PRESIDENT'S MESSAGE
By Gil Landry Jr.

Last month's cover story in Sports-Turf magazine on the work being done with natural grass in a dome stadium was excellent and definitely a milestone for our industry.

Playing World Cup Soccer on natural grass in the Pontiac, MI, Silverdome is a great example of capable people responding to opportunity. After visiting Dr. Trey Rogers, coordinator of the dome project, and viewing the field work at Michigan State University and at the Silverdome, I was struck with the feeling of unselfish cooperation.

This project appears to have succeeded because of teamwork. The university graduate and undergraduate students, the local golf course superintendents, participating MSU faculty and administrators, the modules manufacturer, the sod grower, the local turf industry suppliers, the fork lift operators, the local soccer association, Federacion Internacional de Futbol (FIFA) and countless others.

STMA also recently tasted success with the publishing of our first members directory in more than four years. STMA is also working hard to finalize our annual conference and exhibition at Oriole Park at Camden Yards this November.

The conference will begin with keynote presentations by Oriole great Jim Palmer and Oriole Field Director Paul Zwaska. Speakers include Dr. Trey Rogers, Michigan State University; Dr. Henry Indyk, formerly of Rutgers University; Dr. Don Waddington, Penn State University; Dr. Dave Chalmers, Virginia Tech; Dr. Tom Turner, University of Maryland; Eugene Mayer, O.M. Scotts; Tony Burnett, RFK Stadium; and Dr. David Minner, University of Missouri. I hope you see an “opportunity” in November to join us.

Most opportunities in our industry are close to home. Professional opportunities can take the form of local conferences, field days, distributor programs and visits with fellow professionals. Teaching opportunities include explaining the complexities of turf management to administrators, coaches, facility users and the general public. Be aware of these opportunities and recognize them when they come. Your success provides endless value to those directly associated with the turf industry.

STMA Chapter News

Florida Chapter #1, STMA: On Tuesday, August 17th, the South Florida Chapter will hold a meeting at the University of Miami on renovation of a baseball stadium from artificial grass to natural grass. Host for the August meeting is Kevin Hardy.

The Florida Turfgrass Association Conference and Show will run from September 26-29 in Tampa, FL.

A baseball seminar is being planned for October 15. The location, time and schedule of events will be announced soon.

For information on the South Florida Chapter or for details on these meetings or other chapter activities, contact John Mascaro (305) 938-7477 or Ed Birch (305) 938-0217.

Chesapeake Chapter, STMA: SPECIAL REMINDER — An athletic director's field day will be held on August 12 at the Howard County Grounds Maintenance Division Facilities, 8640 Route 108, Ellicott City, MD 21043, in conjunction with the chapter's quarterly meeting. The contact for the field day is Joe Dick (410) 313-2892.

Chapter members are always invited to attend chapter board meetings, which are held the first Wednesday of each month. The September 1 board meeting will be held at Oriole Park at Camden Yards in Baltimore. The October 6 board meeting will be held at Cedar Lane Park in Columbia, MD.

Remember to mark your calendars for the national STMA meeting on November 6-9 at Camden Yards. It's going to be GREAT!!! The Chesapeake Chapter is putting together an information packet for those who would like to spend a few extra days in the Baltimore area or nearby Washington, D.C. Contact the Hotline for details.

The Chesapeake Chapter welcomes volunteers to assist with making this the best STMA meeting ever. Contact Art Downing at (410) 313-7254.

For information on the field day, the chapter and other activities, contact the Chapter Hotline (301) 865-0667.

The New England Chapter, STMA: SPECIAL REMINDER — An athletic turf maintenance field day will be held August 11 from 9 a.m. to 3 p.m. at Forest Park in Springfield, MA. Along with field day events, the New England Chapter will hold their annual business meeting and election of officers.

To kick off the field day's morning session, Dr. Rich Cooper, a University of Massachusetts agronomist, will present “Construction of an Athletic Field: Begin With the Soil,” covering soils, root zone mixes and topdressings. During the afternoon, a hands-on baseball field renovation session will feature rebuilding of the pitcher's mound, reworking the base paths, field aeration and topdressing. Coordinating the hands-on session will be Jack Schmidgall, tree and grounds supervisor for Danvers, MA, and Twi-Light Field, the 1992 Municipal Diamond of the Year. Other scheduled sessions will include sprayer calibration, weed identification and management, field trial demonstrations of growth regulators and fertilization, equipment demonstrations, and a trade show. Pesticide applicator recertification credits will be issued.

For information on trade show exhibits, contact Joe Kovolyan (603) 437-0060.

A field day is in the planning stages for Plymouth State College, Plymouth, New Hampshire, targeting an early October date. Further details will be announced soon.

For information on the chapter or these activities, contact Mary Owen, University of Massachusetts Cooperative Extension system (508) 892-0382.

Iowa Sports Turf Managers Association: For information on the Iowa Chapter and its activities, contact Gary Peterson (515) 791-0765.

Midwest Chapter, STMA: For information on the chapter or upcoming chapter activities, call the Chapter Hotline (708) 459-4727.

Colorado Chapter, STMA: For information on the chapter or upcoming activities, contact Ron Marten, Falcon Colorado School District 49 (719) 495-3601.
Nested in the center of America's heartland, in Olathe, KS, stands a laboratory where scientists delve into the heart of the earth — the soil. Those facilities are the nerve center for Turf Diagnostics & Design Inc., a physical evaluation laboratory and agronomic consulting company serving the golf and sports turf industry.

According to its literature, the company applies the innovative use of technology in the design implementation and agronomic operation of high-performance turf systems. TD&D services include evaluation of design specifications, laboratory evaluation and selection of construction materials for new facilities or renovation, quality control for adherence to design specifications and proper implementation of high-performance turf systems, on-site agronomic assessments and diagnostic evaluations of high-performance turf systems.

If it all sounds a little complex — it is. It's founders, however, are a plain-spoken yet unlikely pair, at least on the surface. Charles "Chuck" Dixon, president of technical operations, handles the technological aspects of the company. He works with systems in the lab, consults on site, and conducts seminars on soils and soil-related issues. Stephen "Steve" McWilliams, president and CEO, handles management, sales and marketing for the firm.

"My job is to provide Chuck with the lab and the people to do the job, to support the data that we generate and to make sure the money is there to provide what he (Dixon) needs to accomplish the goals on the technical end," says McWilliams.

Mix of Talents

Dixon holds a bachelor of science degree in agronomy-soil science, and a master of science degree in agronomy-soil microbiology, from the University of Arkansas at Fayetteville. In addition, he has spent 40 hours of post-master's study at the Texas A & M University in agronomy-soil microbiology-forage production. He's also taken a 40-hour OSHA Safety Training Course for handling hazardous materials through the Chemical Engineering Extension Service Training School at Texas A & M.

Dixon "followed the economy" to the turf field, first working in the food and fiber industry, then in the environmental arena with hazardous materials. He's been "into turf" since 1985. With his diverse background, he brings an integrated approach to his work, looking at the complete component of any situation.

McWilliams entered the industry from the investment side. Prior to college, he spent six years in the Navy running nuclear power plants for the submarine service. After working his way through Connecticut College in New London, CT, as a tennis pro, he took his degree in economics to where the money was. As a broker for Shearson Lehman Brothers, he followed the market and tracked the trends. Approached to raise money for a client, he assessed the industry and found it to be a viable market for good technical information, and the place he wanted to be.

How did the company begin? "We jumped in a car together one day, discussing the industry during the ride, and by the time we stopped we'd started a business," says Dixon.

The ride was from Kansas City to the East Coast. Proceeds from the sale of the car provided seed money to begin putting the business together. Turf Diagnostics & Design was incorporated officially on May 7, 1991, and the lab was equipped by August of that year.

Both see the company as a means of helping sports turf and grounds managers become more effective. "In seminars and in individual consultations, I focus on helping the grounds manager understand the concepts, to understand how the whole system works," says Dixon. "Once the concepts are mastered, the sys-
tern can be applied anywhere. Then I can help grounds managers gauge their expectations accordingly. It’s pretty tough to expect a Formula 1 race car and end up with a Volkswagen Beetle."

The backgrounds and strengths of McWilliams and Dixon are clearly different. Yet together, their talents mesh well.

"Chuck is an incredibly intelligent person, a kind of Renaissance man, yet he doesn’t have a big ego," explains McWilliams. "He just wants to improve conditions and minimize problems. He focuses on the technology, keeping us on track and to stay within what we know how to do. He’s quick to recognize mitigating circumstances and pulls in consultants in other specialties for their scientific input to attack complex problems."

Says Dixon, "I’ve seen too many companies fail because they have only one part of the equation, the technical expertise, and no one concentrating on sales and marketing with a focus on the business angle. Steve has picked up the turf business where it is and done a great to try to wake it up. He’s always thought-provoking and, in discussions, he always brings an innovative angle. He keeps his eyes on the big picture.

Both principals are quick to credit the expertise and efficiency of their staff. Jeanne Fell serves as soil scientist and assistant to Dixon. She holds a bachelor of science degree in geology from Oklahoma University and master of science in agronomy-soil classification from Oklahoma State University. Her unbiased attitude to the pure physics of soil science and her performance with TD&D have earned her international respect. Jennifer Sutch serves as soil scientist and laboratory manager. She holds a bachelor of science degree in botany, with a minor in geology, from Olivet Nazarene College, and masters of science in agronomy-soil science from Purdue University. She has eight years of experience as a field agronomist with a strong soils laboratory background. Both Fell and Sutch have lived in Africa, and their experiences in the country were instrumental in TD&D’s assistance with the development of the African Veldt Exhibit for the Kansas City Zoo.

**On the Record**

Ask either McWilliams or Dixon a question and you’ll get an answer — often a spirited one.

"Yes, we’re up front about how we see things," says McWilliams. "Frankly, for the industry to succeed and grow we must be self-critical at times. We need to see how we got to where we are and to bring things out that need to be discussed.

"The golf course superintendent or groundskeeper can put his job on the line based on the technical data he receives," McWilliams adds. "The technical part of the industry needs to be utilized by the pros in the field. There are 474,000 sports fields in the U.S. with some sort of budget, and maybe 5 percent of them are high-performance sports fields."

Dixon says that while working on high-visibility sport fields, with the budgets and motivation to make changes, is rewarding personally and for TD&D, the company is also in business to help field managers with lower budgets manage their resources successfully.

"There’s high-speed development in the sports turf and golf areas," Dixon explains. "There are new products and a new boom of development of technol-continued on page 24
ogy in turf. It's not a static industry, and I like that. I'm drawn to innovation. I want to know what happened. Did it work or not work, and why?'

Education and technology, Dixon asserts, must be combined. Technology can help promote better management practices, which he hopes will be economically feasible.

"Biotechnology from other industries will help us manage Mother Nature," he says. "We try to promote the best possible practices and explain why we are recommending them. Then, if people have to step down a notch or two from that, they can better gauge their expectations according to their budget, and they can minimize any possible harm to the environment.

TD&D clients come looking for answers, says McWilliams, who estimates they spend 30 percent of their time educating people.

"That [education] may be in explaining the ramifications of certain test results, or it may pertain to the use of a specific product," he says. "Products must be used in the right situation at the right time to produce the results anticipated. Since our clients risk their careers with every decision they make, we want to make sure they have the best information possible on which to base those decisions."

"We view turf as expendable and renewable, but there is a limit to what it can take," adds Dixon. "A field that performs well can be efficient is an asset in the greenscape. But a 'basket-case' system with nutritional problems and disease infestations, where harsh chemicals are used to compensate for poor performance, is not an asset. Good turf biodegrades inputs. Irrigation water passes through the living filter and the turf and soil to arrive cleanly back into the hydrologic cycle. The acreage in properly constructed and managed golf courses, sports fields, and parks and recreation departments, where inputs are minimized and their fate is controlled, make turf a positive factor."

According to McWilliams and Dixon, TD&D looks at the total picture for it clients. They perform physical evaluations in-house and send the fertility nutrient sampling to another lab. Clients are supplied with a total system analysis, incorporating the impact of the total data.

"Because of the considerable impact of the Walkley-Black organic matter content test, a major innovation of TD&D, on the improvement of the quality of golf green construction, the test has been incorporated in the 1993 USGA Guidelines for Methods of Putting Green Construction and is the foundation for many of the major changes currently sweeping the golf course construction industry," says McWilliams.

Add Dixon, "The 1993 USGA greens guidelines redefine how materials are tested and how work is performed. We can take some of that technology to the sports fields."

Both principals assert that during field construction all steps of the process must be monitored. Material must be tested to ensure that standards are maintained. Each site is different — even the climate inside and outside a stadium can be different.

The golf industry has provided extensive research on sand-based fields. However, McWilliams sees an information void when it comes to native soil fields.

"There's been little done on native soil fields," he says. "For some areas, a native soil field is the best they can manage. Proper grading, lateral drainage and managed play will help. Core aeration and topdressing with sand will let air and water penetrate to get drainage. If the practice is repeated as often as possible, a better field will result. The groundskeeper will then have to manage a hybrid field. Testing for nutrition will be even more critical."

Dixon admits that where budgets are too limited for top-quality field construction, some compromises must be made. Those measures could include creating more fields on the "intermediate level" and rotating play to allow adequate recovery periods. TD&D attempts to help clients make those decisions — where to spend their dollars and how to manage their resources to achieve the best results — and those decisions should be based on understanding technology.

"No matter how limited the budget we can a least say, 'Here's where to put the money — do this with the soils, set up this type of irrigation, use those grass types and set up a maintenance program to sustain it,'" says Dixon. "It's amazing how many fields are constructed with no budget for continued maintenance. At least we can offer the low-end user some guidance at affordable levels."

Dixon believes that as the understanding of soil management grows within the professional ranks it will "trickle down" to junior college and high school levels. He is amazed at the amount of money spent on a sports complex, while little is spent on the field itself. Until the system accepts the importance of sports fields as resources for "the reservoir of athletes for the future," Dixon notes, the budget for athletic fields won't be there.

McWilliams agrees, "The total education process must reach the student athlete, coaches, athletic directors, parents, school boards, architects, athletic trainers, sports turf managers and the general public."

The partners also mesh ideas when it comes to trends within the turf industry. "As the country becomes more older demographically, we'll see more older players and probably more field-related injuries," says McWilliams. "With older players, the quality of sports fields becomes even more important. We'll
see the use of the Clegg Impact Hammer in compaction studies on sports fields. But I hate to see the industry grow just because the liability factor is waving a stick at us."

Says Dixon, "Interest in soccer is growing rapidly. Currently, older people in soccer are almost nonexistent, but the generation coming up will want to play. The majority of stadiums in use now are too small for a standard soccer field. The excitement following the 1994 World Cup play will generate the need for more fields."

Parents always want better fields for their children to play upon, McWilliams observes. He suggest a "check-off system" for people to designate $10 to sports fields for the community, where those funds would actually be spent on fields. He also suggests that professional sports teams assist sports turf managers by holding sports turf management day at stadiums to support field care within their communities.

With so much energy, enthusiasm and dedication — and sparks — flying from McWilliams and Dixon, it's no wonder that Turf Diagnostics & Design has made such in-roads in a few short years. Its client list is impressive (see "TD&D's Broad Base") and as the firm continues to grow, expect more progress and sparks.

Much of the future of sports turf

TD&D's Broad Client Base


Major League Baseball — Atlanta Braves, Texas Rangers, Boston Red Sox, Seattle Mariners, San Diego Padres, Baltimore Orioles, Colorado Rockies, Cleveland Indians.

Minor Leagues* — Shiloh Eagles, Norfolk Mets, Durham Bulls, City of Salt Lake, Pilot Field, Buffalo, Albany Polecats, Baltic Bay Sox, San Antonio Missions, Wilmington Blue Rocks, Thurman Thomas Field.

NCAA — University of Florida, University of Buffalo, University of Houston, University of Tennessee.

Olympics 1996 — Main Track & Field Stadium, Atlanta, GA.

Horse Racing — Santa Anita Park, Los Angeles Turf Club.

*Turf Diagnostics & Design is recommended by the National Football League and the National Association of Professional Baseball Leagues.

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HUNTER NAMES TWO REGIONAL SALES MANAGERS

Mike Kearby

Joe Silva

Hunter Industries has appointed two new U.S. regional division sales managers to direct the sales and marketing of all Hunter irrigation equipment, including residential, commercial and golf products.

Joe Silva, an irrigation industry veteran who has been with Hunter since 1984, is the new eastern regional sales manager, with Mike Kearby, formerly a Hunter regional golf sales manager in Dallas, taking over western regional sales manager duties.

LEBANON BUYS SEED COMPANIES, FORMS NEW DIVISIONS

Lebanon Chemical Corporation has acquired two seed companies: Seaboard Seed Company of Bristol, IL, and Stanford Seed Company, Denver, PA. Both companies are suppliers of retail and professional grass seed.

Lebanon is a leading formulator of homogeneous, blended and liquid fertilizers and related pesticide control products for professional, agricultural and homeowner use.

In related moves, Lebanon announced several new appointments, the formation of a new, unified retail/consumer division and a separate marketing division for Preen® products.

Lebanon’s Greenview division merged with retail components from the corporation’s professional division, forming Lebanon Lawn & Garden. Ed Price is general manager of the new division. Eugene Wright is filling the newly created position of Preen general manager. Also, Peter Thomson has been named general manager of Lebanon Agricorp.

THE NOT SO IDENTICAL TWINS

Aer-Way is pleased to announce the arrival of a new generation of aeration options.

Now you have two bolt-on, interchangeable options. The well known Shattertine and the NEW Bolt-on Finetine designed especially for fine turf areas where you can’t restrict play.

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Ask your Aer-Way dealer for a demonstration of the new bolt-on options today.

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TWO PACIFIC RIM GOLF SHOWS MERGE FOR 1994

The organizers of two Pacific Rim golf shows — the Pacific Rim Golf Course Conference and Show and GolfAsia — have announced a plan to produce the two events under one roof:

The “mega-show” is scheduled for March 24-27, 1994, at the International Merchandise Mart in Singapore. GCSAA and GolfAsia will market, sell, promote and produce the two-shows-under-one-roof concept, with each organization utilizing its own staff and resources, combining them when mutual gains exist.

The agreement alleviates confusion within the Pacific Rim Golf industry. The 1993 versions of each show were held in Singapore only one week apart, forcing some companies and participants to choose between the two. Still, the two shows will retain their identities, with the GCSAA conference focusing on education and training for the golf course management industry and GolfAsia on the public consumer side of golf.
Join Oriole Great Jim Palmer and the Sports Turf Managers Association (STMA) at the home of the 1993 Major League Baseball All-Star Game for its fifth annual conference and exhibition. This year’s conference offers fantastic educational and exhibitor opportunities in a unique location — Camden Yards.

Highlights of the conference and exhibition include:

- Tours of Oriole Park and RFK Stadium, hosted by their respective groundskeeper’s Paul Zawaska and Tony Burnett.
- Exhibits on the Club and Concourse levels of Camden Yards, featuring more than 100 booths with the latest in sports turf technology.
- Panel discussions on the past, present and future of sports turf, both natural and synthetic.
- New technology in the sports turf industry: transportable turfing systems, with presentations by Dr. Henry Indyk, Arthur Milberger and Dr. John “Trey” Rodgers.
- An Evening on the Inner-Harbor Buffet Boat Cruise, organized by STMA’s Chesapeake Chapter.
- Workshops on soil basics, administration of athletic field projects and maintenance, automated irrigation systems and sports turf clinics on weed, disease and insect identification and control, and calibration of sprayers and spreaders.
- Managing turfgrasses using less pesticides, with perspectives on weed, insect and disease control, along with environmental considerations.
- STMA’s Awards Banquet, raffle, silent auction and more!
- Sessions on turfgrass selection, seeding and sodding in cool and warm seasons.

Don’t miss this exciting industry event. Look for our attendee registration on the reverse side of this page. For exhibitor or further registration and conference information, contact Susan Seibert, STMA Headquarters, 312/644-6610.

STMA’s Fifth Annual Conference & Exhibition — Come grow with us!
REGISTRATION FORM

5th ANNUAL CONFERENCE & EXHIBITION
November 6-9, 1993
Oriole Park at Camden Yards
Baltimore, Maryland

Please TYPE or PRINT information as you want it to appear on your badge.

FIRST NAME ___________________________ LAST NAME ___________________________

ORGANIZATION ___________________________

ADDRESS ____________________________________________________________

CITY ______________________ STATE ________ ZIP ________________

PHONE ( ) ___________________ FAX ( ) ________________________

I PLAN TO PARTICIPATE IN: (please check all items that apply)

[ ] The tour of Oriole Park at Camden Yards. Please indicate what time and day:
[ ] 10:30a.m. Sat., Nov. 6  [ ] 2:30p.m. Sat., Nov. 6  [ ] 12:30p.m. Tues., Nov. 9th

[ ] The Awards Banquet at 7:00 p.m. on Monday, November 8th.

REGISTRATION FEES:

[ ] Full Conference * Prior to 10/8 After 10/8
   Member $125 $150
   Non-member $150 $175
   Student $50 $75

[ ] Three day Educational Sessions Only
   Member $100 $125
   Non-member $125 $150
   Student $35 $60

[ ] One Day of Educational Sessions (Circle day):
   Sunday Monday Tuesday
   Member $35 $50 $50
   Non-member $50 $65 $65
   Student $15 $30 $30

[ ] Extra Awards Banquet Tickets $35 $35

[ ] Seminar on Wheels (Bus Tour) (Nov. 6th, 8:00a.m. - 5:00p.m.) $25 $25

[ ] Evening on the Inner Harbor - Buffet Boat Cruise (Nov. 7th, 6:30 - 10:00 p.m.) $45 $45

Enclosed is my check for $ _______

* Full conference registration includes educational sessions, welcome reception, awards banquet, Oriole Park tour, and trade show. Harbor Boat Cruise and Bus Tour is additional.

FOR HOTEL RESERVATIONS: Please contact the Marriott Inner Harbor Hotel at 800/228-9290. Please mention the STMA Conference to obtain our discounted rate of $93/single and $103/double.

Return this form and full payment to: STMA, P.O. Box 809119, Chicago, IL 60680-9119
If you have any questions, please call STMA headquarters at 312/644-6610.

1. No phone or fax registrations accepted.
2. All registrations must be postmarked by October 8, 1993 in order to avoid the late charge.
3. Cancellations must be made in writing. A cancellation fee of $50 will be assessed by STMA for any cancellations postmarked after October 8, 1993.

PLEASE USE PHOTOCOPIES OF THIS FORM FOR ADDITIONAL REGISTRATIONS