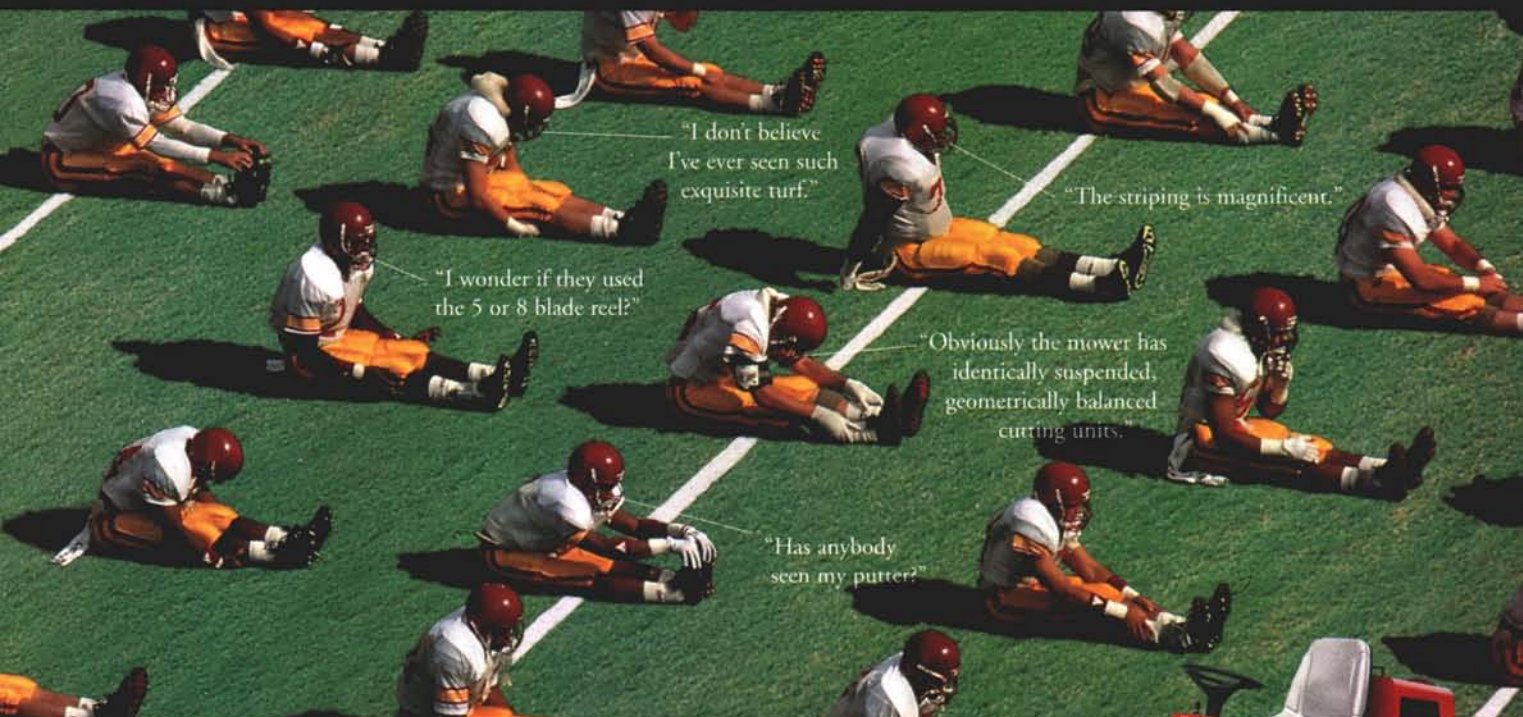


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#### Contents

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# sportsTURF

## PROGRAM

VOLUME 14 , NUMBER 11

NOVEMBER 1998

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The Chicago Bears recently built a new year-round practice facility in Lake Forest, IL. Courtesy: Ken Mrock

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Sports  
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Managers Association

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#### STMA OFFICE

1375 ROLLING HILLS LOOP, COUNCIL BLUFFS, IA 51503  
PHONE: (800) 323-3875  
E-MAIL: SportsTMgr@aol.com  
WEB SITE: <http://www.atp.com/STMA>

#### EDITORIAL TEAM

EDITOR STEVEN BERENS 847-427-3005  
(sberens@mail.atp.com)  
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### On the Road Again



**M**y traveling season continued in October, and I was fortunate enough to attend the Turfgrass, Landscape, and Equipment Expo in Costa Mesa, CA. I was more than happy to trade the falling leaves and dropping temperatures of autumn in Chicago for a few days of sunny, pleasant, California weather.

The Southern California Turfgrass Council made the trip worthwhile by hosting a great show. The Orange County Fairgrounds provided great facilities for exhibitors to showcase all of their latest products and innovations. Attendees divided their time between indoor trade show booth browsing and outdoor hands-on equipment shopping.

Workshops provided attendees educational opportunities throughout the show. Lecture titles included "Controlling Tough Weeds," "Selection and Use of Slow-Release Nitrogen Products," "Nozzle Selection for Drift Management," and "Small Engine Maintenance." Each seminar offered the opportunity to earn CEU accreditation hours, as well as GCSAA credits toward certification.

One interesting seminar covered the topic: "Diagnosing Common Diseases." Dr. Don Ferrin from Pacific Plant Health Services discussed ways to recognize signs and symptoms of common turfgrass diseases, so that appropriate steps can be taken to correct problems. Slides provided visuals of the diseases, so attendees could easily recognize them in real-world applications.

Dr. Ferrin said that El Niño has created a great season for diseases — a funny way to describe something that creates so many maintenance headaches. Drenching El Niño rains made turf more susceptible to disease dispersal and put lots of stress on the plants. The constant moisture helped diseases germinate and grow.

Dr. Ferrin used the example to illustrate the principle that disease dispersal depends more on the number of rain events, than on the amount of rain that falls each time. He warns that disease can be promoted by all sources of water: rain, fog/mist, humidity, and irrigation. Keep this in mind when you're planning your irrigation schedule.

Turnout was strong on the Expo's opening morning, but most exhibitors agreed that overall attendance was disappointing. After hearing the same complaint from people at the Florida Turfgrass show, I have to wonder if this represents a significant trend.

Is interest in trade shows waning? Are people choosing to stay home and find their information from other sources, or are tightening budgets preventing them from making trips to these shows?

Perhaps there's something more at work here. The GCSAA show has been posting record attendance figures for the past few years. Maybe the bigger shows are drawing people away from smaller, regional expos.

It would be a shame if this trend continued in the industry. So many benefits would be lost if regional shows were swallowed up by the big guys.

If you've been hoping to attend a show in your area, but are having trouble convincing the powers that be to foot the bill, several angles can help you break down their objections.

Emphasize the educational offerings that continue to build up the professionalism in the industry. If your facility is getting ready to make new equipment purchases, stress the bargains that you can find at these shows. Don't forget to mention the important networking that goes on, and the ways that cooperation will improve your job performance.

Your participation is the only thing that will keep exhibitors coming to the regional shows.

**Steve Berens, Editor**  
(847) 427-3005

### Tip o' the Month

## Fall Into Action

by Perry Douglas, OPEI

**T**urning leaves and turning engines go hand in hand each fall. According to the Outdoor Power Equipment Institute (OPEI), proper maintenance can help prevent the trouble and expense of unexpected repairs and extend the life of your equipment. OPEI has issued the following fall maintenance tips:

#### All outdoor power equipment

- Read the owner's manual and follow its instructions for proper maintenance.
- Always turn off the engine and disconnect the spark plug, unplug the equipment, or remove the battery before you begin any maintenance work.
- Handle gas carefully. Fill up before you start, while the engine is still cold.
- Regularly check the engine oil.
- Check all nuts, bolts, belts, and screws for tightness.
- Check that engine-cooling fins are clean with every operation.

#### Lawn mowers

- Regularly check belts/chains for wear and tightness.
- Check that pull cords are not frayed, and that they're in working condition.
- Make sure throttle control is properly adjusted.
- Check blades for sharpness, and make sure cutting deck is clean.

#### Hand-held leaf blowers and edgers

- Use high-quality engine oil that's specifically designed for two-cycle hand-held equipment (if applicable). Fuel stabilizers can help fuel maintain high-octane level for longer periods, providing easier starting and cooler engine performance.
- Make sure all intake vents are clear.
- Before using, carefully balance and adjust the equipment for operator comfort and safety. □

OPEI is a trade association whose membership is primarily composed of manufacturers of powered lawn and garden maintenance products, components, attachments, and services.



#### November 14-17

The ninth annual Green Industry Expo, Opryland Hotel Convention Center, Nashville, TN. Contact Eleanor Ellison: (770) 973-2019.

#### December 7-10

Ohio Turfgrass Foundation (OTF) Conference & Show, Greater Columbus Convention Center, Columbus, OH. Contact OTF: (888) OTF-3445 or (614) 760-5442, or fax (614) 760-5431.

#### December 9-11

The Rocky Mountain Regional Turfgrass Association's 45th annual Conference and Trade Show, Currigan Hall, Denver, CO. (303) 770-2220.

#### December 10

Penn State Cooperative Extension's Grounds Managers' Winter Seminar, Warrington Motor Lodge, Warrington, PA. Contact Scott Guiser: (215) 345-3283.

### 1999

#### January 4-8

Cornell Sports Turf Short Course, Cornell University, Ithaca, NY. Contact Joann Gruttadaurio: (607) 255-1792.

#### January 4-February 19

UMass Winter School for Turf Managers, Monday-Friday. Contact Trudie Goodchild: (413) 545-248, or Mary Owen: (508) 892-0382.

#### January 5-7

Eastern Pennsylvania Turfgrass Conference & Trade Show, Valley Forge Convention Center, King of Prussia, PA. Contact Pennsylvania Turfgrass Council: (814) 863-3475, or Nancy Bosold: (610) 690-2655.

#### January 13-17

Sports Turf Managers Association's (STMA) 10th annual Conference & Exhibition, Mesa, AZ. Contact STMA: (800) 323-3875 or (712) 366-2669.

## STMA MESSAGE

Sports  
Turf  
Managers Association



# Major Support

I was asked last month by John Moss, president of the South Atlantic League for Major League Baseball, to suggest some speakers for the organization's October meeting. I spent close to an hour on the phone with John, and shared our commitment to provide and promote better and safer sports fields for his teams.

Kurt Nilsson of Aimcor, a member of the Membership Committee, offered to represent the STMA at the South Atlantic League Meetings. I commend Kurt for his involvement in this critical committee. I also applaud Kurt's company for supporting his commitment, and for developing opportunities to get the word out about the STMA.

Major League Baseball is transporting the level of play to a higher standard. I see more and more new Minor League stadiums being constructed with state of the art technology, from sand-based fields to staged events on and off the field.

I don't know about the rest of you, but I'm into fighting mascots, sumo wrestling, and special theme nights. These staged events bring young families to the ballpark. They create new baseball fans and players for years to come.

More players equal more teams; more teams equal more fields. You follow?

I would also like to thank those STMA members and chapter members who do such a great job of spreading STMA's message in chapter events and at state and regional turfgrass conferences and turf shows.

Thanks are also in order for our STMA Category V and Va (commercial) members, who promote STMA during conference presentations and hand out STMA membership brochures and other STMA materials at exhibit booths in the trade shows.

Thanks go to STMA members who include information about our association in presentations they give at chapter and conference programs. They willingly share their experience and expertise with others in groups and in one on one conversations, in person and on the phone.

STMA belongs to you, the members. It's what you are saying and doing on behalf of STMA that spurs its growth. Thank You!!

Growing into the New Millennium, both professionally and as an association, is the focus of STMA's 10th annual Conference and Exhibition. It's just a few months away; now is the time to send in your registration form and lock in your hotel room.

If anyone wants to share a room to help out with expenses, please notify STMA Headquarters. We will attempt to connect you with other attendees looking for the same budgetary savings.

Lunches, receptions with a wide array of delicious foods, and the annual Awards Banquet are all included in the attendee fees. It's not only easier on your budget, but you also have more time for that important networking.

So don't leave your conference information at the bottom of the pile on your desk. Pull it out and send it in now to be a part of the greatest sports turf show on earth.

**Stephen Guise, STMA President**  
**(714) 704-0403**

Practice

Practice

Practice

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Practice

Practice

by Steve and Suz Trusty

Imagine having the opportunity to serve as architect, engineer, and construction coordinator for a new professional football practice facility. For Ken Mrock, head groundskeeper for the Chicago Bears' Halas Hall practice facility, this dream became reality.

Always thinking of the future, Mrock had long been storing away ideas and plans for the new field. This was his chance to shine — or sink.

The new \$20-million, year-round facility is located in Lake Forest, IL, just four miles from the old Halas Hall fields where Mrock fine-tuned his program. The 200,000-square foot, 2-1/2 field facility spreads across a grand meadow with an oak savanna beyond it. A 100,000-square foot office building overlooks the field.

After the official groundbreaking ceremony May 12, 1995, Mrock's workload doubled, as full scale practice schedules continued at the existing site. In fact, his staff continued to maintain that facility until the Chicago Fire professional soccer



**Head Groundskeeper Ken Mrock acted as an architect, engineer, and construction coordinator for the Chicago Bears' new practice facility.**

*Courtesy: Ken Mrock*

team moved there in 1997.

Mrock pulled from his early experience with bluegrass-covered, sand-based tees on Chicago's city golf courses in his field construction plan. He selected a growing medium of 80-percent sand, 10-percent peat, and 10-percent Profile.

"I wanted a high degree of surface drainage through a high infiltration rate," Mrock explains. "This field does not have a crown. We tested a lot of mixes and found adding Profile increased the infiltration rates and raised the moisture-holding capacity when compared to straight sand or

sand/peat mixes. The field is draining exceptionally well, and yet [it] holds moisture and nutrients, resulting in a massive root system. Our CECs and moisture holding are a lot higher than a regular sand-based field."

Greens Mix did the blending and testing at Thelens Sand and Gravel in Illinois, the source of the sand. They conducted testing on every 500 tons of the 13,000 tons of medium to ensure uniformity. The six-inch sub-layer consists of 7,000 tons of pea gravel.

An underground drainage system is imbedded at the four-inch point. Its four-inch, perforated, corrugated ADS plastic drain tile sits on 15-foot centers.

Construction crews backfilled the remaining two-inches of pea gravel as they placed the drain tile. This layer is topped by the 12-inch layer of sand, peat, and Profile.

"The percolation rate is roughly seven inches an hour," says Mrock. "That, combined with the ability to manipulate the moisture across various sections of the field with the state of the art Hunter irrigation system, gives us greater control of the turf environment."

Mrock and Bears President and CEO Michael McCaskey found ideas for a field-heating system in Sweden. Mrock then collaborated with Heatway and Bornquist on the design, and Althoff Industries installed the system. Fourteen miles of heating tubing lies eight inches below the turf line within 80,000 square feet of the field.

Mrock selected Legends Athletic Pro III, a blend of premium bluegrasses from Conserv FS, for the initial seeding the last week of April 1996. He says, "We applied the seed with a walk-behind cyclone spreader. Then we used the knobby tires of the field rake to dimple it in for good seed to soil contact without compaction or rutting. Despite the cold, wet spring, germination took only a little over two weeks, and coverage was excellent."

Mrock applied a granular Par Ex 10-18-22 starter fertilizer at the

time of seeding. He supplemented with Roots 1-2-3 and K-Power during the grow-in. The growing medium was essentially nutrient-void at the time of installation. Mrock responded with a varied arsenal of fertilizers, and he spoon-fed the developing turf.

He explains, "That initial period was a real learning experience. We used a combination of soil tests and tissue tests along with visual assessment of color and turgidity to strike the right balance of above- and below-ground turf development, while building a nutrient base. That's where the nutrient-holding ability of the Profile came into play,

perfect integrity all across the field complex," says Mrock. "We also tested both core and solid-tine aeration, achieving comparable results with both methods. And we did some adjusting to our bluegrass mix, replacing Baron and Adelphi with Award and Liberty."

A fall application of granular 10-18-22 completed the fertilization program for 1996. The turf was in great shape when the team did an on-field walk-through during the first week of December, and it went into winter that way. Because work hadn't been completed on the building when winter set in, the heating system boilers weren't yet operational.

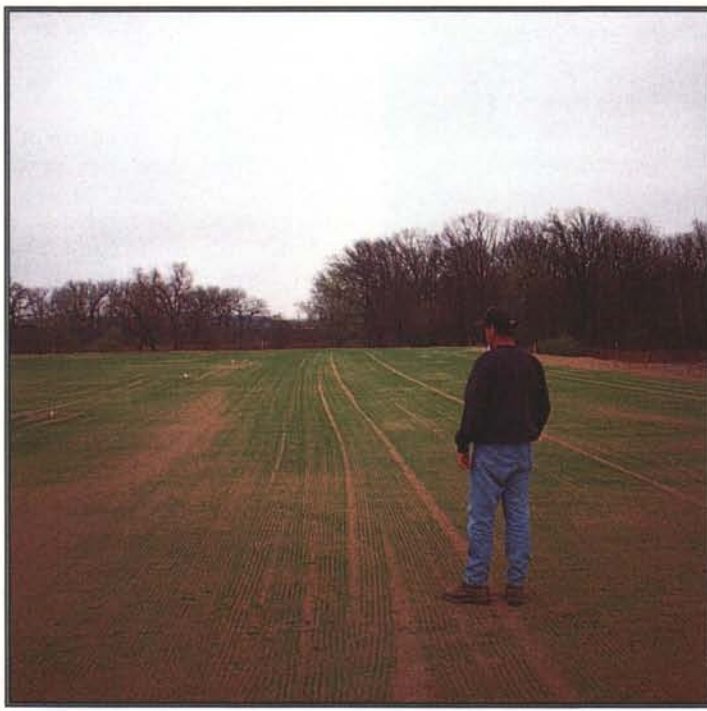
"Though the fields looked pretty good in the initial green-up in the spring of 1997, it was clear the nutrient reserve level wasn't quite where we wanted it," reports Mrock. "So our fertilization fine-tuning continued throughout 1997."

"In August, we added a sprayable EcoSoil Systems 1-0-23 at six ounces per 1,000 square feet once a week, and 5-0-0 with micronutrients twice a month. We kept up the sprayable and granular nutrient program, using 24-4-12, 21-2-18, and 10-18-22 granular formulations. By the time we started the 1998 season, we'd reached a comfort level both with the nutrient reserve numbers and with our ability to manipulate the fertilization program."

Mrock's team fine-tuned the maintenance program in 1997, as the new fields adjusted to the workload. Aeration wasn't needed, and they used topdressing only for divot repair.

When cooling temperatures tested the heating system, Mrock took the conservative approach. He kept soil temperatures in the low 50s, and gradually inched up to as high as 60 degrees at the six-inch sensor depth level when snowfall was imminent.

He explains, "The season's heaviest snow, 11 inches of the heavy, wet



**The new \$20-million, year-round practice facility features 2-1/2 fields and a 100,000-square foot office building.**

*Courtesy: Ken Mrock*

to get those values right on.

"We started mowing the first week of June, gradually tightening the interval to an every-other day schedule. Basically, we tried to slow the turf's upward movement and concentrate on lateral movement to develop one strong mat. When the players got their first sneak peek in July, root growth had reached six inches."

Mrock adopted an extensive topdressing program during the 1996 season. He used the same sand, Profile, and peat mixture as the original rootzone mix. "We wanted





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After finding ideas for a field-heating system in Sweden, Mrock collaborated with Heatway and Bornquist on the design.

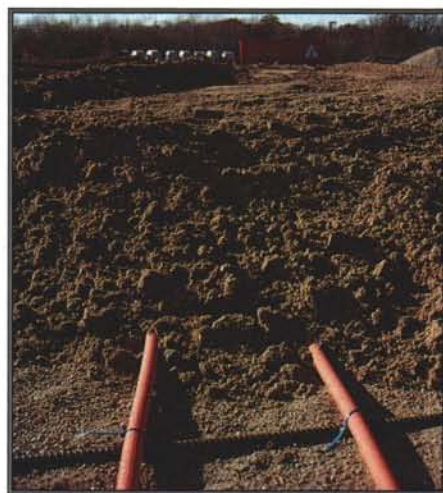
Courtesy: Ken Mrock

kind, started on a Saturday night. The heating system kept up until the snow got really heavy. Then it continued melting, but not as quickly. It took three days for the entire snow cover to melt away, and we practiced on the fourth day. One- and two-inch snowfalls melt immediately; a three-inch snowfall melts within six hours. The field is ready for play as soon as the snow disappears."

Maintenance crews mowed the field weekly in December 1997, with the last mowing taking place December 20.

At the spring green-up of 1998, the 80,000-square foot area of field that was heated was behind in color and turgidity. This year, Mrock plans to spoon feed during November and December to compensate for growth needs and still retain the same level of nutrients as that of the other fields.

"We've built up a 3/4-inch layer of thatch for cushioning and support. Our designer rootzone mix of sand, Profile, and peat holds nutrients and moisture and has promoted development of a massive root system. Divots are minimized, and the turf has held up great. We overseed between the hash marks and let the players cleat it in. Though they will tear off the top of the plant, the crown remains intact. All we're doing with the topdressing mix is covering over the crown so it can regenerate growth. They beat down the turf a bit, but there's no ripping or scaring. It's a joy to plan it that way and have it turn out." □



Fourteen miles of heating tubing lie eight inches below the turf line within 80,000 square feet of the field.

Courtesy: Ken Mrock

Steve and Suz Trusty are partners in Trusty & Associates based in Council Bluffs, IA. Steve is executive director of the Sports Turf Managers Association.