(Continued from page 19)

The planning committee did a great in job organizing the 1997 Wisconsin Turfgrass and Greenscape EXPO. Those individuals are Chris Wendorf (chairperson), Paul Huggett (secretary), Amy Sausen, Wayne Kussow, and Doug Maxwell (advisors), and Audra Anderson and Tom Schwab (committee members). The show's behind-thescenes volunteers from the Badger Turf and Grounds Club helped out considerably during the conference, and UW Department of Horticulture's secretary Karen Denk gave experienced help running the registration table. We thank all these folks.

We ask your help with the planning of next year's EXPO. Please, if you have not done so already, help us by completing the post conference questionnaire that you received back in early February. We are already making plans for next year's conference and need your input to make sure the conference meets your needs as well as those of the turf industry.

Listed here are the trade show participants in EXPO 97. They will be available with supplies and advice to help you succeed with your business in 1997 and beyond.

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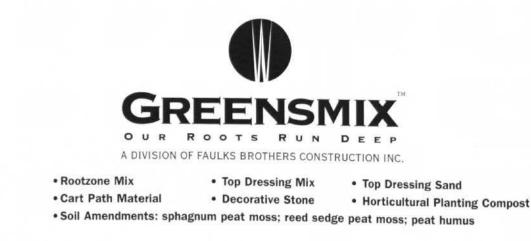
CALS Dean, Dr. Roger Wyse, attended EXPO again this year. He is shown here visiting with Dr. Maxwell.



John Turner presented UW-Madison turf students Tara Zabkowicz and Brad Smith with \$500 AgrEvo scholarships.

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GCSAA 1997 CONFERENCE — A Roll of the Dice

By Monroe S. Miller

The trip to the 1997 GCSAA conference and show got off to a good start, even a rousing start. The night before the flight to Las Vegas was a winner—the Badgers pounded Michigan in Big 10 basketball at the Field House. It was a great victory for the Wisconsin faithful and felt almost as good as the win over Indiana earlier in the season.

The next morning dawned cloudy but there was no snow, no ice and no fog; the plane departed the Dane County International Airport right on time, as it did from the Twin Cities.



The show floor is a busy place.

Best news of all, my luggage arrived when I did in Las Vegas! Although it was cool in the gambling capital, at least it wasn't freezing or snowing. Hurrah!

The town has changed a lot since our last conference there. The number of new hotels is substantial (New York! New York! is the newest—it just opened as we arrived). And a lot of the older but well known casinos have been or are in the process of remodeling. But in the end, Las Vegas is a gambling and convention city, just like it always has been. To its credit, safety wasn't an issue, at least in my experience. That cannot be said of a lot of the cities we visit anymore. As far as Las Vegas goes, I would not care a spit if it was dropped from the list of convention cities. If you have any free time and don't happen to be a gambler, there isn't anything to do. That may well have been the most common complaint I heard. The place was incredibly inconvenient. I got tired of riding a bus or taking a taxi from the convention center to the *(Continuned on page 26)*



Skyline of the Vegas "Strip" as seen from in front of the Mirage Hotel. New York! New York! is in the distance.



Site of a lot of the conference activity — the Las Vegas Convention Center. The Hilton housed many member during their stay.



The Silent Auction was a page right out of the Wisconsin Turfgrass Association Field Day.

(Continued from page 25)

hotels on the strip where so many activities were held and back to the Hilton where I was staying. I wasn't the only one with that sentiment.

The convention center is pretty good, however. It was clean, big and pretty well tended. The meeting rooms where seminars were held had good facilities—lights and sound and furniture. Guys attending meetings in the Flamingo Hilton were upset, even furious. I wasn't there, but they universally condemned the seminar rooms. Same question doesn't GCSAA, after all there years, check some of this stuff out ahead of time?

Cost, to me continues to be a big, big factor. It is a lot of money to spend (and risk, in some years), especially for people from smaller clubs. The argument made by and on behalf of golf course superintendents from smaller golf courses with lesser resources continues to be ignored by GCSAA, just like it was during the dual membership legislation foisted on chapters. But that will most likely continue to fall on deaf ears. I do not look for costs to stabilize or drop to more reasonable levels.

And I swear that one of the biggest ways to reduce your costs is to avoid going through GCSAA housing. It seems that the most expensive rooms are those that mysterious "organization within an organization" books you in. There are scads of rooms in Vegas—why are not some of them made available to members, or at least list them, show them on a map, offer reservation numbers and let members make their own (and less expensive) arrangements?

But I have to admit a discrepancy — cost goes up and so does attendance. That leads me to believe that nothing will be done to make the conference experience more affordable for those currently unable to go.

Opening Session

The opening session was pretty good. I liked the low ceiling of the stage area; it created a room-like effect. Jim Lovell was great—I brought his book *Lost Moon* with me clear from Madison to have Lovell autograph only to discover that they were selling them after the session. Oh, well...I loved to see Joe Vargas honored with the DSA; as I predicted last year, another past president got it for reasons the people around me were unaware of. What former politician will receive the DSA next year?

Environmental Session

This meeting had the same format as the previous couple. Fred Barnes and Eleanor Clift were excellent and well prepared, but who in the name of green grass decided to invite the golf developer seated between them? I don't even remember his name. His body language was terrible, his arguments were weak and his presence a negative (would you buy a house from this guy?). He reminded me of the chemical company lawyer at one of the previous year's environmental sessions.

Who won the debate? Sadly, Eleanor Clift did. She was well informed, I must say. And afterward Fred Barnes beat feet while she stayed to visit and answer questions.

Ms. Clift also illustrated that despite some considerable bragging to the contrary, the GCSAA has a long way to go with politicians, bureaucrats and decision makers. In preparation for the meeting, she had lunch with Carol Browner, EPA Administrator. Clearly, Ms. Browner doesn't think much of golf courses, at least that is the impression many of us were left with. It was a good reality check.

This meeting also lasted too long and did not stay on the program schedule. People were ready to go and the action went on for another 45 minutes. Several of us got there early, waited and got a front row seat. I am interested only to have the chance to take some decent photographs for The Grass Roots. And then a GCSAA employee came by, threw us out of unreserved seats because "we have to save these for the board," even though there were others roped off. In the end, not a single board member sat there. Most were, in fact, left empty. It was





Eleanor Clift (L) and Fred Barnes (R) held good interest at the Environmental Session.



A real-life, all American hero — Jim Lovell, commander of Apollo 13.

Wisconsin favorite Dr. Joe Vargas received GSCSAA's Distinguished Service award. He also gave an excellent lecture at the NOER Foundation meeting.



Robert Trent Jones Sr. was a distinguished presence throughout conference. We were honored.



Ben Crenshaw spent time at the Lofts seed booth, meeting members and signing autographs.

Frank Rossi chaired an educational session again this year. extremely rude, the kind of thing you don't forget. They should make better plans next time.

Educational Program

As I was thinking about it on the way home from Las Vegas, the education program (the main reason I attend) was, shall we say, uneven. Some sections were very good and well attended. Others were as dry as the dust under my bed at the Hilton. Some material was pertinent and some was nearly irrelevant. It is impossible to attend everything, so I was tuned in to what other WGCSA members were saying. It seems that they also thought it was quite average.

I wonder if maybe instead of having so many educational opportunities that only a fraction can be attended, there might be wisdom in placing the emphasis next year on quality instead of quantity. It wouldn't be easy, I will admit. But possibly every speaker and every lecture has to be reviewed before going front and center at conference. This year, thank goodness for the USGA and the ASGCA.

USGA Green Section and American Society of Golf Course Architects

These two outstanding associations offered two outstanding sessions. If you missed them this year, you missed the best of the 1997 conference.

The USGA Green Section meeting featured the renowned tips from the Green Section Agronomists. They were fit in and around Bill Bengeyfield, Judy Bell and Bob Dedman. These three veterans of the USGA and golf were simply splendid.

And the architects' meeting was equally good. Rees Jones, Arthur Hills and Jack Nicklaus held everyone's interest. One of the things they did was critique the contestant winners of the superintendent design contest. It was both an educational and fun time. We are lucky to have these groups with us at conference time.

Show

I will remember 1997 as the year there really wasn't much new in equipment and materials. Some pieces were reworked with minor refinements and new sheet metal or fiberglass. Jake had another electric greensmower on display, and the word was that Heritage was registered by the EPA just as we arrived



Do you remember these former Badgers who stopped in at the Wisconsin/Milorganite reception?



The Wisconsin alumni reception was well attended. Here are Badgers Millett, Riley and Parent.



Professor Maxwell held court with Wisconsin alums Marquardt, Schmidt and Lange.

in Vegas. The show seemed smaller, but that isn't a certainty. Crowds were big on Monday afternoon and Tuesday morning, but diminished after that. The hall was not one of my favorite. The floor was split by level and by direction, and seemed to disorient people some of the time. The aisles were wide, it was well lit and bright. It is hard to beef about such a singular opportunity, however.

Foundation Reception

Pure pleasure! I was bursting with Badger pride as Steve Millett was awarded a Watson Fellowship. He is a very deserving candidate, and I



Students and new graduates from Wisconsin enjoyed Las Vegas — Tara Zabkowicz, Brad Smith and Jeff Gregos.



A handsome couple from Racine — Mike and Karen Handrich



Kenny Loggins provided good entertainment at the annual banquet.

think he felt the magic of the moment. Present to honor fellowship and scholarship winners were Robert (Continued on page 29)

WE PUNCHED HOLES IN THE THEORY THAT QUALITY AND QUANTITY DON'T MIX

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(Continued from page 27)

Trent Jones, Ben Crenshaw and Dr. James Watson (namesake of the fellowships). The Foundation total is now at \$1.5 million. This was a well planned event.

Annual Banquet

I have only missed one of these in the past 25 years, so I am a decent judge of them. This one was pretty good. There is one and only one reason for me to say that-Ben Crenshaw. I think he was an excellent choice to receive the Old Tom Morris award. He was humbled by the honor and I felt his comments to that were heartfelt and sincere. The entertainment was good, albeit loud. There were four Badgers at our table-Oscar Peterson, Karen and Mike Handrich and myself. We were joined by several past presidents, so you know we were practically in the front row.

Which brings me to a complaint. We were up at five a.m. to get in line to exchange vouchers at six a.m. When you arrive that early, you can see exactly how many tables are already reserved. It is way too many. I would guess that 25% of the tables were reserved for connected people, and those were the prime tables. It leaves crumbs for the peons. This kind of arrogance seems to escape GCSAA. It is the old fairness issue; for them it seems to be a matter of who you know. And then, despite the rules, the one person in line ahead of us carried thirty (30!) vouchers, clearly contrary to the rules. How did GCSAA handle it? Went ahead and cashed them in. Those in line behind us were furious, as they should be, But my guess is that nothing will happen or be done to change it. I may do next year what quite a few Wisconsin members did this yeargo somewhere else.

Final Thoughts

I continue to object to the corporate sponsorship. There is too much money spent on too few. And don't kid yourself—we are paying for every little item through higher prices.

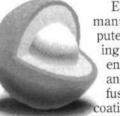
Scotts sells a good product at a premium price. They used to have a nice reception at conference for all of their customers. Nowadays, they spend that money on a president reception, and if you are not chummy with the prez, you aren't privileged to enjoy what you are funding. That reception in particular was so grossly overdone last year that it was sickening, so one may not have missed much or may be better off avoiding it. But the fact remains, this is becoming more and more a money influenced organization and one where "who you know" means too much. I feel it loses sight of what is really important too often.

I give the group credit for a good merchandise area again this year, and I really like the book signings. It is a unique opportunity, if that sort of thing trips your trigger.

And in addition to learning a lot, the conference this time of year immerses a guy in golf at the dawn of a new season. Where else can you meet and visit with people like Ben Crenshaw, Jack Nicklaus, every architect of any note at all, veterans in our business, great faculty members and all kinds of other well knowns? It is almost inspiring at times. At this conference, you could even get a baseball autographed by Whitey Ford!

Although I am always glad to get home, I have never regretted spending the time at conference. I guess they are like a lot of other things one values in life—some are simply better than others. And the 1997 GCSAA conference was, well, average. And average is still pretty good. Like every new golf season, which I consider will be my best ever, maybe next year will the "show of shows."

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Dollar spot resistance management with reduced-rate fungicide mixtures

By Jeffrey S. Gregos, TDDL, Department of Plant Pathology, University of Wisconsin-Madison

In the United States, fungicide expenditures on turf and ornamentals accounts for 120 million dollars annually, and of this amount, 85 million is spent on golf course turf. These facts are the reason why turfgrass holds the distinction of being the largest market for fungicides in the United States (1). With the increasing demand for high quality turf, these figures will only increase in the future.

Dollar spot caused by Sclerotinia homoeocarpa is a significant disease of turfgrasses in the United States, and is found in all regions except the arid west (2). Consequently, it is not surprising that both prevention and control of dollar spot accounts for 37 percent of all turf fungicide sales in the United States (1). Due to this extensive use of fungicides for disease control, resistance to these fungicides has occurred. Currently, the following fungicide families have known resistance problems in controlling turfgrass pathogens: benzimi-



dazoles (Tersan 1991, Cleary's 3336, Fungo), dicarboximides (Vorlan, Chipco 26019, Curalan, Touche), and the demethylation inhibitors(DMI) fungicides (Banner, Bayleton, Rubigan, Sentinel, Eagle) (2). These fungicides, which have a systemic mode of action, have become favorites of the turfgrass industry for several important reasons: lower usage rates than those of contact fungicides, longer residual effects, protection of newly emerged tissue, and less concern for foliar wash-off and fungicide degradation (3).

Systemic fungicides have a very specific mode of action, i.e., they poison the target fungus at one metabolic step during the fungal growth phase (2). Since the mode of action of the systemic fungicide is so specific, it is possible for the fungus to develop resistance to this fungicide by a simple change in a protein in the target metabolic pathway. Fungicide resistance is normally caused by the repeated use of a fungicide of a particular fungicide family. For example, if fungicide X is used repeatedly on the same green, the population of a fungus will eventually shift from one that is predominantly sensitive to fungicide X, to one that is not. If fungicide X is continually used on this population, an increase will occur in the fungus not sensitive to fungicide X. This will eventually lead to diminished control

by fungicide X. One strategy to prevent or delay resistance is the use of fungicide mixtures, each component having a different mode of action.

Reduced-Rate Mixtures

The use of fungicide mixtures has become more common on golf courses in recent years. However, some turf managers are using two or three chemicals in a mixture at their normal rates for controlling a particular disease. This is expensive both economically and environmentally. A solution to this problem is reducedrate mixtures.

In 1991, a study was initiated by Patricia Sanders and Michael Soika at the Pennsylvania State University, with the objective of developing three-component, reduced-rate fungicide mixtures to provided suppression of dollar spot. Four fungicide families were represented in the study, with the hypothesis that several modes of action, working simultaneously to suppress the fungus, would delay or prevent resistance development.

During the five years of testing, six fungicides have been chosen for the fungicide mixtures (Table 1). Each mixture included fungicides from three of the four families represented in the test. In 1995, the mixtures were applied on a 21 day schedule, and compared with the recommended label rates and application intervals for the individual

TABLE 1. Concentrations of fungicides used in the reduced-rate mixtures.

| FUNGICIDES EVALUATED | | | |
|---------------------------------|------------------|---------------------------|-----------------------------|
| Fungicide | Fungicide Family | Label Rate /1000 sq ft | Mixture Rate /1000 sq ft |
| Daconil 2787 F / chlorothalonil | Nitrile | 6 fl oz | 4.0 fl oz |
| Chipco 26019 F / iprodione | Dicarboximide | 3 fl oz | 2.0 fl oz |
| Fungo Flo / thiophanate methyl | Benzimidazole | 2 fl oz | 0.125 fl oz |
| Bayleton DF / triadimefon | DMI | 1 oz | 0.11 oz |
| Banner EC / propiconazole | DMI | 2 fl oz | 0.22 fl oz |
| Rubigan AS / fenarimol | DMI | 1.5 fl oz | 0.5 fl oz |