



## Give Yourself and Your Staff a Turf EXPO for the Holidays

By Tom Schwab, O.J. Noer Turfgrass Research and Education Facility  
University of Wisconsin-Madison

The Wisconsin Turfgrass and Greenscape EXPO 2004 is scheduled for January 5th, 6th, and 7th. Although we can't offer a sunny warm location to gather for a good conference, we can offer everything else. EXPO would be the perfect gift of education to give yourself for the New Year. With discounts for staff members, it would likewise be a great gift to give several of your staff. There will be some of the best speakers EXPO has ever offered and the trade show will be as good as what you see at some of the national meetings.

The EXPO planning committee did many interviews with attendees to see what they wanted in the show. Many of those suggestions will be implemented this year. Those suggestions were everything from bring in more nationally recognized speakers, and make the trade show more user friendly, to offer a discounted price to staff members.

The suggestion to pump-up the list of education by getting more big-name speakers was implemented. James Snow from the USGA and Dr. Harry Niemczyk, professor emeritus from The Ohio State University are two speakers that will interest you. Another big name speaker includes Dr. James Beard, former professor from Michigan State and Texas A&M. Every golf course superintendent owns Dr. Beard's "Turf

Management for Golf Courses!" And then there is former Green Bay Packer turned motivational speaker Blaise Winter who will give the keynote address. You won't need coffee that morning. Blaise radiates enough energy to motivate everyone in the crowd.

That names a few of the nationally renowned speakers coming to EXPO. There are so many more that will be just as educational, just not as nationally recognized. Those presenters will give information on everything from how to winterize an irrigation system to controlling geese and addressing other wildlife questions. There will be talks on new turf management findings from your UW turf researchers. Les Werner from the UW-Stevens Point will present information on caring for trees in a turf environment. And there will be so much more education.

A Speaker's Booth in the trade show area will be a new addition for this year. An area will be set aside in the exhibition hall where you will be able to talk individually with all the presenters. When not giving presentations, the speakers will staff this booth to give attendees one-on-one advice to individual questions.

The main educational sessions will be divided into more categories this year rather than the customary three. There will be education for service technicians, sports and schools, parks



Dr. James Beard will be one of many nationally renowned speakers at this year's EXPO.

and general horticulture, and golf turf.

This is the year that you will want to bring other people from your organization. Not only will there be more specific education for others on your staff but there will be a reduced cost for them as well. There is \$30 off the conference package (or \$15 off one-day attendance) for additional attendees from the same organization. All participants will appreciate the specific education to help them in their individual work areas. You don't have to stick with your category either. You may listen to talks in other professional categories if they interest you more.

Everyone will be impressed with how huge the trade show is. The trade show layout will return to the traditional open layout format used over several years. We listened to you when you told us you didn't like the maze-like layout from the past couple years.

The schedule in the trade show this year will also be different. There will be specific times that each industry may visit the



### The Wisconsin Turfgrass News

is the official publication  
of the Wisconsin  
Turfgrass Association,  
edited by Tom Schwab.  
O.J. Noer Turfgrass  
Research and  
Educational Facility.

exhibitions. For instance sports turf people will have a break in their education to visit the trade show from 3:00 to 4:00, and golf turf people will have a break from 1:00 to 2:00. This will allow you time to get more individual attention without the crowds.

The vendors are going to sponsor a new addition to EXPO. They will hold a Tuesday night get-together in one of the convention center's pubs. This

social gathering will allow you time to get a bite to eat after Tuesday's education then return to socialize with your friends without having to leave the hotel.

So many changes are occurring at this year's EXPO. They are all changes that you requested and ones that will be positively received. This is true whether you've never attended or have come to every WTA Winter Turf EXPO. Tell all your peers and

especially bring others from your organization. Treat them all and yourself to some quality education to start out the New Year right.

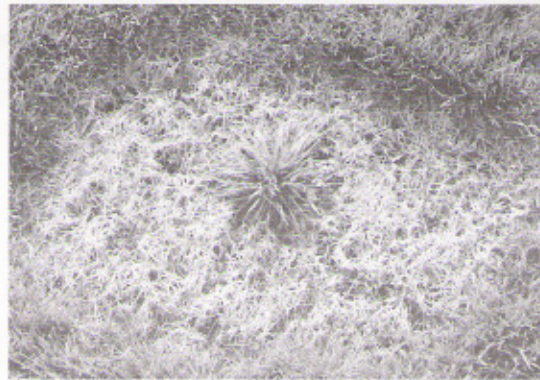
You should have received registration information in the mail. If you didn't receive yours then call Audra to request a mailing. Her contact numbers are 608-845-6536, fax 608-845-8162, or email [ajander2@wisc.edu](mailto:ajander2@wisc.edu).

## New Land at Noer Receives First Studies

By Tom Schwab and Dr. Geunhwa Jung, OJ Noer Facility and Department of Plant Pathology, University of Wisconsin-Madison

We installed the first investigations on the new land at the Noer Facility this past September. This new land was badly needed at Noer since every available plot on the old land already had research projects on them. The last thing we want is for the turf program at the University to be held back by shortage of land.

We'll talk about the new studies soon but first we'd like to thank the four key players that helped get this needed new land ready. The Bruce Company reshaped a ten acre parcel adjacent to the Noer facility to make it useable for turf research. First the land grading had to be designed though. Rettler Corporation had their graphic designers do a grading blueprint to give the whole parcel a 1.5% slope, ideal for research. Next Olds Seed Solution donated a 60/40,



One of 200 perennial ryegrass clones being tested for crown rust resistance.

Kentucky bluegrass/perennial ryegrass mixture of seed for establishing the land. Lastly Spring Valley donated all the fertilizer to grow in the turf.

Now a little over one year from seeding, the new land is getting its first studies. One study is looking at Kentucky bluegrass and the other is on perennial ryegrass. The Kentucky bluegrass study is a breeding project looking at both disease resistance and important agronomic traits. The agronomic traits are things like leaf texture, color, and growth habit. However, these agronomic traits are not important if the grass is susceptible to disease. Thus we are looking to breed a Kentucky bluegrass selection that has both desirable agronomic traits and can resist important Midwestern diseases like necrotic ring spot, dollar spot, and leaf spot.

The other study is evaluating close to 200 different perennial ryegrass clones for their ability to resist crown rust. Crown rust is a very important agronomic disease that mainly infects ryegrasses and gives them an undesirable orange color. The orange color is spores. You've all seen those spores when they dislodge and cover your shoes, clothing and equipment. This disease is the subject of many calls to the TDL during active infection period.

This crown rust study has two objectives. We are studying genetics of the disease resistance (race specificity, number and effect of resistance genes) using classical and DNA methods. This will subsequently improve perennial ryegrass via DNA marker-assisted breeding. The goal is to select and release a new perennial ryegrass cultivar adapted to Midwestern cli-



The first two studies planted on the new Noer Facility land.

mates that not only can resist crown rust but also several other important Midwestern diseases including grey leaf spot.

Both studies started out in the greenhouse several years ago. Initial plant materials were obtained from collaborators and were also created by making crosses using potential clones. Those plants were then evaluated for the important traits through disease inoculations and DNA aided selection in the greenhouse. The selected plants were next taken from the greenhouse and placed into two plots on the new land. Each plant is replicated four times and reserves of each plant are still being grown in the greenhouse.

We're glad we have reserve plants. They are needed to further observe the plants in greenhouse conditions and also to replace some plants that are

being stolen out of the study. Yes, stolen! We're pretty sure that crows are the culprit. It takes a little while for the plug from the greenhouse to take root. In the mean time, crows pull out some of them and where they take them, we don't know. Good thing we have a reserve of plugs to replace them.

Also fortunate is that many of you have donated to the irrigation system that will be installed on the new land this spring. These two studies are just the beginning of what will take place on the land. Most of the studies will need irrigation. Reinders Irrigation designed what will be needed for irrigation on the new land. TJ Emmerich and Associates also gave some input. Irrigation supplies worth about \$4,000 were donated by individuals and businesses during a fund drive we

held this fall. Another \$2,500 was recently donated by the Wisconsin Golf Course Superintendents Association.

We are so thankful to everyone that donated. This is likely close to the amount that is needed to do an in-house installation of the first phase of the irrigation. We are having meetings right now to decide how much of the irrigation to develop and how much to put off for later. Reinders has been accepting and coordinating many of the donations, so after we meet with them we will know just where we stand for the spring installation. We'll report to you in the next newsletter the progress of the fund drive and installation.

The progress of the new land is just beginning. Many new research results will come out of the new land. These first two studies are just the beginning. 🍌

## Recently Labeled Fungicides Add Tools for Resistance Management

By Steve Abler and Dr. Geunhwa Jung, Turfgrass Diagnostic Lab and Department of Plant Pathology, University of Wisconsin-Madison

Now that the growing season has come to an end, many turfgrass managers are turning their attention to next year's budget and fungicide program. Within the last two years, four fungicides with novel active ingredients have been labeled for use on turfgrasses. Important considerations when selecting fungicides for disease control programs are the fungicide's efficacy, longevity, cost, formulation, topical mode of action, biochemical mode of action, and chemical class. Three of the four new fungicides belong to chemical classes that have not previously been used on turfgrasses. Since rotating fungicides from different chemical classes is important for resistance management, these new fungicides may become important tools for turfgrass

managers as more and more chemicals are losing EPA registration. The trade names of the fungicides and the diseases that they are labeled to control are listed in the table on page 4.

### **Emerald®**

Emerald® is formulated as a 70% water dispersible granule and is marketed by BASF Professional Turf. The label rate for turfgrass diseases is between 0.13 and 0.18 oz./M. The active ingredient of Emerald® is boscalid which is the only member of the anilide chemical class to be labeled for use on turfgrasses. Boscalid is an acropetal penetrant which inhibits the cellular respiration of the target fungi. Since this fungicide has a single-site mode of action, there is a moderate risk of

pathogens developing resistance to the active ingredient. Emerald® is labeled for Sclerotinia dollar spot and bentgrass dead spot (both ascomycetes). This fungicide is currently only labeled for use on golf course turf.


### **Endorse®**

Endorse® is formulated as a 2.5% wettable powder and is marketed by Cleary Chemical Corporation and packaged in 1.1 pound water soluble packages. The label rate for turfgrass diseases is 4.0 oz./M. The active ingredient of Endorse® is the antibiotic polyoxin D which is in the polyoxin chemical class. Although polyoxins have been used to control rice diseases since the 1960's, polyoxin D is the first chemical in this class to be

## Recently Labeled Fungicides & Diseases They are Labeled to Control

DISEASE	Emerald®	Endorse®	Insignia®	Medallion®
Anthracnose		X	X	
Bentgrass Dead Spot	X		X	X
Fairy Ring			X	
Gray Leaf Spot		X*	X	
Leaf Spot		X	X	X
Melting Out		X	X	
Microdochium Patch		X	X	X
Pink Patch			X	
Powdery Mildew			X	
Pythium Blight			X	
Rapid Blight			X	
Red Thread		X	X	
Rhizoctonia Brown Patch		X	X	X
Rhizoctonia Yellow Patch		X		X
Rust			X	
Sclerotinia Dollar Spot	X		X*	
Summer Patch			X	X
Take-all Patch			X	
Typhula Blight		X	X	X

\* labeled for suppression but not for control



labeled for turfgrasses. Polyoxin D is a localized penetrant that inhibits chitin (an important cell wall component of many fungi) biosynthesis. Since this fungicide has a single-site mode of action, there is a moderate risk of pathogens developing resistance to the active ingredient. Endorse® is labeled for nine diseases of turfgrasses that are incited by ascomycetes and basidiomycetes (see table) and is restricted from use on sod and turfgrasses grown for seed.

### Insignia®

Insignia® is formulated as a 20% water dispersible granule and is marketed by BASF Professional Turf. The label rate for turfgrass diseases is between 0.5 and 0.9 oz./M. The active ingredient of Insignia® is pyraclostrobin, which like azoxystrobin (Heritage®) and trifloxystrobin (Compass®) are members of the strobilurin chemical class. Pyraclostrobin is a localized penetrant which inhibits cellular respiration of target fungi. Since resistance to other fungicides in this chemical class with the same mode of action has already been documented, the resistance risk for Insignia® is high. Insignia® is labeled for the control of seventeen turfgrass diseases that are

incited by ascomycetes, basidiomycetes, and oomycetes. Insignia® is currently only labeled for use on golf course turf.

### Medallion®

Medallion® is marketed by Syngenta Professional Products. Medallion® is formulated as a 50% wettable powder that is packaged in five-ounce water soluble packets. The label rate for turfgrass diseases is between 0.20 and 0.50 oz./M with a maximum use rate of 1.5 oz./M per year. The active ingredient is fludioxonil which is the only member of the phenylpyrrole chemical class labeled for turfgrasses. Fludioxonil is a contact fungicide that has a single-site biochemical mode of action which acts by disrupting plasma membranes and amino acid uptake in the target fungi. Medallion® is labeled for the preventive control of seven diseases that are incited by ascomycetes and basidiomycetes (see table).

These new fungicides add treatment options for turfgrass professionals who manage their risk of fungicide resistance by rotating chemical classes. Rotating chemical classes of fungicides is one of several techniques that are used to reduce the development of fungicide

resistance. Strategies used to avoid fungicide resistance include: never make more than two sequential applications of fungicides with the same biochemical mode of action, never use fungicides at a rate lower than stated on the label unless you are mixing two chemicals that have been proven to be synergistic, always make sure your spray equipment is calibrated and you are applying the fungicide evenly, and spray preventively whenever possible.

The fungicides discussed in this article represent three new chemical classes. Emerald®, Endorse®, Insignia®, and Medallion® have been tested for their efficacy at controlling various turfgrass diseases at the University of Wisconsin-Madison. If you have any questions regarding the efficacy of these fungicides or have any other questions, please consult the Wisconsin Turfgrass Research Reports or contact us at (608)845-2535. Additionally, if you are experiencing difficulty controlling certain diseases using fungicides that used to be efficacious, please let us know immediately and we will screen the pathogen for *in vitro* sensitivity to the fungicide. 🍀

# PRESIDENT'S MESSAGE

By Dan Barrett

Happy Holidays! I hope this letter finds everyone healthy and happy after another growing season that has come to an end in Wisconsin. I know I am looking forward to spending some quality time with family and friends this coming Holiday Season. I'm sure many of you are doing the same. What a great time of the year!

In October, the Golf Fundraiser at The Bull in Sheboygan was a great success. Another sold out event this year, it helped raise over \$13,000. These proceeds will go directly to help fund a Distinguished Graduate Fellowship at the University of Wisconsin-Madison. The WTA is continuing to work hard to fund four Graduate Fellowships for turfgrass research in Wisconsin. Your support at the Golf Fundraiser is a big part of our effort. Thanks go to all of you who participated in the golf, sponsored a tee sign, and donated a door prize.

Looking ahead to January brings us to the Wisconsin Turfgrass and Greenscape EXPO. The EXPO will again be held at the Madison Marriott-West. The dates for the show are January 5th, 6th, & 7th. The EXPO planning committee has implemented changes to this year's EXPO based on suggestions that they have received from people that attend EXPO. I think you'll like them. Some of the guest speakers at this year's event include; Dr. James Beard from Texas A&M, Dr. Harry Niemczyk from The Ohio State University, James Snow from the USGA Green Section, and former Green Bay Packer defensive tackle, Blaise Winter. Many other great speakers and exhibitors will be awaiting your arrival at EXPO 2004. Plan now to attend if you haven't already done so. If you haven't received your registration booklet yet, contact Audra at 608-845-6536, [ajander2@wisc.edu](mailto:ajander2@wisc.edu), or 608-845-8162 Fax.

Soon my tenure as President of

the WTA will be ending. I have thoroughly enjoyed the time spent serving as your President. I want to thank our turfgrass Professors Dr. Kussow, Dr. Stier, Dr. Jung and Dr. Williamson for their kindness, professionalism and tireless effort put forth for our industry. It has been wonderful to work closely with these four fine gentlemen. A big thank you likewise goes to the staff at the O.J. Noer Facility. Working with all of you has been a great experience.

Through your generous support, the WTA and University of Wisconsin-Madison Turfgrass Program has had and will continue to have a strong and productive relationship in pursuing research and education for Wisconsin's turfgrass industry. This relationship continues to grow stronger every year! Thank you for your wonderful support and for allowing me to serve as your president. I look forward to seeing all of you at EXPO in January. 🍀



## MEET THE UW-MADISON TURF PROGRAM GRADUATE STUDENTS

### Soil Test Calibration - Calibrating Soil Tests for Turfgrass

By Steve Houlihan, Department of Soil Science, University of Wisconsin Madison

Four years ago I came to the University of Wisconsin Madison intending to major in Landscape Architecture and to one-day design golf courses as a career. I was intrigued with the game of golf and grew up as a caddy at Merrill Hills Country Club in Waukesha. After attending student registration in the summer before entering, I was guided to major in soil science, specifically Turf Management, knowing that I would learn how to manage turfgrass. As some may know, my four uncles Jim, Pat, Charlie, and

Dan Shaw were all golf course superintendents and to this day are still involved in the turfgrass profession. With their guidance and knowledge, I have become intrigued with the idea of further advancing the profession and my knowledge through turfgrass research.

Currently I'm a first year masters student under Dr. Wayne Kussow here in Madison. Dr. Kussow has not only been my advisor for the past four years, but he has been an icon in turfgrass research for many years



and a person whose phone has been constantly ringing for his professional guidance. I have been given an opportunity to work under Dr. Kussow as a research assistant and will soon be the second recipient of the Wisconsin Turfgrass Association Wayne R. Kussow Distinguished Graduate Fellowship.

The focus of my research can be described in three parts. The first part is the calibration of soils tests for turfgrass. This involves the collection of soil and tissue samples from golf courses, lawns, and athletic fields around Wisconsin and determining their nutrient content. After compiling all the data, I will construct calibration curves for the soil tests, and develop new interpretations and recommendations for turfgrass.

The second part involves

interpreting soil tests for sand based putting greens. One objective here is to determine the optimum soil tests and nitrogen, phosphorus, and potassium fertilizer rates for establishment. The other major objective for this second part is to verify the role of N-driven plant P and K demand in soil test interpretations. To do this, Dr. Kussow and I reconstructed an existing putting green where the desired ranges of soil P and K could be established under different nitrogen regimes. We have also compiled data from research plots at the O.J. Noer Facility that involved turfgrass on a fairway and a home lawn, that had wide ranges in soil test P and K. By varying the N rates, we will be able to further test the hypothesis that N-rate determines turfgrass uptake of P and K.

Lastly, I will be focusing on

quantifying potassium mobility in sand based putting greens and determining how this impacts interpretations. This involves finishing the study conducted by Doug Soldat, who received his Master's Degree this past summer. He researched the effects of inorganic amendments on sand based putting greens. I'm adding to his database of concentrations in N, P, and K in leachate, bentgrass yields and nutrient content, color and quality ratings, and soil tests for P and K.

To conclude, research has been and will always have a vital role in the success of superintendents and other professional turf managers. I'm dedicated to and grateful for the opportunity to conduct such research and to be able to contribute to the profession. ■



*Wisconsin Turfgrass Association  
Presents*

## **The Winter Turfgrass and Greenscape EXPO 2004**

**Workshops** - Monday Jan 5th, 9am-3pm  
**Sessions** - Tuesday Jan 6th, 8am-4pm  
**Reception** - Tuesday Jan 6th, 7pm-11pm  
**Sessions** - Wednesday Jan 7th, 8am-4pm

**List of Speakers:**

James Snow - USGA  
Dr. Harry Niemczyk  
Blaise Winter - Keynote Speaker  
Dr. James Beard  
Many Other Speakers

**New For 2004:**

More Categories  
Lower Cost for additional attendees  
Tuesday Luncheon Keynote  
Tuesday Night Get together  
Ask the Speaker (in Exhibit Hall)

If you have any interest in the Turfgrass industry, it will be a benefit for you to attend. Whether you are involved in golf, sports fields, parks, commercial properties, lawn care, business owners, or mechanics.

**Mark Your Calendars** and plan to attend  
with your entire staff!

Please contact Audra at **608-845-6536** if you did not receive the registration form.

# Tough to Believe How Great It Was

By Tom Schwab, O.J. Noer Turfgrass Research and Education Facility  
University of Wisconsin-Madison

The WTA golf fundraiser was such a success this year. This was true for both the golf participants as well as the WTA. The event was held at the Bull at Pinehurst Farms in Sheboygan Falls on October 8th. This brand new Jack Nicklaus signature course just opened for their first full year in 2003. The conditions played like it had been open for years. Turf conditions were very mature and utterly playable. Both superintendents, the one that grew in the course and the new superintendent, should be congratulated on the spectacular shape of the course. The WTA along with all the golf participants would like to thank superintendents Tony Rządski and

Randy Witt for hosting this event.

The event sold out for the second year in a row. WTA's goal of raising funds to support turfgrass research well into the future was advanced through selling out the event. But not only was the event sold out. The owners of the Bull gave up their course for only a minimum of fixed costs. The vast majority of everyone's registration fee will go to support the Wisconsin Turfgrass Association Distinguished Graduate Fellowship in Turfgrass Research. The owners of the Bull should feel proud to know money raised will further turf research at the UW and help make Wisconsin turfgrass management better for the future.

The event raised over \$13,000 towards this goal.

The individuals and businesses that sponsored golf holes should feel equally as proud. Those hole sponsors are listed here. I may have missed some of the donors during the hustle of checking prizes in during the morning. I'm sorry if I missed your name but please realize the event was made more successful through your generosity.

Jack Nicklaus really did a first rate job designing the course. The layout rambled through mature forests to open natural areas. Streams, ponds, and ravines came into play regularly to test everyone's skills. Often you had to make decisions about different landing areas to shoot for or just how much of a hazard to hit over. Risk and reward were presented on almost every hole.

There is no question that the weather was a reward. Who would have guessed Mother Nature would cooperate so well. Record high temperatures greeted the golfers on this mid-October Wednesday. There was-



Beautiful scenery abounded on every hole like these fall colors behind Robert Nolan and Joe Knudtson.



One of the prize tables. Every participant went home with a door prize.



## 2003

### WTA Golf Fundraiser Hole Sponsors

Aquatrols	M&I Marshall & Ilsley Bank
Bayer	Maple Bluff Country Club
Chris Williamson	Olds Seed Solutions
Contree Sprayer and Equipment	Reinders
DHD Tree Products	Spring Valley
Geunhwa Jung	Sue Kershasky
Greens Committee at Westmoor Country Club	Syngenta
Hunter Golf	Tom & Dianne Schwab
Ingersoll-Rand Equipment & Services	United Horticultural Supply
John Deere Golf & Turf One Source	Waupaca Sand and Solutions
Long Island Farm Inc	Wayne Kussow
	Wisconsin Turf Equipment

n't a cloud in the sky. It was surreal to have temperatures in the low 80s with mild breezes and be playing such a wonderful golf course with good friends.

One other reward met the 142 participants of the event. Many generous donors gave door prizes so that everyone went home with more than wonderful memories of the golf course. Many of these prizes were worth the cost of registration. Look below to see what door prizes you could have won. We'd all like to thank the generous donors for making the event even greater. 🍏



Host superintendent Randy Witt shows Grant Mortimer how it's done.

## 2003 WTA Golf Fundraiser Door Prizes

Donor .....	Door Prizes
Aquatrols .....	Dozen golf balls
BASF .....	Cash
Blackwolf Run .....	40 golf hats
Bruce Schweiger .....	Bicycle
Bullseye CC .....	Windshirt
DHD Products .....	Golf bag
Evergreen GC.....	Foursome of golf and other prizes
Green Bay Country Club .....	Shirt
Greenwood Hills .....	Proshop prizes
Horst.....	Leather brief case
Hunter Golf .....	2 Carhart jackets
Jacklin Seed .....	Jacklin windshirt, calculator
Syngenta .....	\$200 Cash
John Deere Landscapes .....	2 X \$40 Home Depot gift certificate plus two hats
John Hegge.....	2 X Badgers/ Michigan State football tickets & a multi-tool
JW Turf .....	A couple prizes
Lawsonia Links .....	Foursome of Golf
Monroe Country Club .....	Fousome of golf
New Berlin Hills Golf Course .....	Foursome of Golf
Noer Facility .....	Putter
Old Hickory CC.....	3 golf shirts
Oshkosh CC .....	Putter
Reinders .....	TV
Royal St. Patricks .....	18 pack of Pinnacle titanium distance golf balls
Spring Valley .....	Tennis ball machine, fishing pole case
Stoughton Country Club .....	Foursome of Golf
The Bridges Golf Course .....	Foursome of Golf
The Preserve at Deer Creek .....	Foursome of golf, logo golf shirt, and sleeve of logo balls
The Woods .....	2 gift certificates
Washington County Golf Course .....	Foursome of Golf
Waupaca Sand and Solutions .....	DVD player
Wisconsin River GC .....	Foursome of golf
Wisconsin Turf Equipment .....	Wind Shirts



# Crew Outing

By Tom Schwab, O.J. Noer Turfgrass Research and Education Facility  
University of Wisconsin-Madison

The UW Turf Group would like to thank Jim Krieger from Windy Acres Golf Course. Jim is an avid supporter of the turf program at the UW. He invited all the turf professors, students and staff from the Noer Facility down to Monroe to enjoy a year-end golf outing as his way of giving back to the UW.

He doesn't need to give back anything because we always learn as much from him as he thinks he does from the UW. Jim runs a lower budget yet successful golf operation in Monroe that survived one of the longest droughts in memory this summer. They went over 60 days without any precipita-

tion. He kept the course alive with only portable irrigation tanks since the course lacks an in-ground irrigation system.

Jim has invited the UW Turf Group down for several years for our year-end crew outing. It is always such a pleasure to take a breather at the end of the summer before we lose many of our staff members. The crew is always amazed at the first class treatment and hospitality this wonderful course provides. There are some quite tricky holes that continually test these young hot-shot students, so that they always have fun.

A number of other golf courses

have also opened their doors to host our year-end crew outing. We always have a blast and greatly appreciate the opportunity. 🍷



Dr. Stier eyes up this long putt opportunity. Note the severe drought conditions in the fore and background that Jim Krieger had to survive this summer.



Steve Abler hangs his head low after missing a birdie opportunity.



Kurt Stienke enjoys his day away from digging holes at Noer.



Our host Jim Kreiger (center) pictured with Noer Facility's Walter Thieszen, and TDL's Steve Abler.



Dr. Stier wonders what club he'll need to hit it over the pond on #5.

# CALENDAR OF EVENTS

Jan 5	Pesticide Applicator Training & Testing	Madison, WTA Turfgrass and Greenscape EXPO
<b>Jan 5-7</b>	<b>WTA Turfgrass and Greenscape EXPO</b>	<b>Marriott Madison West</b>
Jan 14-16	Mid-Am Trade Show	Chicago, IL
Jan 21-25	STMA Conference and Exhibition	San Diego, CA
Jan. 28	Wisconsin Nursery Association Winter Workshop	Oconomowoc
Feb. 1-3	Wisconsin Arborist Assoc Winter Conference	Green Bay
Feb 9-14	GCSAA Golf Course Conference and Show	San Diego, CA
Feb 17	Pesticide Applicator Training & Testing	Waukesha
Feb 17-21	TPI Midwinter Conference	Santa Barbara, CA
Feb 22-24	WLF Convention	American Club, Kohler
Feb 23-27	School of Turfgrass Management (UW/UMinn)	St. Paul, MN
Feb 24,25	Reinders Service School	Olympia Resort, Oconomowoc
March TBA	WGCSA Spring Business Meeting	Ramada, Fond du Lac
Mar 3	Pesticide Applicator Training & Testing	Eau Claire
Mar 4	Pesticide Applicator Training & Testing	Green Bay
Mar 10	Pesticide Applicator Training & Testing	Arlington
March 11	Spring Valley Turf Fair	Country Inn, Pewaukee
March 11	Stateline Conference for Landscape Professional	Janesville
Mar 23	Pesticide Applicator Training & Testing	Waukesha
Apr 6	Pesticide Applicator Training & Testing	Waukesha
April 26	WGCSA Monthly Meeting	Hawks View GC, Lake Geneva
May TBA	WGCSA Super/Pro Tournament	TBA
June 21	WGCSA Monthly Meeting	Oconomowoc GC, Oconomowoc
July 12	WGCSA Monthly Meeting	Rolling Meadows GC, Fond du Lac
Aug 10	WTA Summer Field Day	Noer Facility, Verona
<b>Aug 12</b>	<b>WNA Field Day</b>	<b>Johnson Nursery, Menomonie Falls</b>
Sept TBA	WGCSA Monthly Meeting (Tournament)	The Legend at Brandybrook, Wales
Oct 12	WGCSA Monthly Meeting (Guest)	North Hills CC, Menomonie Falls
<b>Oct TBA</b>	<b>WTA Golf Fundraiser Outing</b>	<b>TBA</b>
Oct TBA	WGCSA Dinner Dance	TBA
Nov TBA	Wisconsin Golf Turf Symposium	American Club, Kohler

WTA Members — If you have an important date you'd like to share with other members —  
Call 608-845-6895 or Fax 608-845-8162 and let us include it in the next calendar.

## Contact Telephone Numbers

GCSAA	Golf Course Superintendents Association of America.....	800-472-7878
Mid Am	Mid Am Trade Show .....	847-526-2010
NGLGCSA	Northern Great Lakes Golf Course Superintendents Assoc.....	715-453-4176
PAT	Pesticide Applicator Training and Testing.....	608-262-7588
Reinders	Reinders Service School .....	800-782-3300
TPI	Turf Producer International Midwinter Conference .....	800-405-8873
Turf School	School of Turfgrass Management.....	608-262-1624 or 612-624-0782
Spring Valley	Spring Valley Turf Fair .....	800-635-2123
Stateline	Stateline Conference for Landscape Professionals.....	608-752-3885 ext. 17
STMA	Sports Turf Manager Association.....	800-323-3875
Symposium	Wisconsin Golf Turf Symposium .....	800-287-9645
WGCSA	Wisconsin Golf Course Superintendents Association .....	414-786-4303
WLF	Wisconsin Landscape Federation .....	414-529-4705
WNA	Wisconsin Nursery Association .....	414-529-4705
WSTMA	Wisconsin Sports Turf Manager Association.....	608-845-6895
WTA	Wisconsin Turfgrass Association .....	608-845-6536