As another baseball season winds to its climactic conclusion in the World Series, those less fortunate teams are left to ponder their shortcomings over the long off-season. Just what elements do go into the making of a championship team—skill, determination, and a little bit of luck, but most of all, the true champions find an edge that makes them just slightly better than the competition. This is often the element that propels them to the top of their game.

Sports turf managers are always looking for that edge too, and at the First International Sports Turf Conference and Show, January 13-15, 1989, they will find all the tips and answers that will fine-tune a healthy program and help rebuild an ailing one.

STMA has appropriately chosen Dodgertown for its 1989 annual meeting, conference, and trade show. Dodgertown, the spring-training home of the Los Angeles Dodgers, is located in Vero Beach, FL.

The Dodgertown complex is a veritable turf manager's dream. The site includes 220 acres of sports turf—the four baseball diamonds used for spring training and 6,000-seat Holman Stadium, plus a 27-hole championship golf course.

The conference program will include presentations by experts on all the different segments of the sports turf industry, demonstrations of new and unique approaches to turf maintenance, and an opportunity to discuss problems or successes with other turf managers from around the country.

Members will have direct input into association operations for the coming year, and will elect the officers for 1989. The Annual Awards Banquet will feature the presentations of the STMA scholarship awards and the Baseball Diamond of the Year Award.

The conference will also include the STMA annual business meeting, a trade show and field demonstrations, educational seminars, and a special tour with "the Pro's" at Holman Stadium.

If you are not a member of STMA or would like more information about the conference, please contact the STMA office, 400 N. Mountain Ave., Suite 301, Upland, CA 91768, (714) 981-9199. A conference registration form is on the next page for your convenience. Don't delay, early bird rates expire the end of this month. See you in Dodgertown!

Have a question? Call the STMA office, (714) 981-9199 8 am-5 pm, M-F
Complete and return this form to the address listed above. Do not mail after December 15, 1988.
Make check payable to: Sports Turf Manager's Association

SPECIAL NOTE: To receive the Early Bird discounted fees, registration forms and payment must be received by October 31, 1988

**PLEASE PRINT OR TYPE**

**MAILING ADDRESS** (Please provide mailing address and telephone number)

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**PLEASE CHECK ONE:**
- ☐ Sports Turf Manager
- ☐ Educator
- ☐ Other

1. **TYPE OR REGISTRATION**

**A. FULL CONFERENCE**

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*If registering on site, cannot guarantee lunch

**B. ONE-DAY PASS**

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Subtotal Option C

*Does not include big Dodger Blue Barbeque Saturday, January 14th

2. **TYPE OF LODGING**

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<td>Double Room (two nights plus meals)</td>
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Total

**CANCELLATION POLICY:**

Cancellations in writing will be honored for a full refund, less a 10% administrative charge, prior to December 15th, 1988, after which no refunds can be made.

**OFFICE USE ONLY**

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Institutional Series

MVP In All Fields Of Athletic Competition

Most Versatile Performers

That's why Hunter Institutional Series sprinklers score big in all fields of athletic competition. They have the latest safety and vandal-resistant features, plus the muscle for dependable performance.

At the top of the line-up are safety-cushioned rubber covers, slip clutch protected drive systems, break resistant arc stops, locking caps and small exposed surface areas. Plus the extraordinary versatility of Hunter's interchangeable nozzles.

Now a golf course or field manager can water his turf exactly the way he wants. By using a higher application rate to match older sprinklers in his system. Or by using a modern low precipitation rate with lower operating pressure for water and energy savings.

In either case, you'll find a remarkably even distribution of water and a higher quality turf in all soil conditions.

Look for Institutional Series sprinklers at work on the grid-iron, on baseball or soccer fields, golf courses, bowling greens, grass or clay tennis courts, even horse tracks.

And remember, the whole team is backed by a full five-year, no-questions-asked exchange warranty.
Hard-core football fans over the age of 35 still remember the 1964 National Football League Championship game between the Cleveland Browns and the Baltimore Colts in Cleveland Stadium. How could they forget that frigid December day when Browns quarterback Frank Ryan used running back Jim Brown and ends Paul Warfield and Gary Collins to beat the Colts led by Johnny Unitas? It was a contest between giants with nature adding to the difficulty of an already physical sport.

More than 80,000 fans watched the Browns prevail on the frozen field, whipped by winds off Lake Erie. Film of the contest shows how players tested their strength and balance to keep their footing on the dormant Cohansey bentgrass. There wasn't much that groundskeeper Emil Bossard could do to keep the turf growing in the heavily shaded outdoor stadium past October. It was challenge enough to keep the field in shape for both football and baseball. When the temperature fell below freezing and the snow started falling, only experience told Bossard what he had to do to fool Mother Nature.

Mud was an accepted part of the game back then. Teams scouted for players who ran well in the mud. Obviously the Browns had found better “mudders” than the Colts—and proved it by winning the Crown, 27 to 0. But Art Modell, owner of the Browns, wanted to change that. He was determined that someday professional football would have the same standards for turf as baseball despite the extra challenge of playing during the fall.

Bossard and other experienced northern groundskeepers did their best to keep rain and snow off the fields in the season with tarps. The best they could hope for late in the fall was to keep ice and snow from hiding the lines and making the field slippery. A clean, frozen field was better than a wet, thawed field.

During the ’60s, those who shared Modell’s hope for better winter playing conditions devised a number of alternatives for the NFL. The three most notable were artificial turf, sand-based natural fields and indoor, domed stadiums. The price tag for all of these was substantial compared to conventional fields constructed with native soil. Stadium managers pondered long and hard before making such large investments without some guarantee that the new fields would pay for themselves over time.

When Modell’s Stadium Corp. took over management of Cleveland Stadium in 1974, this tough decision became his to make. The Bossards had an excellent reputation across the country as “turf doctors.” They gave Modell time to evaluate his field options.

Today, David Frey is the individual whose job it is to fulfill Modell’s expectations when it comes to the turf at Cleveland Stadium and the Browns’ two training centers. Frey was hired by the Browns in 1982 as a consultant during construction of the team’s summer training center at Lakeland Community College in Kirtland, OH. Larry Slaverman, vice president of Stadium Corp., asked Frey to help out at the stadium as well. “It developed quickly into a full-time position,” says Frey.

He grew up around golf courses and athletic fields as the grandson of Sidney Dryfoos, a distributor of professional turf products in Northern Ohio since the ’20s. While his formal education is in business administration and biology, his experience is all turf. “My dad used to take me with him on troubleshooting calls when the main thing turf managers wanted from a distributor was service,” recalls Frey. “They needed advice when it came to the use of chemicals, and expected you to be right. If you were wrong, you lost a customer.”

After college, Frey joined the family business. This was in the first years of the new pesticide act. Applying chemicals carried with it a new degree of caution. Older pesticides were being replaced with newer, more problem-specific pesticides. “It was tough trying to explain to turf managers why they needed to do things differently when they had a successful system going for years,” Frey says. “It wasn’t just a matter of curing symptoms anymore. You had to rethink everything ... the plant, the chemical, the soil and the cost. There were more options available for most turf problems if you thought the situation through.”

Frey utilized this analytical approach as a consultant for Cleveland Stadium. “The continued on page 16
Covers Unlimited introduces

TURF-MAT

THE MOST EFFECTIVE YET LEAST EXPENSIVE TURF PROTECTION AVAILABLE.

TURF-MAT IS SAFE, STURDY AND SIMPLE TO USE.

- TURF-MAT is 100% needle-punched polyester, which allows turf to breathe, and lets water, air and sunlight through so turf stays green and healthy.

- TURF-MAT protects both natural and artificial turf from foot traffic, food and liquid spills, grandstands, equipment and other heavy loads.

- TURF-MAT is easy to put down and repack and takes far less time than any other kind of protective surface. Just unroll and tape seams; no special anchoring is necessary.

- TURF-MAT is used by professional and college stadiums throughout the U.S. and Canada, including:

  L.A. Coliseum
  Orange Bowl
  Cleveland Browns Stadium
  Bowling Green University
  Veterans Memorial Stadium,
  Erie, PA
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Photos courtesy of the Rose Bowl, Pasadena, CA

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COVERS UNLIMITED
thing about stadiums is you aren't just a turf manager, you have to make it a point to learn what the owners, coaches and players want—and then build your turf program around it," he remarks. "This is a business, not an arboretum. You have to work things out when you have a rock concert, baseball game and football game all in the same week. It may not be easy and it may not be the best thing for the field, but you have to find a way to pull it off."

From the beginning, Frey experimented constantly to keep the turf responsive later into the season. He started pregerminating perennial ryegrass, topdressing with a mixture of sand and soil, aerating heavily, and protecting the field with new geotextile covers. He even constructed an air-supported greenhouse over the center of the field to trap heat and keep the Kentucky bluegrass and perennial ryegrass growing.

After Frey has spent a year as a consultant, Staverman asked him to join Stadium Corp. as director of field maintenance. The event schedule was one thing, but Frey had his eye on an even tougher challenge: a rock concert, baseball game and football game all in the same week. It may not be easy and it may not be the best thing for the field, but you have to find a way to pull it off.”

Part of the problem is scheduling, explains Frey. In the old days, after a game the turf manager repaired divots, cleaned up the field, marked it, and covered it until the next game. A field could stay covered for nearly a week since it took more than 20 people to remove the tarps before a game. The turf manager had to cover the field when he had the people to do it. He didn't want to leave it uncovered in case it snowed or rained.

Not only does a covered field collect moisture at the surface, it prevents the use of pregerminated or interseeded perennial ryegrass. It blocks sunlight turf requires for photosynthesis. The turf may not be growing above the surface, but it does produce carbohydrates and store them in the roots in late fall. These carbohydrates are important for winter survival and spring recovery. Frey thought the turf should be exposed to sunlight whenever possible.

He is looking at geotextile materials that act like a blanket over the soil without trapping moisture. Of course, they don't keep rain and snow off the soil either, but they would be useful during cool, clear weather in the fall and winter.

“You can't stop maintaining the playing surface when the grass stops growing," explains Frey. "You have to keep the surface in condition, and that goes for artificial turf too. You can't just paint, cover and walk away until the next game. You can't afford a surprise when you lift the tarps before a game."

Frey knew he had his hands full. The median winter temperature in Cleveland is lower than in any other non-domed NFL city, with the exception of Chicago. He set about developing a program to keep the field dry and healthy in December and for playoff games.

His first target was the soil. The field has a clay base with a sandy-loam top mix. The turf is a mixture of Kentucky bluegrass and perennial ryegrass. The Cleveland crew topdresses the field with a dry, sized sand before each game, to tighten the turf and create a little cushion for the crowns of the plants, explains Frey.

"Like freeze-dried coffee, the sand will not stick together when it is dry. The result is a loose, sandy surface that will not freeze in sub-zero temperatures. It accepts spikes and is playable, since the sandy loam is just below. The only negative side effect is the

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- All Controls Operated From Tractor Seat
- Hydraulically Rolls & Unrolls Large, Field-Size Tarps
- Attaches To Existing Stadium Equipment
- One-Man Operation — Fast, Saves Labor

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Chardon, OH 44024
(216) 635-0064

---

Six men can remove tarps with the help of a tarp machine developed by Frey.
possible desiccation of the plants."
The crew protects the field from rain and snow. "Our winter weather and air moisture will not allow for extensive drying," states Frey.

"Anyone who has uncovered a field in below-freezing temperatures can relate to the frost that is found on the underside of the tarp. We simply uncover parts of the field on clear, cold days by folding the tarp in halves or thirds. This lets the frost vaporize into the air. After each section of the tarp is dry, we put it back down and wait for the frost to reaccumulate. This procedure is repeated, pulling additional moisture off the surface."

Frey calls this process freeze-drying. "Once the sand top surface is dry, it will not freeze. When we uncover the field before a game, the turf is dry and frost-free."

All snow is removed from the tarps with special rubber-bottom blades mounted on four-wheel-drive Ford tractors. Four tarps made by Covers Unlimited of Cleveland cover the entire field. They are joined together with Velcro seams that prevent moisture from leaking through. "A tarp with holes or leaking seams is worse than no tarp at all," says Frey. The special snow blades do not hurt the tarps.

To cut the manpower required to handle the tarps from 22 to six, Frey built a tarp machine. This tractor-mounted unit rolls the tarps onto hollow metal cores so that they can be moved and stored below the stadium. "We can cover or uncover the field with six guys in about 45 minutes," he boasts. "So we can cover or uncover the field any time we want to without adding extra crew. That allows us the flexibility we need to keep the field dry."

The National Football League has taken steps to improve field quality during the winter. In 1981, the NFL required stadiums that also host Major League Baseball teams to sod the infield dirt at the end of baseball season. This has increased the use of thick-cut sod to cover the infield dirt and tracks used for portable stands.

In 1983, the NFL mandated that all outdoor fields be covered the night before games if there is any chance of rain or snow. As a result, outdoor stadiums must have tarps and the necessary crew and/or machinery to put them down the day before a game. Artificial surfaces and Prescription Athletic Turf (PAT) fields are not excluded from these rules.

Stadium turf managers today are aware of the benefits of covers, fall fertilization, iron, aerifying fields to improve drainage, topdressing, and using pregerminated perennial ryegrass and thick-cut sod. "We don't use as much green paint as they did in the old days," reveals Frey, "because the turf is in better condition. When we get into December and January and the turf is dormant, paint makes a big difference. But you still have to manage the soil moisture."

This summer, Frey had Ohio State University do extensive tests on the soil at the stadium and the two training centers.

The goal is to develop a soil mix that encourages rapid, deep rooting of both sod and overseeded ryegrass. "With both baseball and football, we don't have time for incompatibility problems," says Frey. "We have to match the soil on the sod with the soil on the fields as closely as possible."

During football season, Frey talks every morning to Coach Marty Schottenheimer to find out his needs. "Marty understands turf and moves workouts around to spread out the wear on the practice fields," says Frey.

This winter will be especially important for the Browns after a rash of injuries early in the season, including quarterback Bernie Kosar. As temperatures fall below freezing, the field will have to be firm and provide the traction the team will need to make the playoffs.

"Playoff time has a special meaning, not only to the Browns, but to the whole city and especially to our stadium ground crew," adds Frey. "It is the ground crew's time to shine. It is a great challenge for them to be able to provide a playable field with good footing in very adverse weather conditions."

Modell is a "grass man" who believes higher standards can be met in northern climates with natural turf. If Cleveland ever does replace its lakefront stadium with a dome, you can bet Modell will try to make it the first indoor stadium with natural turf.
A quality cut isn't the only thing it's designed to leave behind

Make no mistake.

The John Deere 756 and 856 are turf mowers first. Good ones. But what makes these two mowers even more attractive is their ability to do more than cut grass.

With the rear cutting unit removed (a job that takes less than 5 minutes), the 756 and 856 can do extra duty carrying rear-mounted implements.

Both feature Category 1 3-point hitch capability and drawbar. So, when needed, you can quickly put attachments like aerators or spreaders to work.

For mowing, the 756 and 856 both feature three 30-inch cutting units. All are hydraulically driven to deliver better quality cuts in long grass, wet conditions, or over contoured terrain. Places where ground-driven reels fall short.

Individual control of left, right, and rear cutting units also makes them perfect for areas where mowing around obstacles is a must.

Talk to your John Deere distributor today for more information on these multifunctional mowers. Or, write John Deere, Dept. 956, Moline, IL 61265 for a free brochure on all of John Deere's Golf and Turf Equipment.

The 756 and 856 both feature a Category 1 3-point hitch capability to carry attachments like the John Deere 206 Spreader or 260S Shatter Aerator.

Standard drawbar on 756 and 856 allows you to pull implements like the John Deere 140S Shatter Aerator.

Nothing Runs Like a Deere®

Circle 101 on Postage Free Card
Why not enter your baseball field in the Beam Clay® Baseball Diamond of the Year Awards contest? No entry fee is required. You could be honored at the upcoming Sports Turf Managers Association Awards Banquet.

The Awards are sponsored by Beam Clay®, the Sports Turf Managers Association, and sportsTURF magazine in recognition of excellence and professionalism in maintaining outstanding, safe, professional quality baseball diamonds. Entries will be judged in three categories: professional diamonds; college diamonds; and school, municipal or park diamonds.

Send the information below to enter:
1. Age of baseball diamond (year of installation).
2. Geographic location (city and state).
3. Description of maintenance program.
4. Operating budget for baseball diamond.
5. Irrigation: None _____ Manual _____ Automatic _____
6. Total number of maintenance staff for field.
7. Does baseball field have lighting for night games?
8. Number of events on baseball diamond per year.
9. Types and number of events on diamond other than baseball?
10. How many months during the year is the field used?
11. Why you think this field is one of the best?
12. Include an assortment of color slides or prints of the diamond.

Deadline for entries: Entries must be postmarked no later than November 1, 1988. Selection of winners will be made by the Awards Committee of the Sports Turf Managers Association.

Mail entries to:
Beam Clay Award
sportsTURF magazine
P.O. Box 8420
Van Nuys, CA 91409

TEXTRON NAMES REID JACOBSEN PRESIDENT
B.F. Dolan, chairman of Textron, has appointed Robert W. Reid president of the Jacobsen Division. Reid succeeds John Dwyer, who is now president of E-Z-Go Division of Textron.

Reid joined Jacobsen in 1987 and most recently was vice president of marketing. He previously held senior management, marketing and sales positions with Lawn-Boy and other divisions of Outboard Marine Corporation (OMC). He started his career with Kimberly-Clark Corporation in market research and product management.

Jacobsen manufactures and markets golf course, professional and commercial turf care equipment worldwide from its headquarters in Racine, WI.