

## TABLE OF CONTENTS

THE PRESIDENT'S MESSAGE <b>Thank You</b> .....	3
GAZING IN THE GRASS <b>TurfNet Survey Misses the Mark</b> .....	5
WISCONSIN ENTOMOLOGY REPORT <b>Potential for the Development of Insecticide Resistance to White Grubs</b> .....	13
NOTES FROM THE NOER FACILITY <b>Statistics and The Science of Turfgrass Research</b> .....	15
WISCONSIN SOILS REPORT <b>Water Conservation Emerges as the Big Issue at National Turfgrass Research Conference</b> .....	21
GREEN SECTION <b>Mr. Sandman...Is New Technology Lulling Us to Sleep?</b> ...	26
WGCSA <b>WGCSA FALL DINNER DANCE EVENT</b> .....	31
NOTES FROM THE NOER FACILITY <b>Bearable at Blackwolf</b> .....	35
TDL <b>A Tale of Two Summers: The 2007 TDL Year in Review</b> .....	38
GOLF IN THE FLATLANDS <b>Ideas That Evolve Into Practices.</b> .....	42
WISCONSIN ENTOMOLOGY REPORT <b>An Emerald Intruder.</b> .....	46
THE SPORTS PAGE <b>Stricker, Kelly are Old-school Success Stories</b> .....	48
THE EDITOR'S NOTEBOOK <b>A Normal End to an Abnormal Year</b> .....	51
JOTTINGS FROM THE GOLF COURSE JOURNAL <b>Thanks for the Memories</b> .....	54
BADGER STATE TURF CLIPPINGS .....	58

## ABOUT THE COVER

Grass Roots artist Bev Bergemann has captured the beauty, serenity and tranquility of a Wisconsin golf course and a golf course shop in the winter season.

*"Sometimes the snow flutters down and silently alights like immense flocks of birds. At other times it descends as silently, but like the continuous falling of a gray veil shutting one in from all the world lying farther away than his nearest outbuildings. Another comes blown by*

*howling winds in long slants to the earth and whirled and tossed along the fields blurring their surface in a frozen crust."*

- Rowland Robinson  
1890



Visit our web site at:  
[www.wgcsa.com](http://www.wgcsa.com)

## THE GRASS ROOTS

THE GRASS ROOTS is a bi-monthly publication of the Wisconsin Golf Course Superintendents Association, printed in Waunakee, Wisconsin by Kramer Printing. No part of THE GRASS ROOTS may be reprinted without expressed written permission by the editor.

### EDITOR AND PUBLISHER

Monroe S. Miller  
Blackhawk Country Club  
P.O. Box 5129  
Madison, WI 53705  
groots@charter.net

### EDITORIAL STAFF AND BUSINESS AFFAIRS

Dave Brandenburg  
P.O. Box 314  
Theresa, WI 53091



Front Row: L-R: Matt Schmitz, Brian Zimmerman, Mike Lyons, Dustin Riley, and Jeff Millies.  
Back Row: L-R: Chad Harrington, David Swift, Jim VanHerwynen, David Oberle, Marc Davidson.

### 2007-2008 WGCSA OFFICERS AND DIRECTORS

#### PRESIDENT

Mike Lyons  
Old Hickory CC  
316 Grove Street  
Beaver Dam, WI 53916  
E-mail: mike@oldhickorycc.com

#### DIRECTORS

Chad Harrington  
Autumn Ridge GC  
335 Berge Street  
Valders, WI 54245  
E-mail: putter@lakefield.net

#### VICE PRESIDENT

Dustin Riley  
Oconomowoc GC  
762 Summit Avenue  
Oconomowoc, WI 53066  
E-mail: ogcsuper@bizwi.rr.com

#### Matt Schmitz

The Bruce Company  
8120 Martinsville Road  
Cross Plains, WI 53528  
E-mail: mschmitz@bruceco.com

#### TREASURER

Brian Zimmerman  
Milwaukee Co. Parks  
7350 South 69th  
Franklin, WI 53132  
E-mail:  
bzimmerman@milwcnty.com

Jim VanHerwynen  
South Hills Golf and C.C.  
1134 South Park Avenue  
Fond du Lac, WI 54935  
E-mail:  
jkvanherwynen@charter.net

#### SECRETARY

Jeff Millies  
Edgewood GC  
W238 S9560 Kuzendorf Ct.  
Big Bend, WI 53103  
E-mail: jmillies@wi.rr.com

David Swift  
Whistling Straits GC  
4106 North 46th Street  
Sheboygan, WI 53083  
E-mail: Swift@Kohler.com

#### LIAISON

David Oberle  
BASf Corp.  
4250 Wexford Way  
Eagan, MN 55122  
E-mail: oberleD@BASf.com

#### PAST PRESIDENT

Marc Davison  
Green Bay CC  
2400 Klondike Rd.  
Green Bay, WI 54311  
E-mail: mdavison@greenbaycc.org



# Thank You

By **Mike Lyons**, Golf Course Superintendent, Old Hickory Country Club

I would like to start by saying thank you to all of you for allowing me to serve as president of our association. It has been truly a fascinating and very rewarding time. It will be over twelve years when my time is completed and it has gone by quickly.

I have seen the association go through some very good growth and also some slow times, not unlike the growth and slow down in golf. Our association is doing very well at this time and the gentleman succeeding me will only improve the well being of our association.

There are many areas that will be looked at in the future. It is only a matter of time when we will be fully automated with many of our association's activities, things like monthly meeting notices, job posting, etc. I also think in the near future we may have an executive director to help run the association. There will always be change and most of the time change can be very good. The membership I have gotten to know over the years is very passionate and respectful of what we do and would grasp change with open arms.

I also know there are many in this association that will step up and help out when needed.

Speaking of change, many of you may or may not know Monroe Miller is soon stepping down as editor of



*The Grass Roots*. We all know these shoes will be difficult to fill. Monroe has done more for us than anyone I know. He has always been very passionate at what he does and how he feels about our association. I always got the feeling he would do anything for us, and he has. The awards and respect he has earned over the years are too much for me to put into writing. Wish I was more capable to

give Monroe a proper send off but I am sure someone will step up. Thank you so much, Monroe.

The new editor of *The Grass Roots* will be David Brandenburg. Though like I said Monroe's shoes would be hard to fill, David is one man I know who is up to the task. He has done many things for our association and this is just another time he has stepped up and volunteered his time and energy to our association. I am sure he will do everything possible to continue the great tradition *The Grass Roots* has received over the years, one more reason why David is one of the few who have received our Distinguished Service Award.

Once again, thank you and I hope everyone has a great year-end and a great 2008. I look forward to seeing many of you at our monthly meetings, seminars and all the other offerings our great association has to offer.

Take care. 🌱



**January 8, 9 and 10**

**at Marriot West – Middleton, Wisconsin**

*offering an outstanding program that will touch  
all aspects of turfgrass management*

**We know money  
doesn't grow on trees...**



**... it grows in turf!**

**Stretch Next Year's Budget**

Everyone is looking for ways to stretch their 2008 budget dollars further and the Aquatrols' Turf Bucks fall booking reward program can help you do just that.

**Order Now – Save Later**

Book your Aquatrols products for the 2008 season before December 31st and earn Turf Bucks reward savings on every gallon or pound purchased. Use the rewards you earn to buy other turf chemicals or help pay for a piece of equipment. Or take your crew out to lunch to thank them for a job well done. Plus, you don't have to take delivery or pay for your order until spring.

**Donate Your Turf Bucks Rewards Too**

You can also donate your Turf Bucks rewards to support important turfgrass organizations like the Wisconsin Turfgrass Association or the Wee One Foundation. It's your choice.

***Talk to your Aquatrols distributor representative today to get more information about the Turf Bucks fall booking rewards program.***



• (800) 257-7797 •

• [www.aquatrols.com](http://www.aquatrols.com)



# TurfNet Survey Misses the Mark

By Dr. John Stier, Department of Horticulture, University of Wisconsin-Madison

The July issue of TurfNet, the online magazine for golf course superintendents, contained a "survey" of the top 100 national turf programs. The survey was in fact a numerical ranking of turf schools. Some of what I consider top schools were indeed highly ranked: North Carolina State, Michigan State, Penn State. However, some ranked schools were ones I've barely heard of in my 20 years of turf academia, while other notable powerhouses such as the Univ. of Nebraska and the Univ. of Florida were completely absent. How could anyone miss the mark that badly?

The C-5 Division of the Crop Science Society of America, formed in 1946, is the official organization of turf scientists and instructors. Any faculty person who has been a member for more than five years can tick off the top schools and universities, while recognizing that all have certain qualities. During our annual conference we see who is doing the most research and the best research or outreach in various areas. However, doing the most research does not necessarily equate with the best. A similar situation exists at the Golf Industry Show each year. Some schools have massive booths with many turf students in attendance, others have the conventional size and modest numbers, while many have no booth at all and few if any students attending. Should golf courses only hire students that come from the school with the largest booth? Will a golf course superintendent only buy a product from a company with the largest booth, because the largest booth equates to the best product and/or value? Of course not.

The survey questions and overall management appeared to be poorly developed. Anyone who has served on a board to oversee a survey knows that the survey instrument (e.g., questionnaire) is only as good as the type and wording of the questions, along with making sure it gets into the right hands. TurfNet failed on both accounts. TurfNet proudly focused on the fact they had hired a college staff who would "crunch the numbers". This is like bragging about who has been hired to operate the fairway mower with a gasoline engine, then finding out the person they'd charged with fueling it used diesel because they didn't know the difference.

One of the biggest miscues was in how the surveys were sent out. Instead of sending them to the key turf personnel at schools, something which could have been readily done as they are all listed with the

GCSAA, many if not most of the surveys were sent to a school administrator. Thus, if a secretary opening the dean's or the chairperson's mail didn't forward the survey, the faculty didn't receive it. At many schools the turf faculty never saw the survey, and only learned about it after the fact. These schools included Nebraska, Florida, and others. This despite the decades of service professors like Bob Shearman (Univ. of Nebraska) has rendered to the industry through his research, advisory capacity with the National Turfgrass Evaluation Program, and as technical editor for *Crop Science*, the turf scientist's equivalent of *Golf Course Management*. Dr. Roch Gaussion, also at the Univ. of Nebraska, is the current C-5 chair, and only heard about the survey from a fellow scientist in Indiana as the deadline approached. What would the industry think if the president of the



Everything To Make Your  
Course Beautiful

Turf Seed • Fertilizers • Repair Parts  
Golf Course Accessories • Equipment

# LESCO<sup>®</sup>

## 800 - 321 - 5325

LESCO is a registered trademark and Grow With Us is a trademark of LESCO Technologies, LLC.

# The Real Master of the Fairway

Although there are many pretenders to the throne, there's only one Jacobsen® SLF-1880™. In a class by itself, the super-lightweight SLF-1880 is the **industry's lightest** fairway machine – providing you more attractive turf as a result of significantly **less compaction**. The SLF-1880 is also **more maneuverable** than the competition, allowing you to mow fairways, aprons and approaches with just one machine. And, the SLF-1880's patented lift-arm mechanism allows its 18" reels to easily glide over undulating terrain – giving you a **smooth, greens-quality cut** everywhere you mow. It's no surprise that world-class courses like Arnold Palmer's Bay Hill Club & Lodge choose Jacobsen products like the SLF-1880 to provide superior turf conditions every day. Contact your local Jacobsen dealer or visit [jacobsen.com](http://jacobsen.com) for more information.



The 8th hole at Arnold Palmer's Bay Hill Club & Lodge



WHEN PERFORMANCE MATTERS™



1.888.922.TURF • [jacobsen.com](http://jacobsen.com)



444 N. Madison Street  
P.O. Box 110  
Chilton, WI 53014  
Ph: 800-279-2341  
Fax: 920-849-9576

GCSAA was left out of a survey sponsored by TurfNet?

Amusingly, the turf faculty at some schools didn't know of the survey until after the rankings came out, yet their schools were still ranked! Imagine if TurfNet sent a survey to your club's manager, asking how well-maintained your golf course was, without any input from you. Meanwhile, down the road, the manager has turned over the survey to the superintendent to answer. What would you think, especially if you thought your course should rank much higher?

No respectable survey in which I have ever participated, either as a respondent or as a surveyor, has neglected to conduct a follow-up with non-respondents. I get numerous surveys each year, and the difference between the good and the bad is often indicated by the follow-up. Following-up achieves better accuracy as it helps safeguard against surveyees not responding because of a bad address or other condition. It also serves to ensure accuracy in the case of incomplete or contradictory answers. We spent \$100,000 in 2000 to conduct the Wisconsin Turf Economic Impact survey, hiring the Wisconsin Agricultural Statistics Service to do it right. Part of the funds went to hire people who, for one month, did nothing but contact people who had not responded to the survey or whom had given incomplete answers. In a low budget situation in which we surveyed IPM practices of landscapers, we hired two students at \$8/hr to contact respondents after three of us identified which companies had not responded or had incomplete/contradictory answers. The total cost of the follow-up? A few hundred dollars, but it made all the difference between a good survey and a bad survey (Mrill et al., 2007). If one faculty and two staff members can ensure survey follow-up with practically no budget and less time, surely a magazine deigning to be the primary source of information for golf course superintendents should be able to do the same.

TurfNet's fumbling rankled many superintendents and academics. In addition to the mailing of the surveys, the wording and types of many of the questions were just bad. A colleague from a ranked southern school struggled with the following questions:

1) **What is the current enrollment in the turf management program?** At that particular school, all 80 students in the department get a degree called "Horticulture, Landscape, and Turf Science", so should the answer have been 80? However, only about 50 students take more than one turf class, so should the answer have been 50? The faculty member answering the question felt that only about 25 students were truly interested in turf as a career, of course, this would be the faculty member's perception and might be inaccurate. What is the correct answer? A different land-grant university in the South has

approximately 1,000 students in its introductory turf course (FYI-one of the faculty recently earned their Ph.D. in turf from the UW-Madison). The course counts as a general science course for the university, so students flock to it. Should they be included in the numbers?

2) **What is the number of full-time faculty with expertise in turf management?** This question was unclear if it meant full-time faculty members that work full-time in turf or part-time. [Some faculty have part-time or adjunct appointments, meaning their real job is elsewhere.] At the UW-Madison, Dr. Chris Williamson is a full-time faculty member, was a former golf course superintendent so his management experience is unquestionable, however, his appointment is split equally between turf and ornamentals. Does he count? Several of the top-ranked schools have one or more full-time faculty who conduct what is called "bench-top science", but wouldn't know the difference between a .156 inch and a 0.5 inch height of cut. Should they be included? A similar situation exists with the questions about staff and graduate students. We have several faculty members at the UW-Madison who occasionally work with us on turf projects as the



1444 Bernard Drive • Addison, Illinois 60101  
Office 630.268.8871 Fax 630.268.1357

Proud Distributors of:



**Cubby O'Brien**  
630.742.5124

**Ed Devinger**  
414.801.2302

situation demands—should they and all of their staff and/or graduate students be included? While the answer may be clear to those who know the program in-depth, one look at some schools' websites shows even those faculty and staff who are peripherally involved with the turf program have historically been included as members of the "turf team". Not including them would disavow their efforts, but is it really accurate to say they have expertise in turf management? Most C-5 members who have been in academia five or more years could tell you who the faculty really are that work in turf. John Reitman, editor of TurfNet, now says they did have input from turf scientists, but is unwilling to divulge their names. If this is true, the turf scientists obviously were not allowed to play a sufficient role in the process.

3) **Do you have an on-site pathology lab?** Only a handful of universities have a turfgrass pathologist, and many of those only work in turf part-time. However, my colleague from the southern school pointed out in an email to the C-5 group that, even though they lack a true turf pathologist, they have 8 pathology labs in their building. Many of these people can help diagnose a turf disease. What is the answer? At the UW, we have a plant disease clinic on campus, but they don't handle turf samples. Instead, the Turf Diagnostic Lab (TDL) is housed at the O.J. Noer Facility so superintendents can easily get to it, park, run inside, get a diagnosis, and get back to the course. However, the TDL is 8 miles away from campus. Is this an on-site pathology lab? I would guess so, but an independent auditor might see it differently. The lab receives no state funding, is not officially recognized by the College of Agricultural and Life Sciences, and so by these and other measures might not be considered part of the university.

4) **What is the number of courses related to turf management?** One of my colleagues at another university wanted to answer "all of them" (e.g., 4 years-worth). At UW-Madison, turf students do not necessarily have to take all of the turf courses offered, but are required to take a number of courses critical for their careers such as soil science, irrigation, drainage, accounting, personnel/business management, etc. Do these courses count? We have 3 official courses that contain the word turf, but we occasionally offer a 4th course in turf pest management which is not officially listed. Previous to my arrival, only 2 classes were offered which contained the word turf in the title: a 1 credit turf fertility course and a 2 credit introductory turf course. I made the introductory turf course 3 credits instead of 2 by adding a 3-hr/week laboratory, then developed a 3 credit advanced turf management course. Dr. Soldat turned the 1 credit turf fertility course into a 3 credit turf nutrition and water course. Thus, we have officially increased turf course offerings from 3 to 9 credits, a 300% increase, yet based

on number of courses we've only increased it by 50%. Have we helped the students? I think so. One of the large universities in the middle of the country recently split its introductory and advanced turf courses into two different courses each (e.g., Part 1 and Part 2), thus showing a total of 4 turf classes. The number of instructional hours and credits are the same as before, but now they have twice as many turf classes. Does the new situation provide an accurate portrayal of the turf instruction, and does it help the students?

Other fundamental problems exist with the questions. Many pertain to the number of students enrolled in the turf program, but as pointed out with the school having 1,000 turf students in its introductory class, does more mean better? How many of you with B.S. degrees felt you learned more in a class having 200+ people than in a class of 20 students? Should TurfNet instead focus on the student:advisor ratio? Does a university with three faculty members and 125 turf students provide better mentoring than a university with three faculty members and 25 turf students?

What about the academic level of the institution? For example, in order to get into the UW-Madison these days, a freshman essentially needs to have a 3.9



## Water Well Solutions

Toll Free 888.769.9009

*Having Provided Professional Services*

*Blackwolf Run  
North Shore Golf Club  
Oconomowoc Golf Club  
Riverview Country Club*



Design, Service, & Installation  
High Capacity Wells  
Well & Booster Pumps (All Brands)  
Same Day Service Response  
Annual Maintenance & Startup Programs  
Well Rehabilitation:  
AirBurst, Aquateam & Hy-Rip

Authorized Dealer



Oconomowoc, WI

Beecher, IL

WWW.WATERWELLSOLUTIONS.COM

or better grade point average, a 30 or better on their ACT, and show involvement in extracurricular activities. Consequently, our numbers are less than if we admitted persons with lower GPAs out of high school. With the industry's support, we have tried to keep the number of students in proportion to the job market, something which some schools have ignored to the disservice of their alumni. What about the overall quality of the department offering the program? The Department of Horticulture at the UW-Madison was ranked #1 in the country this year by the Chronicle of Higher Education based on faculty productivity in grants and publications, graduate students, etc. Shouldn't these types of covariates be included in the rankings? A credible statistics service able to "crunch the numbers" would want to include school admission criteria, department rankings, and other variables.

In an email to a group of C-5 members shortly after the rankings were published, John Reitman defended the purpose of the survey stating it was done for the good of the students. In reality, virtually 100% of a schools' turf students are in-state residents. Due to the high cost of education, especially out-of-state, does it really do a student any good to go elsewhere?

If a Wisconsin student pays out-of-state tuition to go to North Carolina State, are they really going to get a better job at higher pay? Will they be happier?

Lack of integrity plagues such rankings as these, as the answers and motivation for the rankings are always self-serving. In TurfNet's case, the sole reason for the rankings is to sell advertisements as they know superintendents will be curious to see how their alma maters ranked. The survey has no benefits for the students. It does serve as a chest-thumper for alumni, students, and staff from the few schools ranked at the top. However, even a top ranking is not always beneficial. One of the top 10 schools, with their industry thinking they should have ranked higher, will now be spending money doing an external review of their program. Tens of thousands of dollars will be spent bringing in an outside panel to review a program that anyone in the turf industry, especially students who have gotten jobs due in part to name recognition of the school, has always deemed excellent. The money that will be spent is money that could have gone towards scholarships, field trips, instruction, or any of a number of other items that could truly benefit the students. This is like the UW-Madison using instructional funds to determine what our football team needs to do to win the national championship, a goal which Barry Alvarez never made an object of the program because he has integrity and cares about the players as people and students first. And for any school ranked #1, what happens internally when they lose the #1 ranking?

Needless to say, the rankings have anguished some superintendents and academics around the country. I have received more calls and emails than I have been able to track about the rankings. Time spent with a chest-thumping exercise is time away from mentoring students and helping the industry. If the inability of TurfNet to clearly capture the quality of your educational experience is causing angst, why subscribe to the magazine?

C-5 members have historically been very open and sharing of resources and information with one another. Several of my colleagues feel this is in jeopardy if some schools become mercenary in their desire to gain a high ranking. Loss of this goodwill will negatively affect students and the industry. John Reitman says they will be sure to have several turf persons assist with the second round of surveys. Given the antipathy with which even some of the highly ranked schools felt towards the 2007 survey, it will be interesting to see who from the C-5 group (if any) are willing to be associated with the survey. Will their schools receive a favorable review in return for their help?

The editorial board at TurfNet has been contacted by numerous faculty throughout the country as to the mis- cues inherent in the survey questions, the survey

## PENN G-2 Creeping Bentgrass

*What makes it so different  
is what makes it so good*

The list of what makes PENN G-2 so different and so good goes on and on. Moderate fertility, heat tolerance, disease resistance and reduced *Poa annua* invasion are just a few of the highlights. What it all comes down to is simple. Whether you are building, renovating or interseeding, PENN G-2 is your grass. Why? Because it's as good as it is different.



Putting Green Quality  
Creeping Bentgrass

The same Bentgrass  
used at the 1999  
U.S. Open at  
Pinehurst No. 2

**LESCO**

**800-321-5325**

LESCO is a registered trademark of LESCO Technologies, LLC. The PENN G-2 logo is a trademark of LESCO Technologies, LLC. PENN G-2 is a registered trademark of Tee-2-Green, Corp.

# DHD TREE PRODUCTS

JUNEAU, WI

*"COMMITTED TO YOUR SUCCESS"*

*Stress Phiter*



**WHITE GOLD®**

*Nature  
Safe®*

**Emerald Isle, Ltd.**



**REGAL**  
CHEMICAL COMPANY



**Salsco, INC.**  
LEADER BY DESIGN



**KALO**

Hydraway 2000



**BANNERMAN**



**Wedgle Direct-Inject**  
TREE TREATMENT SYSTEM

**866 - 343-8733**

(866 - DHD-TREE)

**DQ MOBILE: 920 - 210-8616**