiac Silverdome.

PONTIAC, Mich.—As exciting as watching grass grow, you say? Don't use that phrase in conversation with John N. "Trey"

Rogers III, Paul Rieke, John Stier, or any of the other Michigan State University turfgrass researchers involved in putting turfgrass—the real stuff—*inside* the Pontiac Silverdome.

"My phone rings off the hook constantly," said Rogers as he hustled from one group of reporters to another, just prior to the first-ever international soccer game being played on real grass inside a domed stadium.

More than 450 journalists from around the world reported on the June 19th U.S. Cup game between England and Germany. More than 80 countries received its telecast. Two days later, the U.S. Women's National Soccer team played the women's team from Canada, again inside the Silverdome on green, living grass.

These games, important enough in their own right, really amount to a dress rehearsal for the four 1994 World Cup games set at the Silverdome June 18-28, 1994.

More than 1 billion people will view first-round World Cup games taking place here, and in Los Angeles, San Francisco, Boston, Dallas, New York, Orlando and Washington D.C. The Detroit games will be the only ones played in a domed stadium. World Cup games *must* be played on turfgrass.

Pacific Sod in California, because of the longer growing sea-

son, grew the Silverdome's turfgrass sod (85 percent Kentucky bluegrass, 15 percent perennial ryegrass). It was shipped to southeast Michigan this past spring and transplanted to hexagonal metal boxes filled with six inches of topsoil.

The Silverdome turfgrass field is probably the largest jigsaw puzzle in the world—certainly the largest that's both alive and green.

Workmen began putting it together June 8th. Under the supervision of the MSU turfgrass team, they stripped metal bands from the sod-holding hexagons and forklifted each into position.

More about the

Silverdome,

page 39



bands from the sod-holding hexagons Some handwork is required to fit the hexaand forklifted each into position. gons into a nearly seamless 'pitch.'



A fleet of forklifts positioned each of 2,000 separate pieces of sod into a rectangular carpet of turfgrass.

Almost 2,000 hexagons, each weighing about 3,000 lbs. and measuring 7½ ft. across, were fitted with a smaller number of trapezoidal and triangular boxes of sod to make the rectangular playing field.

A lack of light seems to be the biggest challenge to growing excellent turfgrass. Less than 10 percent of the sunlight on a sunny day penetrates the dome's Teflon-coated fiberglass roof.

"We're still in an experimental stage," admitted Rogers. "What we'll find out from these games is if we'll need to bring in any additional lights for the World Cup."

> After this June's soccer games, the turfgrass was removed from the field and placed in the parking lot. It will be returned to the dome next summer for the five World Cup games.

> Rogers said the MSU turfgrass team is confident the field will provide world class World Cup playing conditions, but lots more needs to be learned before turfgrass becomes practical in domes.

> "But by the year 2,000 we'll be so much more knowledgeable that this field will look like a dinosaur to us," said Rogers.

> > -Ron Hall

ELSEWHERE

It's the law: keep records, page 40 Mulching pays off, study says, page 40



MSU turfgrass 'team' at Silverdome field installation: (left to right) T. J. Lawson, John N. 'Trey' Rogers III, Paul E. Rieke, and John Stier.



JULY

8: University of Georgia Turfgrass Field Day, Experiment Station, Griffin, Ga. Contact: Dr. Gil Landry, (404) 228-7300.

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

15: Southern Illinois Nursery Association Summer Field Day, Dintelmann Nursery, Belleville, Ill. Contact: SINA, 4303 St. Rt. 160, Highland, IL 62249.

15-17: California Landscape Contractors Association Summer Tri-Board, Del Mar (Calif.) Hilton. Contact: Marc Gerig, (916) 448-2522.

16-18: Colf Coast Golf Show, Broward County (Fla.) Convention Center. Contact: U.S. Golf Shows, (407) 438-9788.

18-20: Mid-Atlantic Nurserymen's Summer Trade Show, Baltimore Convention Center. Contact: Carville Akehurst, (410) 256-6474.

20-21: National Golf Course Owners Association seminar, "Your Bottom Line," Orlando, Fla. Hyatt. Contact: NGCOA, (800) 933-4262.

21-23: "Field Diagnosis of Insects and Diseases on Trees and Shrubs," Cornell University, Ithaca, N.Y. Contact: N.Y. Arborists Assn., (518) 783-1322.

22: Connecticut Tree Protective Association Summer Meeting, Mountainside Resort, Wallingford, Conn. Contact: CTPA, (203) 257-8971.

24-29: American Society for Horticultural Science Annual Meeting, Opryland Hotel, Nashville, Tenn. Contact: Christine Radiske, (703) 836-4606.

25-27: Power Equipment Expo '93, Louisville, Ky. Contact: Expo '93, (800) 558-8767.

26-Aug. 10: J.E.G. Garden Tour of Scotland. Contact: Rebecca Ferrini, (916) 756-0430.

27-29: Landscape Contractors of MD, DC, VA Summer Conference, Holiday Inn Crowne Plaza, Rockville, Md. Contact: LCA, (301) 948-0810.

continued on page 40

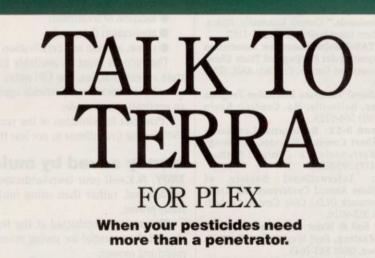
Cultural practices for 'inside'

Supplemental light. A lighting system inside the Silverdome that covers the entire field with artificial light that simulates actual sunlight.

Water. Over-the-top irrigation similar to that used on outdoor playing fields. Little irrigation will probably be needed.

✓ Fertilizer. Some nitrogen and potash to maintain soil fertility. Nitrogen is critical. There has to be enough to allow the turfgrass to recuperate quickly after a game but not so much to create a growth spurt before a game.

▶ Plant growth regulators. Grass cells tend to elongate under shady conditions. That's why the blades become spindly. Several PGRs already on the market can control that.



For a pesticide to do it's job, it has to get through surface foliage or turf to the real problem areas. Plex has been shown to be twice as effective as other adjuvants in improving pesticide penetration.* But that's only the start. With Plex, you get more. Plex spreads the pesticide evenly over plant surfaces and then forms a protective film to reduce losses from sudden showers and heavy dew. Plus, Plex keeps your pesticide performing, providing extra protection from

losses commonly caused by sunlight and evaporation. When you want more performance from your pesticides, talk to Terra Professional Products.



*Trial results available upon request.

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EVENTS from page 39

29-Aug. 1: International Water Lily Society Symposium, Rye Brook (N.Y.) Hilton. Contact: Hildreth Morton, (410) 798-0231.

30-Aug. 1: Southern Nurserymen's Association Horticultural Trade Show. Contact: SNA, (404) 973-9026.

31: Friends of the Rutgers Gardens Annual Open House, New Brunswick, N.J. Contact: Sherry Dudas, (908) 932-9271.

AUGUST

3-5: "Turfgrass Field Diagnostic Course for Golf Course Managers," Cornell University, Ithaca, N.Y. Contact: Joann Gruttadaurio, (607) 255-1792.

4: Baseball Facility Workshop, Sec Taylor Stadium, Iowa. Contact: Gary Peterson, (515) 791-0765.

4-6: "Compost Management Short Course for Professionals," Cornell University, Ithaca, N.Y. Contact: Lauri Wellin, (607) 255-1187.

4-8: TAN-Misslark/American Association of Nurserymen Joint Meeting and Trade Show, Dallas Convention Center. Contact: AAN, (202) 789-2900.

5: National Turfgrass Evaluation Program Field Day, Beltsville, Md. Contact: Kevin Morris, (301) 504-5125.

5-7 and 9-11: Residential Landscape Design Short Courses, Sheraton-Pittsburgh North, Warrendale, Pa. Contact: Michael Masiuk, (412) 392-8540.

8-11: International Society of Arboriculture Annual Conference and Trade Show, Bismarck (N.D.) Civic Center. Contact: ISA, (217) 355-9516.

8-11: Soil & Water Conservation Society Annual Meeting, Fort Worth, Tex. Contact: Karen Howe, (800) 843-7645.

11: New England Chapter, STMA Meeting, Forest Park, Springfield, Mass. Contact: Mary Owen, (508) 831-1225.

12: Wisconsin Nurserymen's Association Summer Field Day, McKay's Nursery, Waterloo, Wis. Contact: WNA, (414) 529-4705.

17: "Annuals: What Works for You?" seminar, Norfolk (Va.) Botanical Garden. Contact: NBG, (804) 441-5830.

18: University of Rhode Island Turfgrass Field Day, Kingston, R.I. Contact: Dr. Bridget Ruemmele, (401) 792-2481.

Applications for golf turf management school

NEW BRUNSWICK, N.J.—Applications are being accepted for the two-year Rutgers Professional Golf Turf Management School. It is conducted in two 10-week sessions over two years, and requires two seasons of supervised field experience.

The fall session will be held Oct. 4-Dec. 10 and the winter session Jan. 3-March 11, 1994. Applications for the fall session are due on Aug. 6; for the winter session, Oct. 29.

For an informational brochure, contact the Office of Continuing Education, Cook College, P.O. Box 231, New Brunswick, NJ 08903; (908) 932-9271.

HOT STUFF

It's the law: recordkeeping begins

WASHINGTON—Companies and individuals applying restricted-use pesticides must now keep complete records, according to a United Press International report.

Users must keep written track, for a minimum of two years, of:

- brand or name of the pesticide;
- EPA registration number;
- crop (grass, ornamentals, etc.);
- total amount of pesticide applied;
- number of acres treated;
- location of treatment;
- application date; and
- name, address and certification number of applicator.

The records must be available for inspection if requested by authorized federal or state representatives, the UPI notes. "Certified commercial applicators must provide a record of restricted-use pesticide application within 30 days to the person for whom such an application was made.

"Penalties for violation of the recordkeeping requirement range from no more than \$500 for the first offense to not less than \$1000 for subsequent violations."

Money saved by mulching, study shows

TROY, N.Y.—If your lawn/landscape maintenance crews are gathering grass clippings for disposal, rather than using mulching mowers, you are wasting money, a recent study proves.

The project, conducted at the Rodale Institute Research Center in Kutztown, Pa., showed the potential for saving money and improving soil fertility when mowing with a mulching mower.

"Each homeowner with a half-acre lawn in this area could generate about 4.65 tons of clippings (346 30-gallon trash bags) in need of disposal...from April through October," says Dr. Terry Schettini, associate director of horticultural research. Using an average town or community disposal fee of \$2 per bag, the typical homeowner with this size lawn would pay at least \$692 in disposal fees per year.

The study was conducted using non-mulching mowers versus Troy-Bilt mulching mowers.

Earning free tools and safety allowances

GREENSBORO, N.C.—Golf course superintendents can again earn diagnostic tools and site safety improvement allowances, or donate money for turf research, through the 1993 Ciba Turf & Ornamental Products' "Prescriptive Control Program."

By meeting a minimum purchase requirment, superintendents can help themselves or the industry stay ahead of damaging turf pests.

"Safety is a priority with us," says marketing manager José Milan.

To qualify for the 1993 program, supers must purchase a minimum of \$2,000 of Ciba products, for which they receive a complimentary copy of "Compendium of Turf Diseases." Other premiums, like disease detection kits and macroscopes, are earned through a point system.

For more information, contact your local Ciba marketing representative.

OLCA's turf equipment swap meet is Aug. 31

MARYSVILLE, Ohio—The Ohio Lawn Care Association (OLCA), in cooperation with O.M. Scotts is conducting a lawn/landscape equipment "swap meet" at the Scotts' facility here on Tuesday, Aug. 31—rain or shine.

Anybody in the green industry is welcome to bring their no-longer-needed equipment: sprayers, spreaders, small engines, hand tools, mowers, etc. All fertilizer and/or chemicals sold (no "restricted-use" chemicals) must be in full, unopened containers. Contact: Julie Guenther, OLCA, Box 14901, Columbus, Ohio 43214. Phone: (614) 261-1242.

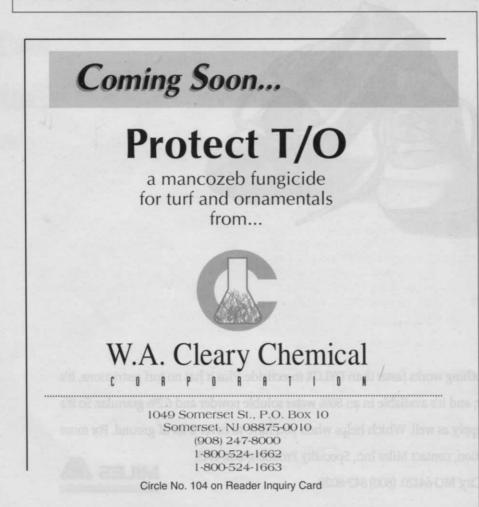


Useful literature and videos for LM readers

ALL ABOUT LAWNS...An order form for a series of eight consumer brochures makes excellent leave-behind material for lawn and landscape maintenance companies. The brochures are designed to promote the use of improved lawn seed varieties, to provide basic information on proper lawn maintenance, and to emphasize the environmental benefits of turfgrass. For a *free* copy of the order form, one of each brochure, and pricing information, write to: Consumer Brochures, The Lawn Institute, 1509 Johnson Ferry Rd., NE, Suite 190, Marietta, GA 30062-8122.

HABLA ESPAÑOL¿...Now available through Thomson Publications is a Spanish-English/English-Spanish distionary of agricultural terms. Agricultural, botanical and horticultural terms are used, along with equipment, tools, weeds, diseases, insects, etc. Illustrations along with the definitions are also used. To order, send a check payable to Thomson Publications or your Visa or MasterCard number for \$27.95 (California residents add 7½% sales tax) to: Thomson Publications, P.O. Box 9335, Fresno, CA 93791. Orders can be phoned to (209) 435-2163.

MEDICAL LEAVE... The American Association of Nurserymen, in cooperation with the Small Business Legislative Council, has developed a guide to complying with the new Family and Medical Leave Act. The publication takes the employer through the step-by-step process of dealing with a leave request, and contains the full text of the law. Cost is \$20 for AAN members, \$40 for non-members, plus \$2.50 shipping and handling. To order, write AAN, 1250 I St., Suite 500, Washington, DC 20005 or phone (202) 789-2000.



FOR SOIL ID... "Soil Color," edited by J.M. Bigham and E.J. Cilkosz, and published by the Soil Science Society of America, focuses on the importance of soil color when making analyses, properties and the genetic significance of important pigmenting agents in soils, and geomorphic and geologic factors influencing the formation and inheritance of soil color. Contact SSSA, Book Order Dept., 677 S. Segoe Rd., Madison, WI 53711.

ON FERTILITY... The Potash & Phosphate Institute has revised and reissued its "Soil Fertility Manual" and accompanying slide photographs. The slide sets are available for individual chapters or as a 10-chapter package. The 10-chapter slide package consists of 320 color, 35mm slides and includes printed scripts for each chapter. The full slide package, containing all 10 chapters and printed scripts, is available for \$230 plus postage. Individual chapter sets may be bought at a cost of \$30 each. Contact: PPI Circulation Dept., 655 Engineering Dr., Suite 110, Norcross, GA 30092; (404) 447-0335.

ECOSCAM...In Ronald Bailey's new book, "Ecoscam: The False Prophets of Environmental Doom," we see an unraveling of all the major environmental scares of the past two decades. From global cooling, to global warming, to acid rain, to ozone depletion, Bailey reveals some of the true motives behind scientific proclamations of a doomed planet, and the real condition of our environment. Contact: Laissez Faire Books, (800) 326-0996; ask for No. CU5712. Ecoscam costs \$19.95.

WHO'S WHO...The Associated Landscape Contractors of America's 1993 membership directory, Who's Who in Landscape Contracting, is now available. The directory provides an index listing of both interior and exterior contractors. Contact ALCA's Publications Department, 12200 Sunrise Valley Dr., Suite 150, Reston, VA 22091; (703) 620-6363.

EQUIPMENT GUIDE...Encore Manufacturing's complete line of commercial turf equipment is featured in a new, full-color *free* Pro-Line brochure. The brochure includes model descriptions, photographs and specs on the company's 32-, 48- and 60-inch mowers, as well as blowers, edgers, dethatchers and accessories. Contact: Encore, P.O. Box 888, Beatrice, NE 68310; (402) 228-4255.

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