



WISCONSIN TURFGRASS NEWS

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SPRING 1998

Lohmann Takes Helm of ASGCA

By Tom Schwab

Bob Lohmann will assume the highest post of the national organization, American Society of Golf Course Architects (ASGCA) this April. Bob has been a familiar personality in the Wisconsin golf industry ever since he started his design business in 1984. He is a University of Wisconsin-Madison graduate with a Bachelor of Science degree in Landscape Architecture, and is a long time WTA and WGCSA member which makes this presidency special for us in Wisconsin.

Many of us can remember when Bob first distributed his resume folders trying to drum up business for his new company. He and his wife Carol were the whole business. Now he oversees a staff of four experienced course designers and a golf construction business. He's been a speaker at The Wisconsin Golf Turf Symposium, monthly WGCSA meetings, and will give a presentation at the Turfgrass and Greenscape EXPO 1999 next January.

He has designed and/or constructed many new golf courses, master plans and course renovation projects in the state and throughout the Midwest. He also has a few projects outside the Midwest in Florida, South Carolina, and Arizona. In Wisconsin some of his many projects include Cedar Creek, Bishops Bay and Whispering Springs. Golf courses that



Bob giving some on-site instructions to staff.

Bob has designed are starting to host top ranked professional events. The USGA, PGA, and LPGA are recognizing this Wisconsin graduate's fine work for some of their major tournaments.

The golf course projects alone are not what qualified Bob to lead the ASGCA. It is his dedication of time and hard work promoting the professionalism of ASGCA that lead him to the front of the pack. He served on numerous committees including chairing the membership committee. In 1996 he was chosen to serve on the executive committee where he served as

secretary and treasurer. Then last year he progressed to vice president which lead to this year's top-dog appointment.

Bob has been a regular attendee at many WGCSA monthly meetings and WTA events and has given numerous talks and professional advice to many of us in Wisconsin. He is a down-to-earth and hard-working individual that we're proud to have associated with our turf association. He'll be even busier this year as president. With some luck we should still be able to see him at Wisconsin events in 1998.

Revised Soil Test Recommendations for Home Lawns

By Dr. Wayne R. Kussow

Department of Soil Science, University of Wisconsin-Madison

In 1994, I took on the task of updating soil test interpretations and rerecommendations for turfgrass. The focus was on homeowners, but the final product is

applicable to turf on athletic fields, commercial and industrial grounds, and cemeteries. The recommendations are not intended for golf courses or low-

maintenance areas such as roadsides and airports.

There are several constraints that have to be taken into account if the recommen-

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dations made to homeowners are understandable and easily followed. "User friendly" recommendations need to recognize that:

1. Homeowners do not know how to calibrate a fertilizer spreader and, even when presented with written information on spreader calibration, consider the process too complex and not worth the effort.
2. Homeowners purchase their fertilizer predominantly from local lawn and garden centers where fertilizer choice is extremely limited.
3. The majority of homeowners use drop spreaders that further restrict the type of fertilizers that can be used.
4. Recommendations such as "apply 3 lbs. P₂O₅/1000 ft²" are incomprehensible to homeowners and the majority of the employees in lawn and garden centers.

It is with this set of constraints in mind that fertilizer recommendations for homeowners underwent a total revision.

Prior to the present revision, interpretations of soil tests for turfgrass were based largely on 1960s literature and much of that dealt with grasses grown as forages, where the emphasis was on biomass production. In 1993, a new database was assembled from a thorough literature search. The major and most useful piece of literature was the work of Turner (1976); additional references found useful were King and Skogley (1969), Miller (1971), Waddington et al. (1978), and Turner and Waddington (1983). Once the new database was completed, new soil test interpretations were developed.

The second part of the task—that of devising recommendations that homeowners could follow—began with contacting soil testing laboratories in the Midwest. All professed to having recommendation formats for turfgrass that were essentially the same as for agronomic crops and consequently not useful to homeowners. After contemplating the issue for a considerable period, the decision was made that the recommendations would have to fit within two fundamental constraints:

1. The recommendations could not require spreader calibration.

2. The fertilizers recommended would have to be those commonly available in lawn and garden centers.

An additional concern was the environmental soundness of the recommendations. For this, I was able to draw upon my own research on N and P losses from turf.

The new database for soil test interpretations brought out several important facts. These were:

1. Turfgrass, with its dense, fibrous root system, is a highly efficient accumulator of plant available P and K.
2. The nitrogen rates being applied to turfgrass are far below those required for maximum biomass production, the consequence being relatively low optimum soil test levels for P and K.
3. During establishment, turfgrass has very high P requirements, does not respond at that time to K, and in fact, high rates of KCl are detrimental to germination.
4. Due to topdressing in sod production, sod brings in substantial amounts of P that need to be taken into account in soil test interpretations for turf establishment.

When all of the above information was factored in with data that related turf quality to soil test P and K, the result was the interpretations shown in Table 1.

The only way to avoid the need for homeowner calibration of their spreaders while keeping N rates at or near our recommendations is for them to use the spreader settings given by the manufacturers' of turf fertilizers. A check of the recommendations found on the fertilizer bag revealed that these result in application of 0.9 to 1.0 lb. N per 1000 ft². This coincides with what I recommend as the rate of N per application and my recommendation of four applications per season.

The homeowner has ready access to only three types of fertilizer: (1) general-use turf fertilizers containing a combination of water-soluble and slow-release N and small amounts of P₂O₅ and K₂O (e.g., 3-4-3-8, 29-3-4, 27-3-3, etc.); (2) turf starter fertilizers high in P₂O₅, such as 19-25-5; and (3) so-called "late season" or "winterizer" fertilizer containing more P and K (and K in particular) than do the general-use turf fertilizers. An example is 18-8-20.

Lawn and garden centers rarely stock for turf use straight P and K fertilizers. Therefore, it was totally impractical to recommend corrective P and K applications. Rather, the fertilizers readily available had to be employed in formulating a gradual buildup program for those turf areas where soil test P and K were found

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Table 1. Revised soil test interpretations and recommendations for the establishment and maintenance of home lawns, institutional grounds, and athletic fields.

	Soil pH	Soil P	Soil K	Interpretation
	----- ppm -----			
A. Turfgrass establishment				
1. From seed:	<5.5	0-15	All levels	Very low
	5.5 to 5.9	16-30	adequate	Low
	6.0 to 7.5	31-45		Adequate
	>7.5	>45		High
2. From sod:	<5.5	0-10	All levels	Very low
	5.5 to 5.9	11-20	adequate	Low
	6.0 to 7.5	21-30		Adequate
	>7.5	>30		High
B. Established turf	<5.5	0-5	0-20	Very low
	5.5 to 5.9	6-10	21-40	Low
	6.0 to 7.5	11-20	41-60	Adequate
	>7.5	>20	>60	High

to be below adequacy levels. In so doing, two basic facts were employed:

1. In turfgrass, where N rates are substantially below those for maximum biomass production, N rate controls growth rate and this, in turn, controls the plant's nutrient demand and the amounts of P and K required for taken up.

2. Because of the strong link between N rate and P and K requirements, the ratio of N:P₂O₅:K₂O required by turf is remarkably constant, hovering around 4:1:3.

Based on this information, recommendations for gradually increasing soil P and K could be formulated. By making use of starter and winterizer fertilizers, it is possible to deviate from the 4:1:3 N:P₂O₅:K₂O ratio and, in the process, slowly increase soil test P and K. Examples of the resulting recommenda-

tions for a lawn with adequate soil test P and K and a lawn low in P are given in Table 2.

The new soil test interpretations for home lawns are based on a small but the most complete database that could be assembled. Interestingly, Dr. Nick Christians, Iowa State University, has independently performed the same analysis and has arrived at interpretations for established turfgrass that are identical to those given in Table 1.

The new recommendations are a radical departure from the past and are unique in the country. Sometime after the recommendations come on-line in 1998, I hope to conduct a survey to try to ascertain end user reaction and validation of the approach taken.

REFERENCES

King, J.W., and C.R. Skogley. 1969. Effect of nitrogen and phosphorus placements and rates on turfgrass establish-

ment. *Agron. J.* 61:4-6.

Miller, R.W. 1971. Soil testing to determine fertilizer needs. *Turf and landscape research: 1971. Research Summary* 56:7-14. Ohio Agric. Res. Develop. Ctr., Wooster, OH.

Turner, T.R. 1976. Factors affecting soil test results and recommendations for turfgrass areas. M.S. thesis, Penn State University, University Park, PA.

Turner, T.R., D.V. Waddington. 1983. Soil test calibration for establishment of turfgrass monostands. *Soil Sci. Soc. Am. J.* 47: 1161-1166.

Waddington, D.V., T.R. Turner, J.M. Duich, and E.L. Moberg. 1978. Effect of fertilization on Penncross creeping bentgrass. *Agron. J.* 70: 713-718.

Table 2. | Examples of the new home lawn fertilizer recommendations for established turf.

Soil test P	Soil test K	Recommendation(s)
		----- ppm -----
46 (H)	128 (H)	Purchase a turf fertilizer that is low in phosphate and potash. Adjust your fertilizer spreader according to the instructions on the bag. Apply the fertilizer on May 1 to 15, July 1 to 15, September 1 to 15, and October 1 to 15. Re-test your soil after 2 to 3 years.
9(L)	79 (H)	Purchase what is known as turf "starter" fertilizer. Adjust your fertilizer spreader according to the instructions on the bag. Apply this fertilizer on approximately May 1 to 15 for 2 years in a row. For the rest of the year, purchase any regular turf fertilizer, adjust your spreader as shown on the bag and apply the fertilizer on July 1 to 15, September 1 to 15, and October 1 to 15. Re-test your soil after 2 years.

Bell Gave More than His Share to WTA Board

By Tom Schwab

Roger Bell stepped down from the WTA board this past December. He gave a nine-year commitment to serve the turfgrass industry on the WTA Board of Directors in addition to many more on the WGCSA board. That is significant when you think of the miles he commuted from his residence in Menasha and Sister Bay to attend meetings often held in Madison. He rarely missed any of those meetings.

Roger served as treasurer for seven of those nine years on the WTA board. He watched over the WTA books more carefully than you can imagine. Roger questioned every expense that came across

his desk. His stringent bookwork is part of the reason for the success of WTA projects such as raising money to build the Noer Facility, starting the Turf Disease Diagnostic Lab, setting up an endowment fund to support future turfgrass research, and funding important turfgrass research projects. But Roger will never be accused of being a yes-man. He would always question the importance of funding requests before they would get his vote.

Recently I asked Roger about some of the accomplishments that he made while on the WTA board. He modestly said that he did no more than anyone else on the

board. He also said that the board was full of talented leadership and that he was glad to be a part of it. We are too. WTA is in good financial position and this is in part due to Roger Bell's commitment to high standards.



Roger Bell always attends his association's conventions; pictured here at EXPO 97.

Successful EXPO 98

By Tom Schwab

If you missed it, you missed one of the best. The Wisconsin Turfgrass and Greenscape EXPO has always been one of the best educational conferences in the Midwest but this year's conference may have outdone the rest. The reasons were the excellent educational sessions, trade show, and large number of attendees. The planning committee searched out the best speakers to give their current information to all three categories of turf managers that attended from golf, lawn and landscape, and grounds and sports turf professions. The trade show was huge, laid out well, and provided plenty of time for everyone to learn about all the turf care supplies available today. In addition the scheduling and organization of the whole conference flowed so expertly.

It was the 15th annual winter conference hosted by the Wisconsin Turfgrass Association and the 5th time held at the Marriott Madison West (formerly Holiday

Inn). The only thing that could have been improved was the weather. Why does the weather always take a turn for the worse during EXPO week! Record cold temperatures for the season and slick snow covered roads have become the norm. Although I'm sure the weather kept on-site registration down, there was still a record number of attendees. 367 attendees came to gather information from the talks and trade show. The number of exhibits in the trade show was a few less than last year though, with 61 booths occupied by 129 helpful exhibitors.

Chris Wendorf, the EXPO planning chairman did such a good job organizing the committee to plan the conference. He has already had meetings to plan for EXPO 1999. Finding all the speakers is the most important element of planning, but scheduling, organizing, and coordinating a 500 person conference also takes significant work. Audra Anderson, Wisconsin Turfgrass Association's admin-

istrative secretary, does much of the planning and almost all the behind-the-scenes work. She really pours her heart into EXPO, and it shows. Planning committee members for this year, other than Chris and Audra, were Dr. John Stier, Jeff Gregos, Paul Huggett, Amy Sausen, and myself.

WTA president Bob Erdahl opened the conference summarizing the research projects that the association has supported this year. He also described the progress the association is making to reach a one million dollar endowment, through the U.W. Foundation, that will support future research projects. We are more than a quarter of the way to reaching that goal since starting the endowment four years ago. Lastly he thanked Greensmix for their \$30,000 donation of root zone materials to build a half-acre bentgrass research area that was constructed in 1997 at the Noer Facility.

One of WTA's past presidents, Curt Larson, introduced the 1998 scholarship recipients and turfgrass research donors. The turfgrass research donations make up a large part of the WTA annual budget for projects and growth of the endowment. The summary of scholarships and turf research donations is mentioned here.

Dr. John Stier continued in the opening session by introducing himself as one of the newer members of the U.W. turfgrass program. He summarized some of his past research from Michigan State University, his present work since arriving this past April, and what his duties will be in the future of the U.W. turf program. He will be adding a new advanced turfgrass management and physiology course to the turf program in 1998. That will be part of his 30% teaching appointment.
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Dr. John Stier at his first of many EXPO's.

Scholarship Donor

AgrEvo
Bayer
Spring Valley
WGCSA J.R. Love Scholarship
Wisconsin Turfgrass Association
Wisconsin Turfgrass Association
Wisconsin Turfgrass Association

Recipient

Dave Rappold \$500
Jeff Beauvais \$500
Raechal Sager \$600
Trygve Ekern \$500
Aaron Goninen \$600
Eric Counselman \$600
Jamie Johnson \$600

Amount

Turf Research Donor

Aqua Aid	WTA	\$1,000
Bulls Eye Country Club	WTA	\$1,220
Cannon Turf	WTA	\$375
Cole Grower	WTA	\$500
Creekwood Farms	WTA	\$500
Greensmix (research & materials donation)	WTA	\$30,500
Horst/ Milorganite	WTA	\$1,350
Milorganite	WTA	\$2,000
Riverview Country Club	WTA	\$1,366
Soil Organic Consulting	WTA	\$1,000
Spring Valley	WTA	\$1,000
Spring Valley/ Milorganite	WTA	\$1,075
Standard Tar Products	WTA	\$500
Stevens Point Country Club	WTA	\$1,148
WI Golf Course Superintendents Assoc.	WTA	\$10,000
Wisconsin Sod Producers	WTA	\$875
Wisconsin Turf/ Milorganite	WTA	\$1,800
Gary Zwerlein	WI Turfgrass Research and Development Fund (WTRDF)	\$200
Lake Wisconsin Country Club	WTRDF	\$450
Reinders/ Daconil	WTRDF	\$5,560
Westmoor Country Club	WTRDF	\$2,730
WTA	WTRDF	\$45,000

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ment at the U.W. His other appointment is 70% extension — so you may be seeing him as he travels the state doing research and giving turf advice.

The newest member of the turf program, who spoke next, is from the U.W. Agronomy Department. Dr. Michael Casler has done work on every U.W.-Madison Agricultural Research Station except O.J. Noer since joining the University in 1980. He will now add to his work by doing some breeding work on turfgrass. Casler described the history of turfgrass breeding and the long arduous process of bringing a new grass to market. He will continue focusing mainly on his forage grass research but in collaboration with Dr. Stier, will work on developing some cultivars that function better for Wisconsin's environment.

Brian Swingle from the Wisconsin Department of Agriculture Trade and Consumer Protection finished the opening session with a discussion of issues governing the green industry. He talked about rules and possible rule changes covering warning signs, advance notice, applicator training, citizen complaints, and record keeping.

After opening session came the large and exciting trade show. Over 60 exhibitors participated this year and the expanded trade show hours allowed time to visit with them all. There was also time for camaraderie to visit with old friends and make new ones in the large accommodating Marriott trade show area.

A wonderful buffet lunch came next, followed by more trade show, and then the best part of EXPO: The educational sessions. The speakers were excellent this year. The talks were divided into the three categories mentioned previously. It's unfortunate that you can't attend all the talks because the categories occur concurrently.

The golf course session was jam packed with information from Drs. Wayne Kussow, Michael Hurdzan, Bruce Clark, and Dave Huff. Bob Vavrek, Jeff Gregos, Andy McNitt, Amy Sausen, and Steve Millett also brought good information to the golf course session. Hurdzan seemed to be the big draw in golf as he had the room packed to the walls for two combined talks. He gave such entertaining and insightful presentations about the past, present, and future of golf in North America.

Not to be outdone, the lawn and landscape sessions had excellent talks from

Drs. John Stier, John Ball, Nick Christians, and more talks from Drs. Wayne Kussow, Bruce Clark, and Dave Huff. Other turf experts also offered insightful talks for lawn and landscape. One of the best talks had to be Kussow's "Turf and the Environment; The Real Story." He presented a scientist's view of the real impact that turf fertilizer and other management practices have on the environment. He made every point so clear to the audience before presenting the next point. The biggest compliment Kussow may have gotten was when one of his peers, Dr. Nick Christians, told him that his information would make a great University Extension publication. Christians then had an informative presentation himself. It simplified the confusion about different sources of nitrogen fertilizers. Next Dr. John Ball gave an enthusiastic presentation about how turf and trees co-exist. He explored issues of pruning, mulching, fertilizing, irrigating, and doctoring of distressed trees.



There was an abundance of equipment, products, and services to check out in the large trade show

The most practical session had to be the grounds and sports turf session. It had three successful sports field managers on the agenda: Rich Riggs from the U.W.-Stevens Point; Pete Bemis from the U.W.-La Crosse; and Vince Patterozzi from the Baltimore Ravens. Drs. Stier and Kussow also had useful sports turf information as did Andy McNitt, John Sorchan, and myself. Use of *Poa supina* was explored in a couple of the talks. It is a relatively new specie which has a lot of potential use for sport fields because of its aggressive stoloniferous growth habit.

All I can say is, "So many good talks, so little time!" You just couldn't get to them all so there were good ones that had to be skipped. If I didn't mention some of the good ones it's because I unfortunately couldn't make them all. We'd like to keep the educational benefits of EXPO at the highest level. I think it is such a good

conference every year and I hope you do too. I mentioned finding the speakers is the most important element of planning. Please let us know of any interesting presentations or positive additions that we could add to next year's educational session. Let us know soon because we have to book these people early. Call Audra or me at 608-845-6536 or 845-6895 about any presentations that you would like to see next year.

Thanks go to the registration volunteers, turf student volunteers, and all the session chairpersons that help make the show flow smoothly. Thanks also to the exhibitors that are quite an informative part of EXPO themselves, and also help defray the costs of offering such a superb conference.

A list of EXPO 98 exhibitors follows. They are there throughout the year to inform you about their latest wares, and to give you the most for your money. Your EXPO program gave a summary of each of their businesses along with their

telephone numbers. Audra can get you a new copy by calling her at 608-845-6536 if you lost your copy. These exhibitors give so very much to the turf industry in Wisconsin, so I encourage you to pay them back by purchasing their products throughout the year. They have everything you could ever need for your landscapes.

1998 EXPO Exhibitors

Absorbent Technologies
Anderson-Thomas
Bayer Corp
Beck's Ornamental & Turf
Cannon Turf Supply
Century Rain Aid
Chipco
Contree Sales
Dakota Peat & Equipment
Data Transmission Network
Evergreen Turf Equipment

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F/S Growmark	Medalist America Turfgrass Seed	Scotts
Glenn Rehbein	Megli Lawn Care	Spring Valley
Graves Feick Golf Architects	Melcher Equipment	Superior Tech Products
Greensmix	MidAmerCo	T J Emmerich Associates
Hanley Company	Miller & Associates - Sauk Prairie	Tee Shot Marketing
Horst Distributing	Milorganite	Terra International
IMC Vigoro	Natural Products Research	Tiziani Golf Car
ISK Biosciences	Novartis	Trelay Seed Company
J W Turf	Olds Seed Company	Tyler Enterprises
Jerry's Small Engine Supply	Olsen Distributing	United Horticultural Supply
Johnson & Associates Turf Equipment	Par Aide Products	W A Cleary Chemical
Kujawa Enterprises (K E I)	Pendelton Turf Supply	Wheeler Consolidated
Lange-Stegmann Company	Peterson Seed Company	Williams, Gill and Associates Golf
Lebanon Turf Products	Porter-Achtenhagen Seasonal Services	Course Architects
Lesco	Pro Greens of Midwest	Wisconsin Turf Equipment
Lohmann Golf Designs	ProGreen Plus	Wolosek Golf Course Mix
McFarlane Implement	Reinders Turf Equipment	Zeneca Professional Products

CALENDAR OF EVENTS

Apr 15	Snow Mold & Spring Field Day	St. Croix National GC, Summerset
Apr 17	Snow Mold Field Day	Sentryworld, Stevens Point
April 20	Snow Mold Field Day	Nemadji GC, Superior
Apr 27	WGCSA Monthly Meeting	Abbey Springs GC, Fontana
May 6	Snow Mold Field Day	Gateway GC, Land O' Lakes
May 11	WGCSA Monthly Meeting	Cedar Creek CC, Onalaska
May 12	NGLGCSA Monthly Meeting	Grand View GC, Hortonville
May 20	SuperPro	Lawsonia GC, Princeton
June 2	NGLGCSA Monthly Meeting	Eagle River GC, Eagle River
June 5	John Deere Team Championship	Old Hickory CC, Beaver Dam
June 8	WGCSA Monthly Meeting	Browns Lake GC, Burlington
June 24	WSTMA Inaugural Meeting	Site to be determined
July 14	WGCSA Monthly Meeting	Monroe CC, Monroe
Aug 4	NGLGCSA Monthly Meeting	Riverside GC, Menominee, MI
Aug 10	WGCSA Monthly Meeting	Edelweiss Chalet CC, New Glarus
Aug 12	WTA Summer Field Day	Noer Facility, Verona
Aug 12	WNA Summer Field Day	KF Evergreens, Osseo
Aug 17, 18	Tri-State Superintendent Tournament	Foxfire GC, Waupaca
Sept 1	NGLGCSA Monthly Meeting	St. Germain GC, St. Germain
Sept 19	WLCA Landscape Technician Testing	MATC, Mequon
Sept 21	WGCSA Monthly Meeting	Koshkonong Mounds CC, Fort Atkn.
Oct 2, 3	WGCSA Couples Weekend	Riverview CC, Appleton
Oct 6	NGLGCSA Crew Championship	Timber Ridge CC, Minocqua
Oct 12	WGCSA Monthly Meeting	Timberstone GC, Kingsford, MI
Nov 3, 4	Milorganite/ WI Golf Turf Symposium	Brookfield Marriott
Dec 1, 2	GCSAA/ WGCSA Regional Seminar	Brookfield Marriott
Jan 12, 13	1999 Turfgrass & Greenscape EXPO	Marriott Madison West

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.

Abbreviations and Telephone Numbers

John Deere	Team Championship	414-781-9050
GCSAA	Golf Course Superintendents Association	800-472-7878
Milorganite	Wisconsin Golf Turf Symposium	800-287-9645
NGLGCSA	Northern Great Lakes Golf Course Supts. Association	715-845-2339
SuperPro	Golf Course Superintendent and Professional Golf Event	414-786-4303
WGCSA	Wisconsin Golf Course Superintendents Association	414-786-4303
WLCA	Wisconsin Landscape Contractors Association	414-529-4705
WNA	Wisconsin Nursery Association	414-529-4705
WSTMA	Wisconsin Sport Turf Managers Association	608-845-6895
WTA	Wisconsin Turfgrass Association	608-845-6536

The Elusive LoTeSLoP

By Jeffrey S. Gregos, Turfgrass Disease Diagnostic Lab
Department of Plant Pathology, University of Wisconsin-Madison

Well, it's that time of year again. When I pack up the truck, and set forth in search of the elusive LoTeSLoP. So, what is a LoTeSLoP? To start, it probably accounts for the most amount of damage to turfgrass in the State. It's only active during periods of snow cover and/or cold weather, and actually hibernates during the warm months of summer. For some turf managers just the thought of these critters will give them nightmares. So, do you know what it is yet?

Early reports from around the State are that it was very hungry this year, and has consumed large amounts of turf. Also, the normal defenses against it seem to have been a little less effective than years in the past. I would have to say that these critters have enjoyed the year of the little boy (El Niño). The increased rains and a January in which the sun was only spotted three days, have led these microscopic creatures to develop quite an appetite. But, I would have to say that these pests are somewhat cowardly. They use the shield of snow cover to perform their covert activities against your turf.

Now that the snow is receding you are getting your first glimpse of what they have done to your turf. Some of you may have been spared the wrath of devastation that they can cause. However, many of you are forced to retreat to the seed locker to plant more food for them to consume in the years to come. So, what is a LoTeSLoP? It is the acronym for Low Temperature Snow Loving Pathogen, better known as the snow molds.

If these pathogens invaded your home turf, or you are looking for new strategies for their control due to your dwindling arsenal of mercury, then the following information will be of importance to you. This year the TDDL in cooperation with the WTA will be hosting 5 Snow Mold Field Days throughout Wisconsin. These field days are in general within a 2 hour drive of everybody in the State. We figured that even though Madison is a great town to visit it is not always easy for many of you to fit a 4-5 hour drive into your schedule. So, we are bringing it to you. As the old saying goes, "Nothing is free." Well, I am setting out to change that, because the admission to these field days is free. Also, as an added bonus I will be buying the donuts. So now for the dates and locations:



Snow Molds on Kentucky bluegrass of Noer Facility.

Location:	O. J. Noer Turfgrass Research Facility, Verona, WI
Date & Time:	Monday, April 6 at 10:00 a.m.
Location:	St. Croix National Golf Club, Somerset, WI
Date & Time:	Wednesday, April 15 at 1:30 p.m.
Location:	Sentryworld, Stevens Point, WI
Date & Time:	Friday, April 17 at 10:00 a.m.
Location:	Nemadji Golf Course, Superior, WI
Date & Time:	Monday, April 20 at 10:00 a.m.
Location:	Gateway Golf Club, Land O' Lakes, WI
Date & Time:	Wednesday, May 6 at 10:00 a.m.

So, I hope to see you at one of the above field days, and if you have any questions or need directions to one of the sites, please feel free to give me a call at (608) 845-2535.



Snow mold infestation on non-treated versus treated fairway bentgrass.

Announcing Ag Clean Sweep Sites for 1998

By Brian Pruka, Information Manager
The Wisconsin Department of Agriculture, Trade and Consumer Protection

Wisconsin Turfgrass Association (WTA) members are eligible for a 60% price discount on pesticides they dispose of at 1998 Ag Clean Sweep events. Ag Clean Sweep's purpose is to provide safe, easy and affordable disposal of waste pesticides and chemicals for farms and agricultural businesses throughout Wisconsin. It is a cooperative effort among local county governments, the Wisconsin Department of Agriculture Trade and Consumer Protection, and a private waste disposal firm from suburban Milwaukee.

Disposing of waste products at Clean Sweeps can cost as little as \$75 to get rid of an entire drum of chemicals and there is a 50% discount to dispose of pesticides. WTA members can save an additional 10% on pesticide disposal fees as a benefit of belonging to the association. This discount is a "thank you" to the nine professional agricultural associations that are helping to publicize the 1998 Ag Clean Sweeps. The waste disposal firm will verify your current membership in WTA by cross referencing the 1998 directory. If you have any questions about whether your membership is current, call Audra (WTA administrative secretary) at 608-845-6536.

Fourteen counties are establishing permanent sites that will be open to collect waste chemicals through November 1998. They are:

Ashland	Ozaukee
Bayfield	Price
Burnett	Rusk
Douglas	Sawyer
Iron	Sheboygan
Lincoln	Taylor
Marathon	Washburn

Another fifteen counties are holding one or two-day Clean Sweep disposal

events. The counties and dates for those events are:

- Adams - June 5,6
- Calumet - Oct 9,10
- Columbia - June 19,20
- Fond du Lac - Sept 11
- Green - May 1,2
- Green Lake - Aug 14,15
- Manitowoc - Oct 8
- Marquette - TBA
- Outagamie - Apr 17,18,19
- Pierce - Oct 3
- Richland - Sept 18,19
- Vernon - Sept 25,26
- Waupaca - June 11
- Waushara - June 12,13
- Wood - July 24,25

You should telephone the waste hauler assigned to your county (see

accompanying map) to participate in Ag Clean Sweep. They will ask for the following information:

1. The types of chemicals you plan to bring to Clean Sweep (e.g. herbicide, solvent, insecticide)
2. The amount of each chemical you'll be bringing in (e.g. five-gallon pail, 55-gallon drum)

Your waste hauler will provide you with a billing estimate based upon this information. If the estimated bill is acceptable to you, you will be assigned a time to bring your chemicals to Clean Sweep. It's that simple. If you have questions about Wisconsin Ag Clean Sweep, call Roger Springman, Ag Clean Sweep Program Manager, at 608-224-4545.



Ag Business Registration

Ag Clean Sweep 1998

To participate in Ag Clean Sweep *ag businesses must register* with one of the phone contacts below.

Ag Business Registration

715-635-2197
NW WI Regional Planning Commission

1-800-255-5092
Waste Management Industrial Services

1-800-482-9919
Superior Environmental

Wisconsin Department of Agriculture, Trade and Consumer Protection, P.O. Box 8911, Madison WI 53708-8911 revised (2/18/98)

For more information, contact Roger Springman, Ag Clean Sweep Program Manager, 608-224-4545.

The Wisconsin Turfgrass News

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

The Wisconsin Turfgrass Association Presents

THE 1998 SUMMER FIELD DAY At the O.J. Noer Turfgrass Facility Wednesday, August 12

The WTA is offering an incentive to get new members in 1998. Become a new WTA member and receive ONE FREE ADMISSION to Summer Field Day 98.

Call Audra for Details - 608-845-6536

U.W. Turf Program Extension Update

By Dr. John C. Stier

Department of Horticulture, University of Wisconsin-Madison

March was a big month for the extension turf program at the University of Wisconsin-Madison. Three major educational events have taken place with good results: Pesticide applicator training, Regional Turf EXPO, and the School of Turfgrass Management. In addition, a presentation entitled "Drought Stress and Wetting Agents" was given at the Northern Great Lakes Golf Course Superintendents Association (NGLGCSA) seminar in Wausau on March 16. Approximately 100 superintendents and turf industry members attended the NGLGCSA seminar at the Wausau Inn and Conference Center.

Pesticide Applicator Training

Pesticide applicator training classes (P.A.T.) are recommended for people who need to become certified to apply pesticides in Wisconsin. Anyone who applies restricted use pesticides must be certified whether they are a private applicator or a commercial applicator. Private applicators are defined as those who apply pesticides for production of an agricultural commodity to land owned or rented by the applicator or the applicator's employer (e.g., sod producers). Commercial applicators are divided into two groups. All commercial applicators for hire (e.g., lawn care employees) must be certified to apply any pesticides, whether general use or restricted. Commercial applicators not for hire do not contract out their services but mix, load, or apply pesticides at a specific site (e.g., golf course superintendents, school grounds personnel). Commercial applicators not for hire need to be certified only to use restricted use pesticides. Many people in the turf industry rarely use restricted use pesticides (e.g., Triumph(r) insecticide), relying on general use pesticides most or all of the time (e.g., 2,4-D herbicide, Daconil(r) fungicide). Pesticide applicator training was provided for over 200 people in Milwaukee, Chippewa Falls, and Green Bay on March 5, 10, and 11. Additional sessions were held in Arlington and a second session was held in Milwaukee on March 25 and 26, respectively.

Regional Turf EXPO

The Regional Turf EXPO was reinstated this year after being on hiatus for several years. The Regional Turf EXPO is

designed to provide turf education and research updates to professional turf managers around the state who were unable to attend the winter Turfgrass and Greenscape EXPO in Madison or to those who desire additional information. The 1998 Regional Turf EXPO sites were Eau Claire, March 10 (41 attendees), Appleton, March 11 (61 attendees), Stevens Point, March 12 (14 attendees), and Milwaukee, March 13 (52 attendees). Attendees at each site were made aware of the value of membership in the WTA and encouraged to join the association. Presentations were the same at all four sites due to the tremendous time involved in preparing the presentations. Dr. Wayne Kussow discussed "Turfgrass

Fertility" and the "New Soil Test Recommendations", Jeff Gregos discussed "Snow Mold Diseases", Amy Sausen discussed "NTEP Update 1997", and Dr. John Stier discussed "1997 Research Report Highlights" and "Athletic Field Construction and Management". County extension agents Kerry Ingraham (Eau Claire), John Biese (Appleton), Deana Sexson (Stevens Point), and Laurie Weiss (Milwaukee) helped to coordinate the Regional Turf EXPO. Due to the excellent feedback received, we hope to be able to offer the Regional Turf EXPO annually. Desirable outcomes from this and related activities are to increase the attendance at Summer Field Day and the winter Turfgrass and Greenscape EXPO.

(Continued on back page)

President's Message

By Robert Erdahl, WTA President

As the 1998 growing season gets underway, I'd like to update you on some events happening behind the scenes within the WTA that will affect the entire Wisconsin turfgrass industry.

I'll start with some great news from Madison! The position of Turfgrass Pathologist in the Plant Pathology Department has been included in next year's budget for the University of Wisconsin. This means that the position will be advertised this summer and hopefully the selection process will be completed by the spring of 1999. The filling of this vital faculty position was made possible due to the cooperation of the Plant Pathology Department - Dr. Tom German, the University of Wisconsin Extension - Dean Carl O'Connor, and the College of Agricultural and Life Sciences - Dean Neal Jorgensen. With tight budgets all around, these three leaders sat down and came up with a way to provide the Wisconsin turfgrass industry with disease research and education that will yield benefits for years to come.

The Turfgrass Disease Diagnostic Lab (TDDL), under the direction of Jeff Gregos, is currently in the second of a three year contract program that provides the funds necessary to run the diagnostic, research and educational efforts of the TDDL. The current base of support is \$23,000 from 85 contract holders. In order to guarantee the future of this important service, the WTA needs to increase the support level to \$30,000 by the

year 2000. If you are not a current TDDL contract holder, please consider joining in to help. Remember, if we don't work together, there is a very real possibility that the new millennium could see us all sending our turfgrass samples out of state.

Finally, I'd like to fill you in on the WTA's Research and Development Fund, an extremely important part of the WTA that does not get the attention that it deserves. The WTA's R & D Fund was started in 1993 to provide for future needs of the Wisconsin turfgrass industry. The goal is to create a \$1 million endowment and use the yearly earnings to support turfgrass research and education. Since the WTA Board of Directors are not professional investors, all of the assets in the WTA's R & D Fund are managed by the University of Wisconsin Foundation.

The major source of income for the R & D Fund is contributions from the WTA. Each year the WTA Board of Directors allocates income to operating expenses, research, and education. After these three commitments are taken care of, any additional funds are placed into the WTA's R & D Fund. In addition, substantial donations to the fund have come from a broad range of WTA members.

In just six short years, the WTA's R & D Fund has grown to over \$300,000. This is a tribute to the wonderful support that the WTA receives from its 230 members and the entire Wisconsin turfgrass industry. Let's keep up the good work. We're off to a fantastic start!

(Continued from page 9)

School of Turfgrass Management

The School of Turfgrass Management was successfully taught once again this year from March 17-March 20. Coordinated by Amy Sausen, this week-long intensive training and educational session received an abundance of positive feedback from the participants. Many of the participants attend based on recommendations from "graduates"; hopefully this trend will continue. This year the school was held at the O.J. Noer Facility and attendance was capped at 25 (the final number of participants was 23). Persons from many segments of the turf industry attended: Golf course professionals (7), lawn and landscape company personnel (5), turf equipment suppliers (6), and miscellaneous organizations including turf product distributors and grounds managers (5). Surprisingly, several of the attendees were from North Carolina, so warm season grass samples were quickly brought in for identification and discussion purposes! Educational sessions were held on turf growth and development, species selection and identification, turf establishment and renovation, weed management and identification, soils and fertility, irrigation

systems, pesticide application and calibration, insect management and identification, and disease management and identification.

In 1999 we anticipate holding the turf school at the Wisconsin Center on the UW-Madison campus. This will allow us to increase the number of participants to about 35 in 1999. If you are interested in attending the 1999 School of Turfgrass Management, currently scheduled for late January or February, contact Ms. Amy Sausen (608) 262-1689 or Dr. John Stier (608) 262-1624 to be placed on a priority list. In addition, several inquiries have been received regarding an advanced



Dr. Dick Straub instructs about pesticide application equipment.

school of turfgrass management. If you are interested in an advanced course, and/or if you have topics you would be interested in, please give us a call.



Phil Pellitteri conducts an insect lab.



1998 turf school attendees intent on absorbing loads of turf information during one of the many classroom hours.

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