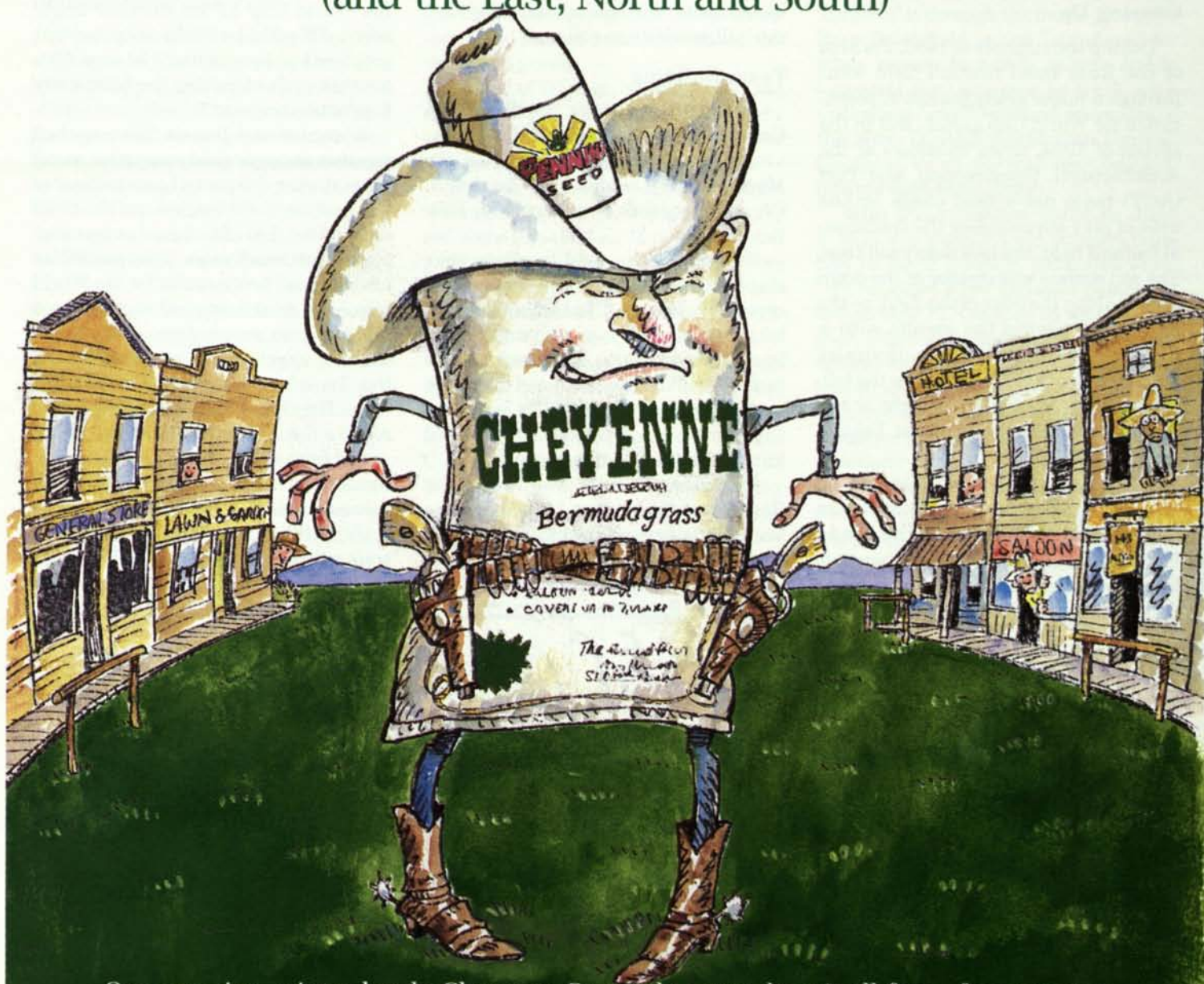


Fastest Green In The West

(and the East, North and South)



Our amazing, winter-hardy Cheyenne Bermuda grass does it all fast—fast germination, fast establishment. It even greens up faster (and stays green longer) than other bermudas. Write or call us today for more information on Cheyenne—it'll change the way you think about seeded bermudas.



CALL 1-800-285-SEED
P.O. Box 290 Madison, GA 30650

Available in the Spring of 1995, Yuma Bermuda Grass —the most advanced seeded bermuda grass on the market.

WORLD CUP '94

continued from page 8

another chapter in the ongoing book of what makes sports turf management so challenging and worthwhile.

Gearing Up

During the summer of 1993, the area of the Rose Bowl football field went through a major grade change in preparation for World Cup games. But in the spring of 1994, when members of the Architectural, Construction, and Turf (ACT) team did a field check on the area of play surrounding the traditional football field, the ball didn't roll true. The soil surface was steeper at the drain swales along the edge of the field, so the ball rolled toward the stands with a pronounced roll to the side. Gonzales describes it as "kind of a break in the roll. The ball would spin to the right or left when it reached the turf just beyond the football field."

At that time, the field had a one-percent grade from the crown to the outer edge of the playing area. The grade became steeper, three to four percent, beyond the field itself.

The solution was to change the grade to one percent from the crown of the field to within 12 feet of the perimeter of the stadium. That gave a 15-foot turf buffer, with the soccer field playing surface ending 27 feet from the walls of the stadium. With the consistent grade, the ball would then roll true.

Team-Building

To tackle this change, the World Cup Committee signed on Neal Beeson, owner of Sports Turf & Facility Management Company in Anaheim, CA, and a long-time consultant to the Rose Bowl.

"We've put the field in every year since 1983, so we know the site and the crew," says Beeson. "This project was definitely a joint effort. It wasn't accomplished by our company alone. The direct involvement of the Rose Bowl staff and crew were a big advantage, especially with the time frame we were facing. Richard knows that field inside and out."

Gonzales has been working at the Rose Bowl for almost 13 years. He's been there through traditional football seasons and bowl games, the May motocross events, concerts and shows, and

the soccer competition and finals of the 1984 Summer Olympics. His position, Public Worker Maintenance 4, is equivalent to foreman. He has a crew of four.

Gonzales is accustomed to the demands of the high-profile facility and views the World Cup as yet another major event. "We kind of take it (pre-event preparation) for granted," he says. "It's another cycle of getting the field ready to produce revenue."

Gonzales and Beeson have worked together on major field renovation many times during the past 11 years. They've worked on a motocross track, then replaced the field after the event was completed, and much more. That particular job was good preparation for the World Cup work, since it required regrading and resodding in seven days. They know what to expect from one another — they know how to work with each other's crew. They know how important it is to remain flexible and work as one team.

"I'd hope that more on-site field personnel have direct involvement with reconstruction and renovation work of their fields," says Beeson. "The contractor has an obligation to those who inherit the results of his or her work. After

World Class

athleticsurfaces
MANUFACTURERS OF

ATHLETIC FIELD MARKING PAINT

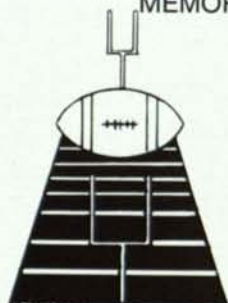
ENVIRONMENTALLY SAFE, 100% ACRYLIC, QUICK DRYING, NON HARMFUL TO GRASS, LAST LONGER, GOES FURTHER, SAVES MONEY

NEW PRODUCTS

ARTIFICIAL TURF PAINT, GREEN GRASS DYE
AEROSOL FIELD MARKING PAINT
(ENVIRONMENTALLY SAFE)

BEST KEPT SECRET IN THE TURF INDUSTRY—ASK OUR REFERENCES

UNIVERSITY OF ALABAMA • COTTON BOWL • UNIVERSITY OF MIAMI • AUBURN UNIVERSITY
POMONA COLLEGE • CORNELL • NEW ORLEANS SAINTS • OLE MS • LIBERTY BOWL
MEMORIAL STADIUM • DALLAS COWBOYS • MISSISSIPPI STATE • MANY OTHERS



ATHLETIC FIELD
MARKING PAINT

1-800-748-9649

World Class
athleticsurfaces

200 Washington Ave. • Greenville, MS 38701
(601) 378-3151 • Fax (801) 378-3420 • Toll Free (800) 748-9649

"We make the game look better." Sports coatings are our only business.

all, the on-site crew members are the ones who 'live with' the changes that are made. It's their work that turns a 'project' into a long-term asset: a thriving, highly playable field."

Implementing The Plan

To prepare for World Cup play, the existing sod was cut, scraped up, and hauled away. Approximately 1,400 tons of new graded sand was brought in and the entire field was regraded to establish the one-percent crown over what would be the entire turf area. At points, the surface level was raised 6 inches from the field center back to the sidelines.

"The field has exceptional drainage," says Beeson. "We worked through 3/4-inch of rain, with no puddling. Drainage is one of the biggest concerns of the Rose Bowl administrative staff, the Tournament of Roses Committee, and the City of Pasadena. The existing subsurface drainage system contains hard pipes that lead to subsurface lines at the edge of the field. They don't want a lesser system when the World Cup moves out. Part of the agreement with World Cup is that the committee will pick up the costs of putting the field back in shape, if

necessary, after the events are completed. Our company also is basically 'on-call' for the month following project completion to handle whatever concerns the committee wants addressed."

Gonzales and crew tackled changes to the irrigation system. Sprinkler heads had to be raised to accommodate the change in grade.

Laying of Tifgreen bermudagrass sod started May 1. As Beeson says, "Every project has unusual twists, and this one was no exception."

Because the net poles used for football were still in place, 8,000 square feet of sod were removed on May 2 to allow a pathway for the heavy crane that was needed to take out the poles. That section was reworked and the sod was re-laid. Sodding was completed May 4.

"We mowed for the first time on May 10," says Gonzales. "The initial cut was to a height of 1/2 inch. Game cut height will be determined by the World Cup Committee. They might stay at 1/2 inch or go to 5/8 or 7/8 inch. They want as much consistency as possible throughout all nine venues."

ACT team member Steve Cockerham of the University of California, Riverside,

and Steve Wightman, San Diego Jack Murphy Stadium field manager who serves as the World Cup "detail guy" at the Rose Bowl, made on-site visits to offer suggestions and guidance. They will consult at the Rose Bowl while World Cup "controls" it through the finals. Since the Rose Bowl field is the "standard" for other venues to match, it was and is essential for Gonzales to work with Cockerham and Wightman every step of the way. During World Cup control, Gonzales, as on-site manager, communicates with them daily.

With the exhibition game on June 4, post-renovation field preparations had to move quickly. Gonzales says, "We replaced a few stressed patches of sod on May 11. On May 16 we core aerated, followed by verticutting, then top-dressed with silver 30 sand. After the sand was on and worked in, we followed with a complete fertilization, according to recommendations by the O.M. Scott Company, the World Cup consultant for fertilization. We plan to fertilize every five days through the finals. In addition, two days prior to play we'll make an application of liquid iron for

continued on page 14



Marking Machine

The Jaydee Model 5000 is a fully featured, self-propelled, professional line marking machine. The engine powers a piston pump, providing mechanical agitation, and powers both rear wheels - it tracks a straight line under its own power. The constant 2-mph speed results in uniform line width & brightness as well as predictable marking material consumption.

Jaydee Equipment Company
202 East Joliet Highway, Box 278
New Lenox, IL 60451-0278
(815) 485-6146

Q HYDROSEEDING? A Hydro-Plant

- Stolon application/
straw and soil stabiliz-
ers for erosion control/
native revegetation
- Commercial, industrial
and residential
- Certified applicators of
Soil Guard™



Hydro-Plant, Inc.

Contractors License #397933 CA, #0033228 NV
356 South Pacific Street, San Marcos, California 92069
619/744-7360 • Fax 619/744-6559

WORLD CUP '94

continued from page 13

optimum green-up. The irrigation schedule has to be dependent on the rate the new sod takes hold and weather conditions. We'd like to see more 80-degree days to get the bermudagrass well-established, but that's not something we can control.

"We want the field to be in top shape for the World Cup competition, but we're looking at the long-term, too," he adds. "We're hoping to be able keep the grade as it is now after World Cup play. That way, the field can be used for both soccer and football. In any event, we'll be sticking with the basics when it comes to turf care.

"Basic, post-construction preparation for World Cup has been much like that of the motocross racing held here in early May," Gonzales continues. "In the years we haven't had motocross and its post-race renovation, we've removed the overseeded perennial ryegrass and stimulated the bermudagrass with cultural practices. The only sod we've had to replace is in the areas heavily painted for New Year's Day.

"Once the field is established, we expect it to hold up well. As we observed during the Olympics, soccer puts less wear and tear on the field than the regular football season," Gonzales notes. "Football travels with 45 players on a team, so there are 90 players plus the coaches and full support staff on the sidelines. Football players as a rule are pretty big guys. Time after time during the game, they dig into a trench to hold the line and try to knock the opposing players onto the field and out of the action. Soccer players are usually lighter in weight. They're moving all the time, with play spread out over a broader section of the field. Generally, the referee, confined to a specific segment of the field, does more turf damage than the players."

World Watching

During the actual games, and especially at the finals, media coverage from all over the world will be intense. Soccer is the premier sport outside the U.S., drawing highly involved and devoted fans. They'll want all the information they can get on their teams and their performance. Every detail of every field

and facility will be observed and become fodder for commentary. Fortunately for Gonzales, he and his crew have gained plenty of media savvy over the years.

"We've had the Olympic experience, along with the regular in-season football games that are televised, the Rose Bowl's traditional New Year's Day kickoff, two Super Bowls and many other events," he says. "We do our best to accommodate the needs of media personnel."

Though sports turf management is mainly a behind-the-scenes profession, there is a "perk" connected with working on a high-profile field. As Gonzales and his crew have discovered, the media can do a great job of "showing off" their hard work. □

Editor's Note: Bob Tracinski is the manager of public relations for the John Deere Company in Raleigh, NC, and the public relations chair for the Sports Turf Managers Association.

Top Liner Hydro



Finally ... An All-New Riding Line Marker With Hydraulic Drive

- Dependability ... no more belts, chains or gears, less downtime.
- Superior paint-mixing agitation.
- Power ... with a 9 hp Kawasaki gasoline engine, electric start.
- Operator comfort ... visibility.

SMITHCO, INC.

Wayne, PA 19087

(215) 688-4009 • (215) 688-6069 FAX



Striping Isn't A Chore

With Walkover's Site-line, an engineered gear pump disperses calibrated solution while a unique floating spray guide produces accurate lines regardless of terrain. Built-in strainer, cleaning tap, toolless adjustments and four large pneumatic tires

all make every job easier.

Marker's safe, permanent ground sockets simply save time, energy and money. Indicates corners, line intersections and circle centers eliminating yearly set-up, plus holds tring pegs for error-free marking. Spring loaded game markers optional.

For details or sports turf supply catalog call or write:

S.P.O.R.T.S.sm

Specialty Products of Related Turf Sports
19109 W. Winchester Rd.
Mundelein, IL 60060
(708) 367-7828

GEARING UP FOR WORLD CUP

Steve Cockerham, superintendent of agricultural operations, University of California, Riverside, and advisor to the Sports Turf Managers Association board, has found his added responsibilities as an agronomist member of World Cup Soccer's Architectural, Construction and TURF (ACT) team a stimulating experience. "I was involved in the Olympics (Los Angeles, 1984) and got my 'baptism' under fire, so this was a little easier coming after that," he explains. "Professional turf managers have to love pressure to handle what they do all time in such a high-visibility setting. I view this tournament as a world-class opportunity to demonstrate their professionalism."

One of the many positive developments to come out of the pre-tournament preparation is the University of California, Riverside, Field Performance Indicator. This device is used to measure ball hop on roll and deflection. The ACT team is using the tool as part of the effort "to get uniformity on playability." The base standards established in the Rose Bowl and a set of cultural standards give the other eight stadiums the criteria to which they must match their own playability for World Cup games.

Here's the World Cup Soccer schedule by site and date:

Foxboro Stadium, Foxboro, MA

June 21 — Argentina-Greece
June 23 — South Korea-Bolivia
June 25 — Argentina-Nigeria
June 30 — Greece-Nigeria
Later round matches: July 5, 9

Solider Field, Chicago, IL

June 17 — Germany-Bolivia
June 21 — Germany-Spain
June 26 — Bulgaria-Greece
June 27 — Bolivia-Spain
Later round match: July 2

Cotton Bowl, Dallas, TX

June 17 — Spain-South Korea
June 21 — Nigeria-Bulgaria
June 27 — Germany-South Korea
June 30 — Argentina-Bulgaria
Later round matches: July 3, 9

Pontiac Silverdome, Pontiac, MI

June 18 — U.S.-Switzerland
June 22 — Romania-Switzerland
June 24 — Sweden-Russia
June 28 — Brazil-Sweden

Rose Bowl, Pasadena, CA

June 18 — Colombia-Romania
June 19 — Cameroon-Sweden
June 22 — U.S.-Columbia
June 26 — U.S.-Romania
Later round matches: July 3, 13, 16
Finals: July 17

Giants Stadium, East Rutherford, NJ

June 18 — Italy-Ireland
June 23 — Italy-Norway
June 25 — Saudi Arabia-Morocco
June 28 — Ireland-Norway
Later round matches: July 5, 10, 13

Citrus Bowl, Orlando, FL

June 19 — Belgium-Morocco
June 24 — Mexico-Ireland
June 25 — Belgium-Netherlands
June 29 — Morocco-Netherlands
Later round match: July 4

Stanford Stadium, Palo Alto, CA

June 20 — Brazil-Russia
June 24 — Brazil-Cameroon
June 26 — Switzerland-Columbia
June 28 — Russia-Cameroon
Later round matches: July 4, 10

Robert F. Kennedy Stadium, Washington, DC

June 19 — Norway-Mexico
June 20 — Netherlands-Saudi Arabia
June 28 — Italy-Mexico
June 29 — Belgium-Saudi Arabia
Later round match: July 2

McCord delivers the tires you need for flotation and traction.



McCord Tire offers you an extensive lineup of tires. Choose from a wide selection of Goodyear tire types, sizes and light-footed traction for just about any driving surface. Everything from a 73-inch diameter Goodyear Terra-Tire[®] to much smaller tires for ATVs, lawn and garden equipment; even ten-inch Goodyear tires for golf cars.

Whatever the equipment, whatever the surface, whatever the job, McCord has the tire and wheel—and the prompt delivery just for you. Give us a call today.

McCord

Replacement & Original Equipment Flotation Tires • Rims • Wheels • Service

INDIANA
219-583-4136 800-348-2396
Indiana Only Indiana

KANSAS
800-332-0122 800-255-0276
Kansas Only Out of State

MINNESOTA
800-622-6735

Turf, Smooth as Velvet, Quick and Lush. That's a Hydroseeded Golf Course

Smooth, vibrant greens and fairways can be hydroseeded in less time and expense than sod installation.

Golf courses in Hawaii, California and Mexico provide this exceptionally fine turf experience for their players.

We use only the finest materials.



- Hydroseeding & hydromulching.
- Stolon Application.
- Straw mulching.
- Hydrofertilizing.
- Erosion & dust control.

Southern California Hydroseed & Hydromulch, Inc.



42396 Rio Nedo St. • Temecula, CA 92590

(909) 676-8270

Hydroseed de Mexico, S.A. de C.V.

Oceano Atlantico 128-2
Col. Palmar de Aramara
Puerto Vallarta, Jalisco

(322) 4-72-32

PRESIDENT'S MESSAGE

By Greg Petry



Soon Bob Milano, University of California at Davis, will gather nominations for the 1994 STMA Awards Program.

Now is the time to start organizing your thoughts about the field you're going to nominate.

Each year STMA recognizes its members who make personal and professional contributions to our industry and the organizations they serve. The awards (and they are beautiful) are traditionally presented at the annual conference banquet. As you probably know by now, the Annual Convention and Show is February 4-8 in Bradenton, FL.

For those of you who attended the banquet last year, I'm sure you'll never forget the tremendous talk Jim Palmer gave. How about that emotional acceptance of the Harry Gill award by Mike Schiller? What an evening that was!

Speaking of memorable events surrounding STMA awards, I'll never forget how my organization reacted when we received the 1989 Beam Clay Award. When I announced that the Waukegan Park District was named the *best* managed baseball field in the country, the staff and park commissioners were elated. It was so gratifying to see that everyone was sharing in our success. Winning that award has helped me justify my department's efforts over the past several years. It was also a tremendous thrill for several of our park commissioners and members of the community.

Our award-winning field was constructed with a lot of "sweat equity." Several members of the community joined forces to beg, borrow, and arm-



twist many people to help turn a sandlot into a city-wide baseball complex. Many people contributed time, labor, and materials to make this project happen. It did. Al Grosche Field still stands as one of the finest in the Chicagoland area. Winning the award has helped confirm that our organization has a commitment and mission to provide excellent programs, facilities, and services. It solidified the thought that we were meeting the needs and desires of the community. Subsequently, other athletic field improvements throughout the park district have been spearheaded because of the success associated with our STMA/Beam Clay award-winning field.

I'm sure many of you have a great story to tell about your facility — a story that involves people and organizations committed to providing a first-rate facility for your community. Let's hear about the great job you're doing. Nominate your field as the nation's best.

This year, six awards will be bestowed at the STMA Awards Banquet:

- STMA/Beam Clay Baseball Diamond of the Year
- STMA Football Field of the Year
- STMA Soccer Field of the Year
- STMA Groundskeeper of the Year, Harry C. Gill Memorial Award
- STMA Commercial Affiliate Award
- STMA Recognition of Excellence in Research.

Watch for nominating material in the newsletter and conference packet. Although you are extremely busy now in the height of the season, take some time to document your success. Carry a camera with you to photograph the great job you are doing, and plan on submitting an award application.

STMA CHAPTER NEWS

The Minnesota Sports Turf Managers Association — The Minnesota Sports Turf Managers Association will hold a Baseball/Softball Infield Workshop on June 16 at Westonka High School. Registration opens at 8:30

a.m. with the program running from 9 to 2:30 p.m. Lunch will be provided. This will be a hands-on event. The old pitcher's mound will be removed, the new mound will be built, basepaths will be

edged, and the skinned area worked. Registration is free to MSTMA members and \$5 to non-members.

This event is jointly sponsored by the Minnesota Turf and Grounds Federation, an umbrella organization formed to develop more unity within allied Minnesota associations and businesses involved with turf and grounds. The foundation hopes to provide greater educational opportunities and improve interaction between turf and grounds care professionals. For more information on foundation-sponsored events, contact Brad Pedersen, (612) 624-7407

For more information on MSTMA contact Tom Rudburg, University of St. Thomas, St. Paul, (612) 962-6545; Mike McDonald, Bierman Athletic Complex, University of Minnesota, Minneapolis, (612) 625-6097; or Brian Deyak, St. Cloud Sports Center, St. Cloud, (612) 255-7223.

The New England Chapter: STMA — On Wednesday, August 10, the New England Sports Turf Managers Association, the University of Massachusetts Cooperative Extension System, and the College of Holy Cross, Worcester, MA, will host the third

annual New England Sports Turf Managers Association Athletic Turf Management Field Day. The day-long event, held at Holy Cross, will include: a tour of the Holy Cross facilities, sessions on developing and maintaining a successful municipal athletic field management program, and a presentation on the maintenance practices for the Holy Cross national award-winning fields. Demonstrations will feature field marking and painting, and irrigation and sprinkler head comparison. Exhibitors should contact Jack Schimdgall, Town of Danvers, (508) 892-0382 ext. 3014 or (508) 465-1653.

For more information contact Mary Owen, University of Massachusetts Cooperative Extension, (508) 892-0382.

The Southern California Chapter: STMA — The Southern California Chapter will hold an STMA Night at Dodger Stadium on Friday, August 12. Evening events will include a tour of the facility with the opportunity to look behind the scenes. During the panel discussion, your peers will share their problem-solving methods from the trenches of real life. Participants will view batting practice, enjoy a buffet dinner,

and end the evening watching the Dodgers play the Cubs. Cost of the event is \$30 per person. Make check payable to SO-CAL STMA. Attendance is limited to 50 people. Send registrations to: Guise & Associates, c/o Steve Guise, Suite 215, 515 W. Commonwealth, Fullerton, CA 92632. Registration must be postmarked on or before August 3. For more information contact Steve Guise, (714) 578-0215.

In conjunction with national STMA, the Southern California Chapter will hold a Regional Institute at UCLA on Wednesday, October 12. The institute will focus on building a winning team with coaches, administration, and turf professionals. Keynote speaker, UCLA head coach Terry Donahue, will present "A Winning Game Plan." More details on this event will be announced soon. For further information, contact Dave Ashman, athletic facilities director, UCLA, (310) 206-6662.

For more information on the Southern California Chapter, contact Chris Bunnell, (619) 432-2421.

Iowa Sports Turf Managers Association — The Iowa Sports Turf

continued on page 28



Line Marking Machine

Jiffy Line Strippers, manufacturers specializing in field marking equipment since 1961, offer a new, self-propelled, professional line marking machine. The Model 8000 features a self-contained hydrostatic transmission for smooth starts and stops and travels at any speed the operator sets. Other models, including the industry-standard Jiffy Model 5000, are available. All products guaranteed and backed by a same-day shipping policy.

Jiffy Line Strippers

(mfg. by Laurie Carlson & Assoc.)

P.O. Box 35, Waunakee, WI 53597

Phone (800) 844-5002, Fax (608) 849-7456

WHEN THE GAME IS ON THE LINE...



TRUST A KELLY-CRESWELL STRIPER.

The compact Heavy Duty C with Traction is the ideal field marking and general purpose striper. Superior balance and maneuverability and positive forward traction make athletic fields, running tracks and parking lots a snap! Add the optional detachable handgun and stenciling is easy. Call Kelly-Creswell or your authorized distributor for more information on our complete line of striping and marking equipment.



KELLY-CRESWELL Company, Inc.
Box 309 • Xenia, Ohio 45385
Phone: (513) 372-9221
Fax: (513) 372-8109

INDOOR NATURAL TURF

All Systems Go at the Silverdome



Thirty years ago, someone at one of America's large

carpet mills had an ingenious idea — indoor-outdoor carpeting. Three years ago, Dr. John (Trey) Rogers, turfgrass specialist at Michigan State University, had a somewhat similar vision — outdoor-indoor turfgrass.

But even Rogers must have wondered how his natural turf would survive four World Cup Soccer matches scheduled this month, indoors, at the Pontiac Silverdome.

In 1991, Rogers was a member of the Michigan bid committee that convinced the Federation Internationale de Football Association (FIFA) to hold first-round World Cup Soccer games indoors at the Silverdome near Detroit.

World Cup Soccer has never been held indoors because FIFA requires World Cup games be played on natural turf. Rogers, had studied other attempts and constructed a plan to maintain turfgrass indoors, and FIFA went along with the idea.

The first real test for the turf was an exhibition match between England and Germany June 19, 1993. The turf, originally grown in California and then trucked to Michigan, had been nurtured in 2,000 hexagon-shaped trays and then

Most of this past year, the Silverdome field was maintained outdoors next to the stadium.

arranged on the Silverdome floor to form a world-class soccer field.

"When we first saw the German national team walk out there with these 3/4-inch-long steel spikes, we had some misgivings," says John Stier, research assistant at Michigan State University. "But we quickly learned that the turf was so thick and so dense that it held up to their cleats and their jumping and sliding on the turf."

"We also had an unofficial pickup game between World Cup officials and Michigan State University staff and students. Then, we had three other sanctioned games between U.S. and England men's clubs, and one game between the U.S. and Canadian women's national teams. So, in all, we had five games and six practice sessions last year."

The field received rave reviews from the players, even though the turf, a mixture of Kentucky bluegrass and ryegrass, was less than a year old. According to Stier, David Platt, co-captain of England's national team, says the field was perfect and that there were no problems with it.

The turf's density and high level of durability was the result of an intensive management program during the two-month grow-in period last April

and May. "And we didn't hold a lot of other events on the turf before the games," Stier says. "We didn't have any Rolling Stones concert, or truck pulls, or carnivals."

Once the turf was indoors, it stayed there for almost a month. "It held up great," says Stier. "Everything just fit together so well that we probably could have gone about 45 days (indoors)."

It took 30 people four-and-a-half days to put the 7.5-foot diameter hexagon metal trays in place last year. Stier says they've learned a few things from the trial run and should whittle the placement time down to three 10-hour days this year.

Other than a faster placement time, not many changes are planned for the indoor maintenance program.

"Everything we did last year we'll do over again this year," says Stier. "We didn't really have to water inside last year because the grass used very little water — the evapotranspiration rate was very low. We probably won't have to water this year, not unless a lot of conditions are much different than they were last year, and I don't expect that."

continued on page 27

Recycling Update

RECYCLING AND COMPOSTING: TURNING RESTRICTIONS INTO OPPORTUNITIES

By Helen M. Stone

Recycling and composting are viable options for every phase of the green industry. They can represent an opportunity for growth if you let new restrictions work for you instead of against you.

There's a good chance you are working in an area that already requires at least some reduction in greenwaste generated by your operations. If there are no limitations, you've probably noticed that your tipping fees are increasing. Even if you live in one of the few areas that still has no restrictions, it's safe to say that there are regulations coming down the road. The time to begin or accelerate your recycling efforts is *now*.

Businessmen are often drawn to the landscape profession because of the opportunity for independence and entrepreneurship. Perhaps this is the reason why many took the first step toward recycling and composting long before it became a governmental mandate.

Small Firm, Big Ideas

A small company often has an advantage because its size allows the flexibility to react to changes swiftly. "Although we provide a whole range of landscape maintenance services to many different types of clients, our niche is small residential," says Carrie Blazek, vice president of Bayberry Landscape in Silver Spring, MD. Blazek and her partner employ anywhere from one to five workers, depending on the season.



Chippers (left) are available in a wide range of sizes and styles. Photo courtesy: Bandit Industries



Mulching mowers (above) eliminate the need for bagging and disposing of grass clippings. Photo courtesy: BLT Landscape

"We've reduced our greenwaste in many ways," Blazek explains. "We grasscycle, we build compost bins in our clients' backyards and we work with city recycling programs."

Bayberry Landscape's fleet of equipment includes both 26- and 36-inch mulching mowers. "We try to use them on as many accounts as possible," she says. "They do a good job. The only time we have a problem is in situations where it rains for several days in a row and we have long, wet grass. Then they tend to bog down."

Blazek says that Montgomery County has embraced green waste reduction with enthusiasm. "It has a center, where you can take clean yard waste, that costs less than half than the dump's fees," she notes. Homeowners are encouraged to put lawn clippings in separate containers when trash is picked up. "We provide some of our clients with trash cans for their lawn clippings," Blazek says. "We stencil our company's name on them."

Award-Winning Compost

Garden Gate Landscaping, also in Silver Spring, MD, has won two awards for its recycling efforts.

The design/build firm has its own nursery and a staff that numbers between 30 and 40. "We started recycling our soil back in 1989," says John Cimabue, a planting supervisor who oversees the recycling effort for the company. "We put sod and any soil we bring back from a job in a separate pile, and once a year we run it through a huge soil shredder and end up with topsoil that we reuse on our jobs. Grass clippings, leaves, spent annuals and tender prunings that are less than 1/2 inch in diameter are composted."

The materials are simply piled up, moistened and turned with a front-end loader. Urea is added to speed up the decomposition process. "It takes about a year," Cimabue notes. "We have several piles going, and it's an ongoing process. In the end, we have a great soil amendment. We never have to buy topsoil anymore."

Cimabue estimates that the company has cut its disposal fees by one-third. "We used to spend about \$30,000 on dump fees, we've cut that figure to about \$10,000," he notes. As an addi-

continued on next page

continued from previous page

tional savings, about 300 to 400 cubic yards of topsoil are generated a year. The composting operation takes about three hours per week, while the topsoil recycling program takes about 120 hours per year.

Filling A Niche

In Decatur, IL, Romer Brothers Tree Service began its recycling operations about three years ago. "Our first incentive was rising landfill costs," says Mike Romer. After researching ways to decrease costs, Romer discovered that there were no local companies that offered recycling services. They decided to take the plunge and purchase a tub grinder and front-end loader.

"We run all of our tree waste through the tub grinder, and it produces a nice, fine chip," says Romer. "It makes a great mulch." The material is sold to homeowners. The company delivers truckloads of mulch county-wide, and never has trouble making a sale. Romer estimates that they have sold between 12,000 and 15,000 cubic yards of mulch.

In addition to processing its own tree waste, the company also processes material for the local university, nurseries, schools, park districts and townships. Their portable tub grinder can be easily moved to any site. Townships often will accumulate green waste, call the company out to process it, and then allow residents to pick up truckloads for their gardens free of charge.

Romer estimates that if the company had to use the county dump, its tipping fees would now run about \$20,000. Although the initial investment was sizable, he says the move was a good one. "We get more and more requests for the service all the time," he notes. "In fact, we're planning to purchase another, larger tub grinder."

Recycling City Trees

"If we had to take our greenwaste to a landfill today, we'd probably be spending about \$300,000 a year," says Mike Ganues, forestry supervisor with the city of Toledo, OH. The city has more than 100,000 street trees and half a million trees in city parks. Ganues says the forestry staff of more than 30 people trims about 6,000 trees and removes about 2,000 each year.

"We double-grind our wood. We have both a whole-tree chipper and what's called a waste recycler. It can chip logs up to 7 feet in diameter," Ganues notes. The chips are then processed once more through a standard tub grinder to produce a fine finished product. The chips are sold to landscape companies, nurseries and homeowners.

"We sell both retail and wholesale," Ganues says. "If you purchase five yards or more, we'll deliver it for \$10."

Toledo also has a firewood program. "We market the wood for about \$90 a cord for mixed hardwood and \$120 for oak," Ganues says. "Homeowners also can buy a permit for \$10 a year and come into the yard and cut their own wood." Proceeds from both the mulching and firewood operations are turned over to the Toledo Urban Forestry Council.

"The money is used for helping reforest the city," Ganues says. "It's used for street trees and nursery trees, as well as education programs. It's also used to fund special planting projects, such as highway beautification. The extra funds are like icing on the cake."

Closing the Loop

The city of Laguna Beach, CA, has reached an enviable goal. With the help of Integrated Urban Forestry, a consulting firm, the city has reduced its green waste to zero.

"We've developed what we call the Green waste Reduction Implementation Plan, or GRIP™," says Tom Larson, president of the firm. The program was developed to follow several steps to implement a "closed loop," where the need to dispose of any green waste in a landfill is completely eliminated.

First of all, greenwaste is reduced up to 30 percent through source reduction. "This is accomplished through landscape management and design techniques," Larson explains.

A sophisticated composting program produces soil amendments, potting soil and mulch. "We process the materials through a tub grinder, and then compost it," Larson says. "We never use the chips until they're composted and we have

a horticultural-grade finished product."

The city has its own nursery, where it uses the composted material to grow plants and "soil-less" sod for municipal landscape projects. Larger wood is either split for firewood or milled into quality lumber. Many urban trees are considered "exotic" species, and woodworkers gladly pay the price for the unusual hardwoods.

Like the city of Toledo, cost savings in dump fees are estimated at about \$300,000. Additional city savings include the "free" compost and topsoil, as well as water conservation and healthier plants due to the top-quality amendments and mulches.

If you're ready to start recycling, the first step is to check for any local ordinances. Some communities require permits for even the smallest composting operation. Investigate whether or not your community has taken any steps to initiate a composting and/or recycling program, and get involved. Even if there are no existing programs, start your own. You will be ahead of the game when the inevitable regulations are initiated.

"If you come up with a new idea, see how you can phase it in," Ganues suggests. "If you never try, you'll never know how it will work."

TOOLING UP FOR RECYCLING: AN EQUIPMENT PRIMER

By Daniel Ingham

The tools available to turn yard trimmings into profits range in size and price from walk-behind mulching mowers costing a few hundred dollars to massive diesel powered tub-grinders costing \$250,000 or more.

Mulching Mowers

The benefits of grasscycling, to the environment and the pocket books of both contractor and client are numerous. To do it right, though, requires more than just taping a piece of cardboard over the discharge opening of your mower.

For starters, you may just want to get a mulching kit for your current mower. Most manufacturers make kits specially designed for their line of mowers, which consist of gates to block off discharge chutes and mulching blades designed to operate with a standard deck configuration.

True mulching mowers, though, are designed to cut and recut the grass many times. Different deck and blade designs are necessary to mulch efficiently and provide quality results. There are also some mowing and maintenance techniques to be followed as well. It takes more than just a good machine, it takes practice.

More horsepower is required to create the additional lift needed to mulch clippings. Crews may experience some initial problems with grasscycling because they are failing to run the engine fast enough for complete mulching. Or, they may be trying to cover the area too quickly, not allowing time for com-

plete mulching. Operators must slow down. However, because there are no clippings to collect, overall time and effort is reduced.

continued on next page



Tub grinders are used to produce a finely-shredded chip suitable for mulching or composting. Photo courtesy: Romer Brothers Tree Service



Kits are available from manufacturers to make conversion to mulching mowers a simple procedure. Photo courtesy: Excel